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MASTER OF MILITARY STUDIES

TITLE:

No Room for Maneuver

The Reduction of Maneuver Warfare from Cognitive Approach to Physical Concept in Marine Corps Doctrine, Discourse, and Education

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Executive Summary

Title: No Room for Maneuver: The Reduction of Maneuver Warfare from Cognitive Approach to Physical Concept in Marine Corps Doctrine, Discourse, and Education

Thesis: In order to make necessary corrections and realize the Commandant's vision, the Marine Corps must first identify the original essence of the maneuver warfare concept, diagnose its current misunderstanding, and appreciate how that misunderstanding came into being following the adoption of FMFM-1.

Discussion: With the publication of Fleet Marine Force Manual-1 (FMFM-1) *Warfighting* in 1989*,* the Marine Corps adopted maneuver warfare as its doctrinal philosophy following disillusionment with the Vietnam War and a decade-long debate in the service's hallways, classrooms, and professional journal, *The Marine Corps Gazette.* On direct order of then-Commandant of the Marine Corps, General Alfred M. Grey, a young captain, John Schmitt, developed the manual to encapsulate a new fighting philosophy. The manual was largely based on retired Air Force Colonel John Boyd's concept of moral-mental-physical conflict, as presented in his brief *Patterns of Conflict.* Boyd's conception suggests that the aim of maneuver warfare is to incapacitate the mind of the enemy, and that practitioners must integrate all actions, physical or otherwise, to serve this end. Concepts such as Sun Tzu's *cheng* and *ch'i*, and the German *Auftragstaktik, Schwerpunkt,* and *Nebenpunkt* are essential components, based on the use of variety, rapidity, harmony, and initiative.

The doctrinal philosophy presented in FMFM-1 closely approximated Boyd's ideas but allowed room for misinterpretation. The continued vigorous debate and clarification in the pages of the *Marine Corps Gazette* and a deliberate educational focus aided in the institutional understanding of maneuver warfare by identifying and attempting to correct the misunderstandings. However, the discourse became episodic and the educational effort quickly waned. In 1997, The Marine Corps revised and re-designated FMFM-1 as Marine Corps Doctrinal Publication (MCDP-1), which clarified several misunderstandings of FMFM-1 presented in the discourse in the *Gazette*, including the explanation of maneuver warfare and some of its key concepts.   Unfortunately, MCDP-1's publishing did little to renew the long-term discourse in the *Gazette* or the deliberate educational effort on the topic. Twenty years later, the doctrine has stagnated, debate has trickled to a one-sided discussion of the true meaning of maneuver warfare, and professional military education has ceased to focus on it. Along the way, as one may infer from the current Commandant's initial guidance and the Marine Corps Operating Concept, and as professionals with Combat Development Command confirm, the Marine Corps has come to focus on spatial movement and has lost sight of the cognitive aspects of maneuver.

Conclusion: Declining debate and educational effort have allowed the Corps's current physical/spatial approach to maneuver warfare to displace the doctrine's original intent, and most importantly the original essence of the concept. Given the Commandant's call for disruptive thinking and for reinvigoration and reaffirmation of maneuver warfare's primacy in the Marine Corps, the time is ripe to correct the misunderstanding.

DISCLAIMER

Illustrations

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Preface

My journey to better understand maneuver warfare started with the guidance and mentorship of Colonel Tom "Sumo" Hobbs while I was a young captain serving as a company commander at the School of Infantry-East.   Colonel Hobbs introduced me to John Boyd's ideas and his dedication to our doctrinal philosophy and the development of his officers sparked my interest in the study of maneuver warfare.   Since then, I have sought to understand more completely, not only our doctrine as presented in MCDP-1 *Warfighting,* but the theories and theorists that led to its development. Through my personal studies, my experiences in the operating forces, and as an instructor at The Basic School, I developed a sense that the Marine Corps as an institution did not fully appreciate or understand the concept of maneuver warfare. The publication of the General Neller's guidance in FRAGO 01/2016 and the Marine Corps Operating Concept demonstrated that the Marine Corps may recognize this shortfall, which sparked this project to determine how and why this misunderstanding developed.

I would like to acknowledge and thank Colonel Hobbs for starting me on the path that led me to explore our doctrine and its foundational theories. I would also like to thank two key individuals whose intellect, support, and passion served as an inspiration and guiding force as I worked on this project—Lieutenant Colonel Shawn P. Callahan, USMC (Ret) and Dr. Anne-Louise Antonoff. Thank you for your encouragement and continued dialogue over the past year. I am convinced that I could not have completed this project without you. To Dr. Nathan Packard, thank you for your time and insights, they helped me cross the finish line. Finally, I would like to thank my wife, Medora, for her encouragement and devotion to our family, which enabled countless hours of research and writing. Your support throughout my career has undoubtedly influenced where I am today.

*"**Maneuver**—A mental approach to conflict, born of opportunism, variety, and cunning, by which we create and exploit advantage as a means for success by creating a rapidly and continuously changing situation in which our enemy cannot effectively cope. We do this by focusing strength against critical enemy vulnerability, generating superior speed and distracting or disorienting our foe through ambiguity or deception." --Major John Schmitt, USMC[1]*

Introduction

The Marine Corps has identified a problem. Shortly after his appointment as the 37th Commandant of the Marine Corps in September 2015, General Robert Neller released Fragmentary Order (FragO) 01/2016: *Advance to Contact,* as his essential and immediate guidance to his service, and as refinement to the guidance issued by the previous Commandant, General Joseph Dunford. One of the three major themes in this FragO is a call for decentralized training and revised preparation for combat in accordance with the principles of maneuver warfare. In the FragO, General Neller calls on the Marines to "reinvigorate a maneuver warfare mindset for the 21st century."[2]

The following year, General Neller approved the release of the Marine Corps Operating Concept (MOC), as the vision for the how Marine Corps will operate in the future, thus solidifying the guidance provided in the FragO. The MOC echoes the FragO's call to reinvigorate maneuver warfare, taking it a step further towards "reaffirming the primacy of maneuver warfare and combined arms for the 21st century…"[3] The language in these official documents, referencing maneuver warfare rather than MCDP-1, suggests that, to re-establish the concept's primacy and vigor, the Marine Corps needs to revisit the original essence and theory of maneuver warfare, rather than rely on its most recent interpretation, which itself is two decades old. The current Commandant's guidance and the subsequent release of the MOC confirm the continued institutional commitment to maneuver warfare. However, at the same time they suggest to readers that the institution has identified a problem.

To adhere to the Commandant's guidance and embrace maneuver warfare as the key to current and future success, the Marine Corps must appreciate the original essence of the maneuver warfare concept and the way its original champion, General Alfred M. Gray, envisioned its institutionalization. The Corps must then recognize the gap between original vision and current practice, and trace the development of any misunderstandings that emerged following the adoption of FMFM-1. Understanding the theoretical foundations of the concept, its codification in maneuver warfare doctrine, and its shifting fortunes in both professional discourse in the *Marine Corps Gazette* and professional military education are all essential steps to frame the current problem. Only then can the Corps make the necessary corrections to organize, train, educate, and equip its forces to fight as a true maneuver warfare force.

Historical Context: The Adoption of Maneuver Warfare

A brief look at the historical events in the decade leading up to the adoption of FMFM-1 in 1989 provides the necessary context to understand the original spirit of the maneuver warfare concept. In his 2008 master's thesis, *The Road to FMFM-1: The United States Marine Corps and Maneuver Warfare Doctrine, 1979-1989*, Marine Reserve officer Fideleon Damian posits that following the Vietnam War, the United States military, reeling from the recent conflict, needed a new direction. Drug use and racial issues plagued its ranks. The demands of public opinion for major reforms among the services, coupled with dissatisfaction within the officer corps, exacerbated these existing issues and drove internal discussions among the services on how to improve their respective branches.[4] Enlisted Marines and officers returning from the Vietnam War who were disillusioned with the war's conduct contemplated a new and more effective way to fight the next war. The ideas of individuals who presented a fresh way of thinking about warfare inspired and fueled discussions about a nascent concept—maneuver

warfare.[5]   Several thinkers from outside the Marine Corps, including retired Air Force Colonel

John Boyd and senate staffer William Lind—who was inspired by Boyd's ideas—introduced the

concept of maneuver warfare to the service in the late 1970s as a potential theoretical foundation

for the Corps. Over the following decade, an intellectual debate between those who believed in

the maneuver warfare concept and those who did not ensued, centering on defining the concept

and advocating or disproving its merits in future conflicts.

Boyd, a retired Air Force colonel and fighter pilot, was known as much for his raucous

and confrontational personality as for his intellectual achievements in the Air Force. In the end,

his intellectual achievements would win the day. While in the Air Force, he developed the

"Aerial Attack Study," which fundamentally changed the way the Air Force thought about and

taught air-to-air combat, and the Energy-Maneuverability theory to aid in the development and

testing of fighter planes. However, it was Boyd's exhaustive study of conflict, entitled *Patterns

of Conflict,* that led to his development of the concept of maneuver warfare and his enduring

legacy within the United States Marine Corps.[6]

Lind, although lacking military experience, was an American historian who studied

Germany, a legislative aide, and a participant in the Military Reform Movement during the

tumultuous times following the Vietnam War. Influenced by his understanding of German

military history and the work of Boyd, he focused his military reform efforts on maneuver

warfare and the United States Marine Corps. He was an early contributor to the debate in the

pages of the *Marine Corps Gazette* and explicitly directed his 1985 *Maneuver Warfare

Handbook* at the United States Marine Corps. Additionally, the *Maneuver Warfare Handbook,*

which Boyd reviewed prior to its publication, provides reinforcement to Boyd's *Patterns of*

Conflict.[7]   In fact, Lind devotes much of his first chapter on maneuver warfare theory to Boyd's findings.[8]

Boyd and Lind's work inspired young Marine officers, who, lacking an institutional organization to address their concerns, began organizing small group to study maneuver warfare. They also began discussing Boyd's ideas in the *Marine Corps Gazette*, the professional journal of the Marine Corps, which started a dialogue over the new concept. However, the concept of maneuver warfare met with resistance and an intense debate ensued in the pages of the *Gazette* between a group of advocates and a group of skeptics. The debate pitted the new "maneuverist" way of thinking about war against the traditional fire-power based warfare labeled by maneuverists as attrition warfare.[9]

Maneuver warfare advocates sought to define the concept and convince dissenters that it was superior to attrition warfare. Maneuverists introduced the concept of attrition as the opposite of maneuver.   In attrition warfare, a military uses firepower and maneuver toward the enemy's physical destruction. The maneuverists introduced maneuver warfare as the counterpoint to the concept of attrition warfare, utilizing firepower and maneuver bring about not just the enemy's physical destruction but also his psychological demise.[10] They created the dichotomy between the two "types of war" to illuminate the difference between the United States' historical affinity for bringing mass and concentrated fires to kill as many enemy fighters as possible—epitomized by the "body count" metric of supposed success in the Vietnam War— and the concepts of maneuver warfare that its advocates deemed essential. The intense debate continued in the pages of the *Marine Corps Gazette* throughout the 1980s.

Damian argues that the proponents of maneuver warfare in the Marine Corps utilized three main mechanisms to "[b]ring about the intellectual transformation of the Marine Corps…"

with the publication of FMFM-1 at the end of the decade.[11] Debate in the *Marine Corps Gazette* increased Corps-wide knowledge and acceptance of the maneuver warfare concept. Large free-play training exercises involving the Second Marine Division, under the command of maneuver warfare proponent Major General Alfred Gray, then tested the concept. Lastly, the institutional authority provided by the appointment of now General Gray, as the 27th Commandant of the Marine Corps, cemented the maneuver warfare concept as Marine Corps doctrine.[12] General Gray commissioned the writing of FMFM-1 and subsequently signed the manual, making it the official doctrine of the Marine Corps, although many opponents still existed in the Corps's ranks.

Yet the doctrine itself is only one aspect of General Gray's intent to effect an intellectual transformation within the Corps. After signing the concept of maneuver warfare into doctrine, Gray recognized the central role that education should play in the transformation of the Corps, creating the Marine Corps University and instituting widespread educational reforms. General Gray anticipated resistance and viewed an improved educational system as a way to tie efforts together and achieve consistency and harmony within the Corps.[13] The discourse in the *Marine Corps Gazette* would continue to play an important role in the Marine Corps's understanding of its new doctrine throughout the 1990s, however, educational inculcation, much as the discourse in the pages of the *Gazette,* fell off over time.[14]

To understand how this negative trend could develop, it is first necessary to grasp the original essence of the concept as introduced by John Boyd in *Patterns of Conflict*. This understanding will enable comparison of the Marine Corps's current approach to and perceptions of maneuver warfare against the original essence of the concept. A stunted intellectual transformation in the Corps then becomes apparent, traceable back to deficiencies in doctrine, discourse, and education.

Patterns of Conflict: The Theoretical Underpinnings of Maneuver Warfare

      Since the ideas in Boyd's briefing, _Patterns of Conflict_, were central to the development

of maneuver warfare in the Marine Corps, they provide the intellectual context for the concept

and serve as the basis for defining its essence. However, the intellectual journey that led Boyd to

Patterns of Conflict, began with his only published work, _Destruction and Creation._ According

to Frans B. Osinga, an officer in the Royal Netherlands Air Force:

> The heart of the essay is the discussion about the nature of knowledge. It is highly
> philosophical and obviously rooted in the epistemological debates that raged in the
> 1960s. Boyd associates these epistemological issues with struggles for survival. The
> fundamental, unavoidable and all-pervasive presence of uncertainty is the starting point.
> It leads to the requirement to learn, to develop adequate models, and to continually assess
> the adequacy of these models as a basis for survival for any organism. The process
> requires both analysis and synthesis, both induction and deduction. [15]

Boyd's theory on knowledge and learning significantly shaped his method of study for _Patterns_

of Conflict. In researching for _Patterns of Conflict_, Boyd analyzed 2,500 years of conflict to

identify trends or patterns that led to success. From this analysis, he then synthesized his theory

around three types of conflict: attrition warfare, maneuver conflict, and moral conflict.[16] The

flow of the brief itself also follows this approach to learning, which pulls the audience along and

allows them to walk the path of analysis leading to synthesis with Boyd.[17] With Boyd's view of

learning in mind and a better understanding of the construct of the brief itself, an analysis of

Patterns of Conflict will enable an understanding of the original essence of maneuver warfare.

      When delivering the _Patterns of Conflict_ brief, Boyd led the audience on an intense

intellectual journey that intended to "make manifest the nature of Moral-Mental-Physical

Conflict; to discern a Pattern for Successful Operations; to help generalize Tactics and Strategy;

to find a basis for Grand Strategy," to identify the "character of conflict, survival and

conquest."[18] The extensive verbal explanations Boyd provided and his energetic style of

delivery were critical to helping the audience understand his central ideas; the slides themselves

are difficult to interpret. As Boyd's ideas evolved, *Patterns of Conflict* became part of Boyd's

larger work, *A Discourse on Winning and Losing*, and the length of the brief grew to six hours or

longer. Realizing that audiences required the whole journey to grasp his intent, Boyd closely

guarded the integrity of the brief and refused to deliver anything other than the complete brief.[19]

The few surviving recordings of Boyd's briefing of *Patterns of Conflict* are therefore the best

sources for understanding the concept behind Marine Corps doctrine, and will enable a

comparison of the Marine Corps's current understanding and perceptions of maneuver warfare

against the original essence of the concept. Ultimately this comparison will show that an

institutional misunderstanding does exist.

NEW CONCEPTION

Action

● Exploit operations and weapons that:

-- Generate a rapidly changing
environment (quick/clear observations,
orientation and decisions, fast-tempo,
fast transient manuevers, quick kill)

-- Inhibit an adversary's capacity to
adapt to such an environment (cloud or
distort his observations, orientation,
and decisions) and impede his actions)

Idea

● Simultaneously compress own time and
stretch-out adversary time to generate a
favorable mismatch in time/ability to
shape and adapt to change.

Goal

Collapse adversary's system into confusion and disorder by causing him to over and under react
to activity that appears simultaneously menacing as well as ambiguous, chaotic, or misleading.
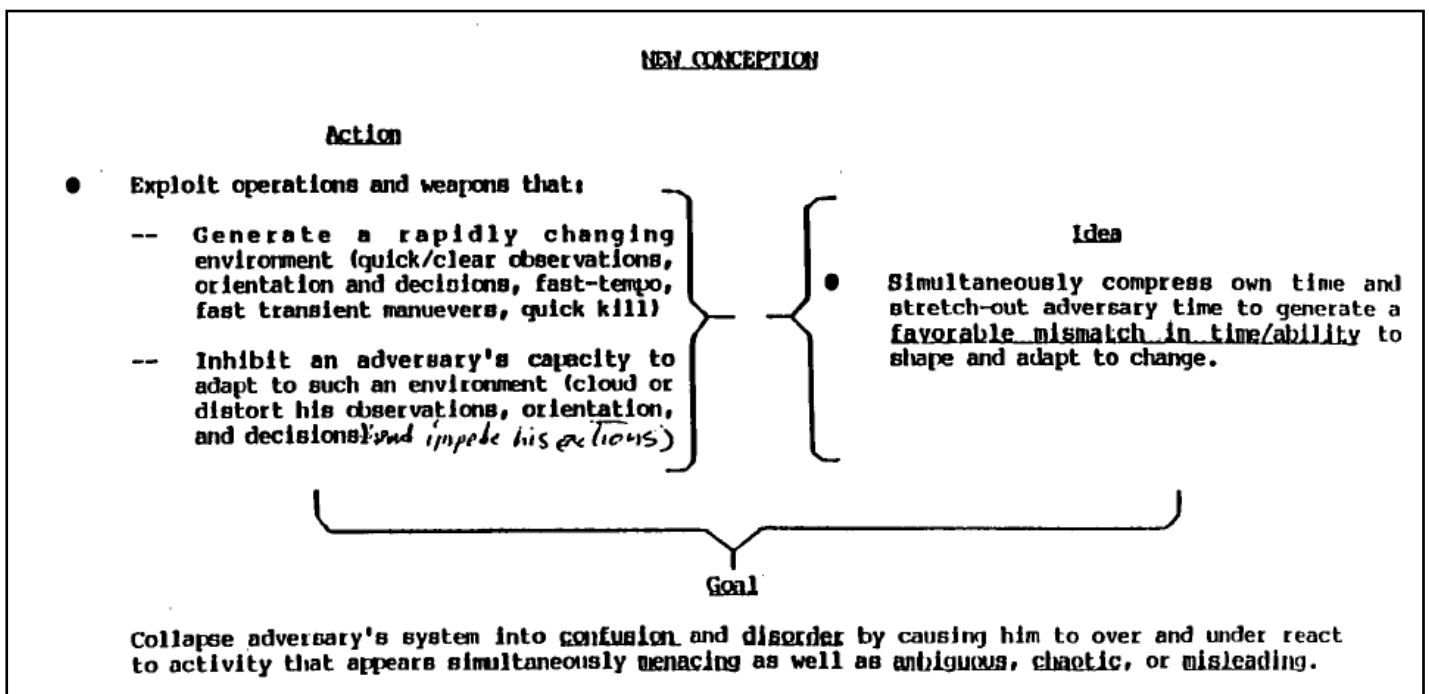
Figure 1. *Patterns of Conflict* **Slide 7, Boyd's "New Conception"** [20]

Boyd's "new conception," or starting point, clearly focused on the mind of the adversary,

as seen in Figure 1. Thinking and conducting actions at a faster tempo creates uncertainty and

causes rapid change in the environmen, while deception, surprise, and shock interfere with

adversary's cognition. As a result, he becomes unable to adapt appropriately in a timely manner, which compounds his confusion and disorder, and ultimately leads to his breakdown as a system.[21] While physical or spatial maneuver may contribute to this collapse of the enemy system, it is neither the only element, nor the most important. This conception stands in stark contrast with the typical view of maneuver as movement in relation to the enemy.
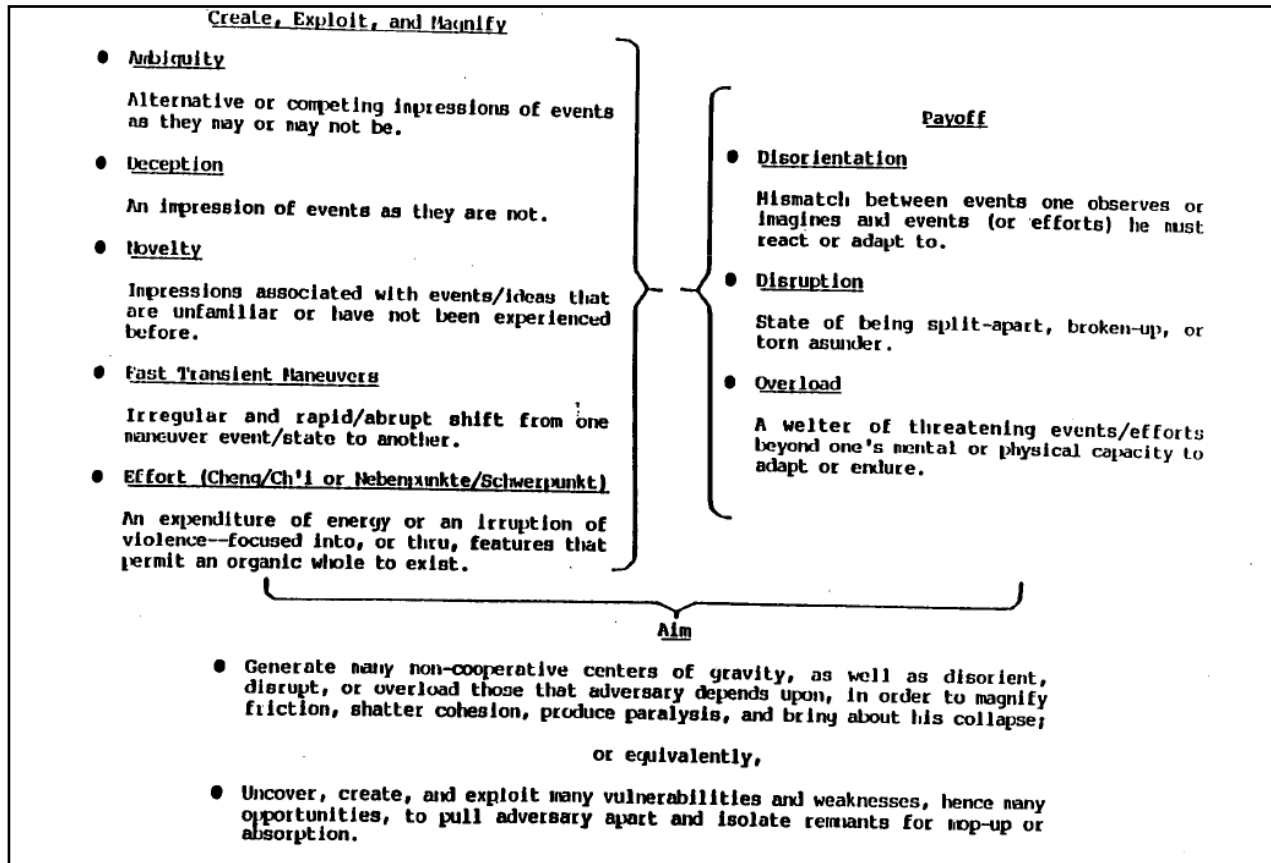

Create, Exploit, and Magnify

- **Ambiguity**

  Alternative or competing impressions of events as they may or may not be.

- **Deception**

  An impression of events as they are not.

- **Novelty**

  Impressions associated with events/ideas that are unfamiliar or have not been experienced before.

- **Fast Transient Maneuvers**

  Irregular and rapid/abrupt shift from one maneuver event/state to another.

- **Effort (Cheng/Ch'i or Nebenpunkte/Schwerpunkt)**

  An expenditure of energy or an irruption of violence--focused into, or thru, features that permit an organic whole to exist.

Payoff

- **Disorientation**

  Mismatch between events one observes or imagines and events (or efforts) he must react or adapt to.

- **Disruption**

  State of being split-apart, broken-up, or torn asunder.

- **Overload**

  A welter of threatening events/efforts beyond one's mental or physical capacity to adapt or endure.

Aim

- Generate many non-cooperative centers of gravity, as well as disorient, disrupt, or overload those that adversary depends upon, in order to magnify friction, shatter cohesion, produce paralysis, and bring about his collapse;

  or equivalently,

- Uncover, create, and exploit many vulnerabilities and weaknesses, hence many opportunities, to pull adversary apart and isolate remnants for mop-up or absorption.

Figure 2. *Patterns of Conflict* **Slide 115, Boyd's "Essence of Maneuver Conflict"[22]**

After tracing patterns and strategies used in conflict from Sun Tzu to the German *Blitzkreig*, Boyd refines his initial concept. Though Boyd identifies three types of conflict—attrition, maneuver, and moral—this study will focus on the portions of the brief relevant to maneuver conflict. As seen in Figure 2, maneuver conflict[23] focuses on the mind of the adversary. By creating, increasing, and exploiting a seemingly incoherent and rapidly changing situation, one can disorient, disrupt, and overload the adversary's ability to interpret unfolding

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events. He makes untimely and inappropriate decisions, thus becoming complicit in his own demise. As a result, the adversary's systemic cognition—his organizational ability to think, decide, act, and communicate as a whole—slows and eventually shatters. Ideally, this accelerating breakdown results in paralysis of the adversary's ability to continue fighting or collapses the system into uncoordinated and ineffective smaller fighting elements.[24]

Boyd uses the analogy of a basketball team to provide the audience a familiar example of a system that is dealing with a situation that is changing too rapidly for it to cope. He explains:

> Many of you people have seen a basketball game, here. And you see, you ever notice when one team starts getting ahead of the other? Christ, they come unglued, you can't measure that. All you know is they aren't working together. What do they do? First thing, they call time out so they can get their act back together. You can't measure that."[25]

In short, the mental paralysis of the team that needed to to call a time out is the aim of maneuver conflict. In war, however, there are no timeouts, only defeat, whether through continued fighting or surrender.

Based on a brief discussion of human nature, Boyd posits that "[v]ariety, rapidity, harmony, and initiative (and their interaction) seem to be the key qualities that permit one to shape and adapt to an ever-changing environment."[26] These four concepts are enmeshed in the concept of maneuver conflict, the goal being to gain the initiative to capitalize on variety and rapidity, which increases adversary disorientation and the friendly force's ability to adapt. Friendly forces can then exploit the advantage gained by the adversary's disorientation.[27] Additional underlying concepts that exhibt the validity of these traits are Sun Tzu's concept of *cheng* and *ch'i* and the German concepts of *Auftragstaktik, Schwerpunkt,* and *Nebenpubkt.*

Sun Tzu, an ancient Chinese philosopher of war, heavily influences Boyd's concept of maneuver conflict with the ideas contained in his classic work *The Art of War*. Along with an

explicit focus on the mind of the enemy, Sun Tzu's thoughts throughout *The Art of War* emphasized the importance of concepts Boyd distinctively considered central, such as variety, harmony, rapidity, and initiative. Sun Tzu's concept of *cheng* and *ch'i* is essential to creating uncertainty and confusion in the mind of the adversary, by maximizing variety and harmony to seize the initiative. Sun Tzu defines *cheng* as the expected and *ch'i* as the unexpected.[28] *The Art of War* advocates using these concepts in tandem to create an advantageous situation, ideally allowing friendly forces to exploit an enemy weakness. One shows the enemy what he expects to see and then executes the unexpected.[29]

Boyd also emphasizes the German concepts of *Auftragstaktik*, *Schwerpunkt* and *Nebenpunkt*, which are complementary to Sun Tzu's concept of *cheng* and *ch'i*. *Auftragstaktik* is commonly interpreted as mission-type orders.[30] Although Boyd only uses the term once in the brief, he clearly defines and stresses its importance. When utilizing mission-type orders, commanders provide clear guidance of what they want accomplished, but allow subordinates to determine how to accomplish their intent. In turn, each subordinate must conduct actions to achieve the commander's intent. This arrangement allows for the subordinate to exercise initiative in execution, which results in variety based on the subordinate's individual decisions, increased rapidity, and harmony of action toward a single commander's intent.[31]

Boyd introduces the concept of *Schwerpunkt* and *Nebenpunkt* to further unify effort horizontally across multiple units. *Schwerpunkt*, as the point of focus, provides unity of effort from the strategic to tactical level. It allows commanders to focus their main effort to achieve success by exploiting a developed advantage, chosen to avoid the adversary's strength and to diminish or eliminate his will to continue fighting. *Nebenpunkt*e,[32] or secondary points, are other elements of the enemy system related to the *Schwerpunkt*. Supporting efforts aimed at

Nebenpunkte serve to occupy or distract the adversary and thus allow the main effort to accomplish its mission. The main and supporting efforts work together, in harmony, based on the commander's intent that is given through mission-type orders and realized through subordinate unit initiative. Harmony and initiative together thus generate rapidity in the sense of tempo in relation to the enemy, and also allow the commander to shift among a variety of *Schwerpunkte* while achieving intent.[33]

Boyd's approach combined *Schwerpunkt* and Nebenpunkt with the concepts of *cheng* and *ch'i*. The supporting efforts aimed at the *Nebenpunkte* present the *cheng*, the expected, as feints or diversions in order to enable the employment of the *ch'i*, the unexpected, through the main effort aimed at the *Schwerpunkt*. Friendly actions may appear incoherent and confusing but actually follow an internal logic. As a whole, friendly actions harmonized through initiative, variety, and rapidity impede the adversary's accuracy of observation and efficiency of orientation on friendly actions. As friendly units gain tempo in action, the adversary's perception of the situation becomes increasingly disoriented and slower, eventually leading to its paralysis and collapse, preventing any further actions. Thus, the aim of physical or any other form of maneuver serves the cognitive aim, in that it targets the mind and will of the enemy commander., hence the phrase, "get inside an adversary's observation-orientation-decision-action loop."[34]

Even though it does not appear graphically in *Patterns of Conflict*, Boyd introduced the observation-orientation-decision-action loop (OODA Loop) early in his delivery of the brief and wove the concept throughout.[35] The phrase "getting inside an OODA loop," and derivations thereof are commonly used to describe maneuver warfare. Lind described operating within the enemy's OODA loop in his *Maneuver Warfare Handbook* as a simplified summary of *Patterns*

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of Conflict and tantamount to the theory of maneuver warfare itself.[36] The OODA loop is indeed

important to the concept of maneuver warfare. However, Lind's characterization is overly

simplified and may underlie some of its misunderstandings.[37] To be sure, Lind acknowledges

this simplification, presumably to make the book accessible to a wide range of readers during the

concept's infancy. Despite the over simplification, Lind's book provides the first definitive

writing on maneuver warfare outside of journal articles, as Boyd never published *Patterns of*

Conflict, and both men remained focused on the mental demise of an adversary.

Misconceptions of Maneuver Warfare Held by Today's Marines

One only need turn to the pages of the MOC and the *Marine Corps Gazette* to see the

difference between the original concept of maneuver warfare and its current meaning in the

Marine Corps writ large. The MOC explicitly discusses the physical focus of maneuver among

today's Marine Corps. Recent professional articles in the *Marine Corps Gazette* either confirm

this misunderstanding, whether by directly pointing out shortfalls, by indirectly reinforcing these

incorrect views, or by a combination of the two. Even many of those who have thought more

deeply about the mental/cognitive aspect of maneuver warfare appear to think they are

discovering a new application for the original concept. Only after establishing the difference

between the Corps's current understanding of maneuver warfare and its original essence in

Patterns of Conflict, is it possible to determine the roots of the misunderstanding.

The MOC acknowledges the Marine Corps's current physical focus when conducting

maneuver warfare, explicitly stating, "In the past, we successfully conducted maneuver warfare

primarily in the physical dimension and employed combined arms in the air, land, and sea

domains. Now, changes in the operating environment and adversary capabilities drive us to

increase emphasis on maneuver in the cognitive dimension and expand our employment of

combined arms to the domains of space and cyberspace."[38] If maneuver heretofore could be

understood as successful yet limited to the physical, rather than the cognitive dimension, then

clearly something has gone wrong in the Marine Corps's institutional understanding of maneuver

warfare.

After criticizing the physical focus the of the Marine Corps in the past, the MOC defines

its current capstone concept:

> The 21st Century MAGTF conducts maneuver warfare in the physical and cognitive
> dimensions of conflict to generate and exploit psychological, technological, temporal,
> and spatial advantages over the adversary. The 21st century MAGTF executes maneuver
> warfare through a combined arms approach that embraces information warfare as
> indispensable for achieving complementary effects across five domains-air, land, sea,
> space, and cyberspace. The 21st century MAGTF avoids linear, sequential, and phased
> approaches to operations and blends maneuver warfare and combined arms to generate
> the combat power needed for simultaneity of action in its full range of missions. The
> 21st Century MAGTF operates and fights at sea, from the sea, and ashore as an integrated
> part of the Naval force and larger Combined/Joint force.[39]

While this explanation of the MOC more closely approximates the original essence of maneuver

warfare, it explicitly restates points contained in MCDP-1, the Corps's current doctrinal

interpretation of the original concept. Yet despite the similarities, the MOC lacks a unified

purpose aimed at shattering an enemy system. This discrepancy may suggest that, beyond

misunderstanding the original essence of maneuver warfare, the Marine Corps as an institution

has lost its grounding in its doctrinal philosophy. The presentation of definitions from MCDP-1

as new ideas, implies that Marines need reacquaint themselves with the concepts in the

publication, and serves as an indicator of a greater misunderstanding of the underlying concept

and theory.

To make matters worse, the MOC's critical task to and associated subordinate tasks focus

less on the cognitive effect and more on the physical aspects of spatial maneuver.[40] The critical

task states that the Marine Corps "must be able to maneuver equally well in the both [physical

and cognitive] dimensions to achieve psychological, technological, temporal, and spatial advantages."[41] However, in its original intent, maneuver warfare unified and integrated all actions, physical or otherwise, in support of weakening the enemy's ability to perceive, adapt, and act or react to a given situation. If the Marine Corps had completely understood maneuver warfare, the focus of maneuver would have already been on the cognitive dimension because the aim of its doctrinal philosophy is to shatter the enemy's ability to operate as a cohesive whole. Admittedly, the emergence of new technology and development of tactics, techniques, and procedures may change the available means, but the ways—the incapacitation of enemy's mind and spirit—remains unchanged.

The subordinate tasks later in the MOC display misunderstandings of concepts central to maneuver warfare such as combined arms. For example, the subordinate task that identifies the broader concept of combined arms and information warfare gives examples of cognitive maneuver as a supposedly novel approach to combined arms. As we have seen, however, Boyd had always advocated the use of ambiguity, deception, and novelty to disrupt, disorient, and overload the adversary.[42] The explanations of combined arms provided in both FMFM-1 and MCDP-1 make clear this original focus:

> In order to maximize combat power, we must use all the available resources to best advantage. To do so, we must follow a doctrine of combined arms. Combined arms is the full integration of arms in such a way that to counteract one, the enemy must become more vulnerable to another. We pose the enemy not just with a problem, but with a dilemma—a no-win situation.[43]

Moreover, the Marine Corps's doctrine does not specify which arms to use; rather, it encourages the use of all available means.

Recent professional articles in the *Marine Corps Gazette* echo the misunderstandings illuminated in the MOC. Two recent articles in the *Marine Corps Gazette* written by members

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of the Ellis Group, the Commandant's hand-selected strategic thinking group, provide examples of both understanding and misunderstanding maneuver warfare. In the first article, the authors demonstrate at least a partial understanding of the essence of maneuver warfare. However, when discussing the concept of maneuver in the later article they treat the cognitive focus as a novel concept. Additionally, both articles cite only MCDP-1 in relation to maneuver warfare, equating the Corps's most recent encapsulation of the concept to the concept of maneuver warfare itself. This approach may serve to hook the younger readers on the relevance of maneuver warfare, but it does so at the risk of distancing the present-day Corps from the original concept.

A November 2016 article, entitled "21st Century Maneuver Warfare," provides several points of evidence of the Corps's misunderstanding. First, the authors devote a large portion of the article to summarizing MCDP-1, which suggests the belief that a misunderstanding of the Marine Corps's doctrine has taken hold.[44] The authors also conclude that the Marine Corps has failed to achieve its stated objectives in MCDP-1's chapter on preparing for war. Like the Commandant, they perceive a need for the reinvigoration of maneuver warfare.[45] Their call for "reconceiving a few concepts" demonstrates their belief that a full understanding may not exist. The Ellis Group authors emphasize focusing on the enemy's mind and seeing one's own actions from his perspective. They advocate the idea that maneuver elements and main efforts should not be limited to ground forces. They also call for an increased focus on investing in mental power as opposed to technological purchases.[46] While the Ellis Group's focus on doctrine is warranted and understandable, their article only references MCDP-1, and does not capitalize on the theoretical foundations that led to its development and adoption. This suggests that their own understanding lacks depth.

In a February 2017 article, "21st Century Maneuver," the Ellis Group echoes the MOC and acknowledges, "In the years since the adoption of maneuver warfare as the Marine Corp's warfighting philosophy, spatial maneuver has been favored."[47] Unfortunately, the majority of the remainder of the article remains focused on physical components of maneuver, such as maneuver forces, combined arms strictly in the sense of fire support, and up-to-date technology. It also contradicts their earlier position, as stated in their November article, on what constitutes maneuver forces. In the February article, they equate maneuver forces with infantry units, which is not always the case if a true understanding of the maneuver warfare concept exists. Perhaps this is due to the belief that "maneuver is the core of the maneuver warfare philosophy."[48] This belief tends to confuse the historical understanding of maneuver as a physical/spatial concept, rather than maneuver as a philosophy aimed to paralyze the mind of the enemy.

The Ellis Group only a devotes a small portion of their 2017 article to what they call alternative maneuver spaces—psychological, technological, temporal, spatial, and informational. This portion of the article provides the closest approximation to the original essence of maneuver warfare, even making the distinction of creating a rapidly changing situation that slows the enemy down and shapes their reaction based on a false perception of the unfolding situation.[49] This approach is not new, however, and MCDP-1 itself mentions four of the five "alternative maneuver spaces" to provide context for the definition of maneuver warfare.[50]

However, the perception that a misunderstanding of maneuver warfare exists in the Corps is not limited to the Commandant's strategic thinkers. In an August 2016 *Gazette* article, Lieutenant Colonel Gregory Thiele, a Marine infantry officer, asserts, "Understanding of maneuver warfare and its integral concepts has sunk to an abysmal level in the last few years….the lack of serious thought and discussion about military affairs within the military is

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extremely troubling."[51] In a 2014 article, Captain Daniel O'Hara, an infantry officer and

instructor at The Basic School, which trains all newly commissioned Marine officers declares,

"The Corps needs to enforce its standards, but appears to be neglecting its most advantageous

and most decisive one: its warfighting philosophy."[52] In a 2015 joint article with Lind, Captain

Daniel Grazier, a Marine Corps armor officer, asserts, "Individual commanders of units and

schools have here and there attempted to change what the Marine Corps does to match what it

says, creating 'islands' of maneuver warfare. But these usually last only until the next

commander arrives..."[53] In a later issue that year, Captain Grazier continues his argument, "Few

people appear to understand the real significance of Col Boyd's work anymore."[54] He

references the confusion surrounding the term maneuver, citing the spatially focused definition

in Marine Corps Reference Publication 5-2A (MCRP 5-2A), *Operational Terms and Graphics*

and comparing it to the philosophical definition in MCDP-1. Captain Grazier elaborates on

MCDP-1 definition:

> …nothing in this definition refers to physical movement…The goal is to collapse his
> entire system. This process begins first in the enemy's mind. Far too many officers have
> been conditioned to understand manœuvre as a matter of pinning the enemy down with
> fire with one element while 'maneuvering' with another to close with and complete his
> destruction. Such thinking betrays a basic lack of understanding.[55]

Perhaps just as damning as these accusations from Marine Officers is the lack of

contradictory articles, which implies either agreement with the accusations at or, perhaps worse,

a lack of interest. A letter in reply to the Grazier and Lind article, by Major Ian Brown, a Marine

pilot, commends the two for renewing the discussion on maneuver warfare and expresses his

opinion that agrees that "the fullness of General Gray's reforms remain unrealized."[56] The only

argument in response to the Grazier and Lind article by Major Brown is that the article merely

restates Lind's initial approach to developing the Marine Corps's understanding. He argues that

the Marine Corps needs to take a new approach, as he believes that the initial approach was not completely successful. This is an important argument, but before one can undertake a new approach, one must first understand *how* the first attempt at inculcation went awry.

Roots of the Misunderstanding: FMFM-1

The comparison of the theoretical underpinnings of maneuver warfare in Boyd's *Patterns of Conflict* to the tasks set out in the MOC and the views of today's Marines in the pages of the *Marine Corps Gazette* sets the problem by illuminating the Marine Corps's current physical/spatial misunderstanding of maneuver warfare. However, it is necessary to determine the cause of the current misunderstanding before attempting to propose or develop solutions. This effort requires an exploration of three primary means of disseminating new ideas—doctrine, discourse, and education—with respect to embedding maneuver warfare in the Corps as an institution. All three functions played a significant role in the Marine Corps's early understanding of maneuver warfare and their dwindling interaction would play a similar role in its failed inculcation over time.

In his foreword to FMFM-1, General Gray states that the manual provides his philosophy for fighting war in an easy to read format that is intended to be read cover to cover.[57] As opposed to a prescriptive set of rules and formulas, a philosophy provides a "theory underlying or regarding a sphere of activity or thought."[58] As a foundational set of ideas, the manual had to remain abstract in order to allow the reader to apply the ideas to a wide range of situations. General Gray goes further, stating that the philosophy should shape the way Marines think in everything they do, not just in combat. FMFM-1 was not intended as a reference manual; rather, General Gray encourages Marines to read, *and reread* the manual, which further suggests he sought to instill a deep understanding of its contents among all Marines. It does not provide set

solutions or actions; rather, it offers common concepts and ideals that require Marines to think and to use judgment in action.[59]

The philosophy and its key concepts are consistent with the original vision behind maneuver warfare. However, the intent for Marines to read the book from cover to cover, coupled with the manual's abstract philosophical nature, requires the reader to understand its intellectual context before he or she can fully internalize the concept. FMFM-1 acknowledges the Marine Corps's challenge is to adopt and develop its new concept of warfare. The manual therefore seeks to clarify and explain the concept of maneuver warfare, while remaining easily readable. These twin goals create a dilemma: On the one hand, easy absorption demands a fairly superficial treatment; on the other hand, sound understanding demands a certain depth of theoretical information. The solution was to favor the former goal over the latter. Therefore, while the manual provides an overview of the theoretical concepts, it requires supplemental education and discussion to develop a complete understanding of the concepts and their origins.

The text of FMFM-1 itself is open to misinterpretation. It defines Maneuver Warfare as, "a warfighting philosophy that seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope."[60] Yet, while this commonly cited definition is consistent with Boyd's original conception, the immediately preceding explanation of maneuver may prompt an orientation to the physical realm of actions in space and time:

> The traditional understanding of maneuver is a spatial one; that is, we maneuver in space to gain a positional advantage. However, in order to maximize the usefulness of maneuver we must consider maneuver *in time* as well; that is, we generate a faster operational tempo than the enemy to gain a temporal advantage. It is through maneuver in *both* dimensions that an inferior force can achieve decisive superiority at the necessary time and place. [61]

The manual does also address the use of mission-orders, commander's intent, and the application of strength against weakness, obviously drawing from the original essence of the concept presented by Boyd. However, as seen in the above quote, the cognitive aims of some of these points remain potentially unclear unless the reader understands the underlying theory.

As Boyd was battling cancer at the time of writing, he was not directly involved in the writing of FMFM-1.[62] Boyd's direct involvement might have alleviated some of these ambiguities. Further, since Gray intended his Marines to read the manual in its entirety, those readers only referencing specific portions of the manual or seeking to point out flaws here and there may not have grasped the whole picture. While FMFM-1 captured the overall essence of maneuver warfare when read in its entirety with an understanding of its theoretical underpinnings, these ambiguities led to potential misunderstandings, confirmed existing misperceptions, or at the very least presented opportunities for those opposed to maneuver warfare to argue against the concept.

Robust Debate in the *Marine Corps Gazette*

General Gray's appointment as the Commandant rekindled the vigorous debate in the pages in the pages of the *Marine Corps Gazette*, which General P.X. Kelley had suppressed during his Commandancy. The original high volume of discourse dwindled in mid nineteen-eighties with Kelley's appointment to the Corps's top post. The renewed debate in the late nineteen-eighties enabled FMFM-1's initial success in achieving its goal, but fell short in the long term.[63]

Figure 3, a graphic representation of the discourse in the pages of the *Marine Corps Gazette* surrounding the term "maneuver warfare," depicts how the quantity, nature, and content of that discussion changed over the last thirty-eight years. The author reviewed 1110 *Marine*

Corps Gazette articles containing the search term "maneuver warfare" to determine substance of surrounding the term's use.[64] Dependent on the level of substance, the author placed the articles in one of three categories. An article ruled a mere mention consists of the term's use within the article with no supporting context. An article determined to contain minor discussion with substance contained anywhere from at least a sentence of clarification up to a specific section surrounding the use of the term. An article determined to contain substantive discussion devoted a majority of the article to the discussion of the term. Appendix A, contains the complete list of the search returns.
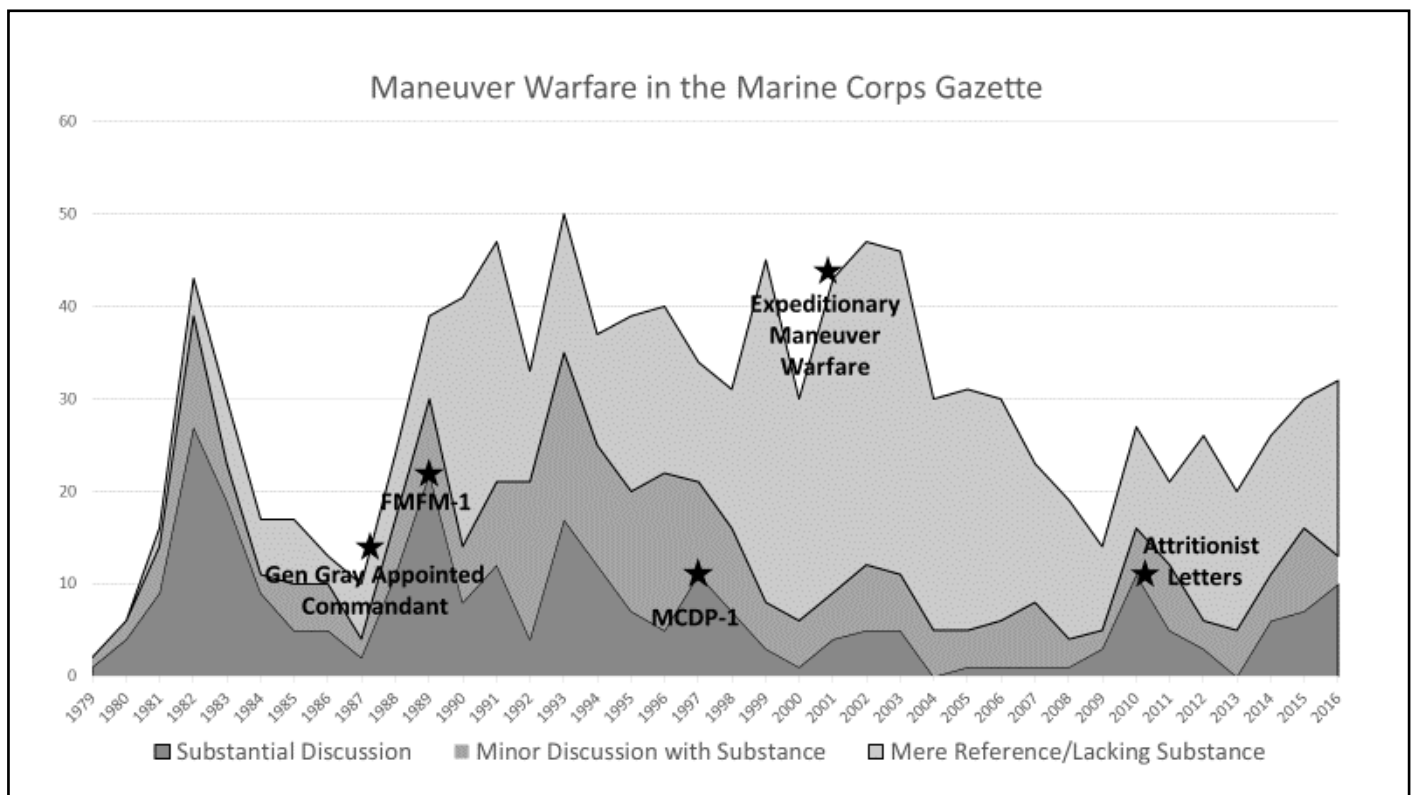

Figure 3: Appearance of "Maneuver Warfare" in the *Marine Corps Gazette* 1979-2016

Although somewhat episodic in the years following the publication of FMFM-1, opposition to maneuver warfare in the *Marine Corps Gazette* sought to challenge the new doctrine, describing perceived flaws and challenging the concept itself. In response, maneuver warfare proponents deployed articles and letters to clarify and sell the concept. As a result, many

of the initial misgivings about FMFM-1 were clarified in stride throughout the pages of the *Gazette*. However, these clarifications were limited to the *Gazette's* readership.

The majority of substantive discourse in the *Gazette* in 1988 aimed to clear up existing misperceptions or advocate a better maneuver warfare doctrine. Lind published an article in January titled "Misconceptions of Maneuver Warfare," which sought to clarify existing misperceptions. In addition to other misperceptions, he refuted the assertion that the concept is simply a recipe to conduct flanking attacks, or pinning the enemy down with fire and then moving to a position outside the enemy's front to attack an exposed flank.[65] The need to refute these claims demonstrates that a physical/spatial perception of maneuver warfare has been present since the early days of the Corps's acceptance of the concept. Several other articles published in 1988 reviewed current doctrine and the Marine Corps's current understanding, both of which were found lacking.[66]

In 1989, the discourse began to reintroduce counterarguments to maneuver warfare in addition to continuing to clarify the concept and apply it to various functional areas of the Marine Corps. As seen in Figure 3, 1989 also marked the significant increase of the number of articles that merely refer to maneuver warfare, a pattern that continues to this day. This trend suggests that even as much of the Corps was attempting to improve its understanding of the new doctrine, some Marines began to advocate for its replacement, while others began invoking the term as a way to sell their own ideas as linked in some way to the new concept. Well into the 1990s, the denunciation, clarification, application, and misappropriation of maneuver warfare—and sometimes mere reference to the phrase—continued in the pages of the *Gazette*.

Although the discourse had ebbed by the mid-1990s, entering a noticeable decline with the end of Gray's Commandancy and the increased operational tempo generated by the Persian

Gulf Conflict, substantive debate still continued. An article published by Captain John Schmitt, the author of FMFM-1, in August of 1990 sought to differentiate physical/spatial maneuver from the concept of maneuver that formed the basis for the Corps's new doctrine.[67] The article demonstrated that maneuver warfare proponents were still fighting against traditional physical/spatial focus of maneuver. In November of 1991 on the heels of Operation DESERT SHEILD/DESERT STORM, in his article, "An Alternative to Maneuver Warfare," Marine Major Andrew D. Walker argues that fire power is decisive in combat and maneuver is secondary. He defines maneuver as movement to gain a positional advantage, demonstrating that he views the word in its traditional meaning, counter to Schmitt's argument the previous year.[68] The same year, in an article entitled "Misnamed Doctrine Misleading," Marine Captain David C. Anderson argues that the concepts of maneuver warfare are sound, but the use of maneuver in the title generates confusion.[69] This discourse enabled the authors and readers alike to observe both sides of the argument. With each article, the opportunity arose for deeper insight.

Educational Reform

The publication of maneuver warfare doctrine in FMFM-1 and continued discourse in the *Marine Corps Gazette* could only go so far in solidifying the institutional understanding of maneuver warfare. Since the *Gazette* is not required reading, its contents do not reach all Marines. Similarly, while the Marine Corps published an authoritative doctrinal manual, its understanding requires institutional follow-through. Professional education provided such an opportunity, as a crucial institutional compliment to the intellectual vigor of ongoing debates, in establishing the central importance and understanding of the doctrinal philosophy, its underlying theory, and its historical context at a foundational level. While the debate was ongoing in the

Gazette, General Gray initiated institutional reforms in professional military education, including a heavy emphasis on maneuver warfare.

General Gray provided his guidance for training and education in an undated signed letter to the Commanding General of Marine Corps Combat Development Command, the Marine Corps's senior command for training and education.[70] As in his foreword to FMFM-1, General Gray offered his philosophical direction for the Marine Corps, this time with regard to the development of a concept for professional military education.[71] He directed the development of the Marine Corps University to provide "a focal point for planning, doctrine, training, education, etc."[72] The philosophical guidance for education stressed maneuver warfare in its first bullet and emphasizing how to think in the second.[73] This emphasis suggests that both points are closely related and central to his vision for education. Documents from Amphibious Warfare School (AWS) and Command and Staff College (CSC), the Marine Corps's formal schools for educating Captains and Majors respectively, confirm that the schools both received and began to act on General Gray's guidance for education.

Both AWS and CSC conducted curriculum reviews, known as Course Content Review Boards (CCRBs), around the time that the Commandant released his guidance. Even though the CSC CCRB for Academic Year 1988-1989 (AY-88-89) took place in early 1988, prior to General Gray's written guidance, the CCRB results show an addition of ten hours of maneuver warfare instruction, including a lecture and discussion about *Patterns of Conflict*, and also refers to a meeting with the Commandant earlier in the year. In addition to the ten hour package the CCRB discussion states "…*[W]e need to take a broad approach at implementing Maneuver Warfare instruction throughout the entire curriculum…Maneuver Warfare is fundamentally a thought process…classes in isolation about the subject will never be understood in the broader*

In the guidance to his Academic Year 1990 (AY-90) CCRB, the

Director of the AWS emphasized:

> The requirement to immediately recognize the importance of FMFM-1, <u>Warfighting</u>, and to incorporate its strictures into the curriculum is evident. It is now the keystone document on not only the nature and theory of war, but also on the preparation and conduct of war. Of particular significance is both this document and the Commandant's emphasis on maneuver warfare. Although maneuver warfare is already an integral part of our instruction, there is a need to specifically address maneuver warfare at the beginning of the year, sandtable it, and then nurture its understanding throughout the year by emphasizing it in all instructional packages.[75]

This quote demonstrates the centrality of maneuver warfare surrounding its adoption. The AWS director sought to introduce the concept early in the academic year and then thread it through the remaining instruction, providing a maneuver warfare link throughout the year.

The early centrality of maneuver warfare in professional military education aided in the Marine Corps's understanding of the concept in two ways. First, it demonstrated the importance of the concept to the institution, which should positively impact the other two focus points of education in the manual—the commander and the individual. Second, it provides clarification of the concept to those selected to attend the schools. Those individuals returned to the operating forces able to continue the discourse outside of the pages of the *Marine Corps Gazette* with fellow Marines. Additionally, those selected and educated at the schools have always been likely to become commanders at varying levels, thus empowered to stress the concepts inside their units.

General Gray's emphasis on professional military education was evident in his deliberate education plan, developed upon publication of FMFM-1. First, he sent the author, Captain John Schmitt, and a small team on an educational tour. This team, armed with hard copies of the manual, proceeded to work their way, regiment by regiment through the entire Marine Corps.[76] Second, Gray conducted an instructor symposium at The Basic School, the Marine Corps school

for educating its newly commissioned officers. Instructors from across the Marine Corps participated in a several-day educational effort to familiarize themselves with maneuver warfare concepts and ease the addition of these concepts into the existing programs of instruction.[77]
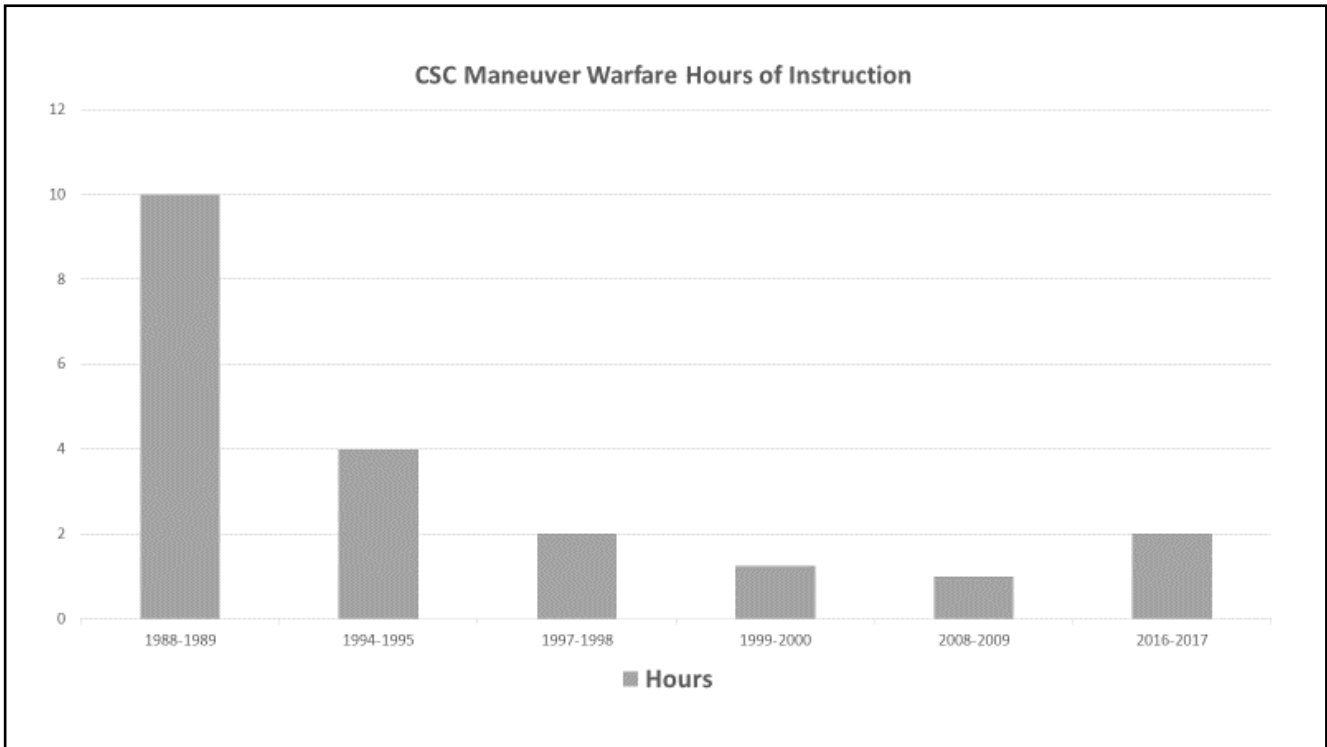

Figure 4: CSC Maneuver Warfare Instruction by Hour[78]

Unfortunately, if the CSC curriculum is representative of the other PME schools, the explicit educational focus was inconsistent at best and quickly faded.[79] As seen in Figure 4, its presence was strong at the start, while the Commandant's interest in promoting change was still high. According to the CSC Planning Calendar for AY 89-90, at the beginning of the year six and a half hours were dedicated to *Patterns of Conflict*, three and a half hours were dedicated to maneuver warfare concepts, and three hours were dedicated to a maneuver warfare practical application.[80] The length of the *Patterns of Conflict* lectures directly coincide with Boyd's briefing length and indicate that he perhaps delivered the brief in person to the CSC students. Additionally, there was a four-hour block of instruction on changing doctrine with a panel

discussion that included Lind and Schmitt. The readings included selections from Sun Tzu, retired German officers, FMFM-1, and other selected maneuver warfare readings.[81] This intense education was short lived, however. The following year the curriculum was reduced to a thirty-minute lecture, hour-and-a-half discussion, and an hour-and-a-half decision game. The assigned readings were limited to FMFM-1 and "Maneuver Warfare Articulated," an article written by Marine Major R. K. Dobson, that referenced the then obsolete OH 6-1.[82] The school increased the amount of instruction the following year. The AY 91-92 course consisted of a two-hour lecture, an hour-and-a-half seminar, and a four-and-a-half-hour practical application with the same two readings from the prior year.[83] By 1997, the scheduled time involving maneuver warfare was reduced to two-hours of lecture midway through the academic year.[84] CSC's movement of the course to mid-year, which it had deliberately placed near the beginning of the academic year less than a decade prior, suggests the fading centrality of the concept. The inconsistencies may have indicated that the school either assumed that the students were familiar enough with the concept or that individual instructors wove the theme throughout the program of instruction by 1997. However, the assumption of familiarity with maneuver warfare stood in stark contrast with the discourse in the *Gazette* and with the Marine Corps's 1997 revision of its doctrine, which inadvertently served to enable existing misunderstandings of maneuver warfare.

Doctrinal Revisions: MCDP-1

In 1997, even as the institution's explicit educational focus was dwindling, the Marine Corps rewrote and republished FMFM-1 as MCDP-1 to clarify its descriptions of the nature of war, the styles of warfare, and critical concepts of maneuver warfare.[85] The impetus to make the corrections in these three major categories suggests that the Marine Corps acknowledged the misunderstandings surrounding its doctrinal concept. Then a Major, John Schmitt, the

publication's author, also acknowledged that Boyd was more directly involved in the writing and publication of MCDP-1, as his cancer was then in remission.[86] Involving Boyd in the rewrite also illuminates Schmitt's desire to capture the original essence of maneuver warfare more accurately.

While MCDP-1's definition of maneuver warfare remained the same as the original in FMFM-1, only removing the masculine pronoun in reference to the enemy, the supporting explanation was greatly expanded. The publication expands on the physical and temporal by suggesting "maneuver in other dimensions as well…to exploit some kind of advantage…That advantage may be psychological, technological, or temporal as well as spatial."[87] It goes on to use language recognizable from Boyd's *Patterns of Conflict*, "…in order to *penetrate* the enemy system and tear it apart. The aim is to render the enemy incapable of resisting effectively by shattering his moral, mental, and physical cohesion."[88] These changes and specific choices of language clearly represent the Marine Corps's attempt to capture the original essence of the maneuver warfare concept more accurately, as focused on the mind of the enemy.

The publication clarified the descriptions of the nature of war, the styles of warfare, and the critical maneuver warfare concepts without changing General Gray's original intent for the publication to remain easily readable by all Marines. General Charles C. Krulak, Commandant at the time of MCDP-1's publication, intended to "[retain] the spirit, style, and essential message of the original."[89] The new publication was still philosophical in nature and intended to be read in its entirety. By maintaining the original intent, MCDP-1, like FMFM-1, required its readers to develop an understanding of the concepts beyond the pages of the publication, but this was even less likely to occur nearly twenty years after the concept began to appear in the pages of the *Gazette*, especially with the "Cliff notes" provided by FMFM-1 being readily at hand. This

generational gap increased the need for discourse and education to establish the theoretical

foundations of the concept. In fact, both General Krulak and General Gray acknowledged the

importance of the supporting discourse in the publication's foreword and preface respectively.[90]

The Atrophy of Debate and Educational Efforts

Unfortunately, as seen in Figure 3, the discourse surrounding the publication of MCDP-1

in the *Marine Corps Gazette* only saw a brief increase and then quickly declined. While, some

discussion continued, such as the debate surrounding the use of synchronization in maneuver

warfare, however, the same institutional vigor that surrounded the publication of FMFM-1 was

missing.[91] Four of the twenty-one articles containing at least minor substance were merely

announcements of the release of the MCDP series publications. As the substantive discussion

became one way articles, mere mentions of maneuver warfare tied to functional areas and the

introduction of physical maneuver concepts began to dominate the pages of the *Gazette.*

Maneuver warfare became little more than a superficial branding of existing programs and

spatially oriented doctrine such as Operational Maneuver From the Sea (OMFTS) and Ship-to-

Objective Maneuver (STOM).

The 2001 publication of the *Expeditionary Maneuver Warfare* (EMW) concept, which

included physical maneuver concepts such as OMFTS and STOM, further clouded the Marine

Corps's understanding of maneuver warfare and the supporting discourse in the *Marine Corps*

Gazette. While EMW does acknowledge maneuver warfare philosophy as a core foundational

competency in its initial pages, its design as a capstone concept that informs how the Marine

Corps will train, equip, and fight necessarily focuses on the specific application of Marine Corps

assets and doctrine.[92] Although the concept itself refers to maneuver warfare, its explanation

implies a more physical/spatial focus that bastardizes the explanation in MCDP-1 and the

original essence of maneuver warfare. In its section on maneuver warfare, EMW states:

> Maneuver warfare stresses proactive thought and action, elevating beyond the crude
> simplicity of attrition. It combines high tempo operations with a bias for action to
> achieve advantage—physical, temporal, or conditional—relative to an adversary. The
> aim is to shatter an adversary's cohesion, succeed in other operations by rapid action to
> mitigate damage, or resolve a crisis on favorable terms.[93]

While the quote begins by referring to proactive thought, it concludes by focusing mainly on

physical action. This approach resembles the explanation of maneuver in FMFM-1 that forgoes

the psychological domain. Though MCDP-1 explicitly referenced the psychological domain,

among others, in a deliberate revision to clarify misunderstandings, this refinement was

apparently underappreciated.

The release of this physically-focused concept generated confusion and dominated the

pages of the *Gazette.* As seen in Figure 3, coinciding with the release of EMW the number of

mere mentions of maneuver warfare in relation to substantive discussion skyrockets. Most of the

articles lacking substance over the next seven years specifically focus on the EMW concept.

Some even go so far as to refer to EMW as the Corps's "capstone doctrine," conflating the

capstone concept with the Corps's guiding doctrine, MCDP-1. This confusion may preclude the

deeper thought encouraged by the philosophical doctrine, instead favoring reference to the action

oriented concept of EMW, and thus creating a deeper rift between the existing doctrine and its

theoretical foundations on one hand, and the Corps's emerging capstone concept on the other.

The physical/spatial maneuver focus that was the subject of earlier discourse and major focus of

the doctrinal revision of *Warfighting*, began to permeate discussion again and enable the spread

of the misunderstanding.

The "attritionist letters," a series of articles published in 2010, intended to regenerate the maneuver warfare discourse in the *Gazette*.[94]   The appearance of these articles demonstrates that a group of Marines who understood maneuver warfare and sought to correct misunderstandings existed. In these articles, a group of anonymous maneuverist officers cleverly wrote about their perceived struggle in the Marine Corps to advance the practice of maneuver warfare despite the attritionist attitudes of uncritical Marine Corps leaders. In the genre of C.S. Lewis' *The Screwtape Letters*, the authors introduced misunderstandings through an imagined conversation between an attritionist general and a maneuverist captain. Throughout the series of articles published over the following year, General Screwtape attempts to refute maneuverist ideas and explain to young Captain Wormwood why they will not work. However, as seen in Figure 3, the maneuverists met limited success in the pages of the *Gazette*, sparking only a short-lived increase in discourse.

Recent articles in the *Gazette* generally fall into one of three categories. They either challenge the Marine Corps's understanding of maneuver warfare, demonstrate their own misunderstandings, or display a combination of the two preceding categories. Undoubtedly, individuals and small groups who understand maneuver warfare exist in today's Marine Corps. Claims of shortfalls in the Marine Corps's understanding and implementation of maneuver warfare go unchallenged, while the apparent misunderstandings stand uncorrected. This pattern has two possible implications. First, those reading the *Gazette*, either agree with the allegations or do not care enough to respond. Second, those reading the *Gazette* do not notice the misunderstandings, which confirms the misunderstanding in and of itself. Finally, many articles only refer to MCDP-1, *Warfighting*, equating maneuver warfare solely with the publication, and

excluding the essence of the concept from its theoretical foundations. Both are equally troublesome and undoubtedly contribute to the current misunderstanding among Marines.

As seen in Figure 4, the CSC curriculum over the same period had very little time scheduled for grappling with maneuver warfare concepts. Maneuver warfare education at the school surrounding the adoption of Boyd's ideas as doctrine in 1989 was deliberate and robust. Following the release of MCDP-1, the school did not place the same emphasis on maneuver warfare education—either in the theoretical underpinnings of the concept or the doctrinal publication itself. Curriculum guidance in the course syllabi merely refer to viewing all education through the lens of MCDP-1. In the 1999-2000 Command and Staff College course syllabus, maneuver warfare was no longer even listed as a recurring theme; rather, it states, "Within the context of MCDP-1, *Warfighting*, these themes should enable the student to better face the challenges within the academic and operational worlds."[95] A schedule from the same year includes only an hour and fifteen-minute lecture on Marine Corps doctrine.[96] In AY 02-03, more time was dedicated to the concept of EMW than maneuver warfare, though by only thirty-minutes.[97] By 2008, maneuver warfare was relegated to a one hour seminar that discussed the characteristics of war, such as uncertainty, friction, fluidity, and disorder—similar topics discussed with newly commissioned second lieutenants at The Basic School during their first week of training.[98] Subjects related to maneuver warfare, such as critical thinking, mission orders, Clausewitz, and Sun Tzu were introduced throughout the curriculum over the years, but they lacked the explicit thread of maneuver warfare to weave them together. The degree to which these subjects were tied to the Corps's doctrinal philosophy was heavily reliant on individual instructors. This method was predicated on the assumption that prior experience and schooling cultivated a solid foundation in maneuver warfare in the students and instructors alike,

which according to discourse and trends in educational efforts was flawed. Like the majority of

the articles in the *Gazette* at the time, the Marine Corps professional military education system

reflects an inconsistent approach lacking depth and, which further solidified the institution's

misunderstanding.

While MCDP-1 closely captures the essence of maneuver warfare as described in

Patterns of Conflict, the lack of consistent formal education built around its concepts and

theoretical underpinnings coupled with diminished intellectual discourse about the Marine

Corps's philosophical doctrine left a gap in Marines' understanding. Further, the doctrine has

not been updated for nearly twenty years, counter to the charge of the 31st Commandant of the

Marine Corps in the foreword to MCDP-1, which states:

> That said, I believe *Warfighting can and should be* improved. Military doctrine cannot
> be allowed to stagnate, especially an adaptive doctrine like maneuver warfare. Doctrine
> must continue to evolve based on growing experience, advancements in theory, and the
> changing face of war itself.[99]

The only Commandant to order a revision of MCDP-1 was the last, which suggests that the

Marine Corps is overconfident in its familiarity with the concept of maneuver warfare and

equates it solely with the doctrinal publication. Without supporting education or discourse and

with a stagnate doctrine, Marines generationally removed from the adoption and theoretical

underpinnings of the concept turn to MCDP-1 as *the* answer, as opposed to incorporating the

original theories it interprets. Quotes from the publication are now cherry picked and the manual

has become a reference, rather than the intended portal to a deeper understanding of the theory

contained within. As a result, the Marine Corps has lost touch with the original essence of the

concept and currently views maneuver in its physical/spatial context.

Conclusions and Implications

The Commandant is right. Maneuver warfare has lost vigor and primacy in the Marine Corps.[100] Without the discourse in the *Marine Corps Gazette* and a professional military education that centers on maneuver warfare, Marines have lost touch with the theoretical underpinnings of their doctrine. This intellectual shortfall plays a major role in the institutional misperceptions of maneuver warfare as a largely physical way of fighting that only now has implications for maneuvering in the cognitive domain. Intellectual vigor surrounded the adoption of maneuver warfare with the publication of FMFM-1 in 1989, facilitating its initial success. FMFM-1, written as the Marine Corps's philosophy for thinking about, preparing for, and conducting maneuver warfare was intentionally more descriptive than prescriptive, and this new approach to doctrine provoked vigorous debate over the validity and true meaning of the doctrine in subsequent years, as well as the revision of the doctrine itself. Following the publication of MCDP-1, however, the debate lost vigor and grew increasingly one-sided. Simultaneously, the concept of maneuver warfare quickly lost its central role in the professional education of Marines. Exacerbated by the loss of vigorous debate and the failure to place maneuver warfare at the center of the Marine Corps's professional military education continuum, the fundamental misunderstanding of maneuver warfare as a physical/spatial concept permeated the Marine Corps writ large.

While FRAGO 01/16 and the MOC indicate the Marine Corps's current misconception of maneuver as a physical/spatial concept, they also represent the Commandant's call to identify shortfalls and make corrections. Although the Marine Corps as an institution misunderstands maneuver warfare, the concept is still applicable and, as Grazier and Lind suggest, "islands" of understanding exist. Armed with knowledge of its misunderstanding and how it evolved, the

Corps can capitalize on these "islands" of understanding and lessons of the past to make necessary corrections to its doctrine, ensure the centrality of maneuver warfare in its professional educational system, and reinvigorate the discourse surrounding the concept. Twenty years following its publication, it is time to reevaluate MCDP-1. While MCDP-1 improved on FMFM-1, twenty years of additional experience, technological advances, and perpetuated misunderstandings have passed, and contrary to both General Gray and General Krulak's intent the doctrine has stagnated. Much as MCDP-1 aimed to correct misunderstandings of FMFM-1, a review and subsequent improvement may do the same today. However, just as the previous versions avoided the traditional staffing process, any revision to improve on the current publication must follow suit. The text must capture the coherent thought of a strong mind, not the cobbled fragments of a corporate body. Review and revision must reflect the Commander's intent, not the pressures of consensus-building and compromise. The authors who review and make any subsequent improvements must come from the group of Marines who truly understand the concept and they must work directly for the Commandant.

As MCDP-1 demonstrated, however, revision of the doctrine alone will not correct the existing misunderstanding. The Marine Corps must reestablish the centrality of maneuver warfare in its schools, both officer and enlisted. Maneuver warfare must be the *Schwerpunkt* of the Marine Corps educational system. The theories underlying the doctrine must be included. The schools' curriculums must be linked vertically in a progressive continuum that starts with entry-level education. They must also be linked horizontally, ensuring officer and enlisted education mirror each other at the appropriate levels. Finally, instructors at all schools, much as General Gray stressed, must be selected and better prepared for their roles in the education of the Corps. The Corps must make deliberate efforts to "educate the educators," institution-wide.

A reenergized doctrine, re-prioritized educational system, and deliberate effort to invigorate discourse in the *Gazette*, can capitalize on the recent resurgence of maneuver warfare articles. The *Gazette*, for example, could run features on the above recommended changes, deliberately soliciting opinions and facilitating the next renaissance. Further, an annual writing contest centered on the theoretical concepts behind maneuver warfare and current implications would encourage new ideas on the subject and spark additional discussion. A maneuver warfare special edition featuring articles central to the original discourse, with a charge from the Commandant that it be read by all Marines, could also serve to rekindle the discourse.

Additional areas such as training and manpower management also require reforms, but the preceding three areas will lay the foundation for broader changes. With a renewed doctrine, a forum for debate, and better educational foundation, Marines will undoubtedly find new and creative solutions to fix training problems and manpower issues. By better educating Marines, they will more deeply understand their doctrine, which empowers them to develop and conduct maneuver warfare training. These improvements will undoubtedly lead to newly identified problems and associated solutions that fall outside the scope of this paper, which will only further the requirement for forward progress and begin the entire process anew. It is time to move out on General Neller's guidance and reinvigorate and reaffirm the primacy of maneuver warfare in the Marine Corps.

Endnotes

[1] John F. Schmitt. "Understanding Maneuver as the Basis for a Doctrine." *Marine Corps Gazette* 74 no. 8, (November 1990): 99.

[2] Commandant of the Marine Corps (CMC). *Advance to Contact*. FRAGO 01/2016, (19 January 2016): 3, 8.

[3] Headquarters United States Marine Corps. *Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century*. Concept, (September 2016): 4, 8.

[4] Grant T Hammond. *The Mind of War: John Boyd and American Security*. (Washington, D.C.: Smithsonian Institution, 2004): 102.

[5] Fideleon Damian. "The Road to FMFM 1: The United States Marine Corps and Maneuver Warfare Doctrine, 1979-1989" Master's Thesis, Kansas State University, (2008): 27-29.

[6] Robert Coram. *Boyd: The Fighter Pilot Who Changed the Art of War*. (New York, New York: Bay Back Books/Little, Brown and Company, 2002) 4-7; James Fallows. "A priceless original." *U.S. News & World Report* 122, no. 11, (March 24, 1997): 9; Hammond. *The Mind of War*, 1-4. The Coram and Hammond works on Boyd offer a more complete treatment on the life and work of Boyd.

[7] Anthony John Piscitelli. "The United States Marine Corps Way of War." PhD Thesis, University of Glasgow, (2014): 44-46; William S. Lind. Man*euver Warfare Handbook*. Westview Special Studies in Military Affairs. (Boulder, Colorado: Westview Press, 1985): Acknowledgments, 1-3.

[8] Lind. *Maneuver Warfare Handbook*. 4-8.

[9] Damian. "The Road to FMFM 1." 27-30, 42-43.

[10] Ibid, 30.

[11] Ibid. 6.

[12] Ibid. 6, 95.

[13] Dan Grazier, "The Creation of *Warfighting*, with John Schmitt," *Pentagon Labyrinth,* Straus Military Reform Project, Project on Government Oversight, podcast audio, November 28, 2016. http://www.pogo.org/straus/issues/military-people-and-ideas/2016/podcast-the-creation-of.html; General Alfred M. Gray, Lieutenant General Paul K. Van Riper, and John Schmitt. "Warfighting Panel," YouTube video, March 26, 2015, 1:23:29, https://www.youtube.com/watch?v=RL4__NVYByw.

[14] Terry C. Pierce. *Warfighting and Disruptive Technologies: Disguising Innovation.* (London; New York: Frank Cass, 2004): 95.

[15] Frans P. B. Osinga. *Science, Strategy and War: The Strategic Theory of John Boyd*. London; (New York: Routledge, 2007): 131.

[16] John R. Boyd. "Patterns of Conflict." Unpublished briefing, (last modified in 1986): 111. Retrieved from http://www.dnipogo.org/boyd/pdf/poc.pdf. Emphasis from original briefing slide.

[17] Osinga, *Science, Strategy*, *and War,* 139.

[18] Boyd. "Patterns of Conflict." 12.

[19] Coram. *Boyd*. 329.

[20] Boyd. "Patterns of Conflict." 7.

[21] Boyd. "Patterns of Conflict." 7.; Osinga, *Science, Strategy*, *and War,* 141.

[22] Ibid. 115.

[23] As mentioned in Boyd's purpose for *Patterns of Conflict*, he studied conflict writ large, thus the use of the term maneuver conflict. The study of conflict implies a larger scope than the study of war or warfare. The "maneuverists" introduced the term maneuver warfare for use in the Marine Corps, an organization focused specifically on war. For the same reason, Boyd uses the term adversary vice enemy. For the purposes of this study, adversary is used in the section on Boyd's ideas to remain consistent with his thought process. Enemy is used throughout the remainder of the paper, consistent with the Marine Corps's focus on warfare.

[24] Boyd. "Patterns of Conflict." 114-117.; Osinga, *Science, Strategy*, *and War,* 166-169.

[25] "John Boyd Patterns of Conflict Part 11," YouTube video, February 2, 2015, 27:32, Retrieved from https://www.youtube.com/watch?v=iTu3kI-hZnw.

[26] Boyd. "Patterns of Conflict." 12. Emphasis from original briefing slide.; Osinga, *Science, Strategy*, *and War,* 142.

[27] Boyd. "Patterns of Conflict." 174-175.

[28] Sun Tzu, The Art of War, Samuel B. Griffith, ed. and trans. (New York: Oxford University, 1963): 91.

[29] Boyd. "Patterns of Conflict." 14.

[30] Bruce Condell and David T. Zabecki, eds. *On the German Art of War: Truppenführung*. (Boulder, Colorado: Lynne Rienner, 2001): 3-5. The editors point out that the concept is not referred to by name in *Truppenführung* it is

clearly present. Boyd's explanation of the concept is consistent with the editors and as seen throughout their translation of *Truppenführung*.

[31] Boyd. "Patterns of Conflict." 74.; Osinga, *Science, Strategy*, *and War,* 156-157.

[32] *Nebenpunkte is the plural form of Nebenpunkt*

[33] Boyd. "Patterns of Conflict." 70-78.; Osinga, *Science, Strategy*, *and War,* 156-159.

[34] Boyd. "Patterns of Conflict." 175.

[35] Osinga, *Science, Strategy*, *and War,* 229. As noted by Osinga, Boyd's only graphical representation of the OODA loop did not appear until 1995 in Boyd's final contribution to *A Discourse*, *The Essence of Winning and Losing.*

[36] Lind. *Maneuver Warfare Handbook.* 5-7.

[37] The OODA loop itself is often oversimplified, which further complicates these issues. This study does not have the ability to address the specific current misunderstanding of Boyd's OODA Loop. For a detailed analysis of this issue see USMC Major Paul Tremblay's unpublished master's thesis, "Shaping and Adapting: Unlocking the Power of Colonel John Boyd's OODA Loop," at http://www.pogoarchives.org/straus/shaping-and-adapting-boyd-20150422.pdf.

[38] Headquarters United States Marine Corps. *Marine Corps Operating Concept*. 8.

[39] Ibid. MAGTF acronym utilized in MOC stands for Marine Air Ground Task Force.

[40] Ibid.10.

[41] Ibid.

[42] Boyd. *Patterns of Conflict*. 115.

[43] Headquarters United States Marine Corps. *Warfighting*. FMFM 1. Washington, DC: Headquarters United States Marine Corps, (March 6, 1989):75.; Headquarters United States Marine Corps. *Warfighting*. MCDP 1. Washington, DC: Headquarters United States Marine Corps, (June 20, 1997): 94.

[44] The Ellis Group. "21st Century Maneuver Warfare: Absorbing the Lessons." *Marine Corps Gazette* 100, no. 11, (November 2016): 36-37.

[45] Ibid. 37, 39.

[46] Ibid. 39-40.

[47] The Ellis Group. "21st Century Maneuver: Mastering the Maneuver Spaces." *Marine Corps Gazette* 101, no. 2, (February 2017): 73.

[48] Ibid. 73.

[49] Ibid. 74-75.

[50] HQMC. *Warfighting*, MCDP-1. 72. Of note, this expanded definition of

[51] Gregory A. Thiele. "The Warfighting Skills Program: An Opportunity—Take Advantage of It." *Marine Corps Gazette* 100, no. 8, (August 2016): 53.

[52] Daniel A. O'Hara. "The Re(al) Awakening" Thoughts on the Direction of the Postwar Marine Corps." *Marine Corps Gazette* 98, no. 5, (May 2014): 47.

[53] Daniel R. Grazier and William S. Lind. "Maneuver Warfare: Making it real in the Marine Corps." *Marine Corps Gazette* 99, no. 4, (April 2015): 24.

[54] Daniel R. Grazier. "A Manœuvre Renaissance" Overcoming the Attritionist Tendency." *Marine Corps Gazette* 99, no. 6, (June 2015): 57.

[55] Ibid. 58.

[56] Ian Brown. "Letters: Maneuver Warfare." *Marine Corps Gazette* 99 no. 8, (August 2015): 6.

[57] HQMC. *Warfighting*, FMFM-1. Foreword.

[58] *Merriam-Webster Dictionary* Online. "philosophy," accessed January 8, 2017. https://www.merriam-webster.com/dictionary/philosophy.

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[61] Ibid. 58.

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[63] Coram. *Boyd*. 388.

[64] The author conducted the search in the *Marine Corps Gazette* digital archives at https://www.mca-marines.org/magazine-archive-search?search_api_views_fulltext=%22Maneuver+Warfare%22. Articles were not analyzed for their understanding of maneuver warfare, only the amount of substance surrounding the term's use.

[65] William S. Lind. "Misconceptions of Maneuver Warfare." *Marine Corps Gazette* 72 no. 1, (January 1988): 16-17.

[66] Kevin R. Clover. "Maneuver Warfare: Where are We Now." *Marine Corps Gazette* 72 no. 2, (February 1988): 54-59; Michael D. Wyly. "Ideas for Changing Doctrine." *Marine Corps Gazette* 72 no. 8, (August 1988): 41-43; Michael D. Wyly. "Operational Handbook 6-1, *Ground Combat Operations*." *Marine Corps Gazette* 72 no. 7, (July 1988): 30-31.

[67] John F. Schmitt. "Understanding Maneuver as the Basis for a Doctrine." *Marine Corps Gazette* 74 no. 11, (November 1990): 90-100.

[68] Andrew D. Walker. "An Alternative to Maneuver Warfare." *Marine Corps Gazette* 75 no. 11, (November 1991): 48-51.

[69] David C. Andersen. "Misnamed Doctrine Misleading." *Marine Corps Gazette* 75 no. 6, (June 1991): 26.

[70] General Alfred M. Gray to Commanding General Marine Corps Combat Development Command, Undated, General Alfred M. Gray Papers, Archives and Special Collections Branch. Library of the Marine Corps, Box 6, Folder Alfred M. Gray P.C. 2580 CMC Guidance on Improved Training and Education Jul 1989, Coll. 2580. A comment in paragraph two references recent HASC testimony on 12 July 1988, which indicates that the letter is likely from late 1988. It also provides a suspense date of 1 April 1989 (less than a year away).

[71] Ibid. 1.

[72] Ibid. 2.

[73] Ibid. 3.

[74] Director, Command and Staff College to Distribution List, Report of Course Content Review Board (CCRB) and Action Required for AY 1988-1989, 16 May 1988, Command and Staff College, Administration 1988-1989, Box 1, Folder: Course Content Review Board, 8-9.

[75] Director Amphibious Warfare School to AWS Faculty and Staff, Amphibious Warfare School Box 57, Course Content Review Board 1987-1989, Folder CCRB AY-90, 1.

[76] Dan Grazier, "The Creation of *Warfighting*, with John Schmitt," *Pentagon Labyrinth,* Straus Military Reform Project, Project on Government Oversight, podcast audio, November 28, 2016. http://www.pogo.org/straus/issues/military-people-and-ideas/2016/podcast-the-creation-of.html; General Alfred M. Gray, Lieutenant General Paul K. Van Riper, and John Schmitt. "Warfighting Panel," YouTube video, March 26, 2015, 1:23:29, https://www.youtube.com/watch?v=RL4__NVYByw.

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[79] Command and Staff College is used as a main example because it was collocated with the newly established Marine Corps University and the availability of archival material.

[80] Command and Staff Planning Calendar AY 89-90, Week 5, Command and Staff College, Administration 1989-1990, Box 1, Folder: Planning Calendar.

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[85] HQMC. *Warfighting*, MCDP-1. Foreword.

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[87] HQMC. *Warfighting*, MCDP-1. 72.

[88] Ibid. 73.

[89] Ibid. Foreword.

[90] Ibid. Foreword, Preface.

[91] John F. Schmitt. "If Not Synchronization, What?" *Marine Corps Gazette* 81, no. 1, (January 1997): 54-60; Irvin E. Evans III. Untitled Letter, *Marine Corps Gazette* 81, no. 1, (January 1997): 10.

[92] J.L. Jones. "Expeditionary Maneuver Warfare." Marines 33, no. 1 (January 2004): 1. MasterFILE Premier, EBSCOhost (accessed December 27, 2016).

[93] Ibid. 4.

[94] Colonel John Kennan, USMC (Ret), "Editorial: Don't Ask Don't Tell." *Marine Corps Gazette* 94, no. 5, (May 2010): 3.

[95] Course Syllabi, Chapter 2 Command and Staff College, Command and Staff College, Administration 1999-2000, Box 1, Folder: Syllabi of Instruction, 18.

[96] Weekly Schedule, Command and Staff College (Week 18), 2 Dec 99, Command and Staff College, Administration 1999-2000, Box 1, Folder: Schedules.

[97] Weekly Schedule, Command and Staff College (Week 23),19 Dec 02, Command and Staff College, Administration 2002-2003, Box 1, Folder: Schedules.

[98] Warfighting…From The Sea Warfighting Course Card, 4 Aug 08, Command and Staff College, Administration 08-09, Box 9, Folder: Warfighting Lessons 1201-1205 Syllabus AY 08-09. The author taught the *Warfighting* Discussion group during his time as an instructor at The Basic School from 2013-2016.

[99] HQMC. *Warfighting*, MCDP-1. Foreword.

[100] In this study, primacy is interpreted to coincide with the Merriam-Webster Online Dictionary. Primacy is defined as "the state of being first (as in importance, order, or rank)." *Merriam-Webster Dictionary* Online. "primacy," accessed January 29, 2017.

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