





SAPARE AUDE AND WILL TO TRUTH: IMPLICATIONS ON CAMPAIGN ASSESSMENT

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INTRODUCTION

Metacognition is hard. Thinking about military thought requires considerable mental exertion, yet the fruits of this effort are sweet. The perennial question is simple: how do we know what we think we know to be true? In war this is a deadly serious question. Without an understanding based on reality, friendly lives will be lost and defeat will loom large.

The nature of conflict is defined by the environment in which it takes place. The combination of belligerents and chance, all with feedback loops between them, form a complex system akin to a natural ecosystem. As Lopes et al, notes in their study of chaotic systems, small changes the initial conditions can lead to large changes in system output.¹

At any moment of time a complex system is in a régime, or class, that describes the general functioning of the complex system. Although mathematic approaches to classification are used, often the system's complexity is such that humans are needed to divide the output of a complex system into classes.

As climate scientist Biggs notes, a régime change is a major and persistent change in the structure and/or functioning of a system.² Yet identifying the changes between class or régime is a difficult task. The planner needs to know what régime the conflict is in so as to tailor operations to the current situation and avoid fighting the previous fights. Knowing the current régime minimize the impacts of the conflict and maximize the opportunities a régime offers to bring the fight to the enemy.

Lopes and others, "A Proposal for Regime Change/duration Classification in Chaotic Systems.", 1419

Biggs, Carpenter and Brock, "Turning Back From the Brink: Detecting An Impending Regime Shift in Time to Avert It.", 826

This identifies what this paper presents as the campaign assessment problematique - Can we be assured that what we think we know about the campaign régime is objective truth? Further, with this understanding, what is the régime in which the conflict being waged?

This paper argues that régime changes are preceded by changes in initiative, culmination and increased apparent battlefield randomness. These shifts provide opportunities for campaign planners to reframe the operational problem. As well, they can develop new campaign metaphors to move towards an acceptable end state.

This paper examines campaign assessment in three major parts. The philosophical underpinnings of Clausewitz, Jomini and Lyotard are examined first. We will see that Kant, Hume and Nietzsche play an important role in formulating how we view the nature of knowledge and truth. With this background in mind, two analytical frameworks are explored. A Classical approach to campaign assessment is outlined based on Clausewitz and Jomini. As well, a Narrative approach based on Lyotard, Davidson and Austin is proposed. Finally, this paper examines the implications that arise from the synthesis of these Classical and Narrative approaches.

SAPARE AUDE VERSUS WILL TO TRUTH

Dare to know! Will to truth! Bold commandments, each with very different implications.

This section presents two schools of thought about knowledge and truth. Beginning with Kant, the Enlightenment view of knowledge is compared with the postmodern view espoused by Lyotard. We will see later in this paper how these two philosophical frameworks underpin the classical and narrative approaches to campaign assessment.

On the thirtieth of September, 1784, Immanuel Kant coined a phrase that would define a period: Sapere aude! Dare to know! Europe was in the grip of the Enlightenment, questioning the very basis of knowledge and understanding. Kant argued that humanity was now mature enough to find answers on their own through free thinking and intellectual energy. With individual focus and drive, people could understand God, nature and government on their own.³ There was no need to appeal to authorities blindly for knowledge.

Six years later Kant presents his conception of nature in *Critique of Judgement*. He argues that nature has an end purpose. Known as teleology, Kant's conception of nature saw many actors each having their own natural purpose that drove them towards an end-state. The observable properties of natural beings and forces, their aesthetic form, are the exhibition of its objective purpose. Aesthetic is measured by the senses, while the objective purpose is discerned by understanding, logic and reason.⁴

Under this framework knowledge is objective. Truth could be deduced by logic based on observation of the environment and its constituent actors. These actors follow a path towards some end-point. In postmodern terminology,⁵ this path would be known as a grand narrative - a large overarching narrative that described the overall plan and story arc of existence.

Even during the Enlightenment there was skepticism over what humans could truly understand about their environment. David Hume argued in 1777 that all human understanding was based on cause and effect. Human understanding is not based on reasoning, but rather on experience. We draw general understanding by assuming what happened in the past will

Kant, "What Is Enlightenment?"

⁴ Kant and Pluhar, *Critique of Judgment.*, Into, section VIII, pg 33

Lyotard, The Postmodern Condition: A Report on Knowledge., need a page

continue in the future. Yet, as Hume argues, since we never know if the "course of nature" remains constant, all of our understanding is actually a circular argument and thus moot.⁶

Like Hume, Nietzsche questioned the nature of knowledge. Whereas Hume was skeptical that truth would remain constant, Nietzsche questioned the mere existence of objective truth. In the first essay in *The Genealogy of Morality* he presents a nation divided between master and slave. Each society believed that they represented good and the other evil. However, since the masters had the power and the slaves were weak, the master's understanding of truth was validated by force. As he had said earlier in *Thus Spake Zarathusa*, the highest human striving is the will to power over others, and the will to truth to impose their own truth on the environment.

In 1979 Jean-Francois Lyotard presented a report on the condition of knowledge to the Conseil des Universities in Quebec. His work dealt with the conflict between science and narrative that the introduction of computer networks had begun to introduce. The conflict was simple yet the results complex - with access to information becoming democratized how would information be legitimized? Who, or what, would be the ultimate judge on the validity of knowledge?

⁶ Hume, An Enquiry Concerning Human Understanding (1748, 1777)., E 4.21 36-39

Nietzsche, Ansell-Pearson and Diethe, On the Genealogy of Morality., I, 13, 25-27

[&]quot;Could ye CONCEIVE a God?—But let this mean Will to Truth unto you, that everything be transformed into the humanly conceivable, the humanly visible, the humanly sensible! Your own discernment shall ye follow out to the end! And what ye have called the world shall but be created by you: your reason, your likeness, your will, your love, shall it itself become! And verily, for your bliss, ye discerning ones!"

Building on Nietzsche, Lyotard argued that a stated truth is legitimate only if everyone believed it too. Objective truth only exists in the "unanimity between minds." Since objective knowledge was teleological, it was following a grand narrative towards a universally understood end. This contrasted with the postmodern condition. Postmodernity is skeptical of grand metanarratives. Although "skeptical" does not imply "reject," it does believe that nature and society consists of a collection of heterogeneous elements within a larger whole. Rather than grand narrative, local determinism within a system of elements rules the day. ¹⁰

Local determinism arises through the process of knowledge legitimation. Since knowledge is either objectively scientific or a subjective narrative, tension results between the two.

Knowledge is thus relational and it becomes impossible to judge the validity of truth statement by either objective or subjective means alone. Knowledge becomes legitimated through a language game between the knower and the referent who is receiving the information. Narrative and science are both required to communicate knowledge, and since unanimity of minds is impossible under these conditions, neither the knower nor referent can really know what they think they know.

These two views on knowledge offer lenses through which to view war and campaign assessment. The Kantian lens ascribes purpose to being and that form follows function. The postmodern sense views truth as relational and subjective, with no grand-narrative other than that which an individual vainly ascribes to the situation.

⁹ Lyotard, The Postmodern Condition: A Report on Knowledge., xxiii

¹⁰ Ibid., xxiv

¹¹ Ibid., 26

¹² Ibid., 11 & 38

Both lenses have value. Real life is Kantian. The simple fact that humans are born, have aspirations and die gives a basic grand-narrative that every person must follow. No amount of power or number of language games will change that. War and conflict is very much a battle of ideas through violence, with one side trying to dominate the other in order to change the way that they think and act. As the Apostle John might have said on the subject, war is a language game made flesh.

This paper casts the two lenses as the Classical and Narrative approach, respectively. The Classical approach is used by Clausewitz and Jomini casts war as rational, observable and possessing a grand narrative. The Narrative approach of design views war as a series of linked metaphors expressed through narrative. Metaphors express the immediate operational problems, goals and environment. As existing metaphors become de-legitimized, new ones arise. The changing metaphors form an overall narrative that represents the campaign and conflict.

THE CLASSICAL APPROACH

The Classical approach treats war as teleology, moving along a linear path towards a preset goal. This section presents the works of Clausewitz and Jomini through the lens of Kantian thinking. We will see that Clausewitz's work addresses the objective purpose of war. Jomini discusses the aesthetic of war and its grand narrative that propels combatants. This section also considers the Clausewitzian trinity through a thought experiment, yielding an interesting result. As the power differential between the opponents narrows, the impact of randomness on the battlefield increases. This impact of randomness is discussed in depth in a later section.

Clausewitz envisioned war as being like a wrestling match. Each wrestler aims to overpower the opponent, throw him from the ring and compel him to his own will. Force is met with counterforce, ¹³ and each opponent maximizes their respective effort until their opponent is exhausted and defeated. War, like wrestling, becomes the maximal use of force to enforce compliance with our desires. ¹⁴

However the result of any match is never certain. Clausewitz believed that human traits like courage and audacity makes war game-like. It is a game where the moves are limited only by human creativity. Yet war is not just between armies, it is between peoples. War harnesses their collective emotions, giving war its strength. War then moves at a variable speed, in proportion to the desires and strength of feeling held by the people. The combination of human creativity and variable emotion give war its unique characteristics among human endeavor.

At the end of *On War*'s first chapter, Clausewitz introduces his trinity concept. He states that war is a combination of hate and violence, chance and subordination to politics. As Echevarra notes, each element of Clausewitz's trinity is unique, yet part of a greater whole.¹⁷ If we conceptualize these forces arrayed on a pie chart, we can imagine each section gaining in size based on their relative power. Powerful own purpose is manifested on the battlefield by success and powerful hostility¹⁸ by battlefield failure. Chance is manifested in battlefield indecision.

¹³ In Clausewitz's words "Polarity." Clausewitz, Howard and Paret, *On War.*, 83

¹⁴ Ibid., 75

¹⁵ Ibid., 86

¹⁶ Ibid., 87

¹⁷ Echevarria, Clausewitz and Contemporary War., 70

Recasting hostility as "enemy purpose."

Jomini has a somewhat differing view on war. Rather than approaching war from a theoretical perspective, he aimed to provide the General practical assistance in pursuing his craft. Jomini aimed to give his readers the tools he believed were needed to be successful in war.

The Art of War in Jomini's conception consists of Strategy, Grand Tactics, Logistics, Tactics of the different arms and engineering.¹⁹ His writings on strategy are germane even today, particularly his concept of lines of operation and decisive points.

Jomini saw a line of operation as being a road, or line of communication, that an army could follow.²⁰ An army would enter the theatre²¹ of operations at one end of the line of operation and follow it to achieve victory at the end. Along this line of operation there would be one or more decisive points. These decisive points are places that when captured give the friendly force commander a "marked influence" over the campaign.²²

Measuring success is very straight forward in a Jominian framework. Progress moves linearly from the start of the line of operation to a final battle and victory at the end. The commander knew how much progress he had made simply by positioning himself along the line of operation. If he was half way along, he was half way to victory.

The Jominian lines of operation and decisive points see extensive use today. Modern doctrine has abstracted these concepts from their geographical shackles. Lines of operation do not necessarily correspond to routes nor do decisive points to terrain. However, this has made

de Jomini and Messenger, *The Art of War.*, 66

Clausewitz too implicitly notes that battles are joined to gather in a sequence, often separated in time in purpose, forming campaigns. Ibid., 100; & Clausewitz, Howard and Paret, *On War.*, 227

²¹ Zone of operations in Jomini.

de Jomini and Messenger, *The Art of War.*, 86

the analyst's task more difficult. Without physical evidence of progress how does one know how close they are to achieving their objective?

Clausewitz and Jomini were firmly rooted in the ethos of the Enlightenment. Certainly when reading their works, Kant's influence is visibly lurking in the background. The implications to Clausewitz and Jomini are clear. War is the aesthetic of the underlying political end. The grand narrative is Jomini's lines of operation or Clausewitz's campaign. War is teleology. A specific endpoint is envisioned and a grand narrative is extracted to guide the battles towards the end state. Combat and maneuver were simply the exhibition of the politics that drove towards the end-state that would be reached. Progress on the ground was a good proxy for progress along the grand narrative. Yet, as Napoleon learned after capturing Moscow, victory may lead to ultimate loss. To address his concept, Clausewitz introduces applies the concept of culmination to warfare.

In warfare, the force that an attacker can bring to bear diminishes over time. In Book Seven of *On War*, Clausewitz notes that total effect of conquering and occupying enemy territory will naturally reduce the attacker's own strength.²³ Clausewitz uses nature to illustrate the approach of the tipping point. A force small force applied counter to the movement of an object will eventually bring it to a stop; even if the force is small. This force can come from the natural frictions of movement or be applied directly.²⁴ Eventually the attacker will be faced with the situation where the defensive reaction "turns" and is able to check the attacker.²⁵ Thus the

²³ Clausewitz, Howard and Paret, On War., 527

²⁴ Ibid., 572

²⁵ Ibid., 528

attacker's major concern is having sufficient forces and applying them effectively so that the enemy is brought to terms before the attacker reaches this culmination point.

Jomini did not explicitly discuss culmination in his principles. However his principles recognized that the attacker had to organize their lines of operation to allow them to act with greater force than the enemy. ²⁶ Culmination, in Jomini's conception, becomes the moment when initiative passes from the attacker to the enemy. The defender's job is to use all elements of the ground and their own forces to find a profitable moment to "wrest...the moral effect" from the attacker over to the defender. ²⁷

Turning points in campaigns thus have both a physical and moral component. Returning to the attacker, their goal is to defeat the enemy before their physical strength drops below that which is needed to attain their objectives and maintain the initiative on the attack. The defender aims to do the exact opposite, to wear the attacker down and seize the moral advantage.

Returning to Clausewitz's trinity, let's perform a thought experiment. The attacker's purpose is striving against the defender's hostility in an environment governed by chance. As the attacker's material and moral strength wanes, the strength of purpose wanes in turn. If the war goes on long enough, eventually the strength underpinning at the attacker's purpose will meet the increasing strength of enemy hostility. A point will come where the strengths of purpose and hostility are perfectly counterbalancing. This counterbalancing point is Clausewitz's culmination point of the attack. In Jominian terms, this is the moment where the defender can seize the initiative and assume the role of purpose versus the attacker's hostility.

de Jomini and Messenger, *The Art of War.*, 176

²⁷ Ibid., 185

When purpose and hostility are balanced, then war is governed by chance. Further, as the comparative strengths of attacker and defender become closer in magnitude, chance plays a greater role in determine the outcome of the campaigns. When the attacker is weakened, the defender has more opportunities to exploit their opponent's mistakes and throw them off balance. Conversely, the attacker must rely on exploiting the defender's mistakes and loss of will to reach their objectives as their power decreases.

Taking this one step further, if we discount the impact of moral elements²⁸ (or assume that they are in balance), the combatants are locked in deadly struggle yet each are unable to achieve their objectives. The material and moral discrepancies between the attacker and defender allow for maneuver. As culmination is approached, maneuver ceases and attrition begins to rule supreme.

This thought experiment implies that two broad régimes exist: maneuver and attrition.

Maneuver exists when one side has a preponderance of material or moral force over another.

This preponderance allows them to cut through the impact of chance in war to achieve their goals. Attrition exists when no side has a greater strength. Chance dominates the course of the war rather than human agency and both sides wear each other down.

Historically, this bears out. The First World War saw this process play out on land. Early German maneuver, where they had material strength and moral superiority in the form of initiative, gave way as their material strength waned in the face of machine guns and barbed wire. German moral strength culminated in the face of a French counter attack along the Marne. The subsequent four years of the war existed in an attritional régime. Neither side had a moral or

These being the commander's skill, the experience of courage of the trips and their patriotic spirit. Clausewitz, Howard and Paret, *On War.*, 186

material superiority, and the war drifted aimlessly in the West. Apparent successes quickly became losses and vice versa. The German experiences in Verdun in 1916 and the Allies in Cambrai in 1917 certainly felt the effects randomness and chance in the outcomes of their major engagements. By 1918, the Germans were able to achieve a moral and physical superiority over some allied forces during the St Michael offensives in the spring. However, this was met by overwhelming Allied moral and material strength in the summer and autumn, leading to final Allied victory.

The classical perspective is appealing. The Clausewitzian trinity model and culmination lend themselves to easy adaption. Further, Jomini's lines of operation and moral factors of initiative are practical, concrete concepts. Yet the classical approach presents war in a reductionist frame. Modern conflicts are multifaceted and the classical approach lacks the ability to fully understand the environment in a way that allows a planner to fully exploit the enemy.

THE NARRATIVE APPROACH

Unlike the classical approach, the postmodern approach is skeptical of teleology. This section presents the elements of the design through a postmodern lens. By examining the roles of metaphor, language and legitimation, insight is gained in to the framing-reframing cycle. Although the postmodern approach is critiqued, it offers a unique sense to view campaign progression. Rather than looking at régimes, it presents campaign themes as metaphors for reality. These metaphors provide the basis of understanding for assessment.

Under postmodern conditions, objective understanding becomes effectively impossible. Metaphor becomes the means of framing the environment. Donald Davidson²⁹ explored the utility of metaphor in his seminal work *Truth and Meaning* as a way to understand how a finite number of words in a vocabulary can lead to the expression of an infinite number of ideas. Meaning must be abstracted from the actual expression of words, since truth is relative to both time it is expressed and the speaker speaks them.³⁰ When ideas are freed from the shackles of the meanings of the words used to express them, we can use the metalanguage of metaphor to express new ideas in the language of the old.

In Clausewitz's trinity, a second, deeper, metaphor is seen. Purpose and hostility are opposing metanarratives, each driving the respective sides towards their objectives. Chance then becomes a metaphor for complexity. Purpose and hostility only have meaning in relation to each-other. Purpose without hostility, and vice versa, is merely politics by normal means, not war. However chance encompasses the totality of the elements that cannot be neatly individually described or even perceived. Like an error term in a mathematical model, it encompasses the net effect of all the other known, unknown and random forces that add noise to the system.

Implicitly, Clausewitz frames "chance" as all of the things that the observer cannot know about the system that they are operating in.

Before we can determine if a metaphor is appropriate or not, we need to make a diversion into language and performativity. Austin³¹ describes in his collection of lectures *How to Do*

David Donaldson is one of the twentieth century's preeminent philosophers and was a professor at the University of California, Berkley until his death.

Davidson, "Truth and Meaning.", 306 & 320

John Austin was a philosophy professor at Oxford University until his death.

Things With Words that words are very often used beyond their meaning and intended grammar. A statement so constructed (beyond meaning or grammar) makes sense only when the statement is performing an action. The example he uses is the marriage ceremony. The statement "I do" is not "reporting" a marriage but actually completes it. ³² So an appropriate metaphor is one that is performative. It reflects reality sufficiently to allow action to result. In a military context, when it is fit to provide impetus to initiate and guide military action. The régime is the metaphor and vice versa.

Lyotard echoes the idea of performativity in *The Postmodern Condition*. He argues that the ultimate goal of any truth seeking endeavor is performativity. To be legitimate, knowledge needs to either work or be backed by power. It works if it represents the best "input/output" function for the situation at hand.³³ Conjuring Nietzsche, Lyotard acknowledges that raw power is self-legitimizing, giving those with power the ability to control the narrative context.³⁴ Objective truth is reduced to optimized procedures backed by force. The dominant metaphor is thus legitimate only so long as that metaphor is the model of the situation; or is supported by a preponderance of force versus the enemy.

As a concrete example, consider Germany in World War Two. Their narrative, although hideous, was legitimate over Europe for five years. So long as they had sufficient force to impose their worldview, it held sway. Once their force was bested, then their narrative was replaced by those espoused by the Allies.

Austin, How to Do Things with Words., 6-11

Lyotard, The Postmodern Condition: A Report on Knowledge., 47

³⁴ Ibid., 48

There are similarities between the earlier thought experiment and the legitimization/de-legitimization process. Recalling the thought experiment above, as the power differential between purpose and hostility narrows, chance's influence on the battlefield increases. The consequence that the experiment postulates is that this presages a régimen change from maneuver to attrition. Yet if we replace "chance" with "implicit complexity," then the problem for military planners becomes how to make the implicit, explicit and move out of the attritional régime.

Making the implicit explicit is the crux of the systematic operational design (SOD) process. As Vego³⁵ puts it, SOD is based on iterative problem framing and re-framing based on systematic adaption.³⁶ As the amount of implicit complexity increases, the existing framing metaphor becomes less viable as a way of understanding the operational problem. Conversely, when implicit complexity is low, like during a maneuver régime, the existing operational metaphor remains intact longer.

Framing is about building a shared understanding of the environment through narrative.

BGen Wass de Czege³⁷ explains the process as being based on a "learn, assess, adjust" cycle. An initial frame based on strategic direction is constructed and used to view the exploitable tensions that exist in the real world.³⁸ This frame, or metaphor, is inherently performative. It is legitimate in so far as it works or is backed by a preponderance of power.

Milan Vego is the R.K.Turner Professor of Operational Art at the US Naval War College.

Vego, "A Case Against Systematic Operational Design."

Been Huba Wass de Cage is a researcher and mentor into strategy, operational art and tactics.

de Czege, "Systemic Operational Design: Learning and Adapting in Complex Missions.", 8

As the campaign progresses, a metaphor retains its legitimacy until it is no longer performative. Either it no longer works, either due to an increase in complexity or lack of force, or it carries through to successful conclusion.

The implication for campaign assessment is that the frequency of re-framing is proportional to the level of implicit complexity. If chance is becoming the dominant force on the battlefield, or initiative has even lost, reframing should happen frequently. Potentially in a highly network based, attritional battlefield such as counter insurgency, then reframing should happen continuously.

The postmodern narrative approach is not without its criticisms. Chiefly amount them are the relativism and the success of the modern, rational and empirical Kantian approaches. The rejection of metanarrative results in a relativism that strips concepts of true meaning, limiting the utility of the concept.

Charles Lindholm,³⁹ in his defense of anthropology from postmodern attack, notes that the postmodern rejection of grand narrative leads to a universe of "open and limitless choice," that doesn't exist in real life. As he goes on to argue, that just because an object can be described a plethora of different ways, doesn't mean it can be used in many different ways as well. Further, postmodernism ignores the primary grand narrative that everyone is part of – death.⁴⁰ People are still governed by the biological processes of birth, growth, aging and death. This provides a common inescapable grand narrative that binds us all. No matter what, grand narrative still influences existence.

Charles Lindholm is a professor of anthropology at Boston University.

Lindholm, "Logical and Moral Dilemmas of Postmodernism.", 752 - 753

Richard Dawkins takes a similarly dim view of the postmodern approach. In his review of *Intellectual Imposters* in Nature, he proposes that postmodernity may be just a joke. If all truth is relative, and all points of view valid then the whole edifice is nothing but a word-game.⁴¹
Certainly Dawkins criticism feels valid. Lyotard and Davidson emphasize the ambiguity of knowledge and language respectively, which undermines their own claims on legitimate truth.

Yet the postmodern approach still has appeal when addressing the complexities of modern warfare. Clausewitz and Jomini are useful constructs, but their warfare models oversimplify the realities of the security environment we find ourselves today. As Elkus notes, the classical approaches may be useful for well-defined problems, but a postmodern systems approach is needed to even begin to understand the problem that needs to be solved.⁴²

The postmodern approach is operationalized through design. Design aims to conceptualize the environment in terms of a system. Dalton notes that systems thinking is done to identify the elements within the system, and their relationships, in order to exploit the tensions that exist within. The designer's task is then to arbitrarily define the systems boundaries so as to make the task manageable. As we have seen above with Lyotard and Davidson, the designer's framework does not exist in reality. Rather, it is a metaphor for the some combination of objective and narrative truth that exists in the physical world.

Identifying turning points is more difficult in the postmodern approach. Unlike culmination in the Classical approach, which is visible and dramatic, system changes are nonlinear and

Dawkins, "Postmodernism Disrobed."

Elkus and Burke, "Operational Design: Promise and Problems."

Dalton, "Systemic Operational Design: Epistemological Bumpf or the Way Ahead for Operational Design?", 34

potentially invisible. Small or large inputs may have impacts out of proportion with their magnitude. Yet one element that is in common is the impact of chance and randomness. If we accept that chance is a metaphor for complexity, then battlefield randomness is due to an element of complexity that is not otherwise accounted for in the operational metaphor that has become increasingly important. In classical terms this is when purpose and hostility are balanced. In postmodern terms it is when complexity is unaddressed or has increased.

Combining the two approaches yields interesting similarities, particularly about régime changes. The Classical approach views régime changes happening around pivotal campaign events such as change of initiative or culmination. The Narrative approach relies on the process of legitimization and de-legitimization. When combined, we can view a loss of initiative as a narrative de-legitimization. The narrative in play has lost its ability to influence the battlefield. As Lyotard might have said, the narrative lost the language game. Culmination is when a narrative is delegitimized by losing the ability to impose force on the enemy.

Reframing or régime change have similar symptoms. Régime change is presaged by major battlefield events, reframing by increasing randomness and complexity. Operational planners must not be shy about challenging their key assumptions and viewpoints regularly in the face of battlefield events. Major events, or increasing variability, demands immediate attention.

CONCLUSION

This paper has shown two lenses through which we can view the campaign assessment problematique. How can we be assured that what we think we know about the campaign régime is close to being objective truth? To answer this we have used the works of great philosophers to

describe how we can know something, and if that truth is even universal. Following the work of Kant and Lyotard, this paper presents two distinctive lenses through which to view the world. The Classical Kantian approach where observation teamed with logic allows one to learn the objective truth and identify a teleological end state that we are hurtling towards. Contrasting this is the postmodern narrative approach that is skeptical of teleological end states, and presents all truth is subjective rather than truly objective.

Clausewitz and Jomini are products of the classical approach. Clausewitz's trinity model, combined with Jominian lines of operation provide a useful framework for the assessment of campaigns. Yet their very simplicity is somewhat unsatisfying. Much of the complexity that exists in war is fobbed off as randomness. During attritional campaigns where no one side has a preponderance of force, it is very difficult to assess relative progress.

The narrative approach addresses these shortfalls. Rather than taking a linear approach, design uses metaphor and language games to grasp the inherent complexities of war. A metaphor for the campaign is developed to guide operations. So long as the metaphor is legitimate it can be used as a basis for planning. The metaphor is delegitimized if it is no longer performative or backed by a preponderance of power.

Thus both approaches yield a similar approach to campaign assessment. Major turning points such at the loss of initiative or culmination are key moments to reframe the plan. Further, if Clausewitzian chance begins to increase, there is "too much" implicit complexity that is going unaddressed by the current metaphor and a reframing is in order. Whether the régime metaphor is maneuver, attrition or something else, it needs to be performative to be of use.

This paper has shown that major campaign shifts are preceded by changes in initiative, culmination and increased battlefield randomness. Campaign shifts provide the opportunities for

the campaign planners to reframe the operational problem and develop new campaign themes to move to an acceptable end state.

Thinking about thinking is hard. Yet if we are going to truly understand our operating environment we must understand what underpins our understanding of language and truth.

Awareness of the limitations and boundaries of knowledge and truth are critical to grasp the modern operating environment.

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