

## Developing Tactical Cunning

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### ABSTRACT

**FM 3-24** serves as the foundation for U.S. execution of counterinsurgency operations. It states in Chapter 7, Paragraph 6, "Senior commanders should, at a minimum, ensure that their small-unit leaders are inculcated with tactical cunning and mature judgment. Tactical cunning is the art of employing fundamental skills of the profession in shrewd and crafty ways to out-think and out-adapt enemies." Yet there are gaps in the training in critical thinking and decision making necessary to support the inculcation of those skills.

The need for versatile Joint Forces is understood, and emphasized in the 2010 *Strategic Plan for the Next Generation of Training for the Department of Defense*, noting the critical need to "Train in the art of deception in both planning and mission operations." The complexity of current conflict and the expectation of future conflicts demands a joint force that understands, educates, trains and assesses the "fundamental skills" mentioned above. This must be executed at all echelons of the joint force while maintaining our forces' legal, moral and ethical stance, within the boundaries of the rule of law, against an enemy who has no boundaries. This will require the development and support of innovative and adaptive leaders who are prepared to make complex decisions, fully understanding the objective and the consequences of those actions.

This paper will provide an analysis of fundamental skills to support tactical cunning, the state of educating and training to those skills, and how they can be developed in today's warfighters. It will conclude with a plan for integration of potential research outcomes in support of the Next Generation of Training for the Department of Defense.

### ABOUT THE AUTHORS

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“US Marine Major-General Richard Natonski, who devised the ground attack, yesterday revealed one of the key ingredients of Operation Phantom Fury: several days before the start of the real attack, a large “invasion” force, with up to 200 armoured vehicles, carried out several “feint” attacks to the south of Fallujah, charging right up to the edge of the city in what is known as dynamic manoeuvres.”  
Evans, M. (2004). Deception and mass firepower were key to success. *The Times UK*, Nov. 15, 2004.

The second Coalition attempt to restore order to the city of Fallujah was characterized by extensive pre-planning, a mass deployment of troops, intense coordination of massed firepower, and a deception plan. Through a series of practiced movements towards the southern portion of the city, the coalition forces were able to test their execution timing and bait the insurgents into revealing their positions and their response drills. After a week of rehearsal, the US Marines, Army and Iraqi national forces were ready to attack the city from the north – and the insurgents they were targeting were confused, desensitized towards troop movements, and unwilling to put themselves at risk (Evans, 2004). The feints accurately achieved the desired end state of not only masking actual operational movements, but softening the targeted area, and creating paranoia and anxiety in the insurgent forces. The feints served as one plank of the skill set utilized throughout the operation at Fallujah, part of the larger skill set of tactical cunning.

### INTRODUCTION

It is evident from analysis that military units who have received the same training will differ in the application of the trained skill sets against the enemy. One unit will wait for a tactically opportune moment to present itself. Another unit will create that opportunity by employing their skill sets shrewdly, to signal untruths in such a manner that the enemy commander accepts the untruths as fact. How does that second unit know how to send those deceptive signals successfully? When are our military leaders being actively trained to be tactically cunning? This paper will attempt to address those questions by analyzing fundamental skills that

comprise tactical cunning, and describing the current state of educating for those skills as well as potential research directions.

### TACTICAL CUNNING

People lie at least once every day, and some people lie even more frequently (DePaulo, Kashy, Kirkendol, Wyer & Epstein, 1996). These lies range from small white lies which serve as social lubricant to larger lies and complicated fictions launched for a range of motives. This is before complicating the concept of verbal lies by including concepts such as offering vague equivocations, creating misunderstandings and a host of deceptive activities.

This larger spectrum of deceptive activities is one that Bryne and Whiten (1992) refer to as Machiavellian intelligence or tactical deception. Tactical deception is defined as “acts from the normal repertoire of the agent, deployed such that another individual is likely to misinterpret what the acts signify, to the advantage of the agent” (pg. 611). For the purpose of the paper, that definition is considered supportive to the military’s use of the phrase tactical cunning. FM 3-24 defines tactical cunning as “the art of employing fundamental skills of the profession in shrewd and crafty ways to out-think and out-adapt enemies” (Department of the Army, 2006). This is the functional military-centric application of acts from a person’s normal repertoire used to their advantage against individuals from opposing forces. The word “cunning” carries positive connotations where the word “deception” is not necessarily widely acceptable. “Tactical” accurately describes the level at which the skill set is employed.

Despite the negative conceptualization of the idea of deceit and the weight American culture places on honesty, activities along the spectrum of deception are normal in the population. DePaulo et al. (1996) reported that adult members of a studied community lied an average of once a day, according to their self-report data, and college students from a similar study lied an average of twice a day. Over the course of a week, those community members lied to 30 percent of the people in their lives, while college students lied to

38 percent. Other studies on deception (Alpert & Nobel, 2008; Bristol & Mangleburg, 2005) reveal a steady state of normalization for the activities, across career paths and age groups.

Daily deceptions occur for a number of reasons, and may ultimately ease the sharpness that would occur in a world where all participants were openly and uncaringly honest to their friends, families, coworkers and partners. The motivation for deceit is overwhelmingly focused not on the potential for material gain, but at end states, such as attempting to avoid conflict, creation of a positive environment, maintaining group unity, and creating a better image of oneself to present to others; these daily deceptions had little emotional significance or impact on the deceiver (DePaulo et al, 1996; Spence et al., 2004). The field of social intelligence and Machiavellian intelligence, largely based in animal and primate focused research, correlates the normality of deception as a key to interpersonal relations (Bristol & Mangleburg, 2005; Bryne & Whiten, 1992).

The bulk of research in this field focuses on deceptive activities viewed through the lens of applicability for law enforcement, business and organizational management. It has been concerned not with what deception is or what skill sets and learning deception builds upon or is built on, but on the art of detecting and thwarting a deceptive person (Gordon & Miller, 2000). Overall, the concept of rooting out deceit through educating a population to recognize it has had little effect on practical application of recognition exhibited in study groups (George et al., 2004). It is likely because of the negative connotations of the idea of deceit that the bulk of effort has been placed on quick training and educational programs on biometric signatures and physical tells. These programs focus on spotting a deceitful individual in one's line of work whether it is as a police detective, a judge, or a soldier operating an entry control point rather than understanding the skills which are utilized when performing an effective deceptive act.

The military applications for understanding deception are more broadly based than performing simple lie detection duties. Warfighters must understand the principles of performing deception from both the user and the receiver perspective so as not to jeopardize future engagements. Correctly applied, it is a skill set leveraged for a range of activities from deceptive signaling and placement of decoys to confuse and mislead the enemy to more complicated diversion plans and subtle manipulations.

## **Military Utility of Tactical Cunning**

Traditional military deception whether accomplished through signals or human actors is "those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce the enemy to react in a manner prejudicial to the enemy's interests" (Department of Defense, 2006). At the tactical level, it is the moral, ethical and legal employment of those behaviors at a one to one level: One warfighter attempting to outthink his immediate enemy for the larger goals he is operating under (Caddell, 2004). It becomes the employment of the entire range of tactical cunning.

The spectrum of acceptable military operations for deception stretches from passive deception, which is the hiding of real intentions and capabilities, to active deception, the process of providing an adversary with evidence of intentions and capabilities which are not real. On that spectrum are activities such as diversion, camouflage, disinformation, distractors, and desensitizing.

Diversion is the movement of military units for the purpose of misleading the enemy (Greenberg, 1982). That movement can be a small attack in a non-targeted area to lead the enemy to believe that the main body of forces is not where it is, or it can be a feint. Camouflage can mask military objects as something non-military – a car, a bush, a house, etc. – or can be employed to make non-military items appear military in nature, creating inflatable or wooden items which appear to be a military vehicle or structure from the air (Greenberg, 1982). Disinformation includes propaganda and other misleading information streams fed to the enemy (Greenberg, 1982), to include radio broadcasts and other things that would simulate that which is not there or not occurring.

Distractors can create confusion and add additional noise to a situation which can mask an actor's actual intent, such as the presence of two Japanese Ambassadors in Washington DC in the days leading up to the attack on Pearl Harbor in 1941 (Caddell, 2004). In that case, this activity contributed to the overall success of a larger deception plan by engaging cognitive biases against other, correct signals.

Desensitizing is the act of preparing to launch an attack openly and regularly according to a set schedule without attacking until the target reaches a point where they no longer respond to the routine activity. A prime way to accomplish that level of target desensitization to activity is to hold a training exercise on a regular basis which would just happen to simulate the buildup of

troops and equipment that would be seen prior to the launch of an attack. After baiting the target into mobilizing repeatedly in response only to find the activity to be a training exercise, the ruse can become an actual attack as the Egyptians did with the Yom Kippur War in 1973 (Caddell, 2004). Desensitizing the target was an end state also achieved in Fallujah through the repeated feints performed (Evans, 2004).

Traditionally, Americans are not known for their ease of deception in the operational world. Indeed, current doctrine cautions against the application of deceptive techniques in counterinsurgency operations due to the potential negative effects on the image of the operation and forces on the ground (Department of the Army, 2006). Nonetheless, there have been past examples of successful deception operations on the scale of the Yom Kippur War, where the tactical cunning of the units involved at the lowest levels were responsible for the success of the overall deception plan. A prime example is the deception plans nested under Operation Fortitude, which were formed to protect Operation Overlord, the landings at Normandy, and draw German units away from the area. These plans included leading the Germans to believe that a false army group existed, complete with plausible documentation, radio traffic, and actual units interspersed organizationally in with the false ones (Courand, 1989). Adding to the challenge of committing deception in the military environment is the spread of rapid communications which had been unavailable during the conventional examples given above. A warfighter must not only take into account the end state of a distraction on the targeted enemy, but also on civilians, host nation governments, NGOs and neutral parties.

When enacting a plan along the spectrum of tactical deception, a warfighter must be cautious of why they are making the choices they make. There are cognitive pitfalls to which a warfighter can fall prey, such as 'mirror imaging'. This is the assumption that one's own culture, motivations and responses to a situation will be the same as the enemy's (Caddell, 2004). Avoiding that pitfall in a military setting requires understanding and being able to act from the enemy's cultural context as well as knowledge of the enemy's prior deception plans, and execution techniques to the greatest extent possible.

To have a tactical actor who can regularly and fully utilize all potential actions available to him for legally and creatively deceiving an enemy for the greater good of the operation, he must have a full mental repertoire of techniques to draw on, a depth of experience in application, and be creative. All of this while maintaining the accepted moral, legal, and ethical

stance of our joint forces, as well as fully understanding the potential consequences of failure. There are experts who can pull together a tight act of cunning on a small scale or a larger deception plan supported by tactical level actions, but they have gained that skill through years of experience and a potentially natural inclination to success in tactical cunning. How do we inculcate that skill into general purpose forces? What skills must be enhanced to create warfighters who are able to quickly and effectively take action along the continuum of deception when it's required?

## **ORIGINS OF THE SKILL SET**

Tactical cunning is a skill set with its roots in the evolutionary history of primate cognition (Byrne & Whiten, 1992). Through behavioral observation, Byrne and Whiten were able to collect data from multiple exceptionally skilled primate observers, examining a wide range of primates for evidence of deceptive behaviors. These behaviors were observed to occur at low frequencies, which was expected due to the inability of the observed primates to provide verbal statements of intent for failed attempts and deceptions which had gone unobserved by the researchers. Despite this challenge, tactical cunning was found at similar levels throughout all of the observed anthropoid primates.

The best examples of tactical cunning provided in the Byrne and Whiten study were those which showed primates who were able to misrepresent rank structures to other primates in a manner which took into account not their own place in relation to the rank structure, but the target's place in relation to the rank structure. A juvenile baboon, hiding out of line of sight, could use a scream of fear to scare off another baboon that it recognized as one of its parents' competitors.

Increasing levels of deception were recorded across a wide range of the age spectrum in those primates who are evolutionarily closer to humans (Spence et al, 2004). If juvenile baboons could successfully manipulate a target into fearing for its life and thus embarrassing itself in front of its peers, the question is at what age do humans exhibit tactical cunning?

Deceit exists in humans at a very early age, and progresses with growth and finesse as a human ages and collects a wider pool of experience in employing the skill set. Human babies as young as 9 months exhibit deceptive, cunning behaviors, such as waiting for supervision to have left the room before proceeding with an activity that they had previously demonstrated an understanding of as forbidden (Reddy, 2007).

Activities such as concealment, distraction, teasing and pretending lead to lying around age 2. Even at 2, the lying is enacted with a surprising lack of rigidity (Reddy, 2007). The presence of rigidity would indicate the action was based on mimicry of adult lies, but young children exhibit flexible, situationally appropriate and responsive lies for the same range of reasons that adults do, such as building an image of competence, creating a sense of affiliation with others, and saving face. The earliest instances of complex face saving lies which were observed in a natural setting began at two and a half years of age, and included subtle communications such as bravado, and correcting for earlier misstatements. Reddy (2007) also noted in her study of developmental behavioral observations that when lying to attribute blame, two year olds were able to plausibly place blame on an innocent party. Only nine of 24 children studied named a toy as the responsible party for their misdeeds, and only three of the 24 blamed an implausible party more than once, learning quickly from their mistakes and previous failures of deception. In children suffering from conversion disorders, which is the presentation of motor or sensory symptoms without a neurological cause, they still exhibit keen signs of deceptive signaling through behavior, attracting adult attention and causing confusion in a manner which is self-benefiting and appropriate to their home environment, much like birds that use deceptive signaling to lead a potential predator away from a nest (Kozłowska, 2007).

With that level of sophistication for deception at age two, it is not surprising that the literature shows that by the time a two year old has become a teenager, he or she has had many years to practice and hone those initial skills in deceit (Bristol & Mangleburg, 2005). It was mentioned previously that except for those who suffer from particular classes of developmental disorders, the majority of the population commits some level of deceit, which spurred interest into how deception attempts performed by a human would show on functional magnetic resonance imaging (fMRI). FMRI results in one study showed that deception activates executive areas of the brain in ways that truthful responses do not (Spence et al, 2004). Other activities which activate executive functions are problem solving, and working memory; however, there is not a set pattern of brain activity detectable by fMRI which can be generalized across a set of individuals as tied to a specific cognitive action.

With each member of our joint forces acting on a deceptive cognitive process differently with diverse inclinations towards verbal or non-verbal actions to support their activities, there is still a way to create a

reference point on which to base education of tactically cunning activities.

## SKILLS OF TACTICAL CUNNING

Apart from behavioral and developmental studies in children and similar observational studies in primates, most work that describes the skills involved in tactical cunning has been focused on the thwarting of those acts. However, Byrne and Whiten (1992) laid out a list of actions exhibited by primates which comprised the spectrum of what they called tactical deception.

These categories included: concealment, to include concealment by silence, hiding, inhibiting interest and ignoring; distraction, to include distraction by calling, looking, threatening, leading, signaling and proximity; attraction, to include attraction by calling, looking, leading, signaling and proximity; image creation, which included neutral, affiliative and threatening images; deflection; using a social tool to deceive tool, target, or both; and counter-deception of any of the above deception tactics (Byrne, & Whiten, 1992, 614). To these categories, Reddy (2007) added the skill of creating an image of self competence, which includes bravado and other denials of error.

Verbal communications which support the commitment of deceptive acts were classed by Burgoon, Callister and Hunsaker (1994) as falsification, concealment, exaggeration, polluting fact with fiction, and obfuscating. There is also equivocation, which is a vagueness and ambiguousness of information provided, to allow the listener to draw their own often incorrect conclusions (Buller, Burgoon, White & Ebesu, 1994). As physically and mentally healthy human adults benefit from the ability to employ these spoken language capabilities, it is assumed that they are sub-techniques which are employable in all categories. The original category utilized by Byrne & Whiten of acquired signs has been replaced by signaling. These functional categories have been mapped to military activities which they would support (see table 1).

**Table 1. Modified Byrne & Whiten (1992) categories of tactical deception**

Categories	Sub categories	Military Activities Supported
<b>Concealment</b>	by silence	Operations requiring silence
	by hiding	Ambush
	by object hiding	Camouflage
	by inhibiting interest	Disinformation, larger deception campaigns

	by ignoring	Not responding to reconnaissance by fire, enemy attraction signals
<b>Distraction</b>	by calling	Diversion; shouts indicating movement from an area of enemy interest
	by looking	Feigned visual interest in another area
	by threat	Feign movement towards an enemy interest
	by leading	Steering actors away from operation interests
	by signaling	Disinformation, deployment of signals
	by proximity	Providing a targetable decoy away from actual interest
<b>Attraction</b>	by calling	Diversion; leading to a trap
	by looking	Purposefully presenting interest in an area
	by leading	Leading a target to an unexpected arrest location
	by signaling	False presence signals to draw an attack.
	by proximity	Serving as trap bait
<b>Image Creation</b>	Neutral	Desensitizing
	Affiliative	Legal False Flag operations
	Threatening	Operations suggesting powerful nonexistent capabilities
	Self-competence	Straw man public relations campaigns
<b>Deflection</b>	to third party	Information operations
<b>Using a social tool</b>	Tool deceived	Passing false information to an enemy informant
	Target deceived	Using a double agent against a target
	Tool & target deceived	False assertion of authority support
<b>Counter deception</b>	Counter deception	Counter deception

### Supporting Skills

Skills associated with successful employment of tactical cunning are peppered throughout the literature on deception, but with little correlation to a functional taxonomy of deception.

Riggio, Tucker and Throckmorton (1987) found in their research that successful deceivers were those who could skillfully present a false emotion rather than those individuals who were naturally emotionally expressive. The same study also found that individuals who were deemed by observers to have an “honest

appearance” were the most successful deceivers due to observer bias towards appearance (Riggio, Tucker, & Throckmorton, 1987). Those deceivers who were overall more highly socially skilled were also favored over those who were lacking the verbal fluency to impress observers, during both deceptive and non-deceptive communication sessions; less fluent participants were more likely to be deemed dishonest even when they were making honest statements (Riggio, Tucker, & Throckmorton, 1987).

There is also the supporting skill of motion fluidity, as studies on deception detection correlated that particular types of deceivers exhibited more restrained body movement and curtailed gesturing during the telling of lies, either due to increased cognitive load or as a symptom of asserted self control (Forrest & Fledman, 2000; George et al., 2004). Those who were skilled at acting, however, exhibited no such inhibition. Other research has linked personality dominance to the ability to lend credibility to deceptive messages and signals (Keating & Heltman, 1994), though the question still exists whether adept social manipulation and kinesthetic management during acts of deception creates an actor’s socially dominant status.

### EDUCATING FOR CUNNING

Deception is a complex, learned social skill (Riggio, Tucker, and Throckmorton, 1987). The deceitful teenager also shows considerable development in performing acts of tactical cunning from early teenage years to the end of the teenage years, as they have expanded their knowledge of not only the world around them and the plausibility of their lies, but the tactics that are likely to make their deceits succeed (Bristol & Mangleburg, 2005). Increased competence in a skill leads to a tendency to be more comfortable practicing it, particularly a skill set such as cunning, where a poor outcome could yield drastic risks for the individual performing the skill. Nonetheless, the self-knowledge of how they are executing is all experiential, tacit knowledge.

Tacit knowledge has been described as ineffable (D’Eredita & Barreto, 2006), information that is hard to encode into a transferable medium because of its personal experiential nature, yet still has proliferation among a community of activity or practice. D’Eredita and Barreto (2006) also suggested that tacit knowledge is highly episodic, and that those episodes can be related to others if captured accurately, the same way tacit knowledge proliferates through the relaying of episodes within an organizational group.

### Current Techniques

Tacit knowledge is passed most often through educational settings as an abstract concept stripped of meaning, ideally to allow recipients a broad range of functional application. There has been research on the education of abstract concepts not passing through to functional applications. Since classroom mathematics was assumed to be an abstract concept, it was assumed that once the abstract concepts were understood it would transfer to applied situations like grocery store shopping. Lave (1988) proved this assumption incorrect with an experiment that showed those most effective at calculating prices and totals in a grocery store were not using the abstract concepts they had been taught in classroom mathematics. There was no translation of techniques between classroom learning and functionality.

Current education in deception focuses on similar abstract detection rules rather than applied, constructive learning. However, the information needed to detect deception – the physical tells, an understanding of what the observer should expect – is tied to understanding how to commit deception. Training to learn how to detect deception has been spotty in performance over the years, with accepted training techniques leading to a detection level of around slightly better than chance, and an increase in false positive identifications (George et al., 2004). George et al. attempted to develop a training program for military general purpose forces to utilize in their detection of deception. It educated the students in the basic concepts associated with deception, some of which have been outlined in this paper, as well as heuristics to apply for detection using a method of explicit education, practice, and performance feedback.

The end result of this application of abstract concepts to functional application was that while participants showed an improvement in factual and conceptual declarative knowledge tests over the control group, there was no statistically significant difference between the experimental and control groups when it came to actual accuracy in detection performance (George et al., 2004).

Another study looked at the circumstances and techniques associated with effective natural performance of deception detection. This study assumed that lie detection includes identification of cues linked to deception, and correct interpretation of those cues (Forrest & Fledman, 2000), and laid in a more holistic sense of non-verbal cues than the specific words. The study demonstrated that individuals who were casually attending more to the nonverbal cues of the scenarios, the more experientially-based processors,

were better judges of deception than those who intently observed every word spoken and provided feedback as to the honesty of a particular message.

### **Potential Solutions**

Current educational experiences involving deception fail to translate to practical application in detecting or applying the spectrum of tactical cunning. With that stymied transfer, there is correlation to the challenge expected to be faced in trying to translate the application of the skill set through educational processes. Krathwohl (2002) presented an update to Blooms' Taxonomy of Educational Objectives which redefined the six categories of the cognitive domain into a framework of knowledge and cognitive processes with factual, conceptual, procedural and metacognitive knowledge interacting with the categories of Remember, Understand, Apply, Analyze, Evaluate and Create (Krathwohl, 2002). Concealment, distraction, attraction, image creation, deflection, using a social tool, and counter deception fall along a wide spectrum of points on this continuum for defining educational objectives. To achieve these activities, individuals must be applying, analyzing, evaluating, and creating with procedural and meta-cognitive knowledge, modeling their assumptions of target responses. To create an educational experience that holds procedural and meta-cognitive meaning for the learner which will transfer to real life applications, students must be challenged to apply the knowledge up to and through the create stage. Stopping at applying conceptual knowledge to analyzing, as is currently done in studies on training to detect deception, leaves an important gap on the way to creating and applying higher levels of knowledge in a flexible way, and building it into other ideas in novel ways.

Tactical cunning is tacit regardless of the level of expertise an actor has with the skill set. To effectively build on knowledge with such specific meaning to the individual, a constructivist learning technique is required. *Constructivism* is focused on the construction of new knowledge within the framework of the holistic life experience which an individual uses to interpret reality (Jonassen, 1992).

The gains seen by utilizing constructivist educational techniques to support experientially based training have already been demonstrated in military settings through programs like the U.S. Marine Corps' Combat Hunter Program (Gideons, 2008; Spiker, Johnston, Williams, & Lethin, 2010). This type of experientially rooted education is critical for naturalistic decision making models (Klein, 1993), where through quick mental simulation, experts are able to quickly select the

best fit response to a situation. The creation of these experiential learning environments is not necessarily limited to live settings. Research has been ongoing on utilizing immersive virtual and gaming systems to support the development of all levels of expertise (Ross, Phillips, & Cohn, 2009). These virtual simulations focus not only on providing visual fidelity, but also on providing the learner cognitively authentic tasks and frameworks within even a sandbox-style environment. From 2008 to 2011, the Department of Defense demonstrated the art of the possible in virtual simulations and gaming technology through the Future Immersive Training Environment (Muller, 2010). Research gleaned on the knowledge transferred to trainees during those demonstrations proved the hypothesized usefulness of virtual environments for transferring knowledge in ill-structured domains where performance of skills overlap (Ross, Phillips, & Cohn, 2009).

There are assessment challenges inherent to measuring learning achieved through this kind of experiential, constructivist technique, as the learner has constructed new meanings based on their experience levels, all of which will present differently in a class. Simplified, context-less evaluations are inappropriate for constructivist learning (Jonassen, 1992). Evaluation must allow the constructor to be a tool in the assessment process, reaching beyond testing declarative knowledge gained, and utilize not just responses to situational judgment tests, but the expert recognition of appropriate behaviors being exhibited in virtual and live practice. One technique which allows the constructor to be the ultimate processor of the assessment is an in-depth after action review (Muller, 2010); refinements for assessing functional transfer of learning are ongoing.

### **FUTURE DIRECTIONS**

Areas for further research are broad and necessary if the skill set is ever to be formally inculcated into the military education system. Research must focus on discovering the root skills which best lead to accurate applications of the tactical cunning skill set. Research must also focus on to what degree ease of natural communication actually affects application in a naturalistic setting, rather than an experimental setting where the risk reward structure for performance is not realistic or sufficiently motivating.

The goal of effectively educating both analysts and ground units in deception techniques has been longstanding, but unmet (Courand, 1989). The *Strategic Plan for the Next Generation of Training for the Department of Defense* (Department of Defense,

2010) noted the critical need to “Train in the art of deception in both planning and mission operations.”

That need cannot be executed in a vacuum as a standalone educational package that does not link to training and eventual field application. As tactical cunning is experientially based, all educated knowledge should facilitate meta-understanding of the ability level where a student is already applying the skill, providing support to each student’s strengths and compensating weaknesses. It should complement the person’s own experiences and lead to the capability to create new experiences through the ongoing development of virtual and immersive training techniques. Virtual worlds would provide a high utility environment for practicing acts of tactical cunning at all levels of the operational environment. This includes acts of tactical cunning performed when face to face with another individual, to an officer organizing larger deceptions involving forces moving against an enemy stronghold.

Performance of tactical cunning should be further integrated as a task to perform in and among other battlefield tasks, creating realistic cognitive load and a sense of challenge if not a feeling of realistic lethal culpability. Feedback on these training opportunities should be treated as a chance to further enhance the education of the participant, while allowing the trainee a safe way to create acts of tactical cunning in a complex environment without the risks inherent in performing the first attempts in the field.

There is much work to be done to create educational programs for the skills that contribute to tactical cunning. Through limited objective experiments, it must be established where each skill can be best realized in Krathwohl’s revised taxonomy of education objectives, cognitively and affectively, as well as the optimal balance between classroom teaching, virtual and hands on practice.

### **CONCLUSION**

The end state of tactical cunning is the successful, creative employment of fundamental skills of the war fighting profession in ways that allow warfighters to support decision makers in their goal of getting inside of and influencing the enemy’s decision cycle. The challenge is not in making that activity culturally palatable for American society, as it is viewed supportively in instances with positive endings – as with the deception plan executed in Fallujah. The challenge is breaking down the behaviorally observed skills into a format that is not only teachable, but builds on the natural experience that all warfighters have with

applying small portions of tactical cunning skills in their day-to-day lives.

Two warfighters who have gone through the same training can be presented with the same information in a situation and come up with vastly different accounts, even if they agree that the end state is the same. Constructivist educational techniques harness that difference in perception by providing the tools to understand how and why they are applying their knowledge differently. Practical application opportunities, whether given in live role-playing or virtual settings, will encourage the innovations that will come from different backgrounds and experiences. The opportunity to repeatedly practice and experience the challenges of employing images of affiliating, deceptions, distractions, diversions, and all of the other skills associated with tactical cunning will improve the ability of even the most socially and verbally inhibited.

Ultimately, the effective application of tactical cunning on the battlefield will also require changes to doctrine and policy, as well as acceptance within the hierarchical structure to empower individuals to act in a cunning manner when necessary so as not to inhibit the believability of the act. Focusing on the training and building on the military's inherent capabilities for strong, morally, and ethically sound decisions by adding enhanced ability for deceiving the enemy is the gateway to closing the gap of inculcating small unit leaders with tactical cunning.

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