

## **Slide 0\_Foreword *The Power of Will in International Conflict How to Think Critically in Complex Environments***

**This foreword is atypical of other forewords you have read. Mine provides you with the preparatory remarks to help you understand what you are going to read in the script correlated with the visuals.**

- **My script highlights the main ideas in the book, and I provide some interpretation and a small degree of explanation for each visual via the explanatory script.**

**Know that the script is peculiar. It is in bigger font to help me see the words. Also, I double spaced and indented and indented more at select places in the script.**

- **You can't review the slides in Slideshow. So, just keep them in normal view please.**
- **When you see the slide, there will be a small symbol of a speaker in the lower right hand corner. Mouse over it and then click on the arrow and it will play. It will stop when the talking finishes. Then, just move to the next slide and repeat.**
- **I designed all measures, except for the restriction to keep the slide view as normal, to help me see well enough to read coherently.**

**As another interesting tidbit, the script is more than it appears to be and is sufficient for people to read, as they review the visuals, listen to the verbiage, take notes, and develop their questions and answers.**

- **Questions and answers should be occurring during any presentation of my book.**
  - **In my view, all intent listeners develop and use their notes and questions and answers, as lines of further inquiry and pursuit of knowledge.**
    - **This session is no exception.**

**I believe it would be best if people could possess and read the script and stay with the person describing the visuals. And, of course, the person responsible for the session, presenting the visuals, and reading the script must read and understand my book.**

**Know too that the script numbers correlate with the slides. There are 32 substantive visuals, so there are 32 parts of the text and readers can easily connect slide numbers with the beginning of each page of text. This part is easy, as the text title, text header, and visual all line up with one another.**

- **People can work through the entire session most effectively by reading the script as they move slide by slide, matching script pages and sections with respective visuals.**
  - **I think that the readers and listeners will understand the visuals and script, and they will be motivated to read the book.**

- **But, be advised—any presenter needs to rehearse.**
- **Also, they must read and master the book, as they will be responding to the questions of students looking for answers.**

**I judge the quality of this presentation to be 90-95%. I have never done anything like this, so I admit to a few mistakes in grammar, and stumble and mumble in a few places, as I read the script. Therefore, I do apologize for any mistakes that I made.**

- **The script appears lengthy, and I acknowledge its length. While the script is lengthy, it is but a mere sniff of my book.**
- **Please read the book and take the time and expend the mental energy to think deeply and critically about what you read.**

## Slide 1 Why Listen to These Words

**Greetings. My name is Brigadier General Wayne Michael Hall. I am the author of the book, *The Power of Will in International Conflict*. Today, I am going to explain the book in a few visuals.**

**I have confidence you will enjoy the book and find it useful.**

- **Following a thorough reading of this book, you will possess a well-armed mind, ready to engage in and win in bouts of mental combat.**
- **Additionally, I see you discovering in a realization of the presence and nature of an overarching war of wits that any kind of conflict entails.**

**My goal is to help you gain a thorough understanding of the phenomenon of *will* and use this knowledge for advantage.**

- **Understanding and employing a deep knowledge about *will* is so important that it can mean whether or not you win or lose in a fight. After all, *will is the central idea of conflict*.**
  - **When I say conflict, of course, I'm speaking of a broad range of struggles to win wars, to corporate takeovers, to competitive contests between lawyers in courts of law, to parents imposing their wills on their children, and even pertaining to spats between spouses.**

**As a first gambit, I ask what do you know about this great and important phenomenon?**

- **In my experience, I must confess that I had not explored this wonderful subject in sufficient depth until I researched and wrote my book.**
  - **I found the book to be difficult to write because I didn't find much in the literature that related to what I sought to write about.**
  - **As I finished writing this book, I can tell you that it punches straight into the subject of *will*.**
    - **As a result, the book provides **UNDERSTANDABLE AND USEABLE KNOWLEDGE** about this great phenomenon that has lived such a long life and influenced so many people in peace and war.**

**As I thought, and then thought some more, *will's* meaning became clear. As such, in this book I present a framework for thinking about the subject, to gain clarity of its latent power, and how people can apply this power to win in bouts of *will*.**

- **This book took well over two years to research and write.**
  - **I had to cut the book from whole cloth as I could not find existing patterns to use as a guide for completing my intellectual journey.**

- **Of interest, as I wrote the book, I determined that I could have used this book throughout my entire 30 years of service in the US Army and in my 17 years of work thereafter.**
- **With the hours I devoted to writing this book, I can say without equivocation that *will*, as a concept, still remains largely unknown today.**
- **For certain, people mention *will* but usually only as platitudes and generalities.**
  - **But one tends to pass off sustained and deep thinking about *will* thinking it to be too complicated to study, let alone to discuss.**

**This book provides readers with showers of discoveries about *will*'s meaning, its intellectual underpinnings, and how to turn theory of *will* into practice.**

**In my view, a wide variety of people need to study and know this subject of *will*.**

- **This book should enable their knowledge to acquire a breadth and depth of thought sufficient to impose their *will* on an adversary successfully.**
  - **In addition, this knowledge and comprehension that comes with reading the book, must be sufficient to enable people, players in the game, as it were, to anticipate an opponent's resistance and counter-moves.**

- **Further, studying this book will provide you the intellectual wherewithal to overcome any attempts to deny you victory as you impose your *will* on an adversary and deftly deny their efforts to impose their *will* on you.**
- **In fact, you will surmise the worthiness of the book as you conclude that its concepts, ideas, thought models, definitions, and journeys from theory to practice provide the basis to win.**

**Also, this book provides the wherewithal to gain an understanding, indeed comprehension of the subject of *will*.**

- **A thorough reading provides you the wherewithal to use what you now know to outthink your adversary.**
- **It also provides you the intellectual means to possess and impose seven kinds of advantage on an opponent.**
- **The book even provides sufficient depth of thinking and thought models to impose your *will* on an adversary **AT THE INCEPTION** of his first thoughts about the probability of attempting to impose his *will* on you.**

**What proof do you have of your claim, I hear someone ask?**

- I respond, as a starting point that “There is no definition for *will*, relative to conflict, except for mine.”
- I found no explanation of ‘how to think’ about the thinking one has to do to think about *will*. This is metacognition. My book provides this intellectual task.
- There is no system of thought to help people learn ‘how to think’ about the intricacies of this phenomenon. I provide such a system; it is my book.
- I found no author who has explored this topic, defined the term, developed the concepts, and put forth the argumentation and explanation to understand this great phenomenon. My book resolves these shortfalls and inconsistencies.
- Of interest, I developed my own definition of *will* because none exists in doctrine.
  - Of note, my definition identifies and discusses *will* as a struggle **IN THE MORAL AND PHYSICAL DOMAINS**, it involves a connected conflict with a distinct linkage among the past, present, and future, and postulates *will*’s primacy in determinants for winning and losing in conflict.
  - I present this definition for your consideration in slide three.



**With this setting, know that throughout the book, I provide the reader with the wherewithal to put *will* to work in practical application.**

**Thus, in this explanatory session of *will*, know well that the basis of my work lies in: 1) philosophy, 2) history, 3) theory, 4) conceptualization, and 5) creative thinking.**

**Know too that I view the book as but a start.**

- ***Will* is a great subject and powerful phenomenon deserving of continuous study, publication, and actual use for seeking and securing advantages.**
  - **This subject deserves to be studied in all of America's Department of Defense's Command and Staff Colleges, Schools of Advanced Military Studies, and all War Colleges.**
  - **The substance of this book needs to be in America's library of doctrine and come alive with explorations from now to infinity, particularly in intelligence, planning, operations, and decision-making doctrine.**
  - **My desire is that many a thinking person start with my work and broaden and deepen it.**

**This talk about my book is in reality a Cliff's Notes walk-through of the main ideas in the book.**

- **The book provides an explanation of its many ideas, themes, concepts, thought models, and how the reader can turn theory into practice in their everyday lives. To**

**gain in knowledge and thinking, readers will have to commit to taking the time and expending the mental energy to comprehend this book. Lastly, know that the talk that accompanies the visuals is in my voice with my thoughts, and with the passages coming from my mind.**

## **Slide 2 Intellectual Foundation of The Power of *Will* in International Conflict**

**The next two slides provide *will's* definition and discusses my use of great thinkers and captains in their many books, poems, and plays.**

- I found joy in reading and re-reading their works and using their passages.**

**From my researching efforts, I became even more certain of the importance of my task to bring the great phenomenon of will into the light of day for direct examination.**

## Slide 3 My Definition of *Will*

As I just noted, until now, there has been no definition of *will* that deals with conflict and imposing one's will on another or denying an adversary's attempts to impose his will on you.

- All I could find in my research were platitudes, but I found no mention of thinking about *will* in doctrine.

About the time my book was published, Rand researchers developed their own definition of *will in one of their research projects*. I read it, thought about it, and while good for their purposes, quickly determined it was not sufficient for my purposes.

I knew that I must have a good working definition to start the deep think effort to know *will* in depth.

- I felt the need to explain my thinking about this great phenomenon *will*, with a sound basis coming from history, philosophy, theory, and creative thinking.
- With such a foundation, I could think about *will* and generate the theory and thought models to help people understand this difficult subject and to put its theory and concepts into actual practice
  - I needed a working definition so as to shape my thinking about the thinking of the central idea of all conflict, which is the concept of *will*!

**I went to work on defining *will* in my 2009 book, *Intelligence Analysis How To Think In Complex Environments*—but, it was only a start and a poor one at that. I wrote that book from 2006-2008. It was published in December 2009.**

**I improved the definition and explanation of *will* in my next book, *Intelligence Collection How to Plan and Execute Intelligence Collection in Complex Environments*. I wrote that book from 2009-2011. It was published in July 2012.**

- **Over time, I kept improving on the definition and its explanation.**
- **I evolved in my thinking by listening to criticisms and suggestions from my students. Nobody had a worthy definition, but the ideas that rolled around those seminar rooms helped me form what you see now.**

**On this graphic, you see a short-hand version. The book has a more detailed definition, which expands upon this definition you see below.**

- **This shorthand definition presents the essence of *will*.**
  - **It provides sufficient thought to enable the reader to understand what *will* means**
  - **The definition provides sufficient suggestion and implied direction to learn how to think about the concept.**
  - **Understand too, if a person understands the definition, one can envision the thinking underpinning the concept to broaden our views of**

***will* and set the conditions to coalesce its many parts and pieces into a whole, the whole of *will*.**

- **With the whole and its parts, one gains an understanding of the entire concept.**
- **The short-hand definition of *will* is:**

Appearance of desire, volition, life-force, bringing to life a purpose to impose '*will*' on another entity, who may or may not resist. With this appearance, a call goes forth in each side's collective minds for a willingness to sacrifice and an arousal of sufficient passion to win.

**This definition of *will* and its explanation one finds in *The Power of Will in International Conflict* must go into doctrine now!**

**Each side must assess sufficiency of the moral and physical domains to impose their will or to deny or resist and their adversary's.**

- **People can readily assess the **PHYSICAL DOMAIN**, which generally involves capabilities. But they run into trouble once they try to assess the moral domain for it is unquantifiable.**
  - **Thus, the book sculpts the moral domain for any participant in a conflict.**

- **As such, early in its presentation, the book suggests a need to surmise the importance of resolve, life force, strength of motive, purpose, determination, perseverance, sacrifice, passion, advantage and disadvantage.**
  - **In any conflict, these elements often appear, but come and go in appearance, influence, and importance.**
    - **Sometimes all are at play, but at other times in other contexts, some do not appear and influence at all.**
  - **Thus, players in conflicts must wargame clashes of *will*.**
    - **What is different about this book is that along with traditional intelligence wargaming, people must now wargame the wargaming of their opponent.**
  - **But know well, the outcomes or the moral domain can never be certain because what they must deal with is the unquantifiable. It exists in a turbulent operational context, and its inhabitants, people, live in a wide variety of highly influential cultures.**
- **As one topic of wargaming, we focus on their adversary's willingness to **SACRIFICE** and arouse sufficient **PASSION** to endure hardships and win.**

- **This is a place that an appearance and influence of both logic and bias errors often erupt, as you wargame from your perspective and as you wargame the adversary's wargaming.**
- **You find in this book an explanation of the importance of these subjects in the 14 element thought model for thinking about *will*. I discuss all 14 elements within the chapters in the book.**



## **Slide 4 Talking with The Masters and Using Their Ideas**

**While researching for this book, I plumbed the thinking of authors in 81 books. The books ranged from literature, poetry, to books on science, philosophy, and history.**

**I ‘spoke with the masters’ in my quest to understand *will*.**

- **While none of them dealt explicitly with the idea of *will* that I sought, I borrowed ideas where I could.**
- **In some cases, I found their thinking useful, even as I acknowledged that they expressed their thoughts long ago.**
- **Their wisdom written so long ago helped me fill the gaps that I needed for my exploration into *will*.**

**Each of these great authors gave me peeks into the shrouds encasing their actions.**

- **With their actions and outcomes therein, several of the great captains helped me surmise what they might have thought, but I don’t know for sure.**
  - **Most of their writings explain the action and its affect, but they did not explicitly explain their thinking about *will* and their opponent's *will*.**
    - **I was looking for their thinking about how to impose their *will* on their adversaries and how**

**they anticipated what their adversary might think about imposing his *will* on them.**

- **So, I depended on their thoughts pertaining to *will* that they dropped into their works.**
  - **I examined their ideas from all sides to help me think about this complicated subject.**
    - **The 5 thought venues coming closest to what I sought came from Napoleon at the battle of Austerlitz in December of 1805, Scipio Africanus's victory of Ilipa in 206 B.C. as told by Scullard, certainly assisted my efforts.**
    - **I also borrowed ideas from T. E. Lawrence, and his masterpiece *Seven Pillars of Wisdom*, Caesar's *Commentaries*, particularly his amazing rendition of the battle of Alesia in 52 B.C., and Clausewitz's *On War*. I also found Sun Tzu's theory and reasoning about war to be of use in my exploration of *will*.**

**Literature also proved helpful in exploring the idea of *will*.**

- **In particular, I borrowed from the ideas of political theorist Hannah Arendt, authors—Dostoevsky and Tolstoy, philosophers— Nietzsche, Schopenhauer, and Pirsig. These authors helped me form the basis of my thinking.**
  - **Additionally, Goethe's *Faust* and the dangers in unresolved quests for knowledge and Kant's thinking about man's self-serving nature, proffered**

**ideas to my mind thus helping me to understand why **SELF-INTEREST** dominates any attempt to rationalize why people fight over *will*.**

- **Such struggles between competing, resisting entities exists today and, I dare say, forevermore. Self-interest, clothed and cloaked as altruism, still lives. Thus, struggles for dominance of *will* have a permanence in human history.**

## Slide 5 Select Discussion of the Book's Big Ideas

As a summary, the book yields many ideas, big ideas. The details of these big ideas will continue to be resting and awaiting readers, between the covers of my book of *will*.

- By big ideas, I am talking about ideas that grab the reader's mind and proceed to expose it to the main ideas in the book. I want these big ideas to stay with you as you read the book and, I hope, forevermore!
  - These ideas **CONNECT** to other ideas not yet coming forth.
    - The suggestion the reader draws is how these ideas, one by one, and then in aggregation, connect to other ideas and concepts the book introduces and explains
- A big idea is **PART OF A LARGER WHOLE**. And it is the whole that is important. The reader needs identification and elucidation of these big ideas to envision, explain, and sense the whole under our examination.
  - Also, these big ideas identify thoughts about functioning of the whole and with it how coherence contributes to how the whole can reappear on call in readers' minds.
- As another explanatory thought, a big idea presents **IMPLICATIONS** and **INFERENCES**.

- **An implication, in the vernacular, is something that has not happened, but it is something you believe or sense to be coming.**
- **An inference is the work one's mind performs, as data comes into their bodily portals and their minds render data into meaning.**
- **The data, by way of images, vision, or appearance is coming, so your intuition warns you.**
  - **It is that which is coming that your senses alert your mind to.**
  - **This intuition presents to you as a reader a yearning to explore the sensing further.**
  - **The urge comes to life in your mind before being either identified or discussed.**
  - **Implications start taking shape as these thoughts take us into a higher level of thinking as a ladder extending to the heavens of knowledge.**
  - **This is where minds draw inferences of meaning and relativity.**
- **Such thinking requires a high level of thinking, such as **SYNTHESIS, HOLISM, AND METACOGNITION**. The requirement on the human mind comes down to the demand for deeper thinking than is required to deal with smaller and easier to understand ideas.**

- Again, **DEEP THINK** means—taking the time and expending the mental energy to think about a problem or issue critically and deeply.
- Big ideas urge the reader to admit to one's own need to study and learn more, agree or disagree and reason as to why, see connecting ideas, and discover ways to investigate the many mysteries that remain even after finishing this book.
  - From such thinking, one always comes forth with 8 additional ideas—
    1. Coming forth with more creative thoughts about improving the book's central ideas.
    2. Developing more thought models.
    3. Finding other supportive ideas in a variety of intellectual areas of concentration.
    4. Finding and plumbing the minds of other great thinkers.
    5. Tinkering with the definitions that I have provided to you in the book.
    6. Developing more concepts.
    7. Designing ways to put the theory into practice.
    8. Developing more and better implications.

## Slide 7 Essence of the Problem

I simplified this graphic to help people grasp what *will* in conflict means.

Here, I present the nub of *will*. Here, in the interest of time, I constrain my explanation of *will*'s breadth and depth that a reader finds in my book.

As you can see, one side attempts to impose their *will* on the other side.

- The other side could acquiesce, if he determines the calculus of *will*, particularly capabilities, purpose, strength of motive, passion, and sacrifice, and determines if these elements of *will* are or are not in his favor.
  - But, in this case, the receiver of the first blow and aggressive imposition decides to resist, and we have a struggle over superiority of *will*.
- Observers of this graphic tend to concentrate on the clash of *wills*.
  - The wise person though, views the slide holistically and bores into the right and left sides, looks carefully, and is drawn to the identical four words on each side.
  - The words are: desire, volition, life-force, and resolve.

- They constitute, in my thinking, the inception of *will*, its birth, as it were.

⇒ Remember these words as the inception of *will*.

⊗ If you can anticipate these words and their strength and influence, you might want to impose some kind of preemptive action.

⊗ Your intent would be to attack or influence the adversary' inception of *will* and plan at its genesis how to thwart this fellow's intent.

⇒ We'll discuss these key words in more depth later in the briefing.

⊗ But, for now, keep in mind—  
desire, volition, life-force, and resolve.

Since the beginning of time, men have competed with each other to obtain what one side wanted that the other side had and didn't want to part with.

- This is the genesis of the drive to impose *will* or deny such imposition.
- Action becomes the active force in that it is one or more actions that one side uses to impose his will



**on the other and how the other side resists this initial imposition.**

**At the start, my imagination takes me to the dankness of a cave where one caveman covets a fur, a woman, something that another man possesses.**

- **The coveter's desires, volition, life-force, and resolve are at play, but he should also consider the mind of the coveted.**
  - **If the coveter decides to move from a passive volition to an active imposition of his *will* on the coveted, he attaches these invisible motivational thoughts to purpose, strength of motive, capabilities, and so on, and acts to impose his *will* on his opponent.**
    - **If the coveted in this imposition resists, the two struggle; one side wins and the other loses.**

**Nonetheless, nothing in life is ever so simple as what you see here, in this graphic.**

- **The clash of *wills* is much more complicated—you are going to delve into complications now.**

## Slide 8 Collision of *Wills*

In this visual, you see two *wills* clashing.

- It is definitely a collision, even in the cyber and information domains.
  - You notice the presence of clashing objectives.
  - You notice the presence of clashing assessments and adaptation.
    - People have to think about these struggles as they occur first in the intersection of 7 vertical domain silos (air, ground, sea, space, cyber, information, cognition).
    - They intersect with 4 horizontal levels of conflict troughs (strategic (policy), strategic (military), operational, and tactical).
      - Please note that I plan to discuss these concepts in the Matrix War discussion coming up later in the session.
  - I need you to remember, all the pieces matter in frays over *will*.
    - This is a truism that always serves one well while thinking about difficult problem sets in *will*.

Notice the recursion occurring with all-important feedback loops for each competing organism. This is rudimentary for complex adaptive systems as they compete and assess their

**actions and try to adapt faster and better than their adversary.**

- **Yet another clash thematic!!**
  - **But your mind cannot rest.**
    - **You feel the need, in a broad and illustrative sense, to think again about the objectives for each side in the struggle, as blue considers theirs' and red's objectives and vice versa.**
    - **I also want you to think deeply, view, and comprehend the operational context.**
      - ⇒ **Examine its advantages and disadvantages for each player in the game of chance you have entered.**
      - ⇒ **This game has an outcome that isn't preordained.**
        - ⊗ **That is, it is the struggle for dominance of one's *will* over another person, organization, or country and their *will*.**

**Are we done?**

- **No, we have to consider the dark cloud in the middle.**
  - **It represents the moral domain of conflict.**

- **The moral domain is as important or in some cases more important than its counter-part, the physical domain of conflict.**
  - **It is full of important aspects of conflict like the moral perspective, view of the context, potential for chance to occur, change, moving truths, involved and influential populaces, nonlinearity and its many irksome characteristics, and culture as it influences complex adaptive systems (CAS) rules and action models.**
  - **The fog of war is always at play, full of variables, some of which are sensitive!**

**Thus, to grasp the macro, I want you to engage in synthesis and holistic thinking. Each entwines with the other to create a powerful whole. Neither proves easy to understand or to apply in practice.**

## Slide 9 Will's 14 Element Model

**This is the hallmark thought model in the book.**

- **It has 14 elements.**
  - **Any adversary will have some or all elements at play in conflicts of *will*.**
    - **Please note that the front end, which includes elements 1) life-force, 2) purpose, remain stable. These elements prove to be constant functions of will.**
    - **The middle of the model, however changes. Its elements—3) strength of motive, 4) capabilities, 5) advantage, 6) disadvantage, 7) perseverance, 8) determination, 9) passion, and 10) sacrifice—prove subject to flux coming with the play of sensitive variables on emotions and feelings.**
      - ⇒ **Additionally, while vying for ascendancy of wills in complex environments, one knows that at least several of many nonlinear system's characteristics will be at play, coming and going, appearing, disappearing, growing powerful and becoming weak, being influential and becoming negligible.**
    - **The back end of the model, including 11) imposition 12) action, 13) assessment, 14)**

**adaptation, also remain relative stable as functions of will.**

**The 14 elements involve the most important aspects of *will*.**

- **It took a good deal of time to dissect *will* and to find its key elements.**

- **As you can see, I envisioned 14 elements.**

- **In my judgment, not all elements play all the time.**

⇒ **Thus, I had to consider that some elements cannot be quantified, and some are not stable.**

⊗ **In my view, these 14 elements or facsimiles thereof constitute or better said, represent what any thinking foe uses, but again, some elements will come and go or some do not appear at all or appear all the time.**

- **I do not know how to cut out any of the elements but certainly agree that one could add more.**

- **As I intimated above, I did add degrees of flux in the middle elements as their power, roles, and influences depend on variables, the thinking of human beings, outcomes of action, friction, and the turbulence and change involved with chaos.**

- **To top it off, each of the middle elements are intangible, lacking in finite shapes and forms.**

⇒ **Thus, they prove difficult, even abstract to imagine, and to bring forth as an appearance in our minds.**

⊗ **Yet, we know that they are at play and any attempt to deal with *will* cannot ignore these elements without accepting risk and peril.**

**Element fluctuation can also come with changing intensity and importance. Indeed, in conflict, truth changes. Thus, fluctuation comes forth and causes intensity to vary and importance to come and go.**

- **Sometimes some elements do not come into play because of weakness or pressures or abject irrelevance.**
  - **Importance and change in the middle revolve around clashing missions, nonlinearity, the play of sensitive variables and, of course, chance, and the ever unpredictable adversary.**

**Also, note this is a model that encompasses the ideas in the book about the importance of complex adaptive systems, humans and human-populated organizations, and their absolute need to co-evolve and adapt better and faster than their adversary.**

- **The model shows the importance of omnipresent feedback involved with assessment and adaptation inherent within any complex adaptive system (CAS).**

## Slide 10 Riding the Wild Pendulum

**This visual depicts two adversaries fighting one another over imposing *will*.**

- **The visual depicts nonlinearity where permanent is change, where time is timeless, where chaos reigns owing to effects of nonlinear contexts surrounding and shaping each opponent's thinking and action.**
- **Our theoretical pendulum swings, indeed, gyrates, as it travels first to blue then to red.**
- **Our thinker's purpose is to ride the pendulum and drop off on the adversary's side, get into his mind, learn how he thinks and plans, learn his aim, goals, objectives, and strategies.**
- **Discover his *will* by using the 14 element thought model we just talked about in this briefing.**
  - **Search for and discover what you believe to be his version of our model of *will*.**
  - **Determine the power and energy of each element of the two wargaming models.**
    - **Determine which of the elements have the greatest probability to appear and influence his thoughts and actions.**
    - **Determine which of the elements have the greatest probability of remaining dormant but**



**capable of coming forth with changes in the situation and context.**

- **Determine which of the thought model elements, if any, won't be at play regardless of what transpires in the conflict.**
- **Determine the adversary's actions and how he could be planning to impose his *will* on us.**
  - **Determine how he plans to assess outcomes of his actions.**
- **Determine how he thinks we think about our assessment of our actions.**
  - **Determine how he thinks we think he thinks we think about assessing our outcomes.**
  - **Determine how he evaluates assessment data, how he learns, and how he adapts.**
- **Search for and discover that which actions are tangible and intangible and what makes them this way.**
  - **Discern preeminence in his model, e.g., strength of motive, passion, sacrifice, etc., and pack away into your mind.**
- **Think about how the adversary views the operational context.**
  - **Consider the advantages it presents to him as well as the disadvantages.**

- **Consider the advantages and disadvantages the context presents to us.**

⇒ **Consider how the adversary thinks the context presents advantages and disadvantages to him.**

⇒ **Consider if the adversary has or will be thinking how we think the context presents advantages and disadvantages to us and to the adversary.**

⊙ **Also, we have to think about how he thinks we think he thinks concerning advantages and disadvantages but holding tight to the standard of always thinking and feeling from his perspective.**

**When you have found some of what you want, you hang back on the pendulum and swing to the friendly side's processes of conclusion, recommendations, wargaming, and decision-making.**

- **Think hard about how your decision-maker's thoughts relate to the adversary's mind you just visited.**
  - **Continue to ride the pendulum until you have visited him enough to warrant suspension!!**
- **Pick what you want to wargame.**
  - **Think as an analyst from a friendly perspective and also wargame the adversary's wargaming.**

- **Adjust, consider his errors in thinking and yours and how he intends to protect his penchant to err.**
  - ⇒ **Think about how he intends to attack your errors.**
    - ⊙ **Anticipate how he thinks you are protecting against manipulation via his well-thought about deception, changes, inputs from intelligence, realization of duality, views of context, thinking through observer/observing relationships, and so forth.**
- **Take the time and expend the mental effort to think about wargaming your adversary's efforts to wargame.**
  - **This is difficult.**
    - **You have to be in his skin and think like he thinks and know how his culture and experience influences his rules, morals, values.**
      - ⇒ **Know how the cultural-driven rules shape and drive his models of action.**
- **Then, ride the pendulum again and jump off in the middle and strive to think objectively, knowing full well that it is impossible to be objective.**
  - **Employ a red team to examine your assumptions in this process.**

- **One of the assumptions will be identifying areas of his thinking in which he will make logic and bias errors.**
- **Such work takes knowing and understanding how your adversary:**
  - **Perceives, thinks, plans, decides, acts, assesses, uses observables to drive assessment collections, collects data, turns data into information, turns information into knowledge, evaluates outcomes, learns, and adapts.**
- **Identify areas of your thought in which you are prone to make logic or bias errors.**
- **Have a red team of an iconoclast attack your thoughts and plans and assumptions.**
- **Think about his views against your views, his intentions against your intentions, his advantages and disadvantages from the context.**
  - **Think about your thinking against his thinking, your logic and bias errors against his mental and bias errors.**
    - ⇒ **Be as neutral as possible about what you have learned about the thinking of each side.**

⊙ **Decide how to arrange his mind and how he intends to arrange your mind.**

**Game on!! Outcome is undeterminable!! Be self-critical so as to uncover logic and bias errors.**

## **Slide 11 Wargame the Adversary's Wargaming**

**One could ask why should I endure this most daunting mental task of wargaming your adversary's wargaming?**

- **It is a good question and worthy of a detailed response. Please allow me to explain.**

**First, we can safely assume all human beings perform some kind of wargaming, as they contemplate, prepare for action, and execute actions relating to *will*.**

- **We must acknowledge that worthy adversaries will attempt to anticipate what their adversary would, would not, could do, or could not do in clashes of *will*.**

**Second, we wargame our adversary's wargaming to attain one, two, or all seven advantages over our opponent.**

- **These seven advantages include: 1) initiative, 2) tempo, 3) momentum, 4) knowledge, 5) decision, 6) position, and 7) freedom of movement.**
- **The adversary will attempt to block our efforts to create advantages while strengthening his own attempts to seize and control these advantages.**

**Third, mental combat demands that we outthink the adversary.**

- **This demand is at the least partially met by wargaming the adversary's wargaming.**

**So, let's unpack this notion to gain a better understanding of the intricacies of this phenomenon.**

- **Wargaming the adversary's wargaming allows us to **PEER INTO OUR OPPONENT'S THOUGHT PROCESSES.****
- **This kind of wargaming enables us to think like our opponent **THINKS THAT WE THINK**, and to use this knowledge to our advantage.**
- **Such wargaming allows us to use our minds and machines to anticipate our opponent's actions.**
- **It allows us to anticipate his condition setting.**
  - **This involves the necessary preparatory steps that he must accomplish for his actions to succeed.**
- **It allows us to search for and discover such condition setting and the juxtaposed, growing, spreading, and clutching vine-like links that connect the causes for his actions to his desired effects.**
- **Wargaming the adversary's wargaming allows us to present our decision-maker with the opportunity to preempt the adversary's actions.**
  - **Preemption allows our side to seize the always prized mental, emotional, or physical edge inherent to seizing and holding the initiative.**

**Now, back to a broader explanation of this kind of wargaming.**

- **Know well that to outthink an adversary, we have to understand his aim, goals, objectives, and fathom how he plans to achieve these essentials in conflict.**

**To outthink our adversaries, we have to have a good idea about how he confronts contexts in which conflicts occur.**

- **He must resolve contextual impediments to his desired outcomes.**
  - **Resolution must involve the essential building blocks one finds in one or more problem sets that he uses to drive his strategies and tactics.**
    - **A problem set is a difficult problem that has numerous sub-problems that relate to the whole problem at hand.**
  - **It follows that we have to *think how he thinks* as he wargames.**
    - **We must use this knowledge to beat him and win in clashes of *will*.**
- **I believe that his goals must involve achieving optimal performance of his setup actions.**
- **He must visualize, seek, and grasp the best opportunity, and probability, out of many, to satisfy his purpose.**
  - **From purpose and strength of motive, he eventually **ACTS AND THEREBY USES HIS CAPABILITIES TO ACCOMPLISH HIS AIM, GOALS, AND OBJECTIVES.****



**Thus, I peer into the depth of my enemy's mind and stealthily enter this brain.**

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- **There, I find glimpses of his logic, experiences, cultural influences, views of the world, education, views of technology, influence of his coteries, which help him think and plan.**
- 

**This capability is so important that I submit learning how he thinks could be the *most important outcome* of wargaming the adversary's wargaming.**

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- **Continuing, it seems logical to me that he must wargame his options against us.**
  - **His overall purpose is to learn how to satisfy his intent to learn about and anticipate possible outcomes emanating from his adversary's act, react, and counteract actions.**
  - **So, could he be wargaming our wargaming?**
    - **The answer has to be yes, given that he is smart.**
- **In his wargaming, he will play out the conflict in a realistic operational context. This context is full of potential, but it always appears from his perspective, against his hypothetical adversary.**
  - **He might use artificial intelligence, perhaps even very smart, culturally programmed avatars to oppose us in his wargame.**

- Also, he will employ a sophisticated human opponent to play his enemy in his wargaming.
- As such, he will play out the actions involved with accomplishing his aim, goals, objectives, and so on as he imagines the two forces colliding.

As we enter his mind, we must learn what he thinks about relative to himself and how he thinks we think about a minimum of nine points:

- 1) what truly matters,
- 2) the value of objectives,
- 3) Clausewitz's Marvelous Trinity,
- 4) the 14-element *will* model forming the central idea of this book,
- 5) the notion of multiple **PRESSURE POINTS**,
- 6) the notion of fewer and more important **DECISIVE POINTS**,
- 7) the notion of even rarer **CENTERS OF GRAVITY**,
- 8) his '**HOW TO THINK**' model, and
- 9) how he thinks you think that he thinks about these things.

As another interesting twist, we must think about how our adversary thinks about BATTLES.

- That is to say in a broad sense, you must think as he thinks about a range of seemingly disparate battles appearing in our minds as competing *wills*, the clashes of each of the 14 critical elements, physical combat, mental combat, and the constant war of wits he sees himself fighting.
  - All of us must realize that these seemingly disparate elements of conflict connect to one another and enfold into a unified and connected whole.
  - More specifically, this demanding kind of thinking about his thinking about battles is an important twist in wargaming his wargaming.

Now, let's delve into more specificity about battles.

- I'm speaking of the appearance and influence of 12 subsets of primary battles including,
  1. battles of **NARRATIVES**,
  2. battles of **ADVANTAGES AND DISADVANTAGES**,
  3. battles to **OUTTHINK** an adversary,
  4. battles involved in manipulating **OBSERVED/OBSERVER** relationships,
  5. engaging in **BATTLES OF INTELLIGENCE SYSTEMS**,
  6. battles of **COUNTERING THE ADVERSARY'S ASSESSMENT AND ADAPTATION PROTECTIVE METHODS AND TECHNIQUES**,

7. battles of clashing **OBJECTIVES**,
8. battles of respondent elements of **QUALITY AND THE STRUGGLE TO KEEP QUALITY HIGH AGAINST THE ADVERSARY'S EFFORTS TO PUMMEL THAT WHICH COMPRISES CRITERIA FOR JUDGING QUALITY**,
9. battles of **MINDS**,
10. battles of **LIFE-FORCE** and **RESOLVE**,
11. battles of **SACRIFICE**, and
12. battles of **PASSION**.

To wargame his wargaming, you need a realistic process that he would likely use as he wargames against you and your organization.

In such a process, you must find a person well-versed in the adversary's culture and thinking to play the adversary.

- One must always provide this person with enough resources so as to have the wherewithal to design his plan and play it out in the wargame.
- This person and his support elements must design a plan to win against you, while he is thinking like his adversary (you) think. This list can add many more elements, as I'm just giving you a few examples.
  - This person, whom I hope comes from the culture of your adversary, has few scruples, restrictions via rules of engagement, or moral inhibitions.

- **This person is smart, ruthless, capable, full of hatred, and dedicated to win or die.**
- **This person or people will use a sequence of aim, goals, objectives, resources, constraints, strategies, tactics, the 14 element thought model of *will*, pressure points, decisive points, centers of gravity, and advantages and disadvantages the nonlinear operational context presents.**
- **This sequence also involves:**
  - **Addressing the specter of logic and bias errors,**
  - **Assessing the quality of advice from experts and the adversary leader's inner coterie,**
  - **Visualizing the 13 element thought model that an actual adversary has to use as he plans, which includes: 1) perceive, 2) think, 3) plan, 4) decide, 5), act 6) assess, 7) design observables, 8) collect assessment data, 9) recompose data into information, 10) synthesize information into knowledge, 11) evaluate, 12) learn, and 13) adapt.**

**Now, let's review of few fundamentals your adversary would probably be using by way of **TALKING WITH HIS MIND** as he thinks. I think a series of cautions could be guiding his thought, such as these admonitions:**

- **Determine the feasibility of my actions before they happen.**

- **Know that my adversary will assess strengths and weaknesses from competing perspectives.**
  - He anticipates how I ride the wild pendulum between opposing sides and find a middle point in which I can see those strengths and weakness from the viewpoint of each side and adapt to win.
- **Assess the **NONLINEAR OPERATIONAL** context and judge my advantages and disadvantages relative to my foe's advantages and disadvantages in this turbulent context.**
  - Identify nonlinear characteristics of the context.
    - In my book, I present 17 characteristics that you can choose from.
  - Judge the impact of nonlinear activities and their sudden appearance and subsequent influence on my operations as well as my adversary's.
- **Again, the adversary knows he must assess the effectiveness of his intelligence system. As such, he muses about some of what follows.**
  - How well does this system provide essential assessment data from my actions and those of his adversary?
    - My goal must be to win in adapting faster and more effectively than my adversary.
  - He will do the same for his adversary, as he judges the quality of his intelligence and how he thinks

**about his adversary's efforts to assess, adapt, and co-evolve.**

- **Wargame my *will* against my adversary's *will*.**
  - **Address some or all of the 14 elements that I tee up as critical elements in *will*.**
  - **NOTE—Do not forget the **MORAL DOMAIN** such as respecting and understanding passion, sacrifice, determination, and perseverance.**
- **Continuing with an adversary's thinking ... I must assess the feasibility of my actions necessary to impose my commander's *will* on our adversary.**
- **I must assess my foe's aim, goals, objectives, resources, constraints, strategies, tactics, *will*, pressure points, decisive points, centers of gravity, observer/observed relationships and so on.**
- **I can use a model to assess the battle of intelligence systems and counterintelligence and design counters accordingly.**
  - **This point clearly connects to the observer/observed relationships that we have been pondering.**
    - **He will understand this relationship and design his off-sets and deceptive moves.**

**OK, back into our thinking, in a general sense, if we want to think like the adversary thinks, we need people**

**to use a variety of techniques, such as:**

- 1) Thinking about duality,**
- 2) Employing a person from the culture of your adversary to be your foe in wargaming,**
- 3) Using a red team to challenge your assumptions and how you think like the adversary thinks,**
- 4) Causing your wargaming to occur in a context that belches out random characteristics of nonlinearity,**
- 5) Providing a group of technical, cultural, and military people to support the adversary leader and key thinkers,**
- (6) Enabling the hypothetical adversary to possess the wherewithal and *will* to win in this war game at any cost.**

**Every adversary must perform some semblance of the above elements of a thought process model. Now here is another way to 'see' and 'sense' his thinking process.**

- To get into the adversary's mind, you must know the meaning of each process element of our model of *will* and how it relates to the whole that is *will*.**



- **You want to ‘enter’ his skin and travel through his mind thus enabling you to see the world from his perspectives.**
  - **I describe such a trip in my book, as I imagine my hypothetical opponent’s mind (see pages 329-330 and 356-357).**
  - **This move enables you to approximate how to think like he thinks.**
- **Now, as we swing back to the adversary’s mind, I believe that his critical thinking processes could include ever more detailed self-induced admonitions such as:**
  - **Be detailed and specific in my planning.**
  - **Be wary, as my enemy watches.**
  - **Wargame my plan against a most capable foe who accurately represents my enemy’s mind.**
  - **Anticipate the appearance and outcomes of chance events.**
    - **Develop flexible alternative plans with which to switch upon friction’s appearance.**
    - **Induce change that I want via actions and be sure to synchronize.**
  - **Find and attack my adversary’s links connecting his causes to effects directly, through action or indirectly by link decay.**

- **Use multiple collectors to optimize my intelligence efforts.**
  - **Think like my adversary and thus anticipate what he seeks with his intelligence systems.**
  - **Show him what I want him to see.**
  - **Establish countersurveillance to deny the adversary access to my plans and intent.**
- **Anticipate how the adversary could attempt to confuse or alter my co-evolutionary needs.**
  - **Know the adversary will attempt to alter my assessment data so as to confound my efforts to adapt.**
- **Work the observed/observer relationship to my advantage.**
- **Leverage my advantages in a nonlinear context and minimize my disadvantages.**
- **Attack my adversary's contextual advantages and accentuate his disadvantages.**
- **Be ahead of my adversary's efforts to attack or manipulate my pressure points, decisive points, and centers of gravity.**
- **Think about disassembling my systems and processes to hide them throughout the **CHAOTIC CELLS OF MATRIX WAR.****

**It follows that wargaming our adversary's wargaming means you have to be in his head and 'in his skin,' as he works his way through each of the above requirements.**

- **As another thought, learn to think as he thinks and shall act when he anticipates the mistakes you could be making by committing logic and bias errors.**
  - **And you have to think, as he thinks you think, that he thinks, that you will be making logic and bias errors.**
  - **Going even further, I want you to think how he intends to protect himself, as he anticipates his own logic and bias errors that he thinks you will be attempting to exploit.**
- **As you go along with him as you think that he thinks, and as he wargames, you develop your adversary's intelligence requirements, counters, deceptive actions, and soft spots in how he is protecting his pressure points, decisive points, and centers of gravity.**
  - **By using my methodology, you will be with him as he thinks about how you are thinking and acting.**
  - **You will be in his mind as he develops his methods for imposing action to bring you to your knees as he thinks you will try to develop and enact counters to his actions.**
  - **With this entrée into his mind, you can learn enough to attack his plans at their inception.**

- **Swinging back to our thinking, know that with respect to Matrix War, in all vertical domain silos and at all horizontal levels of conflict troughs, work on:**
  - **Identifying the adversary's intelligence operations that he intends to employ to feed his co-evolutionary adaptation requirements,**
  - **working through the obstacles appearing as he intends to resist your efforts to be superior in how you think, plan, decide, act, assess, and adapt,**
  - **anticipating how he could be wargaming observed/observer relationships,**
  - **forecasting how he wargames his options,**
  - **conjecturing how you think he thinks about how you intend to overcome your proclivity to err via bias and logic errors,**
  - **anticipating how he could attempt to manipulate your wargaming outcomes such as deception,**

**With this knowledge from wargaming the adversary's wargaming you can now foresee the actions you could take to negate all of his models and vignettes.**

**So, there you have it. I have given you a short explanation of this important notion.**

- **Wargaming the adversary's wargaming is one of the book's big and important ideas.**

- **Wise people must study this notion of wargaming the adversary's wargaming and improve upon my emergent thinking.**
  - **In my view people who follow me, will merge my wargaming and the adversary's wargaming theories with the evolution of artificial intelligence, avatars, and synthetic environments.**
- **We shall have the capability to use artificial intelligence to design: synthetic environments and avatar adversaries,**
- **We shall have the capability to replicate the chance appearance of random characteristics of nonlinearity, necessary problem sets, and avatar condition setting complete with causes connecting to links and effects.**

**All of this man/machine capability can support our wargaming in an ordinary sense and as in my thinking about wargaming the adversary's wargaming.**

**Such replication will thereby enable us to develop awesome deterrents.**

- **Or if necessary, we can use these capabilities to neutralize any adversary, any time, any activity, or in any place.**

## **Slide 12 Operational Context**

**Now we'll move on to a short explanation of my thinking about the operational context. This explanation of context is the first of three visuals and explanations. All three prove vital in a discussion of *will* because the context is where fights over supremacy of *will* occur.**

**You will find this explanation about the operational context to be an addendum to what the United States Joint Staff calls the operational environment.**

**To start our inquiry, we need a definition. Here is the short definition and just a few broadening thoughts that I use when thinking about context:**

- **Context is, the set of situational influencers that surround, permeate, and influence one's thinking and the aggregated thinking of organizations. Context enfolds the activities of a particular event, the arena of action, the place where an operation unfolds, and subsumes contestants in any contest of *wills*. Context often shapes and infuses intensity in any situation. Context constrains individual actions or groups and their collective thinking and actions.**

**With this definition in mind, know that context is a sea of data way beyond what man can truly and fully know.**

- **Instead, a person's mind and their machines can know only parts of any context.**
- **Again, the context is important to our inquiry about *will* because of its influence on outcomes of clashes of *will*.**

**The human mind picks up the fragments and aspects of the context with the function of gaining perspective and processing the data that makes it to one's consciousness.**

- **Said minds, however, must be up to the task of deep thinking, to enable what they seek in the sea of data to have the best probability of appearing.**

**Interestingly, the data in the context that comes to people's minds can be noticeable or unnoticeable.**

- **Data, whether noticeable or unnoticeable, most often comes from the 'urging' of a mental framework guiding focused collection and then the sifting, selection, and storage of data.**
- **Incoming data can be passively ingested, or it can be purposefully sought.**
- **Lots of data is ignored and either continues to exist or goes to the refuse dump of unused or worthless data.**
- **Once found and 'digested' by the rational mind, one remains circumspect about this data. The guarded view of value of said data needed to gain understanding is often fragmented and most regularly lacks meaning until more thinking and machine work occurs to turn data into information.**

- **Incoming data can even be false owing to its nature or because it is deceptive and planted by an adversary.**
  - **Being wary is a way to acknowledge that the data that people recognize as valuable is but a sliver of a constantly changing and shimmering ‘whole’ of the data coming and going into one’s subconscious and occasionally making it into consciousness.**
- **We realize that most data comes to us through passive means by way of data absorption.**
  - **But know that this data, for the most part, remains obscure and unnoticed.**

**Remember.... context always provides data inputs—some that each side seeks and uses or discards or stores, and some not sought but arriving anyway.**

- **Such inputs have significant potential for influencing opposing perspectives of contextual advantages and disadvantages peculiar to contesting entities.**
- **In our way of thinking about context, we must recognize and cope with the intermittent appearance of highly influential characteristics of nonlinear systems.**
  - **We can cope with these characteristics with a nimble mind, nimble machines, and flexible organizations, as we know that in contexts housing conflicts complexity theory is always present and its appearances often come with great surprise at the wrong time and place.**



- **On a positive note, knowing, recognizing their appearance, and twisting these characteristics for our purposes can influence success in imposing one's *will* or denying the impositions of a competitor.**

**This view of the operational context influences how adversaries might think about themselves.**

- **Such influence could affect how your adversary thinks you think about influences of the context.**
- **Such influence requires that you study each side's susceptibility to vagaries of nonlinear systems at play in each context.**
- **Such influence causes one to be watchful and aware of the fluctuating status of the fight for advantage inherent to encounters of varying size in any operational context.**

**The context provides constant data to all sides in a struggle over *will*.**

- **Some of the data is welcome, but some of it comes as a surprise and is therefore not welcome because it can cause problems and turbulence.**
- **The appearance of unwanted data can even set conditions for failure or at least is the cause for changes to one's thinking, planning, assumptions, and thus to one's operations.**

**We can conclude that while the operational context presents opportunities to seize and exploit advantage, it remains fickle and can flit back and forth in the twinkling of an eye.**

- **I want you to think with me and realize a new idea. That is, if we learn to reason similarly to our adversary and understand his contextual layers and how he receives and processes context-pushed data, we can start to comprehend the beckoning of an indirect approach into their mind.**

**Operations occur in operational context. So, here is the book definition of operation:**

**It is, an organized and concerted activity involving a number of people, especially members of the military or law enforcement or competing people/organizations. An operation comes into action with aim, goals, objectives, resources, constraints, strategies, and so forth.**

**Contexts prove to be in constant motion and change.**

- **Humans and human-populated organizations move about, in and out, up and down and they sometimes conduct operations.**
  - **They disturb the contextual universe via actions, transactions, interactions, and behaviors.**
- **Turbulence could also come from the context by way of weather, for example bringing winds, thunderstorms,**

**hail, rain, snow, ice, and so forth along with natural phenomena such as, earthquakes, tsunamis, forest fires, and the like**

- **Disturbances in contexts can come as purposeful, such as the induced expulsions of energy that human and human-populated organizations and their functions cause and even their organizational communications and networks that connect and transact every second with other networks around the world.**
  - **It follows that data exchanges between computers cause ripples in the sea of data. On a singular note even when one computer transmits data and then receives data, both transactions disturb the context.**
    - **Whether big or small, all disturbances come with expulsions of energy.**
    - **Of interest to our inquiry, note that many of the causes for the effects we label as disturbances in the context leave physical and electronic traces. One can gather these traces or scrape them from the context and proceed to exploit the traces for intelligence analysis, which focuses on activities, transactions, interactions, and behaviors.**

**One can say with a high degree of surety that large parts of any context remain hidden. Part of context's opacity comes from a **VEIL OF ILLUSION** that clouds the human eye and thus goes far in obscuring reality from human minds and their machines.**

## Slide 13 Aggregations and Context

My view of the operational context fits with the wonders of **AGGREGATION THEORY** and its enfolding and unfolding characteristics.

- We must start our inquiry into aggregation theory with two meaningful definitions to answer two questions: What is an aggregate? What is an aggregation?
- The definition of **AGGREGATE** is:  

One complex adaptive system, heretofore known as CAS kluging with another and bonding via glue (which holds similar and dissimilar aggregates together); when more than one aggregate conjoins, one finds an aggregation.
- The definition of **AGGREGATION** is:  

Gathering and bonding separate aggregates into a larger whole. This whole is collective and responsive to accepting more like and disparate entities into its boundaries.
- Let us expound upon the theme, as aggregate and aggregation prove important to our understanding of the context housing struggles for ascendancy of will.

- **So, I continue my explanation by stating something obvious by now. That is, when I add one aggregate with another aggregate, I have an aggregation. This statement is important for our understanding of context. Aggregations, their growth, and their ultimate disbandment always occur in contexts' ignited by action coming from active characteristics at play in nonlinear systems.**
- **Aggregations can turn into unexpected consequences as some have velocity, with mass, movement, direction.**
  - **They can keep growing in nonlinear contexts enfolding smaller aggregations and unfolding into ever larger aggregations.**
    - **They can wreak havoc on any operation or turn good intentions into a firestorm.**
- **If they prove to be cloaked as such, they appear and disappear.**
  - **Interestingly, aggregations influence operational contexts hosting the many outcomes in battles of *will*, by being and not being—that is, being influenced by the null is a distinct possibility.**

**CAS live in and operate in the operational context.**

- **They compete with one another; they try to use the context to their advantage; and each tries to cause disadvantages to fall on their competitor.**

**In my book, CAS include people and people-populated organizations.**

- **They compete via co-evolution in which they: act, assess their action, collect assessment data, think about it via synthesis, evaluate, learn, and adapt.**
  - **All of this takes place for each CAS but none more so than in competing CAS who have to adapt faster and better than their adversary.**
    - **This process is both a strength and weakness in each CAS.**
      - **In my book, I put forth the proposition that we must anticipate our adversary's attempts to attack our adaptation system while he protects his own.**
      - **In my book, I propose that we should understand the adversary's co-evolution and adaptation processes and either attack or manipulate the data our opponent's assessment system gathers and uses to adapt.**
- ***The Power of Will in International Conflicts* and its theory about context involve **FOUR KINDS OF CONTEXTS** that combine and live with and within one another. Remember, one CAS is an aggregate, two CAS are an aggregation, one aggregation plus another aggregation proves to be a larger aggregation.**

**In a theoretical sense, I want you to see that human beings need to engage their minds in synthesis and holistic thinking to sense, see, feel, and judge various contexts coming to us or that we are moving about or within.**

- **The contexts of our inquiry can be permanent, semi-permanent, partially fluid, fluid, micro-contexts, and macro-contexts as each enfolds and unfolds within our contextual schema.**
- **Context may be physical or nonphysical, tangible or intangible, visible or invisible, symmetrical or asymmetrical, harmonious or inharmonious, odorous or nonodorous, noisy or silent and so on.**
- **Our individual, aggregate, and aggregations live within and move about in these four contexts that we are discussing. These contexts live within and they move about in and out of our individual and collective consciousness and subconsciousness. The more sensitive we become to such movements, the more advantages appear where none previously existed in our conscious minds.**
- **Culture drivers and shapers always prove important to context. For example, please remember that in cities, a relevant operational contextual feature is infrastructure and its many linear systems such as distribution arteries and centers, hospitals, icons, religious edifices, museums, schools, street cars, trains, subways, water**

**taxis, emergency rooms, highways, bridges, railroads,  
and so on. You get the picture.**



## Slide 14 Context—continued

- If more than one CAS joins for a mission, say a task or a social outing, the single CAS and its **INDIVIDUAL CONTEXT** conjoins with other CAS and their **INDIVIDUAL CONTEXTS**.
  - Thus, they form an aggregate, which is a **MICRO-CONTEXT**.
    - If two or more aggregates conjoin, an aggregation of CAS and their contexts are enclosed in a larger operational context (operational because said people have a purpose for congregating and performing some action/activity that requires an operation of some kind).
      - This is a **MACRO-SMALL CONTEXT**.
- When two macro-small contexts conjoin, one finds a **MACRO-LARGE CONTEXT**.
  - We know that a larger context always exists around their smaller bubbles, as individuals, aggregates, or aggregations, as I have described.
  - They knowingly connect with the micro- and macro-context in which they exist and that exists about them.

Let's quickly review, as I know this must be difficult to grasp. In a general context, one finds:

- **Illusions distort what our eyes see, and minds interpret thereby causing a combined assault on our common senses owing to the blinding or distorting influence of said illusions.**
  - **It follows then, that when the veil of illusion appears, it can cause the appearance and influence of *a long string of logic and bias errors or both.***
- **Of interest to us as an adversary makes his decisions, acts, assesses, evaluates subsequent data, and adapts, he too will be affected by the veil of illusion. But the influence of which I speak will cause a twisted view of reality from a curtain of illusion stitched with patterns coming from their culture-influenced perceptions and subsequent thinking. This is the thinking that is vulnerable to exploitation in mental combat.**
  - **Regardless, one can count on erring themselves and they, in turn, can count on their adversary to err too. Just consider, indeed conjecture how quickly anyone can experience a distortion of what they see, hear, perceive, sense, touch, smell, or intuit but not necessarily realize the culprit of distortion is attributable to a **VEIL OF ILLUSION.****
  - **This distortion can come without the person making the error being aware of the distortion the veil causes.**

**Now, let's move on to more discussion of contexts and pick up our thinking about aggregations.**

- 1) **INDIVIDUAL CONTEXT.** I consider individual contexts as membranes with an outer texture of contexts that surround and influence organisms existing within the operational context.
- 2) **MICRO-CONTEXT** is larger than the individual context and contains at least two individual contexts.
- 3) **MACRO-SMALL** context is, of course, larger than the micro-context and contains two or more micro-contexts.
- 4) **MACRO-LARGE CONTEXT** is larger than the macro-small context and contains at least two or more macro-small contexts.

Of note, these four contexts contain the actors and their organizations who struggle for triumph of their *wills* on opposing actors and their organizations.

- The actors, of course, are CAS.

An operational context contains countless striving and counter-striving CASs and CAS-populated organizations.

Remember though, in any conflict, **CONTEXT IS NEUTRAL.**

- This means the context presents opportunity, but it also secretes misfortune.
- To find or create advantage, one must imagine how their competitor—
  - Perceives, thinks, plans, decides, acts, assesses, prepares observables, collects, turns the data into

**information, synthesizes information into knowledge, evaluates, learns, and adapts.**

- **One must know how their adversary ruminates about his personal context and his larger context.**
  - **They also have to consider how he senses his adversary's context from this person's or organization's view.**
- **Sometimes one must be aggressive and disturb the universe with the express purpose of using the subsequent turbulence, change, and chaos to create and seize advantages from the operational context itself.**
  - **Advantages that CAS seek can involve—initiative, tempo, momentum, knowledge, decision, position, and freedom of movement.**
  - **All sides in competition struggle to find or create advantages in an operational context.**
- **Competing CAS struggle to achieve advantages for themselves.**
  - **At the same time, they attack or manipulate their adversaries with the intention of causing disadvantages to appear and influence.**
    - **The struggle for contextual advantage is an important aspect of all struggles over ascendancy of *will*.**

**Let's work with another angle of context. That is, variables live in the operational context. Variables can appear and cause some perturbation. But they often remain dormant.**

- **Then with the right combinations of other variables or changes coming with events or actions in the context, they can become powerful yet unpredictable.**
  - **Certainty can never be known owing to the change and turbulence of chaos, which is a characteristic of nonlinearity. When variables become sensitive, they influence and cause change.**
    - **They cause perturbation and inject either fortune or misfortune into one side or the other or to all participants.**
    - **The presence and influence of sensitive variables preside and prove to be always at play in fights over *will and know well they influence outcomes.***
- **Opportunities to seize advantage can appear but prove fleeting.**
  - **Thus, one must be intellectually agile and willing to act quickly, regardless of risk, to grasp a fleeting opportunity and use it for advantage in struggles of *will.***

**I want you to consider and remember a few points that should have a lot of meaning to your minds by now. That is to say,**

- 1) View context as a series of ever-increasing or ever-decreasing sizes. The context unfolds into larger bubbles or enfolds smaller bubbles of context.**
- 2) In the field of conflict and competition, a large macro-context houses any conflict, competitive event, or bartering activity.**
- 3) A macro-context can accept smaller mobile contexts that might be passing through, staying, passing over, or becoming stationary instead of being mobile.**
- 4) Always wargame your actions relative to the context. Additionally, wargame your adversary's wargaming about the operational context and how it presents advantages and disadvantages to this opponent.**
- 5) As an addendum, I ask you to answer a few rhetorical questions:**
  - a. What constitutes the main points about operational context housing people in conflict that you should consider in your thinking and decision-making?**
  - b. What are my advantages and disadvantage coming from the context?**
  - c. What are my adversary's advantages and disadvantages coming from the context?**
  - d. How does the adversary think I think about my advantages and disadvantages coming from the context?**

- e. How does the adversary think I think he thinks about advantages and disadvantages the context presents to each side in a conflict?**
- f. What does an adversary consider as he mulls over how his enemy decision-maker thinks relative to finding and exploiting advantages and disadvantages in the operational context?**
- g. What characteristics of nonlinearity could be at play and how must I prepare for them to appear and to wreak havoc?**
- h. Am I prepared for contextual data inputs that could be welcome or unwelcomed?**
- i. Am I viewing the operational context as comprised of four types of context with CAS as occupants that this discussion presents?**

**I close this discussion with the following thoughts. In my world, nothing is easy. Our work with aggregations and context is one of the most difficult concepts in the book. But we cannot flinch owing to abstraction or difficulty. We shall persevere!**

- It takes synthesis and holism to be proficient in this thinking.**
- Chapter 4 in The Power of Will provides much deeper thinking about the subject of operational contexts.**

## Slide 15 Characteristics of Nonlinearity

**Nonlinear systems can cause troubles as by definition, they bring forth turbulence and change. Nonlinear means:**

**The study of situations where, in a general sense cause and effect are not proportional to each other. That is small causes can bring forth enormous and uncontrolled effects.**

**The definition also suggests the presence of a certain strangeness when dealing with nonlinear systems and their influence on actions and counteractions in the operational context.**

**I have thought about this strangeness, as the definition suggests, for years. Over time, I developed the 18 characteristics that you see on the screen.**

- **I believe that all of us need to use this list and understand it for preparing for the appearance and influence of one, two, or many of these characteristics.**
  - **One of the most important characteristics is that I must acknowledge the **PERSISTENT APPEARANCE OF TURBULENCE AND CHANGE** in any operational context housing fights over *will* to help me think.**
- **With turbulence and change, facts might not be facts, truth changes, plans can prove to be defunct, surprise comes forth, small inputs can cause catastrophic**



**consequences, and unexpected chance events wreak havoc with any force or activity.**

**Let us further explore some of the characteristics I listed on the visual.**

- **Interestingly, Clausewitz in *On War* discussed nonlinearity but, in his words, and his descriptions. Clausewitz discusses **FRICION, RANDOMNESS, CHANCE, FALSITY OF INFORMATION.****
- **In *On War*, Clausewitz says on page 119,**
  - “Everything in war is very simple, but the simplest thing is difficult...It is much the same in war. Countless minor incidents—the kind you can never really foresee—combine to lower the general level of performance so that one always falls far short of the intended goal...Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper.”**
- **Clausewitz goes on to say on page 120,**
  - **“This tremendous **FRICION**, which cannot, as in mechanics, be reduced to a few points, is everywhere in contact with **CHANCE**, and brings about effects that cannot be measured, just because they are largely due to chance.”**

**As one digs deeper into this subject of nonlinearity, you will conclude that you must ponder some of these important characteristics relative to our discussion of operational context. So, let's drive on.**

- **To win in contests of *will*, our minds and organizations have to be intellectually and structurally capable of dealing with unexpected chance events, which is friction in Clausewitz's thinking.**
- **These events come forth, often with surprise, because of the machinations of nonlinearity and, of course, man-induced changes coming as a result of co-evolution and adaptation.**
  - **I call these changes and happenings, **VAGARIES OF THE OPERATIONAL CONTEXT**.**
  - **Important to our inquiry, we discover that as we plumb the depth of the change and turbulence inherent to nonlinear contexts, we find at the root of all changes, none other than nonlinear vagaries and their constant irruption, interference, and unpredictability comingling with the actions of man and their organizations striving to impose their *will* on their adversary.**
  - **Let's say for the sake of argument that an adversary resists your imposition, and thus we find a conflict over imposition and denial of *will*. When this force coming from the collision of forces of each side in the conflict collides with the nonlinear aspect of the operational context, we can count on**

**irruptions, SMALL INPUTS LEADING TO LARGE OUTPUTS, SENSITIVE DEPENDENCE ON INITIAL CONDITIONS** leading to compounding errors in estimating change and turbulence.

As you can see on the visual, I use these characteristics of nonlinearity to help me think about the operational context and my struggles with my foes. You can undoubtedly add more characteristics to my list. For example, at one time I had developed a list that reached the incredible number of 42 characteristics of nonlinearity. The list was unwieldy. Thus, I trimmed it and now work with 18 characteristics. Just be aware that your minds can and should add more considerations to this list. I have highlighted a few for your continued interest and attention.

- Please understand that not all of these characteristics will be in play at any one time.
- Their appearance, their entrée into the lives and times of people and people-populated organizations, greatly influence all happenings in a conflict over *will*. This influence comes via turbulence, change, friction, and random events, as I mentioned above, and we realize these happenings **CANNOT BE PREDICTED WITH ANY ACCURACY** simply because things do happen that are totally unexpected and that cause great stress and storm in any involved organizations and their populations of people.

Being alert and aware, we take note that in any complex context in our work contains battling people and their

**organizations and machines. All people, machines, and organizations caught up in conflicts of *will* and within complex operational contexts shall suffer from the appearance and influence of these characteristics.**

- **These rumblings of change and turbulence prove highly influential as they can make truth to be false, black to be white, wrong to be right, and data to be both false and true.**
- **Because the context houses all the necessary ingredients needed in the recipe of **CHANCE**, it is important and needs constant attention, indeed observance and study.**
- **For the context is also home to variables like pent up emotion, resentment, and distrust of law enforcement smoldering for years and exploding suddenly in the Los Angeles riots in 1992.**
  - **With these ingredients cooking in the context for several years, all it took for the **VARIABLES TO BECOME SENSITIVE** was an acquittal of the police on trial after a brutal beating of Rodney King was caught on video camera. This acquittal and the pent up and explosive hatred the populace of the Los Angeles had for the police was the igniter of underlying variables.**
  - **Some of the variables became sensitive and highly influential. These sensitive variables ignited the potential for the appearance of a plethora of unintended consequences. What we saw was a huge influence on the riots and beatings and fires. And,**

**we saw failed attempts to stop the riot, which could not overcome the huge aggregation that was the riot.**

- **If the lurking variables had been identified and worked with before the judicial decision, the riot might not have occurred.**
  - **So, the point of all this discussion is, in nonlinear contexts, small inputs can lead to unexpectedly large outputs.**
  - **Therefore, search the context for variables that could become sensitive, and take action to keep the variables from becoming sensitive and also to set conditions to deal with potential problems before they become too big to influence.**
- **In such a context, players on the stage of strife know with a sinking sense of dread of the presence and influence of **RANDOMNESS**.**
  - **Random means arbitrary. With arbitrariness comes the realization of the impossibility to predict random events with accuracy.**
    - **Random happenings come to human beings as whimsical, capricious, and oh so difficult to deal with.**
    - **Yet such events are certain to happen during contests of *will* owing to the characteristics of nonlinearity, the**

presence and influence of such constants of inconsistency such as weather, and the presence of humans and their organizations and machines disturbing the universe that is the operational context and reaping the crop of turbulence and change.

- Also, I might add, the operational context and nonlinear systems are home to **CAS, AND THEY HAVE A PRESENCE AND INFLUENCE** on all actions within an operational context. Please recall that CAS involve people and people-populated organizations.

- As another reminder, a CAS is a:

Dynamic network of many agents (which may represent cells, species, individuals, firms, nations) acting in parallel, constantly acting and reacting to what the other agents are doing. This definition comes from Mitchell Waldrop's book, *Complexity*.

- CAS comprise **AGGREGATIONS**. Aggregations can grow and grow into one or more huge aggregations with hundreds of CAS bonding, and the outcome being that when in the context we find conjoining of like and disparate people, organizations, and their equipment—all come together, all the pieces matter, and the **WHOLE IS GREATER THAN THE SUM OF ITS PARTS**.

- **Aggregations thus bear watching as the whole of the aggregation or even a small aggregation of CAS can prove to be one of the variables that can become sensitive and to start moving and bonding with other aggregations.**
- **Aggregations influence via the appearance and activation of several characteristics of nonlinearity, with one being: small inputs can lead to unexpectedly large outputs, the second being: sensitive dependence on initial conditions, three, the presence and influence of CAS, and four, the presence and influence of aggregations and aggregation theory.**
- **Aggregations sometimes become unexpectedly large growths of people, equipment, organizations, thoughts, social media, and so forth. It is no wonder that contestants in the conflict over the superiority of *will* believe they are star struck when bad things start to happen, and as if guided by an invisible hand, their plans, actions, and operations, are adversely affected by unexpected events and happenings.**
  - **One finds in such contexts that success often goes to the side with the best leadership, the best agility of mind, and the best agility of organizations and machines.**

**All CAS live through continuous cycles of *co-evolution*.**

- **CO-EVOLUTION** means:

**The evolution of two or more species or organisms (natural or man-made) that interact closely with one another, with each adapting to changes in the other(s). Note all CAS must and do co-evolve. In the logic of the book, CAS use this thought model to thrive or die—act, assess action, design assessment observables, collect assessment data, turn data into information and information into knowledge, evaluate, learn, and adapt.**

- **This means that organisms, which we call CAS, living or acting in the operational context, interact and compete with one another, with each adapting to variations in others.**
- **All CAS must **CO-EVOLVE AND ADAPT** or die.**
  - **My theory is that co-evolving CAS will always follow the sequence I just described to successfully co-evolve and adapt. Nonetheless, a battle of the quality of this cycle shall rage in all areas of the contextual battle bubble. Those who perform the fastest and the best always have an open door to the seven advantages we have been talking about, starting with initiative. Those CAS that perform the worst shall not only lose, but most probably shall die.**



- **It follows that this sequence has two faces.**
  - **The first face allows for viewing the context and one's opponents and watching for reaction to your action. With practice, the CAS can assess, learn, and adapt faster and better than the adversary.**
  - **The second face though opens a door of vulnerability. That is to say, assessment and evaluation of assessment data are subject to false data, to manipulated data, to data laced with inputs designed to fire up emotions and to thus open another door that is the door holding back bias and logic errors.**

**Now, we move forth on our journey. As the next step, we shall engage in deep thinking about the role of culture as it affects CAS rules and models of action such as how cultural rules affect a combatant CAS's assessment of the context and its adversaries.**

## **Slide 16 Role of Culture on Complex Adaptive Systems**

- **In any struggle of clashing wills, colliding CAS and their co-evolution and adaptation contribute to the realization that truth can change in any operational context.**
- **Keeping this issue of fluxuation of truths in mind, let's think about that which guides and controls CAS and their actions through adaptation.**
  - **Within each colliding CAS one finds action models that shape the nature of action, hence imposition for one's *will*.**
  - **But going even deeper, one finds cultural rules that guide and constrain and unleash the types and targets of CAS actions.**
  - **It is within the rules that one can start to understand the purpose, strength of motive, and selection of capabilities. Thus, this peek into the engines of *will* proves valuable indeed.**
- **While many things in a culture change, its rules governing behavior, punishment, death, birth, marriage, religion, and so forth seem stable.**
  - **But even stable cultural rules can bend and sometimes snap in the winds of change brought forth with chaos of nonlinear operational contexts.**

- **Disturbances in any operational context happen with impositions of *will* by actions, reactions to attempted imposition actions, and from co-evolution activities of CAS.**
  - **Again, I advise you to keep the 18 characteristics of nonlinearity in mind, such as friction, randomness, presence and influence of sensitive variables, importance of context, and so forth.**
  - **I want you to understand an interesting consistency of data inputs that you will face. That is the arrival of both wanted and unwanted data.**
- **Four guiding forces drive CAS actions.**
  - **First, CAS must act, assess, collect assessment data, evaluate the data, learn, and adapt.**
    - **Thus, action and adaptation must occur to survive or to accomplish aims, goals, and objectives.**
    - **CAS have rules that account for demands that they co-evolve and adapt.**
  - **Second, rules guide and influence *action models* leading to particular kinds of actions, outputs of action, assessment, and adaptation activities.**
    - **This process is alive and thrives with our adversary's intelligence system providing the data to guide the rule-driven action model and its strokes designed to impose one's *will* on the**

**right spot at the right time with the right force to achieve the desired effect.**

- **And, of course, this intelligence system must provide assessment, evaluation, and adaptation conclusion recommendations.**
- **Thus, it should be clear by now that the adversary's co-evolution and adaptation system should be a first priority target in any struggle of *wills*.**
- **Third, rules serve to drive, guide, and constrain the activities of CAS. A rule for our purposes is,**

**A principle or structure of behavioral code governing and influencing the models that shape actions; guidance that governs, binds, influences, and leads models to direct CAS actions that may, in turn, impose one CAS's will on another.**

- **Fourth, CAS rules and models are subject to influence by data coming from the operational context in two ways. Wanted and unwanted.**
  - **Know that rules shape requirements and models purposefully directing data gathering via intelligence collection.**

- **Also, the context imposes unwanted data, often at the worst possible time.**
  - **Sometimes this input into decision-cycles and well-being of CAS could cause failure if the recipients of the intrusion were not inured to such surprise by data inputs coming from the context.**

**Other things rules do include the following:**

- **As one thought, rules dictate the connectedness you see as my four kinds of context merge, (e.g., individual, mini-individual, macro-small, and macro-large).**
- **As another thought, rules dictate the kind of action the CAS takes.**
  - **Know that decision-makers, planning people, and operations people implement *will* via the rules, models of action, and the selection of particular kinds of action, assess outcomes, evaluate collected data, learn, and adapt.**
- **Continuing with this line of thought, rules govern how people think—good and bad.**
  - **Thus, I say, first identify cultural rules, then successfully affect the rules, and then you can affect the way people think.**
    - **If you feed the rule-driven CAS assessment and adaptation system you can affect outcomes of thought.**

- **Take a moment and think of the power of cultural rules. They serve as the basis for ‘how to think’ about the requirement to select the kind of incoming data and with its gathering and presentation, attribute meaning. This action, purposeful as it is, applies a degree of meaning as data transforms into information. This is a man and machine process.**
- **These rules dictate needs to the action models then filter the action results/outputs to the assessment of actions, evaluating data coming in, learning by sharing, and adapting faster and better than an adversary.**
- **It follows that this process of which I speak, starts with cultural rules, knows their influence on action models in human minds, and because of their influence on the entire process of co-evolution, rules and action models become a huge target.**

**It became apparent me that there is a way to identify six principles, as I work to understand the context prior to, during, and after engaging an opponent in a battle of *wills*:**

- 1) Influence your adversary’s views of context. But you have to know and understand his culture and how it affects his thinking before you can influence his views.**

- **Turbulent disturbances come forth as change agents.**
  - **They affect people's cultural-laden system of beliefs and values.**
  - **Such influence gives rise to using the adversary's culture to gain advantages.**
  - **Turbulence affects operational contexts and CAS operating therein.**
- **Within a changing context, I envision a host of probabilities appearing and disappearing. Cultural rules shape both appearance and selection of the probabilities.**
  - **One probability involves seeking, finding, and changing an adversary's influential but nascent and fragile **RULES**. These rules prove important because they guide action models that the thinking people use first to strike and then to evaluate outcomes from assessment data.**
  - **Some of them can lead to advantages and disadvantages, so you must be careful about choice of affecting the right possibilities.**
- **On the other hand, most of the time trying to affect long-standing rules will prove difficult to succeed, and often the attempt ends in failure.**

- **But there are many rules to work with in this model of adversary CAS and their inner workings.**

⇒ **These workings come from the influence of culture.**

- **Consequently, rules have a significant influence on the actual outcomes of conflicts as each contestant sees and thinks about the aftermath of a collision of *wills*.**
- **Thus, the planning person must take into account the influence of rules and wisely choose the most influential of rules to attack.**

⇒ **That is, each side has to evaluate their rule vulnerability, protect theirs, and attack their foe's.**

- **Perhaps a person might try to attack a rule that appears the strongest at the start of the struggle, during lulls, and even in a stand-off.**

⇒ **Attacking the strong rules as you attack the weaker and more nascent rules might work. Let me explain a little more.**

- **Know that there is a weakening of the old rules and disturbances in the context, while the nascent is wrecked.**



⇒ Perhaps we can work on the strongest rules so as to weaken the strong and suggest to vulnerable minds that the weak is too fragile to live.

- With such thinking, we aim for and influence acceptance and use of different rules more to our liking and potential use.

⇒ Our sought after rule is more to our liking, as it could influence the thinking that goes into the CAS action models.

- The new rule could affect the selections of ACTIONS, the thinking that goes into the expected outcomes, the design of ASSESSMENT OBSERVABLES, the choice of collections systems to gather sought after assessment data, assessment output and the subsequent output and interpretation of assessment data.

⇒ Thus, this strategy also affects how the adversary EVALUATES ASSESSMENT DATA.

- It also affects how the adversary CAS LEARNS from its evaluation of assessment data.
- Affecting the rule could very well influence the thinking that goes into INTERPRETATION AND JUDGMENT OF WHERE CO-EVOLUTION efforts sit after the action occurs.

- **This rule could influence the thinking and sharing of **LESSONS LEARNED** from the synthesized information as it moves into knowledge.**
- **We know such knowledge development to be biased and subject to logic and bias errors in thinking and conclusions.**

**⇒ Thus, each sentient entity uses off-sets to account for a penchant to error in their thinking because of logic and biases errors and influences.**

- **And finally influencing one or more models that will affect thinking processes could have a remarkable influence on the thinking that goes into **ADAPTATION**.**

**2) Influence how he thinks about how your culture influences how you think about your advantages and disadvantages.**

- **This includes the cultural inputs to logic and bias errors in your thinking and what you do about this proclivity that exists in all human beings.**
- **Ponder how he considers how you think and be prepared to reinforce this notion to gain any kind of advantages.**

**3) Think about how he thinks relative to the nature of context and the culture and its wanted and unwanted data inputs.**

- **Seek weak links and prepare to attack or manipulate them.**

**4) Think about the vastness of the macro-context that encompasses your world which is but a small conflict but one that congeals and connects to larger and larger contexts, which enfold and affix with even larger contexts.**

- **Contemplate the whole of the 1) macro-large context 2) the macro-small context, 3) the micro-context, and 4) the individual context.**

**5) Anticipate and affect how the adversary's culture sways rules guiding and controlling CAS action models to your advantage.**

**6) Attack and disperse the congealing aggregations that come with chaos and that have the potential to provide your adversary with positional advantage and certainly enable him to have access to initiative, tempo, and momentum advantages.**

- **It is a good place to attack or manipulate the adversary's intelligence system.**

**Seizing advantages from the context and denying the adversary similar power can lead to your ascendancy to superiority in bouts of *will*.**

- **Attacking your adversary's efforts to co-evolve can lead to victory.**
  - **This aspect of struggles for *will* cannot be ignored.**
- **Within the operational context one finds advantages and disadvantages—for each side.**
  - **Attack or manipulate your adversary's advantages but always remember to extend the life of his disadvantages.**
    - **But always anticipate his attacks on your advantages and protect yourself.**
- **Exploitation and denial of attempts to gain advantages appear from the context.**
  - **It holds signals and hints as to the nature of conflicting attempts to exploit and win.**

**Of course, one finds the culture at work in everything that happens within the context.**

- **It permeates (or should permeate) all thinking, plans, actions, assessments, and adaptations for yourself and for your adversary.**

**Yes, our best and brightest must not only think about this process from their perspectives, but also their opponent's perspectives.**

- **My approach to winning in contests of *wills* demands that you think about how the adversary thinks about your thinking, acting, and eventually adapting.**

- **This approach demands that you relate to the cultures involved and influencing entities in the fray, such as national and international rules of engagement, and your adversary's constraints, if any exist.**

**My thoughts and explanations must be in any discussion of context.**

- **Specifically, I ask that you include *will's* definition.**
- **Along with definition, I want you to comprehend the presence and influence of turbulence and change.**
- **I ask that you recognize the power of culture in all that happens and what you think.**
- **I want you to recognize and work with the cultural rules that guide thinking, action, assessment, evaluation, and adaptation.**
- **Always think about the appropriate application of the list of 18 characteristics of nonlinearity.**
- **Seek to identify and leverage the advantages and disadvantages coming forth from the context and acknowledge your susceptibility to vagaries of the context.**
- **I ask you to learn to wargame the adversary's wargaming, immersing your mind in his constantly immersing and highly influential culture.**

- **You will need to employ people of your adversary's cultural background to act as your adversary and to critique your thinking.**
- **Your goal is to get into his mind, understand the importance of his culture, recognize the power of his cultural rules in his CAS action models, and learn his thinking as he attempts to use context to gain and hold one, two, or all seven advantages.**
- **I ask that you work with the 14 element thought model of *will* relative to the adversary and to the context at hand.**
  - **Always consider how the adversary CAS's culture influences him, as he works with the 14 element thought model.**
    - **The arrow of time and these 14 elements always end up immersed in the culture.**

## **Slide 17 Thinking Effectively About *Will***

**In this portion of the discussion, I will be thinking with you about the following subjects:**

**Slide 18 Considerations of Will**

**Slide 19 Thinking About the Adversary's Mind's Eye**

**Slide 20 Imagining the Mind's Eye**

**Slide 21 Thinking Like the Adversary**

**Slide 22 Thinking Model for Adaptive Adversaries**

**Slide 23 Matrix War**

**Slide 24 The Matrix in Simple Form**

**Slide 25 Connectedness in Matrix War**

**Slide 26 Connections—COGs in Vertical Domain Silos**

## Slide 18 Considerations of *Will*

At this point in our journey, I took a break and assessed my story. I came to the conclusion from my review and assessment that I needed to adapt. I decided to strengthen my 14 element model of *Will* as it spirals throughout my book and this discussion. I decided to add more intellectual heft to the conceptual framework.

- To meet this requirement, I developed a table with 18 considerations. In my book, a consideration is careful thought or extensive forethought. Thus, we now turn to a focus on the considerations of *will that I use in the book*.
  - Readers can use these considerations to understand the extent of the deliberations they must make in their thinking processes.
    - Readers are best served by pondering the processes and potential outcomes of imposing their *will* on another party or parrying their attempt to do likewise on you.
  - Therefore, I'll briefly discuss these considerations. Please note though that I present and discuss them throughout *The Power of Will in International Conflict*.
- The people most likely to use these considerations involve the people working and living with conflict.



- **More specifically, I point to decision-makers, policy-makers, corporate and military planners, aides to senior commanders, military commanders, corporate leaders, corporate strategists, attorneys, judges, police, and so on.**

**I started working on the list of considerations quite some time ago, but I was most focused on the term when I was the J2 or intelligence officer for the US Forces in Korea.**


- **Thinking about how to crack the moat of protection surrounding my adversary's *will* in that crucible, I found myself thinking about *will* every day. I was trying to anticipate if the North Koreans would be attacking the south like they did in June 1950, and if true, why would they attack and with what end-state did they have in mind.**
  - **If they attacked, I was worried if such an attack, specifically designed to impose their *will* on the Republic of Korea, was to accomplish limited objectives or to impose their *will* on the entirety of the Republic of Korea.**
    - **I found thinking about *will* to be a most difficult subject. Complicating matters, I had no reference to use as a starting point for thinking in depth about this subject.**
- **Then, in about 2005, several years after I had retired from the Army, as I was working as a consultant for the Joint Forces Command, I started to tinker more with this difficult, seemingly impenetrable concept of *will*. It**

**was then that I developed for the first time a partial list of considerations one should make to think about *will* successfully.**


- **In 2008, I was leading seminars to intelligence analysts centered on my book *Intelligence Analysis How to Think in Complex Environments*. I included *will* as a category in critical thinking. But I was frustrated in that there were no references for where I wanted to take the discussion of *will*. I became more motivated to explain *will* to my seminar students, but unfortunately, I had only briefly discussed it in my book about advanced intelligence analysis.**
  - **But I did come up with a few more considerations of *will* that seemed appropriate and usable.**
  - **Since then, I have been adding, subtracting, and combining considerations of *will*.**
- **In retrospect, I had just scratched and skimmed along the edges of the notion of *will*. But I didn't stop, think, and go into this concept in detail. I have done so now and have picked and shoveled my way into the heart and body of *will* with this, my fourth and last book. Now I know that my journey into *will's* heart must continue until I die.**
  - **This journey beckons to me and I take my deep thinking excursions to thus continue to add and subtract considerations for using and optimizing the phenomenon of *will*.**

- I determined that one has to think deeply and for a long time to sufficiently plumb the depths of the phenomenon of *will*.
  - Not wanting to stop at understanding the **PHENOMENOLOGICAL** aspects of *will*, I grew even more determined to take this deep dive to know **THE INTRICACIES** of *will*.
  - Such knowledge is essential for using advanced data, information, and knowledge to understand *will* in sufficient depth to put it into practice. Our aim? To possess and use data, information, and knowledge to gain a condition of superiority over our opponent and use this condition to win in battles of *wills*.
    - In my view, with such a condition of information superiority in hand, we can control the flow of data, information, and knowledge. Such control provides the capability to attack our adversary's co-evolution processes. Success in attacking his flow of data into his assessment processes can help us to successfully impose our *will* on our adversary.
- As you will see in the book and throughout this briefing, comprehending *will* requires hard mental work.
  - Accordingly, we must challenge our minds and frequently travel to **OUR HIGH GROUND OF**

**THOUGHT** and into the depths of our inner sanctum to contemplate what each consideration means.

 Will is so difficult that as one examines its parts, such as considerations, they find the pressing requirement to dive deeper into the ocean of *will*. We must do this to learn from *will's* depths how to employ the considerations under study in mental and physical combat.

- This kind of conflict will occur in particular contexts, working against specific adversaries. One has to know what they intend to do to us to successfully impose their *will* relative to what we want to do to them to impose our *will*.

 I'm sure you agree this is an interesting dynamic. Of course, you agree with the notion of duality and riding the wild pendulum to assist in causing the dynamic to enable your side to win.

- With improved understanding of these considerations, we realize how meanings and truths prove to be chameleon-like. I need to explain this proposition further.
  - Changing truths come forth and hit our consciousness from changing adversaries, chaos in operational contexts, nonlinear

**incidents, and combatants coping with episodic randomness and friction.**

- **With duality we know it is our foe who is trying to outthink us in contests of *will*.**
  - **He engages in mental combat and is capable in this kind of fighting.**
  - **He views the information age as being a perfect setting to attain information superiority.**
  - **He desires dominance in all aspects of the information domain. As such, he aims to control the moral and physical aspects of conflict.**
  - **Ultimately, our adversary always wants to outthink his opponent, in the imposition and denial of actions involved with clashes of *will*.**
- **These considerations of *will* involve the thinking that people must perform to broaden and deepen their thinking. The goal is, of course to thus optimize the use of knowledge as a weapon system in its own right.**
  - **Such intellectual competence comes from study and contemplation of these considerations of *will*.**
  - **Our goal is, of course, to triumph in contests of *will* and quickly and soundly thrash the adversary's *will* into submission and impose our *will* in any contests.**

**I originally designed over 40 considerations of *will*. But the list was unwieldy, and I had some duplication. So, I shortened it to what I construed to be the most important considerations.**

- **Even with this paring, however, you must know that typically people won't have time to consider all 18 considerations. Instead, you always need to prune the tree of considerations and select the right fruit, as it were, appropriate to the mission, situation, context, and adversary.**
- **Gaining sufficiency in our thinking to be competent in each consideration is challenging. Then, gaining sufficient knowledge about each of these considerations, to turn them into action is even more difficult.**
  - **Our goal is to leverage each consideration to design actions and to co-evolve faster and more efficiently and effectively than the adversary.**
  - **More or fewer considerations should be appropriate depending on the adversary, context, your aim, goals, objectives, and so forth.**
- **It follows that thought warriors need flexible minds to work with and apply their chosen selection of considerations for working with *will*.**
  - **You discover that the list of considerations demands comprehension.**

- **Unfortunately, they flux and change owing to contextual chaos and the actions of our adversary and other opponents in the fray, e.g., neutrals.**
  - **Thus, know well that these 18 considerations serve as guides and stimulants to our thinking. They are not dogma.**

**Also, in my experience people rarely perform the mental work to contemplate these considerations. The reason is that each prove difficult to think about from all the *perspectives relative to the culture*, which provides the ‘wallpaper’ of the context in which our contest of *wills* is occurring.**

- **Reasons for careful and limited selection of considerations should include time and the intellectual difficulty of thoroughly understanding the consideration.**
  - **Also, one could find it difficult to employ acquired knowledge when coping with the dynamic nature of a co-evolving adversary and the influence of turbulence in a nonlinear context. Thus, the validity of gained knowledge has a short half-life. Our minds have to be nimble and agile to move on and adapt.**
  - **Or perhaps the context might not provide sufficient conditions for some considerations to be relevant.**
    - **But rest assured, the potential for change and movement toward goals and objectives lurks and lives in the heart and mind of your**

**opponent who is waiting for the right moment to strike to impose his *will on you*.**

- **Thus, you realize that the considerations you select must always relate to potential probabilities coming and going and becoming relevant to an adaptive adversary and fluid context.**
- **Remember from our earlier discussion that the adversary CAS has to act, assess, evaluate assessment data, learn, and adapt even in the always changing operational context.**
- **And perhaps the adversary's nature doesn't match with all of the considerations.**
  - **It follows that your mind must move from the present to what is most likely in future courses of action based on your wargaming.**
    - ⇒ **This necessity clarifies how you need to co-evolve and to be in a position of superiority as the adversary adapts.**
  - **You can discover such anticipatory work as you perform one of the book's biggest ideas. That is, to learn how to wargame the adversary's wargaming and comprehend what his considerations of *will* are and how they appear.**



⇒I want you to be there waiting to pounce once he comes into your anticipatory trap.

With all of these thoughts swirling in your mind, my advice is to carefully choose the considerations to work with and draw a cut line between selected and not selected.

- For those considerations below the cut line, you find that old bogeyman—*risk*.
  - Thus, ensure people you work with know that you have delineated risks.
    - They also need to know how you intend to mitigate negative outcomes of each risk, if things go badly.
- In conflicts of *will* there always exists the high potential for **'TRUTH' TO CHANGE**. Thus, involved people have to anticipate change, prepare for its induced vagaries, and be nimble of thought and organization.
  - This finding requires a sentinel of sorts to warn you to periodically revisit your interpretation of the considerations of *will*.
  - At the same time, you and your Red Teamers must constantly evaluate the efficacy of your assumptions, influence of logic errors, and your biases. Our goal is, of course, to make the optimal use of incoming data, information, and knowledge.

- **Armed with the knowledge that truth changes implies to active minds a distinct need for anticipation, flexibility, and an understanding of the variables at play in the context.**
  - **This knowledge also causes us to recognize the connections between that which makes the original truth right and believable, but also the presence of multiple strands connecting the current truth with the form, object, or shape of a new truth coming in to being.**
  - **Choosing such a mental course of action proves vital to deep thinking sufficient to notice and address changes in existing conditions. We must also learn to recognize either obvious or subtle appearances of new and suddenly demanding considerations of *will*.**
  - **Such thinking proves necessary for spotting adversarial attacks against your assessment systems via deception.**

**So, let's now talk about these 18 considerations.**

- **All appear in the book in a table and the book explains each.**
  - **In fact, I devote entire chapters to most of these considerations.**
- **Thus, I propose that one must consider the right elements of the table to succeed in planning for and executing impositions of *will*.**

- Here are the brief definitions of each of the 18 considerations:
  - 1) **LIFE FORCE** means impetus force within a human being that ignites and motivates purpose, strength of motive, capabilities, passion, sacrifice, and so on.
    - Life force is a fundamental dynamism within one's being that compels a person to take what another person possesses.
  - 2) **PURPOSE** is the reason, grounds for, cause for which something is done or created, or why something exists.
  - 3) **CAPABILITY** is the means, ability, and potential to perform or achieve designed actions or outcomes through a set of observed and measured acts, activities, and influences.
  - 4) **STRENGTH OF MOTIVE NEEDS TO BE DIVIDED:**
    - Strength is a status of being strong, such as taking a stance against unfavorable odds or potential cost or loss.
    - Motive is the force or energy or other provocative phenomena that cause a people to act in a certain way, do a certain thing, endure deprivations, or operate, act and behave, or perform.
      - It involves not only its content or purpose, but also the action and outcomes that cause.

- Motive is sublimated to life force, and purpose, but it infuses energy to all of the other elements in my model of *will*.

5) **PASSION** is a strong craving whose presence and influence interferes with rational thought.

- It often appears as emotion, which can imprison rational thought.
- With passion, one's rational and deep thinking capabilities decay.
- This means that the adversary, context, and derivative considerations become victims of the highly influential emotion of passion.
- Naturally, one has to take into account the presence of passion not only with respect to the adversary, but with respect to one's own forces.
- As another perspective for your consideration, know the difficulty in wargaming passion as it also extends to the other side as they try to estimate the passion your force has.
  - To understand it, we have to think and feel the emotion our adversary experiences, whether strong, weak, or dormant.
  - Passion does matter, and you must take it seriously.

6) **PERSEVERANCE** is the indomitable continuation, lasting power, resolute finishing of an action, or dogged,

continued defense against another person's imposition of their *will*.

7) **DETERMINATION** involves a firmness of one's fixation on resolve, purpose, resistance, and imposition actions.

- People can comprehend the difference between determination and its twin, perseverance, by envisioning determination as **A FUEL THAT PROPELS PERSEVERANCE**. This fuel flows throughout the 14-step will model to potentially empower decision-makers' *wills*.

8) **ADVANTAGE AND DISADVANTAGE**.

- Advantage—a situation of being in a preferable position over another competitor.
- Disadvantage—a state or an instance of being in an unfavorable circumstance or condition.

9) **SACRIFICE** means a readiness to endure loss even with physical and emotional pain for the sake of accomplishing a goal, objective, successfully executing a strategy, or hating, retributing, and, of course leaders' exhortations.

10) **AFFECTING COMPLEX ADAPTIVE SYSTEMS (CAS) ADAPTATION CYCLES**—The nub of this consideration revolves around the notion of co-evolution.

- Reinforcing what we heard about in an earlier section, this word means the evolution of two or more species or organisms, natural or man-made,

**that interact closely with one another, with each acting, assessing, and adapting to changes in the others.**

- **All complex adaptive systems involve people and their organizations. I take some license to borrow the term complex adaptive system or better known as CAS, from physics and other scientific use. As such I use it to describe human beings, their organizations, and their activities.**
  - **Thus, all CAS must co-evolve, meaning they must approximate this following process: act, assess, design assessment observables, collect assessment data, turn data into information and knowledge, evaluate, learn, and adapt.**
    - **All CAS must strive to adapt faster and better than their adversary or face neutralization or death.**
  - **Thus, I say it is only natural for competing organisms to attack their opponent's co-evolutionary processes, people, and machinery.**
    - **I submit it is logical to assume that competing organisms must anticipate and thwart such attacks on them or their co-evolution apparatuses, while simultaneously planning to attack or confuse their opponent's co-evolutionary and adaptation maneuverings.**

- **The way of thinking among warring CAS must be the way of aggression, as even when aggressively searching for opportunities and advantages, they are aggressively thinking about their own vulnerabilities.**
  - **Therefore, a must duty is to characterize the organisms' intelligence collection and their analysis and counterintelligence apparatuses because each gathers and interprets assessment data, which ultimately points to their future adaptation.**
  - **An adversary's adaptation process is vulnerable to exploitation, and it must be vigorously attacked, killed, or neutralized. And, be forewarned once again, your adaptation process is subject to being attacked too.**

**11) THAT WHICH TRULY MATTERS** involves using our reasoning powers and higher level thinking skills such as analysis, synthesis, and holism.

- **People use these thinking methods to discern the nub or central idea of value.**
- **Also, we have to think about capability and strength of motive. With deep thinking, knowledge blooms from the manipulation of data into information and the transformation of information into knowledge.**

- **Winners in contests of *wills* always seek ways to twist this knowledge sufficiently to transform and fit it to gain power.**
- **Knowing **THAT WHICH TRULY MATTERS** is a powerful capability because it also gives us a peek behind the curtain masking the inner thoughts of people with whom we compete. This knowledge of an notion of *that which truly matters* is influential in that it connects with other parts of the book, such as ‘value of the objective.’**
- **Recognizing that which truly matters must appear in our repertoire of moral and physical domain weapons to win in a contest of *wills*.**
  - **However, remember the word ‘duality.’ Here it means that the adversary will be trying to think as you think and protect his ‘**THAT WHICH TRULY MATTERS**’ from your efforts to exploit.**
    - **Thus, know your adversary always considers and then attacks what he thinks you think ‘that which truly matters’ to mean.**

**12) MARVELOUS TRINITY, INCENTIVE, AND INDUCEMENT.**  
**Trinity** as I paraphrased from Clausewitz’s tome, *On War*), is composed of primordial violence, hatred, and enmity ... it has a blind natural force; it involves the play of chance and probability where the creative spirit is free to roam; the trinity and its elements are



**instruments of policy, which makes it subject to reason.**

- **The first of three elements ... concerns the people; the second the commander and his army; the third the government .... (Clausewitz, *On War*, 89).**

  - **I advise you to know that your opponent intends to protect his trinity and to attack yours's.**

- **Incentives prove important in considerations of *will*. An incentive incites or tends to incite to action, as a reward offered for increased productivity.**
  - **It also means an action, reward, or promise that could motivate or encourage desired action in an opponent.**
  - **Know that an **INCENTIVE IS BENIGN** because there is no punishment intimated if the incentive is rejected or if it fails to alter behavior.**
- **An inducement is similar to incentive. But an important difference exists. Yes, an inducement is an offer that promises or encourages one side to accept the terms of the other side's desired outcome.**
  - **But an inducement is more threatening than incentive. It implies punishment if the**

**receiving side tries to manipulate conditions of the agreement for their self-interest.**

- **Thus, an **INDUCEMENT IS NOT BENIGN** and is actively dangerous because punishment is implied for rejection or for failure to change a behavior.**

### **13) VALUE OF OBJECTIVES.**

- **Value means a moral principle or belief. One or more values mean an acceptance and standardizing behavior of a person or a social group.**
  - **Values dictate the worth of things, principles, goals to accomplish, or power that people seek to control.**
  - **A value derives from the culture and one's perspective.**
  - **Know that organizations, and countries have values.**
  - **The culture houses, explains, and enforces rules relative to values.**
  - **Thus, it is self-evident that values live in cultures, in which operational contexts and battles of *will* exist. Values prove sufficient and significant, sometimes prized, in a variety of ways by all sides in a competitive situation.**

- **An objective is a deliberate action that consumes mental and physical energy.**
- **This energy helps to feed the appetite of the elements comprising *will* and its 14 key elements.**
- **The book discusses the value of objectives in depth. Suffice it to say, there is a value to objective ratio one can use to help them think. As one example, I show in the book a way to divide the value to objective ratio into quarters.**
  - **The first 25% involves *the quality of thinking in this sequence*—vision, desire, resolve, *will*, purpose, capabilities, strength of motive, advantage, disadvantage, perseverance, determination, passion, sacrifice, action, assess, collect assessment data, evaluate, learn, and adapt.**
    - **This is the sequence of one's imposition of his *will* on other people, organizations, nations, and the like.**
    - **It has to be effective to enable the act of imposing one's *will* to be successful.**
  - **The second 25% involves a must consideration of duality.**
    - **This judgment leads to the back and forth of wargaming, wargaming the adversary's wargaming, identifying how**

**he thinks, and how he thinks you think and so on.**

- **The third 25% involves identifying his highly considered objectives. I counsel you to take these prized objectives away or alter their state of appearance and capability.**
  - **My belief is that such a focused effort at the heart of his most prized and valuable objectives will cause him angst and deviation.**
  - **Such a well-aimed stroke also influences the physical well-being of the recipients of your actions, as well as cognitive dissonance causing divergence in their thinking, acting, assessing, and adapting.**
- **The fourth 25% involves protecting our objectives and their value via anticipation, wargaming our adversary's wargaming, and influencing his intelligence system.**
  - **This tack attacks or manipulates one's adversary's intelligence feeds supporting his co-evolutionary needs.**
  - **Out of necessity, he must continuously gather data to feed his decide, act, assess, evaluate, learn, and adapt faster and better than his adversary cycles.**

- His co-evolutionary cycles are vulnerable to manipulation and neutralization.

14) **CONSTRAINT** is a restraint or limitation on action or behavior. The constraint can appear due to morals, values, lack of resources, limited capabilities, limited time, contextual turbulence, legal restraints, or cultural inhibitions.

- A constraint can impede the efforts or desires of people attempting to impose their *will* on another person or while trying to block an adversary as he attempts to impose his *will* on you.

15) **PRESSURE POINTS, DECISIVE POINTS, AND CENTERS OF GRAVITY.**

- A Pressure point is a sensitive, critical point, weakness, or dispute against which pressure of many persuasions is directed.
- A Decisive point is a geographic place, specific key event, critical factor, or function that, which acted upon, allows leaders to gain a marked advantage over an adversary or contribute materially to achieving success. US Joint Staff Publication 1-02.
- Centers of gravity—the hub of all power and movement on which everything depends. That is the point all our energies should be directed. Clausewitz, pages 595-596, in *On War*.

- Please note that as you think deeply, you see these three notions, sometimes realities, as they entangle.
  - The entangling amalgamation of these three concepts (pressure points, decisive points, centers of gravity) into a whole comprised of aggregates and aggregations contribute to discerning *that which truly matters* and the *values of objectives*.

16) **AS WE THINK ABOUT KINDS OF WILL**, we must include a substantial variety. The variety includes adversary's *will*, friendly *will*, populace's *will*, willpower (not our focus in this book), imposition of *will*, blocking others' impositions of their *will*, governed people and their collective *wills*, individual *will*, groups of people and their combined *will*, leaders' *will*, governing people and their *will*, organizational *will*, and so on.

- Keeping this extensive variety of *wills* in mind, the important ideas to remember involving these following views include—
  - Settle on the *will* or *wills* that you must compete with to win.
  - Divine the target that you intend to impose your *will* upon. Identify the goals and objectives you seek and plan to sever their linkage with the *wills* you target for action.

**Consider this struggle of *will* from your adversary's perspective.**

- **Anticipate your target's strength of motive, capabilities, and other pertinent elements of the 14 element thought model the book presents.**

**Along with imposition comes its antipode. That is, one always has to anticipate how your adversary will try to impose his *will* on you.**

- **Always consider your adversary's self-interest, true purpose, strength of motive, capabilities, perseverance, determination, sacrifice, passion, advantages, disadvantages, and so on.**

**As a last aspect of this consideration, I want you to think about the astonishing phenomenon of unintended consequences and the birth of new kinds of *will*.**

- **Think about the appearance of congealing combinations that come forth first as a single aggregate, but soon transform into an aggregation.**
  - **It too transforms and becomes much stronger and much more likely to have the capabilities to successfully impose its (the aggregation of aggregates) *will* on others.**
  - **Or, naturally, this aggregation could be a constraint to your efforts.**

17) **FEAR OF ALTERNATIVES**—Let's break the phrase apart.

- **Fear** means a disturbing or threatening emotion arising as a premonition of lurking danger, trepidation of an impending experience, or a foreboding state of mind coming from one's mental and emotional status.
- **Alternative** means the presence of a certain flexibility, the **APPEARANCE** of varied options, a vision of a different method or path, or the availability of a selection from which to choose. Alternative proves to be a close relative to potentiality, which I define as "possibilities unbound by constraints."

18) **A PRESSURE** is the continuous physical or emotional "weight" a decision maker, or anyone for that matter, feels, intuitively, senses, or thinks about as they make a decision. The pressure comes from dealing with turbulence, nonlinearity, fear of failure, risk, ego, self-interest, and the unknown coming from not knowing the adversary's heart and mind and the changes that come once the contextual pool of quiet water becomes agitated with stimulation and intrusion.

- Examples of pressures of interest to us could include self-pressure; ego; and self-esteem; physical; adversarial; organizational; political; historical; cultural; familial; hatred; revenge and so on.



- **We have to know our own potential pressures in which the adversary could attack purposefully creating pressure on the friendly leadership hierarchy with the goal of seeking advantages or attacking valuable objectives or causing perturbation in that which truly matters to us. And, the antipode once again. That is, know the adversary's vulnerability to pressure and vigorously attack it.**

**Now, we are off to a different aspect of this journey. That is, we are going to think about the adversary's mind's eye, how the thinking adversary thinks, and how one attacks the adversary's plan at their inception.**

## **Slide 18 Thinking About the Adversary's Mind's Eye**

**Imagination—the most important aspect of thinking. It was Albert Einstein who said, “Imagination is more important than knowledge.”**

- **I believe we have to imagine the adversary's mind eye so as to influence it.**

**A mind's eye is a human being's inner sanctum of thought.**

- **It is where one imagines and visualizes the thoughts that the rational mind provides and comingles it with the data fragments and shards streaming into this sanctum via one's senses—through one's bodily portals into the quiet, inner refuge of one's private thoughts.**
- **The minds' eye provides entrée into one's undermind where the fragments, shards, and shreds of data swirl and sometimes collide with rational thought and imagination—the upper mind in our thinking. But sometimes these seemingly meaningless shreds of data make it into the upper mind to turn into meaning. (please note, I have extrapolated and borrowed some of the ideas of Guy Claxton from his book, *Hare Brain, Tortoise Mind*, published in 1997 in this depiction of the human mind).**

**One's mind's eye is a gatekeeper, a guardian, as it were, precluding the upper mind from being overwhelmed by the massive amounts of data one subsumes into the undermind.**

- **This role presents opportunities for entering and striking or influencing the adversary's mind's eye and protecting yours.**
  - **It is via the adversary's mind eye where you can attack adversary plans at their inception.**
- **It is through the mind's eye that one can see the world as the adversary sees it and thus grasp his/her perspectives and perceptions.**
- **It is where the life-force lives and dreams of passion, desires, retribution, hatred, love, fears, live and blow about in the vastness of the mountains, plains, and swamps that form the human mind, the wonderful human mind.**
- **In is via the mind's eye in which one finds the adversary's inner sanctum and high country.**
  - **With this discovery, you now discover how to approach several onerous tasks.**
    - **Some of these tasks include understanding—how he thinks, what he thinks, why he thinks.**
    - **You also consider how his logic and bias errors, culture, education, perspectives of technology, and world-view affects his mind.**
- **Several important elements condition one's mind's eye. As a few, consider the influence of *will*, culture, education, world view, experience, intellect, view of you,**

**view of technology, view of the operating context, mythos, values, mores, rules, and emotions and so on.**

- **It is here, in one's mind's eye, where the true seeker can find the inception of thought. One can find the starting point in which opponents choose to capitulate or to do battle to win wars of wits and bouts of mental combat for triumph of one's *will*.**

## Slide 20 Imagining the Mind's Eye

A mind's eye is, of course, to be found in a human mind.

- We are speaking about a mind that is thinking about imposing his *will* on an opponent who possesses something he wants.
  - Or we could be thinking about a mind that is deep in thought discerning whether to parry or capitulate to an imposition of *will*.

The Merriam-Webster dictionary defines mind's eye as, *the mental faculty of conceiving imaginary or recollected scenes*.

- My definition of mind's eye is a place where functions relative to the dictionary definition occur.
- Here is the definition that I developed for my book of *will*. A mind's eye is an,
  - ...inner sanctum of thought where one imagines and visualizes a comingling of data fragments and shards streaming into this sanctum via the body's portals into the quiet, inner refuge of one's private thoughts.

Psychiatrist Carl Jung has another label for what I identify as the phenomenon of mind's eye. That is, in my view, he uses the word *psyche* to describe the mind's eye like I use in my book.

- **All thinking people recognize that they have a psyche and other people have psyches.**
  - **I dare say, that they recognize that we live with consciousness, where we think, plan, decide and the unconsciousness, that is unknowable.**
  - **We go into the well of the unconscious only in our dreams and during the strange instances all of us have experienced in being alive in other times, Déjà vu, flashbacks, and visions of what could be in the future.**
  - **We walk on higher ground when we realize and admit out loud that neither the conscious nor unconscious parts of our minds can ever be completely understood.**
- **Dr. Jung's thoughts add brightness to our mind's eye as he tells us,**

**“But the psyche creates our world, our understanding, which allows us to make only indirect and hypothetical inferences about the real nature of matter. A struggle occurs in one's psyche between real and unreal ideas and thoughts ... Hence if we speak of the totality of an experience, the word 'totality' can refer only to the conscious part of it...the psyche is no exception to the general rule that the universe can be**

**established only so far as our  
psychic organism permits. Jung,  
*Psychological Reflections*, 7.**

**This means to me that if we expand our intellectual horizons,  
we will be able to extend our view of what is possible. Jung  
goes on to posit,**

**Anything psychic is Janus-faced: it  
looks both backwards and forwards.  
Because it is evolving, it is also  
preparing the future. Were this not  
so, intentions, aims, plans,  
calculations, predictions, and  
premonitions would be psychological  
impossibilities. Jung, *Psychological  
Reflections*, 15.**

**The mind's eye is indeed difficult to describe as it is a human  
being's inner sanctum, deep within a mind, where a host of  
intellectual functions occur. Carl Jung helps us a little with  
this thought,**

**“I know, however, from hundredfold  
experience that it ... contains the  
equivalents of everything that has  
been formulated in dogma and a  
good deal more, which is just what  
enables it to be an eye destined to  
behold the light. This requires  
limitless range and unfathomable**

**depth of vision.” Jung, *Psychological Reflections*, 20.**

**I believe, broadly speaking, that the mind's eye is where, at a minimum, some intellectual functions occur such as, 1) analysis, 2) synthesis, 3) combination, 4) fragmentation, 5) coalescence, 6) relationships, 7) integration, 8) synchronization, and 9) the place where an apparition of holism first casts its welcome shadow.**

**To reach this higher level of thinking, one can pay a price, so Carl Jung tells us about the light of knowledge and its enabling function for broadening and deepening one's mind,**

**“The brighter it becomes via deep thinking and knowledge, the more agitated the unconscious becomes and the wilder the dreams that come forth therein.” Jung, *Psychological Reflections*, 25.**

**One's mind's eye, or as Jung calls our psyche, is a place where the thinker works with aggregation and wholes.**

- **Thus, our person becomes aware of a propensity at play, requiring a watchful eye for the appearance of conditions in which variables become not only sensitive but highly influential.**
- **They watch for and recognize when sensitive dependence on initial conditions becomes prevalent.**
- **They watch for and shape the conditions when small inputs start causing the formation of large, unexpected**



**outputs such as aggregates becoming large aggregations.**

- **It is where the birth of causality occurs as **CAUSES TO LINKS TO EFFECTS** appear first as a vision, then as real action.**
- **It is there, in the mind's eye, where this sought after presence of holism first lights up the probabilities for achieving synergy.**
  - **These prospects lurk in the operational context and often take only with the embracing of a sensitive variable to come forth into actuality and influence in contests of *wills*.**
- **With synergy, one finds a variant of holism and in so doing discover the phenomenon of wholes being greater than the simple sum of their parts.**
  - **One of the implications that come to mind is that leaders and decision-makers should recognize and employ the mental power of their best thinkers' minds' eyes to perform the deep and arduous thinking.**
    - **Also, this implication suggests that mental combat involves a battle between contestant's mind's eyes.**

**As I consider the mind's eye, I notice its brightness and its functioning. The brightness ebbs and flows but continually becomes brighter and brighter with study, deep thought, expression, and understanding of reflection. Interestingly,**

**Jung tells us that as an event occurs in what I call an operational context, it occurs again in our minds if we are conscious of the event. Jung, *Psychological Reflections*, 22.**

**Along the line of the notion of a human being's mind's eye, Clausewitz tells us of what he calls the *inward eye*.**

- **He says the inward eye,  
“Stripped of metaphor and of the restrictions imposed on it ... merely refers to the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study and reflection.”  
(Clausewitz, *On War*, 102)**

**Clausewitz also tells us of the inward eye of a relationship relative to my book's discussion of determination and perseverance as essential elements of the 14 element thought model I present in *The Power of Will*.**

- **As such, Clausewitz tells us,  
“Their courage and their intellect work are separate, not together; determination, therefore, does not result. It is engendered only by a mental act; the mind tells man that boldness is required, and thus gives direction to his *will*.” (Clausewitz, *On War*, 103).**

**His thoughts help to reinforce a connectedness between *On War* and *The Power of Will* with this thought that men,**

**“...cannot possess determination in the sense in which we use the word. They may act without hesitation in a crisis, but if they do, they act without reflection; and a man who acts without reflection cannot, of course, be torn by doubt.” (Clausewitz, *On War*, 103).**

**Clausewitz's inward eye deals with presence and means to reason and always seeks a balance of mind. Under even the most difficult situations, the mind can't succumb to fear of failing or the emotion of physical fear. Instead, he tells us the intellect,**

**“... must play a great role in war, the domain of the unexpected, since it is nothing but an increased capacity of dealing with the unexpected.” (Clausewitz, *On War*, 103).**

**Something else occurs in the mind's eye. It is **PERCEPTION**, which is, of course, a derivative of perceive.**

- **To perceive means ‘to become aware of, know, or identify by means of the senses.’**

- **It is perception that directly affects how people think, plan, and interpret.**
  - **‘To perceive’ is the start of a thought process that this book presents and uses in hypothetical planning, wargaming, and advanced analysis sessions.**
- **Perception is how one’s **LIFE FORCE** first becomes alert to a desire arising within one’s mind.**
  - **Perception is how a person first becomes aware of the potential of resistance to his desire and what outcomes could come forth from clashes of *wills*.**
- **As a perception departs, it leaves traces that prove to be vestiges.**
  - **The deep thinker scrapes these traces and synthesizes them back into wholes.**
  - **With the wholes, the mind’s eye turns that which one perceives into concepts, ideas, cost/benefit analyses, thinking, and so forth, as I listed earlier.**
- **Just keep in mind that perception isn’t thinking but it is the start of thinking process.**
  - **It is where one’s imagination comes forth to influence the thought functions I listed before.**
  - **Remember, your adversary is also probably going through the same intellectual drill.**

- **Borrowing from Sun Tzu who tells us to: attack the enemy's plan at their inception, interpolation tells me when it would be wise to start attacking or at least influencing my adversary. My thinking tells me that any action must be very subtle at first.**
  - **Then, I hear my readers and listeners ask a good question—They ask why?**
- **I have an answer. That is, an appearance of perceptions appears in my mind's eye. Such appearances suggest the presence of one or more cause and effect relationships.**
- **Change it is, that actuates my sensory apparatuses.**
  - **I notice signs of change through slight movements, subtle actions, nuanced shifts in verbiage, variations in what are repetitive or normal patterns, or better yet, the slowing or speeding up of the activity involved with standing patterns.**
  - **The thought here is to imagine what his perceptions could be. I also capture in my mind's eye a visual that shows a nexus connecting perception, desire, life force, and resolve.**
  - **I then set my co-evolution system to work against my opponent without any cyber-attacks.**

- **While realizing this heightened watchfulness disturbs the universe, I attempt to hide the cause via social media, exercises, or training.**
  - **Instead I gain influence with my intelligent collections tasking driven by advanced analysis observables.**
  - **I'm specifically looking for data showing a blip indicating shifts in normalcy and indicating unexplained change in my adversary's activities, perceptions, desires, life force, and resolve.**
- **Can this be done? The answer is yes, by all means. We have to pursue such thoughts to control the initiative and the other six advantages.**

**Now I speak of and quote from Sun Tzu's famous aphorisms. As one relative to our case at hand, Sun Tzu tells us,**

**“To subdue the enemy without fighting is the acme of skill. Thus, what is of supreme importance in war is to attack the enemy's strategy...Attack plans at their inception.” (Sun Tzu, *The Art of War*, 77.)**

- **With such adjurations rampaging through our thoughts, one finds, with deep thinking, some of what could happen or has happened in one's mind's eye.**
  - **That is, if we listen to Sun Tzu, then we want to attack our adversary's plans at their inception.**
  - **To do so, we must plot to defeat the enemy before he commences actions to impose his *will*.**
- **To attack an enemy's plans and his strategy, at their inception, takes a connected presence and influence of aggressive mindsets in a number of people. One aspect of this work is to find the clues of the beginning of effects, links, and causes.**
  - **Such clues could lead our minds to alert on changes in energy levels leading to subtle alterations in the potential operational context.**
  - **Finding changes at inception suggests mental travail with the thought warrior knowing full well that lots of deep thinking must occur.**
  - **Out of the thinking comes actions and, in reality, a plan to successfully impose your will and thwart the *will* of the adversary.**
    - **This plan, my objective, and associated action is to alter his thinking, his planning, and his scheming before he turns them into physical attempts to impose his *will* on me.**

**Interestingly, you must realize that a perception is Clausewitz's view of imagination. As such, he tells us that**

**“Things are perceived, of course, partly by the naked eye and partly by the mind, which fills the gaps with guesswork based on learning and experience, and thus constructs a whole out of the fragments that the eye can see.”**

**He goes on to say that, “...if the whole is to be vividly present to the mind, imprinted like a picture, like a map, upon the brain, without fading or blurring in detail, it can only be achieved by the mental gift that we call imagination.” (Clausewitz, *On War*, 109)**

**One of the most creative functions that appears in one's mind's eye, is where people first begin to recognize wholes as appearing, congealing, and connecting.**

- People, organizations, activities, communications, data, equipment, thoughts, computing, and so forth, all start to gather and congeal.**
  - Their purpose comes forth by the appearance of relationships, connections, and aggregations.**

**So, let's consider the wholes of which I speak.**



- ***A whole is something comprehensive in itself including all of its parts or elements.***
- **Wholes can pre-exist, such as the human body, a tree, an organization, or an airplane.**
  - **Or, human beings, organizations, and machines can make wholes of like or disparate elements or parts using the theory of aggregation.**
  - **Wholes come together with the thinking skills of synthesis and holism.**
- **Interestingly, Clausewitz talks about the importance of wholes, coming to the mind's eye via appearances, when he tells us in *On War*,**

**“The man responsible of reevaluating the whole must bring to his task the quality of intuition that perceives the truth at every point...Otherwise a chaos of opinions and considerations would arise, and fatally entangle judgment...”**

**He goes on to tell us,**

**“What this task requires in the way of a higher intellectual gifts is a sense of unity and power of judgment raised to a marvelous pitch of vision, which easily grasps and surmises a thousand remote possibilities which an ordinary mind would labor to**

**identify and wear itself out in so doing (Clausewitz, *On War*, 112).”**

- **One’s mind’s eye is the door to the upper mind. As I say in my book, *The Power of Will in International Conflict*, the upper mind is protected by the mind’s eye.**
  - **One’s mind’s eye is at work with perceptive inputs arriving and mixing with one’s imagination from the under-mind and rational thought from the over-mind.**
  - **This eye selects the data, information, and knowledge coming into the upper mind.**
- **The upper mind is where thinking occurs.**
- **The under mind takes all remaining data, absorbs it, analyzes it, and stores data that has a chance of relevance. Author Guy Claxton explains the undermind with these passages:**
  - **“The undermind is a layer of activity within the human psyche that is richer and ‘*more subtle*’ subtler than consciousness.**
  - **It can register and respond to events which, for one reason or another, do not become conscious.**
  - **We have at our disposal a shimmering database full of pre-conceptual information, much of**

**which is turned down by consciousness as being too contentious or unreliable.” (Guy Claxton, *Hare Brain, Tortoise Mind*, 116)**

- **The under mind stores some of the vast data coming into the body's portals and discards the rest into nonbeing.**
- **The under mind connects with the mind's eye. But, the undermind is largely opaque. So, they don't communicate as the mind's eye communicates with the upper mind.**
  - **One's dreams come forth from the undermind and often consists of the data that the upper mind has discarded as being specious or stray.**
- **With this line of thinking, one's mind's eye must eventually reason how the adversary perceives, thinks, and plans.**
  - **In addition, one has to know how his adversary views the operational context, to include the advantages and disadvantages it presents to each antagonist.**
  - **Here is another thinking chore.**
    - **That is, you must realize that this adversary has to think about how you think he thinks about you and your view of his capabilities**

**and the motives and purposes behind any hostile actions.**

- **This same look into how you think he thinks must involve the pluses and minuses that the operational context presents for exploitation.**
- **Our adversary also has to have a good understanding of how the adversary that appears so clearly in his mind eye's and thinks about his adversary.**
- **The mind's eye must comprehend the recipient's thinking about his desires and the awakening of his life force.**
- **Our minds must see and thoroughly understand his strength of motive coming forth in his early thoughts.**
- **The mind's eye has to work with both upper and under minds to gain understanding of this opponent.**
  - **As such, we have to anticipate how he thinks and decides that what truly matters relative to his plans to attack and win, thus successfully initiating actions to impose his *will* on us.**
- **But of great interest, the wise leader considers how this adversary contemplates violence to successfully impose his *will*.**

- **Such thinking always involves an addendum that prods us to ponder how he thinks you perceive, think, plan, decide, act, assess, and so forth.**

## Slide 21 Thinking Like the Adversary Thinks

Mental combat is a given as we think about our adversary. Of course, this has been true since the beginning of man's conflicts with other mankind. But in this age, mental combat is even more important than ever. As a first step, here is the definition of **MENTAL COMBAT**.

The constant multidomain, multilevel, multi-spectrum cognitive conflict or competition in which people with conflicting interests attempt to impose their *will* via superior mental functioning.

The book makes a few early statements that you should recall.

- That is, **MENTAL COMBAT** exists and functions under a larger umbrella of connected **WARS OF WITS**.
  - This means that as one moves vertically up say a chain of command and level of operation that each level is involved in increasingly larger and more complicated **WARS OF WITS**.
    - But venture your gaze in a horizontal way around and at a standoff, and you find large aggregations of wars of wits that, of course, house a vast variety of bouts of mental combat.

**One can claim, of course, that we cannot enter our adversary's mind and know exactly what he is thinking and preparing to do.**

- **Nor can we know with precision how he will react when we do something, or how he can initiate action and do something to cause our reaction.**

**Regardless of difficulty, we have to learn to think like the adversary and beat him.**

- **Yes, we have to enter his skin and mind.**
  - **We have to travel in his mind and see the world as he sees it, and in particular, his perspective on himself and us relative to conflict.**
- **So, you might ask, what are the basics of outthinking the adversary?**
  - **After all, he seems to hold all the advantages such as knowing his culture, speaking its language, and often knowing the physical context better than us.**

**The answer to the question can be found in this list of things one must do to outthink their adversary.**

- 1. Know his 14-element model for thinking about *will*, or facsimile thereof.**
- 2. Know the kind of conflict he knows that he has embarked upon.**
- 3. Understand his thought model for thinking about the overall situation.**

- The **'HOW TO THINK'** thought model I use involves 21 elements: strategic aim, goals, objectives, constraints, resources, strategies, tactics, *will*, co-evolution and adaptation, duality and pendulum thinking, adversary wargaming, 13 element model to enrich his thinking, advantages and disadvantages, logic and bias errors, pressure points, decisive points, centers of gravity, understanding of nonlinearity, understanding the nature of the operational context, engaging in Matrix War, and so on.
4. Know the situation, operational, and political context in which he plans to compete.
  5. Understand his previous behavior, his culture, his world view, his travel in and out of his country, his views and proficiency in technology.
  6. Know his co-evolution and adaptation cycle and the system he uses to collect assessment data of sufficient value so as to evaluate his actions and adapt.

We can also work into our perspectives and how we think by considering and using the following thoughts.

1. As a first step, by recognizing that we compete with an unpredictable adversary helps you to be agile in mind and organizational processes. This adversary will do things that you don't expect. The unexpected causes cognitive dissonance.



- **This means that in our work to be aggressive and anticipatory to gain the initiative that we shall sometimes fail.**
- 2. As a second step, in understanding that we compete in a context that houses two kinds of systems. One involves linear systems. They can be quite stable. Their monitoring allows us to know and protect the most important linear systems relative to the conflict, context, culture, and, of course, the adversary's, while comprehending impending chance events in nonlinear systems.**
- **The other system is nonlinear.**
    - **But the nonlinear system is, for the most part, impenetrable, turbulence prone, unpredictable, full of variables, and full of big and small complex adaptive systems all of which co-evolve with their competitors.**
      - **They co-evolve with action followed by rigorous assessment, they collect data pertaining to outcomes of the action, they evaluate assessment data, learn, and adapt.**
  - **Many other characteristics of nonlinearity appear in the book and in this briefing, so please recognize that these are but a few.**
- 3. As a third step toward intellectual redemption and preparation for mental combat, one always helps**

**themselves by sensing and recognizing the presence of influential sensitive variables.**

- **In a nonlinear system, variables prove plentiful and influential.**
  - **If a variable becomes sensitive, it can cause immense and unexpected change.**
  - **Variables become sensitive because of one or more causes for the effect have stimulated the variable, and it becomes sensitive.**
  - **The causes for the effect in question can be found in the operational context.**
  - **Thus, effective searches for the lurking causes in question can be anticipated, located, and neutralized.**
- 4. As a fourth step, when overcoming our adversaries via thought models, concepts, and methods of problem solving that the reader finds in my book, one could be setting the conditions for success in mental combat and wars of wits.**
- **A model helps our minds consider a projected reality.**
  - **This reality, composed of understandable characteristics, helps us discern what our adversary could be after as the model plays out.**

- **The model must be restless and in motion, always adapting to operational context and the actions of opponents, but never in insolation from other influences of outcome of conflict.**

**We'll now turn to a different slide, slide 22, that shows a thinking process model that will help people learn 'how to think' deeply and ably and sufficiently to engage and win in any contest of *will*.**

## **Slide 22 Thinking Model for Adaptive Adversaries**

**This is what any complex, adaptive system (CAS) does, whether individuals competing or organizations, countries, aggregations of people and organizations and machines. All struggling adversaries have some interesting commonalities. For example,**

- 1. People want to win.**
- 2. People try to impose their *will* on others for a distinct purpose.**
- 3. People who are the targets of impositions of another person's *will* either capitulate or resist.**
- 4. Resisters possess a calculus to help think whether or not to contest an attacker's efforts to impose his *will* and win.**
- 5. If a resister refuses to capitulate or to strike a 'deal,' a conflict unfolds. Then the resister's version of the 14-element model of *will* kicks in full blast.**

**Now, I ask that you take a look at the visual. It is an easy model to follow because it is numbered, 1-13.**

- I venture to say, all people in struggles of will follow some semblance of this sequence if they hope to be sufficiently organized and adequately cerebral to design and aggressively seek aims, goals, objectives, and so on.**

- **The model could have either more elements or some could be taken away. They are hypotheticals, but I am believe most of these elements shall appear in various forms to be at play in any contest or clash of *wills*.**
  - **This model also reflects my emphasis on co-evolution and adaptation with its rules and thought models.**
  - **Co-evolution always involves actions, assessing outcomes of action, evaluating outcomes, learning, and adapting.**
  - **Each competing organism wants to perform such tasks better and faster than their adversaries in a race to successfully impose their *will* on the foe who is attempting to do likewise to them.**

**The sequencing of necessary elements in thoughts come out loud and clear.**

- **Anybody, including ourselves, go through some kind of a thinking journey, if they are in a struggle of *wills*.**
  - **What you see in this visual is how I see people thinking in a struggle of *wills*.**
  - **Thus, it is critically important to use this model to hone your own thinking.**
- **But more importantly, one has to use the model to attack their opponent in mental combat.**

- They must use a semblance of the model to win the war of wits that struggles of *will* entail.

Let's talk about each of the elements just a little,

1. **PERCEIVE.** We have to understand that we perceive and what influences the purity of this snapshot of meaning in time. This is where desire begins. This is where life-force and resolve come into being and bring to light and focus on a distinct want or desire.
2. **THINK.** Perceive does not mean think. We have to think about what our senses have perceived or scoped or received by way of data inputs that are sought or provided by the context.
3. **PLAN.** After thinking, one has to plan. A plan involves some semblance of aim, goals, objectives, resources, constraints, strategies, tactics, analysis of *will*, pressure points, decisive points, centers of gravity, observed/observer relationships, operational context, and so on.
4. **DECIDE.** The leader has to approve or disapprove the plan. Normally, a good leader will tweak the plan because he/she were involved in its process. This is where one finds the planners and leader talking about **PURPOSE** for the upcoming impositions of *will*.
5. **ACT.** An imposition of *will* comes via one's capabilities. Along with capabilities one finds strength of motive feeding energy to passion, sacrifice, perseverance, determination, advantage, disadvantage.

6. **ASSESS.** The organism is a CAS. It is competing. Thus, when it acts, it must judge how well it is doing relative to its opponents and to its aim, goals, objectives, and so forth. Thus, the organism assesses the activities in the operational context.
7. **DESIGN OBSERVABLES.** Advanced and skilled intelligence analysts design, direct, interpret, and synthesize data, information, and knowledge. They decompose their requirements, study the context, and develop observables for use in their collections systems. The output in our current thinking is that the observables will relate to assessment requirements and thus suggest further actions and then guide the collections to gather subsequent data, so it goes.
8. **COLLECT ASSESSMENT DATA.** The collections and analysis partnership work as a connected entity in planning and executing intelligence operations. It produces assessment data relative to one's actions to impose his/her *will*, or to deny another person's efforts to impose his *will* on you.
9. **RECOMPOSE DATA INTO INFORMATION.** As data arrives, machines and people recompose the data into information. Information has meaning but is often neither organized nor combined to a high level of quality. But it leads to knowledge.
10. **SYNTHESIZE INFORMATION INTO KNOWLEDGE.** Analysts synthesize information into knowledge. With current and accurate knowledge one can lower risk. But it takes time

**for the human mind to synthesize information into knowledge. Also, knowledge has a short time life of accuracy and relevancy so decisions on synthesized knowledge have to be quick and well-aimed.**

- 11. EVALUATE THE KNOWLEDGE.** Leaders and red team people challenge assumptions and the thinking of intelligence analysts. They must answer the question—**Does this product, conclusions, and recommendations come from sound deep thinking?**
- 12. LEARN.** The conclusions and after action reviews move around and help other people of similar ilk to correct what might have been wrong or use the knowledge coming their way to help in their own fight.
- 13. ADAPT.** Then, the organism adapts keeping the overarching goal in mind and thus acting better and faster than their adversary. Then, the organism does in fact adapt and change or move.

**Accordingly, I'm hoping this visual is self-evident, in your minds.**

- **But, in my experience people sometimes fail to think about their thinking in this way.**
  - **To pile on, people don't think about their adversary's thought models relative to their own thought models, and the battles over the quality of thinking therein.**
- **This kind of mental combat is important.**



- **Therefore, mastering mental combat and actually forcing one's mind to perform these functions in a disciplined way enables you to win in any domain, at any level of conflict, at any time, and at any place.**
- **Using these methods of thinking and acting provides you with the wherewithal to win in mental combat and wars of wits. Such thinking contributes to your leader's *will* to ascend to impose their *will* over one or more of their adversaries.**
- **But I still hear some grouching. A few readers or listeners are whispering that there is more to this problem than easily meets the eye. I say yes, there is more, and I'll talk about the 'more' now.**
  - **Again, this visual shows how this adversary: perceives, thinks, plans, decides, acts, assesses, develops observables for assessing, collects, recomposes data into information, synthesizes information into knowledge, evaluates, learns, and adapts.**
    - **He is under immense pressure to adapt faster and better than his opponent.**
  - **Our situation will be more than it appears to be if you ponder the influence of culture on your opponent's thinking.**
    - **In particular, think deeply and find current knowledge about his religion, attunement to**

**law and order, and his public and private thoughts.**

- **Also know his societal rules and their influence on his thought models for action.**
- **Consider your opponent's education, circle of friends, world view, travel experience, work, family, social mores of the context the opponent grew up in and in which he worked or works.**
- **Consider his world view and travel experience. How does he view strangers? How does he view people who are not a part of his religion?**
- **How does he treat minorities such as women?**
- **Consider his view of technology and how adept he is with both phones and computers as well as his tendency to use the Internet for business and for fun.**

**These are but a few of the questions and wonderings we have to consider, as answering them and many other thoughts and questions about our adversary can result in success or failure.**

- **I'm convinced that great leaders do think this way, the way of this 13-step thought model.**
  - **But our challenges in mental combat and wars of wits prove so demanding that we cannot just leave it up to great leaders anymore.**

- **They need very smart helpers who are trained and educated to meet the challenges of modern struggles over *will*.**
- **In my view, it is imperative to think about the adversary and how he thinks about *will* and how he thinks you think about *will*.**
- **The 14 element model is now extant in your minds. As one of the book's big ideas, the model helps us think about the adversary's view of his *will* and how we need to think about ours and his views of *will*, and the ensuing struggles over its ascendancy!!**

**While the visual is obvious, it is difficult to perform as suggested. Why?**

- **First, our own biases, egos, backgrounds, experiences, education, cultural influences, arrogance, values, and so on get in our way.**
- **Then, our thinking becomes clouded by the *veil of illusions* we talked about before. This veil obscures reality with illusions, such as an illusion of personal grandeur.**
  - **Our troubles also come forth by how we think or do not think.**
  - **We sometimes struggle to think clearly and well because we become fixated on our intentions at the expense of recognizing that a foe exists. The foe and the nonlinear context cause unexpected**

**disturbances that our minds must understand and adjust to as needed.**

- **Additionally, know well that your foe will often parry your impositions and carry his actions, his impositions of his *will*, against you to win and to cause you to lose.**
  - **After all, he is a thinking and acting foe who wants to impose his *will* on us or deny our imposition of *will* on him.**

**What do we need to help us learn how to think about our foes so as to set the conditions for successfully imposing our *will* on any foe, any time, any place, in any domain or level of conflict?**

- **As I have said repeatedly, we need to learn ‘*how to think*’ using thought models, professional Red Team people who challenge our ideas, assumptions, identify your logic and bias errors, and lead you to self-examination via introspection.**
  - **Also, we must learn to think holistically through integration, horizontal thinking, and learning how to call forth and use the art of synthesis.**
- **Technically, we need realistic synthetic environments, very smart artificial intelligence driven avatars, powerful and linked computers, and players for our wargaming (our wargaming and his).**
  - **Also, as I have said many a time in this discussion, winning will be difficult. To win in mental combat**

**and wars of wits, one has to get a grip on presence and influence of the culture and ethnicity of our adversary.**

- **As I discussed above, all of us need to understand our adversary's views of his thought processes that any thinking adversary has to employ so as to win in struggles of *will*.**
  - **As a starting point, you engage your mind in deep thinking so as **TO LEARN HIS:****
    - **1) Strategic aim, 2) goals, 3) objectives, 4) constraints, 5) resources, 6) strategies, 7) tactics, 8) *will*, 9) co-evolution, 10) adaptation, 11) duality and pendulum thinking, 12) adversary wargaming, 13) his 13 element model of thinking, 14) his advantages and disadvantages, 15) his logic and bias errors, 16) pressure points, 17) decisive points, 18) centers of gravity, 19) understanding of nonlinearity, 20) his understanding of the nature of the operational context, 21) how he engages in Matrix War, and so on.**
- **We need to know how he thinks about his and our *wills* but also the advantages rendered by the operational context and how he plans to cope with the chaos associated with nonlinear contexts. A tall order but doable!!**

**I deal with this subject throughout the book and in particular in one chapter—Chapter 14—*The Thinking Adversary*.**

## Slide 23 Matrix War

I stumbled onto something new as I wrote the book. The new idea is what I call **MATRIX WAR**. I want to explain it to you in brief terms.

As I thought about conflict relative to struggles over *will* it came to my mind that I could explain wars of *will* and clashes over imposing and denying *will* in another way.

- It is the way of a matrix that came forth in my mind as I labored on *will*. **MATRIX WAR**, as the way battles of *will* play out, is truly one of the most important ideas in the book but quite abstract. In the book, I turn the abstract into concrete thought.

As I pondered *will*, as a phenomenon, I found that I need to be more expansive and deeper in my thinking relative to how conflicts over *will* occur and where they occur.

- Upon diving into the well of introspection, I discovered that I had missed two thoughts and their absence limited my comprehension of struggles over *will*. I worked hard to fix what I had missed.
  - First, *I envisioned* how struggles over *will* always involve parts and pieces.
    - For example, consider as wholes the sub-elements of weapon systems, and their objects and elements such as communications systems, missiles, radars,

**internet systems, logistics, humans and their needs, robots, sensors, computers, data, tanks, helicopters, artillery, maintenance functions and elements, command and control organizations (physical), and knowledge production organizations (virtual).**

**⇒ Consider that effectiveness means that all elements must come together, act, then disband. This conjoining and disbanding must be done in an orchestrated and synergistic manner. What we find is a dance from separate, ‘do si do,’ to whole, ‘do si do,’ then back to separate.**

- Contemplate how the elements interact and struggle against the adversary counterpart’s look-alikes, mirror imaging functions and actions in their own right.**
- It occurred to me that these struggles over *will* occur not as a huge whole but in a scattered senses in any context but able to aggregate and perform as commanded on call.**
- But, as I mentioned, the scattered nature of wholes can converge for purposes of striking as a synchronized whole force. But this whole, as a combination of minds and organizations and the elements of which I speak realize its**



**vulnerability when it is together, operating as a whole.**

- **Thus, the disassembled whole is much safer in a scattered sense.**
- **However, know well that the parts and pieces of the disassembled whole, must be able to come together at the right place and right time to achieve a state of synergy and thus be optimally effective.**

⇒ **The meme, *MOVE DIVIDED AND STRIKE UNITED*, comes to mind as an aid to think about the scattered nature of a whole that is not antithetical to the whole's purpose, capabilities, and strength of motive.**

- **After accomplishing its mission, this whole disassembles.**

⇒ **In my thinking, the parts and pieces of the whole of a mobile surface to surface missile could be found in multiple and sometimes odd places.**

⇒ **The parts and pieces of systems, I determined in my thinking, could be found in multiple horizontal levels of conflict troughs and in several vertical domain silos.**

⇒ It came to me that the connecting pieces on all sides in conflicts of *wills* purposefully converge or careen, and sometimes do so by accident owing to Clausewitzian friction.

- **Second**, I had to expand the five domains the US military uses as a theoretical construct for its doctrine.
  - Note, the domains the United States military recognizes today involve air, ground, sea, space, and cyber.
  - Yes, while the extant five domains still prove relevant, I discovered two missing domains.
    - I found that I had to add—*information and cognition*—to enable the vertical sequencing sufficient to synchronize well with the levels of conflict even when acting into partial, complete, or scattered small wholes that belong to much larger wholes.

⇒ An example could be a transporter erector launcher, a TEL, in a mobile surface to surface missile system. When assembled and whole, it is capable of accurately launching a nuclear weapon.

- **With this in mind, I could now begin envisioning these seven domains as vertical domain silos cutting through four horizontal levels of conflict troughs. These four horizontal levels of conflict troughs include tactical, operational, strategic (military), and strategic (policy).**
  - **The result is, of course, cells, 28 cells to be more precise.**
  - **To get my mind to rise to the level of abstraction necessary to visualize the intersection of vertical silos with the horizontal levels of conflict, I thought of this process as ‘scythe cuts.’**
    - ⇒ **Now, I ever so clearly envisioned seven vertical domain silos (air, ground, sea, space, cyber, information, and cognition) slicing into horizontal levels of conflict troughs—always four to my way of thinking.**
      - **Again, these horizontal levels of conflict troughs are: Strategic (Policy), Strategic (Military), Operational, and Tactical.**
- ⇒ **Know that a total of 28 cells come forth and appear. Know that it is in**

**these cells where the struggles over  
*will* occur.**

**⇒ These cells exist in all conflict  
involving *will*.**

**The vertical domain silos and the horizontal levels of conflict  
troughs exist as living entities, shimmering and energy-  
emitting wholes.**

- **They are micro-aggregations and macro-aggregations connecting to other entities but always, at each of the aggregations' cores, one finds these 28 cell matrices.**
- **It was in this deep thinking trance that I had a vision of a Matrix whose cells house conflicts over *will*.**
- **With deep thinking, I concluded that life-force, purpose, strength of motive, capabilities, and timing drive the size and duration of these clashes in and through 28 cells.**
- **This, ladies and gentlemen is **MATRIX WAR**.**

**Next, let us back up and think about the matrix of which I  
speak in its most basic form.**

## Slide 24 More Thoughts About the Matrix

What you see here is the **MATRIX**—a 7 vertical domain silo schema to understand battles over *will*—air, ground, sea, space, cyber, information, and cognition.

**INFORMATION'S** importance is obvious owing to its relationship to quests for meaning and knowledge to foster good decision-making. Also, information is imperative for psychological operations and deception in the social media age.

- Information comes from data that comes from the context or that one gathers via its intelligence collections systems.
- Information can become knowledge via the higher level cognition that is synthesis.
  - This combination—data, information, and knowledge—and how they affect decisions, actions, assessing actions, and adaptation proves critical to winning in any contest of *wills*.
- Thus, its gathering, validating, and use can lead to information superiority and information dominance. Quality though becomes important to winning in this fight for superiority and dominance. Thus, this process must lead to better and faster decision making in acting, assessing, and adapting than adversaries.

- It follows that information has to be a full scale domain as it is critical to winning contests of *will*.

Closely related though, one finds **COGNITION**, which is, perhaps a bit more obscure than information.

- Cognition means, according to the Oxford University Press,

the mental function or process of acquiring knowledge and understanding through thought, experience, and the senses.

- In our thinking about reaching a state of high cognition, our people must engage in higher-level thought with synthesis, holism, relational thinking, integrative thinking, fragmentation, connectedness, and coalescence,
- Cognition is the key in winning a distinctive kind of struggle for ascendancy of *will*. It is through cognition that we make decisions. Because of the importance of decisions and how thinking affects the quality of decisions we shall be involved in battles over the quality of thinking.
  - Thus, I can say without equivocation that we find ourselves, right now, in **MENTAL COMBAT** and **WARS OF WITS**.
    - This fact helps us realize that we can think about and recognize **MENTAL**

**COMBAT** and larger **WARS OF WITS** as the new normal.

- This new normal in which we find ourselves, is inherent to struggles over cognition.
  - It follows that America has to outthink its opponents in bouts of **MENTAL COMBAT** and **WARS OF WITS**. This situation prevails not just at the present but it's going to intensify over the next century.
    - ⇒ This view proves to be fact and truth particularly when one understands the intensity of struggles for ascendancy of *will* as America works against Russia, China, drug people, terrorists, and other asymmetric foes.
    - ⇒ The implication is quite simple. That is, because of the importance of decisions, how one thinks and reaches decisions becomes fair game in contests of *will*.
    - ⇒ This means that we have to help our people learn how to think by way of the highest levels of cognition by education, organizational learning, mentorship, and self-directed learning throughout life.

**As a new thought, we have to treat cognition as a weapon system—same with information.**

- **Many of our best people will be in mental combat all the time across the 28 cells and with all instruments of national policy.**
  - **Some of our people are, in fact, orchestrating a larger **WAR OF WITS** in which **MENTAL COMBAT** is a sub-element of the larger whole of continuous struggle and competition.**
- **China and Russia, proven masters at melding information and cognition into their national aims, goals, objectives, and strategies, know the importance of cognition and information.**
  - **They seek to be superior in thinking and in manipulating information to all takers in struggles of *will* with the objective of causing opponents to acquiesce and capitulate.**
- **These battles in mental combat and wars of wits epitomize struggles for superiority of *will* that I believe shall play well over the next 100 yrs.**
  - **Our foe's asymmetric approaches involve information via disinformation, deception, cyber-operations, information operations, and seeking and gaining information superiority.**
  - **Also, cognition, or thinking and metacognition prove to be directly linked to Maskirovka, loosely defined as deception. But it proves to**



**be closer to information operations, which the Russians prove so adept.**

- **In other words, the Russians, Chinese, Iranians, and drug cartels are exceptionally practiced in deception and manipulation of thoughts, perceptions, and even emotions.**
- **The elevated importance of social media, as it impacts people's minds and fills these minds with data and information around the world, has heightened the importance of both information and cognition.**
  - **Action is occurring even now, as we speak, in the matrix where vertical domain silos and horizontal levels of conflict troughs intersect. This action creates the cells now in **MATRIX WAR**.**

**As I view the matrix and gaze upon the 28 cells where struggles of *will* occur, I can see how people can be confused, as the matrix appears in isolation.**

- **But in truth, one finds a high degree of relationship among the domains and levels of conflict.**
- **And, upon taking another look, one finds the matrix they see, with all of its relationships, to be entangled with other larger and smaller matrices. All of them either unfold into larger matrices or enfold smaller matrices thus creating aggregations**

**when conditions in the operational context suggests or demands congealing into the wholes of which I speak. Alas, once again, aggregation theory comes forth for recognition as a critical theory in our understanding of Matrix War.**

- **Know well that lots and lots of connections exist in Matrix War, and they dominate conflicts of *will*. Thus, we have to learn this theory of connectedness and apply it to daily struggles of *will*.**

**As a next step in our journey of learning, we shall talk about connectedness in Matrix War.**

## Slide 25 Connectedness in Matrix War

**A fundamental thought in any serious thinking about *will* involves the notion of connectedness.**

- **It means, *joined into a viable and thereby operable whole.***
  - **In simpler words, I'm talking about entities or thoughts linked one to the other in purposeful agreement.**
  - **Know well this phenomenon: that is to say, parts, pieces, people, organizations, machines, infrastructures, and so forth link with one another to set the stage for coherency of a whole.**
    - **Five kinds of links exist and prove essential for connectedness in our thinking. They are human/social, functional, technical, thought, and organizational links. The links serve as binding agents in our whole.**
    - **The parts, pieces, organizations, people, and machines, etc., each a small whole in their own right, also exist as in situ assemblages, thus proving to be important elements of the larger whole of which we speak.**

- **If our whole of which we speak is filled with sufficient energy, purpose, and strength of motive, then when assembled, the parts, people, organizations, and machines can live in and even govern the whole of connections and thrive.**
- **When this whole merges with time, place, and intent, the process, understood and guided with high-level and high-quality thinking, achieves a state of coherence which empowers one or both sides in any struggle of *will*.**

⇒ **Coherence is a sought-after state of being as it signifies high quality.**

⇒ **Reaching a state of coherence allows the whole in question to function optimally.**

⇒ **Coherence allows a smoothness in functioning among the parts and pieces of the whole.**

⇒ **Coherence imbues the whole's total capabilities to come forth in a synchronized way to inflict maximum force on an adversary's resistance.**

⇒ **Coherence sets the conditions for synergy among the parts, pieces,**

**objects, sub-systems, micro-aggregations, macro-aggregations that comprise a high quality, relevant ‘whole’**

**⇒ It is the coherent whole in which one side or the other effectively uses to accomplish their aims, goals, and objectives to successfully impose their *will* on an enemy or to deny his impositions.**

**OK, all should be well in our minds. So, let’s take a deeper dive and dial up some **COGNITIVE DISSONANCE!** Here we go! The 7 vertical domain silos of conflict connect: 1) among themselves vertically, and 2) with the four strata of Horizontal Level of Conflict Troughs.**

- **Connectedness first occurs in one’s mind as the mind visualizes what ‘could be’ by way of connections.**
  - **I’m speaking, of course about connections within the matrix cells and the actions that create outcomes.**
    - **I’m also speaking about connectedness of causes leading to effects.**
    - **Pushing ahead even further, I’m speaking about the links connecting causes to effects.**

**⇒Knowing this kind of connectedness is the key to preemption and struggles for initiative, in even larger struggles for dominance of *wills*.**

**If something happens in an intersection in the matrix, as opposed to centrality of a cell, one finds it to also occur as a ripple effect among different Horizontal Levels of Conflict Troughs and Vertical Domain Silos.**

- **When an event at the Tactical Level of Conflict Trough occurs in a particular Vertical Domain Silo in which it resides, then the released energy can affect what happens at the Strategic Level (Policy), in the same Vertical Domain Silo and other Vertical Domain Silos to which the first silo connects.**

**Thus, one can imagine: windless rainfall—like actions occurring within Vertical Domain Silos.**

- **Then, a snake like curvature appears. It is the connection of influence. This phenomenon is real but proves difficult to follow and to grasp as appearance.**
  - **Nonetheless the slithering head leads to forms, which comes forth in causes and effects in other cells coming forth from the union of Vertical Domain Silos and other Horizontal Levels of Conflict Troughs.**

- **Imagine the snake-like curvature to be a curved connectedness of causes and effects.**
- **With our imagination at work, we can see the curvature and understand its relationship to causes and effects.**
  - ⇒ **The connectedness that comes forth startles our minds. With it, we possess holistic thinking that empowers seemingly unimportant actions to create significant outcomes of action owing to the strength and power racing about throughout cells, connections, and the whole in question.**
- **The actions stretch, reaching out by way of the snake-like curvature and move across several Vertical Domain Silos and rupture the membranes encasing Horizontal Levels of Conflict Troughs.**

**To perform this mental function of connecting like and disparate things and events, one thinks integratively.**

- **As one thinks integratively, they enter vertical domain silos to understand the parts and pieces of each of the elements within the silo that reside with the potential to act either sequentially or simultaneously.**

- **As a spider on gossamer gazes on their web, they imagine appearances showing horizontal and vertical connections, down, across, up and down in the matrix.**
  - **The connections occur when one mentally knits the parts and pieces of disassembled elements into wholes, which then connect to other like and dissimilar wholes.**
    - **When mentally knitting, one can cross the horizontal and vertical lines comprising one or more cells in the matrix.**
      - ⇒ **Then when one knits the aggregates and forms aggregations into wholes, the nascent whole integrates into macro-wholes.**
      - ⇒ **These macro-wholes originate as singular, then aggregated cells of horizontal and vertical intersections.**
      - ⇒ **With this understanding of the probability of connectedness, one can understand the power of which I speak that resides in the **MATRIX WAR** concept.**

**Complicated, yes. Yet the thinking is rudimentary for fighting and winning in wars of wits and mental combat in purposeful **MULTI-DOMAIN STRUGGLES** over *will*.**



- **This kind of struggle occurs now, and it is only going to intensify!**

**Thus, I know you can see the complexity of Matrix War. This complexity, the coming multi-domain conflicts, the speed of actions occurring in the vertical domain silos, the effect of actions moving up and down through and in the horizontal levels of conflict troughs, suggests the need to have incredible, holistic thinking and its merger with synthetic contexts, specially programmed avatars, powerful linked computers, virtual knowledge environments, and knowledge centers. To top off all of this, we have to understand the theoretical connected relationship between our thinking and actions and Clausewitz's admonition, which is,**

**The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature. This is the first of all strategic questions and the most comprehensive.**

**(Clausewitz, *On War*, 88-89)**

- **The various tools available in multi-domain conflict suggest the importance of artificial intelligence and advanced hardware/software avatars our engineers can build.**

- **These artificial intelligence empowered avatars come to ‘life’ driving and supporting command and control, wargaming the adversary’s wargaming, anticipating his *cause to link to effect* actions giving our leaders the opportunity to preempt, and for sagely attacking or manipulating the adversary’s co-evolution, adaptation, and recursion cycles.**
- **This is not to say deep thinking is archaic, nor is it saying that the human being in conflict will be forced to make decisions with data instead of knowledge.**
  - **But I do say that our minds must learn how to think deeply and quickly, to understand the phenomenon of Matrix War with its connecting arteries running throughout a conflict, its start, its action, its operational context, and its successful conclusion.**
  - **I do say we have to understand how, in a complex operational context that surrounds and permeates the 28 cells of Matrix War, we find, if we look, a force, an apparition, a spreading energy connecting like and unlike activities and events, parts and pieces, people and their organizations, missiles, cyber-attacks, artillery fire, tanks and armored personnel carriers, command and control apparatuses, cruise missiles, drones, weapons of mass destruction, IEDs, ambushes with machine guns and rifles, kidnapping, assassinations, terrorism, propaganda, social network websites and attacks via narratives, and the like.**

- **These parts and pieces, happenings, people, organizations, weapons, communications, etc., may seem disparate and inconsequential. But know well that in my mind all connect—all the pieces matter and they connect in matrix war.**
- **So, our minds, organizations, and machines must prepare for this kind of conflict when our country needs to impose its *will* on multi-domain oriented adversaries and know we must learn to resist multi-domain attacks by a determined adversary. To this end, we must start with my notion of—  
**MATRIX WAR.****

## **Slide 26 Connections—COGs in Vertical Domain Silos**

**Right from the start of the discussion about this slide, I want to make a proposition. That is, clashes over *will* occur not in one cell, but in multiple, connected cells. Know too, I believe there are multiple centers of gravity or COGs in each cell, at each level, important to each battle, engagement, and campaign.**

- **But, of course, there will always be fewer COGs than either decisive points (DPs) or pressure points (PPs), even though all three of these connect.**
  - **So, affect one and agitation occurs in all of the connected family. Let's think further on this proposition.**

**Parts, pieces, and elements of COGs can exist in each cell among many cells. But chances are no COGs appear as easy-to-find, packaged and contained entities.**

- **Instead, the sub-parts and sub-pieces will appear and link to the whole that is a COG. These parts and pieces will be scattered throughout the 28 cells that are Matrix War.**

**The parts and pieces of the disassembled COGs appear to our senses as vestiges, as standing physical presences, as moving appearances, as assemblages in hiding, or as ghostly, nascent imprints on the walls of caves.**

- **Each are wholes unto themselves, thus we think of them as aggregates and aggregations particularly when they start connecting with other aggregations.**
- **Thus, what we have in our minds is an operational context housing and hiding the parts and pieces of disassembled COGs. This context is shifting, shimmering, and changing.**
  - **I also acknowledge a presence. It is the presence of a bedeviling effect of the appearance and influence of one or more of the many characteristics of nonlinearity that cause turbulence and change that wreak havoc on these assemblages often in hiding.**
  - **COGs and their parts and pieces scatter to remain obscure from prying eyes or to actually hide.**
  - **The particular COG's nature dictates its relationships with the wholes and assemblages in hiding, training, securing, and assembling on call within their contextual bubbles. The parts and pieces of wholes must hide, and when beckoned, congeal for the sake of optimizing missions.**
    - **The result is a matrix, alive with energy, purpose, strength of motive, and always vulnerable to friction, mistakes, small inputs and large outputs, randomness, and so on.**

- **We recognize that certain kinds of activities, exist and connect to one another at all levels of war and in all domains of conflict.**
  - **To cause the greatest effects on any adversary, one has to assault, tangibly or intangibly, the adversary's multiple vertically and horizontally connected COGs with optimally grouped weapon systems.**
- **Upon searching for and being guided by higher level reasoning about aggregation analysis, one finds, with deep thinking, aggregations of capabilities and probabilities.**
  - **But their smaller and larger pieces stretch and connect across levels within domains of conflict**
  - **Any COG has related parts that are smaller but attached to larger COGs and other related parts *roughly similar* to one another yet remaining somewhat different in size, capabilities, limitations, and vulnerabilities.**
  - **Interestingly, if one desires to influence the adversary's vision for winning, I submit that one must reason holistically and relationally across, I repeat across, vertical domain silos of conflict as well as up and down horizontal levels of conflict troughs.**

- **The search for COGs, decisive points, and pressure points has to occur via this kind of connectedness. Let us reason a bit more about this notion.**
- **Actions occur in vertical domain silos and horizontal levels of war troughs, but these actions relate, in fact connect.**
  - **Thus, affecting a COG at one level can affect other COGs in other silos and at other conflict troughs. Thus, an action in one place not only affects COGs in the vicinity of that particular location but also influences COGs at other levels of conflict troughs and domain silos too.**
    - **When one COG in one cell is struck, several other COGs in other domain silos and levels of conflict troughs come to life, fibrillate, influence their immediate space, but also perturb the universe of the wholes at hand.**
    - **This causes change and shifting influences in other silos and troughs.**
- **Can we say, at this point in time that a maxim is thus born? That is to say, actions against COGs in one domain or one level can affect COGS up and down other domain silos and at other levels of conflict troughs. One has to anticipate reverberations, watch for them, and decisively act.**
- **If our considerations about vertical domain silos and horizontal levels of conflict troughs prove true for one**

**side, should it not be the truth for the other side? Thus, while assaulting adversary COGs in this manner, we must anticipate his assault on our COGs using similar logic, and we must prepare for the certain assault to come.**

- **Often, the parts and pieces of wholes might appear disparate, but they still relate and connect. Life-force, purpose, and strength of motive are often the bonding agents.**
  - **The connections though could be latent, waiting to come into being upon notice or with spurring on by just the right stimuli coming from unanticipated sensitive variables.**
  - **Each system we seek is important to the adversary in his desire to invoke his *will* on us or our friends. The system we seek is a whole unto itself, that connects with other wholes.**
    - **But as we have talked before, they are broken into pieces, scattered, and thus protected because its wholeness is abstract and hidden.**
    - **Scrape away the seeming disparateness knowing you will find the connections, or links, connecting the parts and pieces of the whole that tie to lower echelons and to a higher echelon.**

**Please recall that bouts of *will* always involve pressure points, decisive points, and COGs.**



- **These three elements of conflict connect for each side. The contestants connect when they compete or prepare to compete in contests of *will*.**

**Adversaries disperse their pressure points, decisive points, and Centers of Gravity and spread them throughout the matrix, but they still connect among themselves and with higher beings or organizations.**

- **They connect in all of these ways via five kinds of links I previously discussed. The links are sometimes active and sometimes dormant**
  - **Consider this question. What value does a pressure point have in a ground vertical domain silo's intersection with a strategic (policy) horizontal level of conflict trough? The easy answer is, at this high level of intersection, a pressure point is undoubtedly of no consequence, while, at the tactical horizontal level of conflict intersection with the ground vertical domain silo it could be a Center of Gravity.**
- **Examples include mobile surface-to-surface (SSM), mobile surface air missiles (SAM), Koksan Guns in Korea, command and control distributed elements and so on.**
- **As systems such as mobile SAM become more complicated, they leave trails such as pheromones when they move.**

- **For example, a SAM needs data. The need proves to be specialized and thus the data comes from a variety of sources.**
  - **As one source, data flows from the operational context.**
  - **As another, data comes from weather radar.**
  - **Also, targeting data comes from drones.**
  - **Intelligence collection systems search for, find, and report on causes connecting with effects via links.**
  - **Human collection data about the location and context surrounding targets could be received.**
  - **The missile system needs deceptive data to help confuse the opposition trying to find them via data trails.**
  - **The SSM needs security and security has to talk among themselves, to higher headquarters, and to missile crews and their leaders.**
  - **The SSM needs maintenance, thus there is a maintenance footprint and trail via vehicles, helicopters, people, and the flow of parts.**
  - **The SSM crews need human support such as food, water, medical support, training, and they will need to contact relatives at some point in time.**

- **The SSM needs to communicate.**
  - **It communicates to spotters, to sub-elements, to security, to maintenance by radio and by Internet—both leave traces that can be discovered.**
- **The missiles systems and crews need to train, and I suspect they do so deep in the night in unforgiving terrain.**
- **These machines, maintainers, missile crews, logistics people and their equipment, and security people will need to move, train, sleep, go to the bathroom, eat, receive medical support, communicate, and so on.**
- **All are part of their whole. They scatter for safety and alert and come together to fire.**
  - **Thus, their whole is never static and ebbs and flows, with parts and pieces residing in many different cells, sometimes neighbors to other parts of other wholes, such as artillery systems, or maneuver forces.**
- **SSM could very well hide in a cave in a reserve battalions area of operation.**
  - **If so, this SSM is not a tool for the battalion commander. He is at the bottom of the vertical domain silo and intersects with the horizontal level of conflict trough IV.**

- **He has to put up with security coming with the SSM, its logistics, its maintenance, its flow of technical experts coming and going, medical support, communications, training, preeminent ground to hide on and routes of movement, but it is of little concern to him as a weapon system.**
- **But, for the country's strategic (policy) leadership and the strategic (military), this missile is a COG and the location of its main parts and pieces would be one or more decisive point.**

**⇒It connects to a center of gravity, the command and control and decision-making center at the intersection of the ground, air, and space vertical domain silos with the strategic (military) horizontal level of conflict trough, level II.**


- **Each has the potential to cause strategic outcomes even though the Koksan gun itself lives in the ground vertical domain silo at the tactical level of conflict trough.**
- **Let's take a quick excursion and talk about North Korea's Koksan Guns along the DMZ and within range of Seoul.**
- **These guns are in caves or adits according to Wikipedia existing in hardened artillery sites,**


**or commonly known as HARTS. To fire, they must come out of their protected area, set the range, level the weapon, load, fire, and very quickly pull the gun back into the cave or adit. These guns need ammunition vehicles to be nearby to provide the shells if not somewhere hooked to the gun itself as it comes from the HARTS or possibly even shells would be stashed and protected nearby the firing sites.**

- **To be proficient, one would have to practice taking out the gun, leveling the gun, setting the range, firing, and moving quickly back into the cave. If the gun breaks down, maintenance people must be on standby to repair.**
- **Undoubtedly, US and ROK artillery and air power will strike the gun's HARTS entrance or adits. Let us assume that the main entrances are bombed shut. Once the entrance is blocked, there will be machines auguring from inside the cave out and from outside the cave to quickly excavate the debris from the strike.**

**⇒I ask that you keep in mind that each element listed above has security, maintenance, communications, automation, logistics, transportation, and peculiarities inherent to tactical level problem sets, e.g., augers inherent to 170mm Koksan Guns in**

**their Hardened Artillery Sites in North Korea. According to Wikipedia, North Korea has ~ 500 of these guns.**

 **These parts and pieces that are maintenance and logistics must come and go and appear only to disappear.**

 **But they prove difficult to notice and to recognize as they appear as scattered up and down vertical domain silos and across various horizontal levels of conflict troughs.**


**⇒ But changes in functions, forms, objects, and connectedness and periodic appearance have to occur, and if one is looking for the right observables, they should prove real and noticeable.**


**⇒ If one knows what to look for, when to look, and to be prepared for the interaction of opposites appearing as objects and no objects, people and no people, and figures and no figures, appearances and no appearances, on and off, in and out, silence and noise, peculiar and normal phenomena,**

**these wholes of the Koksan Gun can be found and had.**

⇒ **Obviously, if the auger is auguring from the outside in, or if workers are using picks and shovels to excavate the cave or adit, then they have to be neutralized. The gun itself is ineffective until brought outside the cave or adit so it could fire.**

⇒ **So, the auguring equipment and anybody trying to tunnel in to break open the entrance to the HARTS would be decisive points from the perspective of the people inside the mountain.**

 **But this equipment and people would be insignificant to North Korea's senior leadership. If 500 of the guns in their HARTS were so neutralized, the additive influence on the adversary's minds and psyches would affect national decision-making. They would have found themselves in a corresponding state of insufficient firepower to fire on Seoul.**

 **This loss would weigh heavily in the minds of North Korea's leaders up and down the ground the vertical domain silo and forming the matrix cell by its intersection with the tactical, operational, and strategic (military) horizontal levels of conflict troughs.**

**We now understand connectedness to a sufficient level of comprehension. But to be sure of our intellectual prowess, consider connectedness in the matrix. Think about another turn of the screw of hard mental work.**

- **If we were to reduce problems and kill SSM TELs without its many other distributed parts and pieces, such as back-up missiles, back-up computers, extra communications systems, more security, back-up maintenance and additional transportation and the states of literally hundreds of breathing human beings hiding in many matrix cells, up, down, and across the matrix, then trouble can quickly come henceforth.**
  - **We would have failed to understand how the problem set is scaled among the cells of **MATRIX WAR****
- **If we blast the opening of a Kosan gun without considering the auguring equipment and its crew, auguring equipment maintenance, transformation of equipment from stationary to moving and functioning,**



**refueling, maintenance of old equipment, people needs and activities (see culture), for example, the maintenance of computers, security, deception, etc., that is part of the holistic view, then be forewarned, blocking either adit or HARTS or tunnel entrances even with blast doors, will be temporary at best.**

**So, look at the gold dashed line that moves about as a snake of the matrix.**

- **Our minds have to think as the snake moves through the matrix and connects activities and parts and pieces of whatever whole we have decomposed, that is appearing and happening in different but related horizontal and vertical mergers.**
- **To be effective and to win bouts of *will* one has to think and reach a state of holistic thinking. With this kind of thinking, we could kill the parts and pieces of each COG incrementally, knowing we would get to each element incrementally, or we could just seek what we think to the eminent COG. Or, we could find and kill all of the pieces at the same time to create the maximum physical and moral domain outcomes we seek.**
- **Know that it would be optimum to kill all at one time where the snake connects to the centers of gravity identified by each starburst in the visual, or totally, all at the same time.**
  - **Since we have to admit to several centers of gravity, know that we would have to use several**

**matrices at once, and that I'm showing only one and a simple matrix at that.**

- **But I constructed it to help us think and understand what I'm talking about.**
- **To reach a sufficiently high quality state of holism we have to use analysis, synthesis, integration, coalescence, metacognition, and relationships to not only see vestiges, or apparitions of what is to come or what has been, but also to glimpse the whole via connectedness.**
  - **To my way of thinking, it follows that one has to think and plan holistically so as to synchronize our efforts to attack all of the main parts, e.g., decisive points, of the snake's body.**

**⇒ With such thinking, one can thereby assault both physical and moral domains. The assault would be destroying the physical being and its strewn parts, pieces, structures, and objects. The assault on the moral domain would be via reducing his capability thereby weakening the adversary's purpose, strength of motives, capabilities, determination, passion, and willingness to sacrifice.**

**This thinking is fundamental to attacking the adversary's *will* through thoughtful actions aiming at his 14 element**

**thought model that connects throughout this presentation and throughout the book.**

## Slide 27 What Can Be Done?

To close, I present what I think readers should do since you have worked your mind and spent the time to go through this discussion so far.

People responsible for winning in conflicts of *will* must read and understand this book of *will*. There is no other book like this book.

You can readily conclude that understanding the book and helping people learn *how to think* sufficiently well not only to understand this book, but to put it into practice, takes momentous amounts of intellectual power and motivation.

- Such study and comprehending the inferences cascading forth as one reads this tome can only be described as complicated and challenging.
- The book is dense, full of ideas, models, tables, big ideas, and implications.
  - It causes us to think.
    - It presents models to help with thinking and it has ideas on how to turn theory into practice.
    - ☺ The methods I am providing to you come from 49 years of experience.

This confession of difficulty to unlock the secrets in this book means that people reading it have to be committed so as to

**gain advantages over any adversary, imbued with the power of winning, not losing, not fighting or competing to a draw.**

- **I'm talking about being committed to take the time and expend the mental effort to think deeply and critically about difficult problems or challenges.**
- **I'm talking about learning how to think critically and the honing of your ability to use analysis and synthesis, in an inseparable whole, as I portray as an absolute for such serious study.**
- **Such effort is imperative for unlocking the book's many secrets.**
  - **In short, you have to engage in deep thinking to understand this book.**

**It is your responsibility as a thought leader to help your people learn how to think via synthesis and holism, how to think critically, how to read critically, how to develop good conclusions, and how to make viable recommendations in situations of extremis and associated stress, as well as in daily work.**

**You now have a system of thought for doing all of the above with this great and powerful subject of *will*.**

- **How to think and enact the thought about *will* lives between the covers of this book.**

**It is your responsibility to read, study, understand, and put the ideas in this book into practice.**

- **You have the responsibility to purposefully help your people prepare for wars of wits and mental combat and imbue them with the desire to win in any conflict or competition.**
- **You have the responsibility to attack the adversary's *will* while protecting yours, just as you would prepare physical entities such as robots, tanks, planes, artillery, and so forth for conflict.**

**Now, just a few more closing thoughts to help you plan for and execute mental combat in wars of wits.**

## Slide 28 Thinking Requirements Necessary to Think Successfully About *Will*

To perform the intellectual challenges the book presents and to put the concepts and theories into practice, people must learn '*how to think.*'

- This is a broad task, and I even have a 20 page paper devoted to explaining what 'how to think' means and how employing its challenges can open the door to power.
- But, right now, our task is to know some of the intellectual requirements so you can optimize your thinking to beat capable opponents in contests of mental combat, wars of wits, and contests of clashing *wills*.
- I will be brief, but I do want you to think about 15 ways to be able to think sufficiently well to read and understand *The Power of Will in International Conflict*.

So, here we go ...

1. **SYNTHESIS**— human cognitive activity that combines elements of contexts, substances, events, electrons, activities, energy, and the like to create a new, coherent, and better whole.
2. **HOLISM**— theory that the parts of any whole cannot exist nor be understood except in relation to an extant whole or wholes coming into existence via aggregate and

**aggregation theory. The concept espouses the notion that wholes can be greater than the sum of its parts.**

3. **IMAGINATION**—drifting in and out of consciousness via contemplation but being sufficiently conscious to see, hear, touch, smell floating shards, flotsam of data, pictures of activities, the absence of what should be present, and the all-important intrusion of one's quietude and contemplations by active and nonactive appearances and presences that stimulate one's imagination.
4. **INTEGRATION**—a form of combination, integration combines assorted parts, pieces, people, organizations, actions, methods, processes into at least a semblance of a unified whole and even opposites such as horizontal and vertical thinking processes, knowing full well that the whole being integrated relies on its antipode—disintegrating that which has been integrated.
5. **COMBINATORIAL**—derivative of connect and connectedness as people, organizations, countries, etc., merged into wholes one hopes to be viable and operable. When I speak of connectedness, know I'm also including people, organizations, objects, subsystems, micro-aggregations, macro-aggregations comprising wholes, and many other organisms and entities.
6. **ANALYSIS**—Breaking a whole entity into its constituent elements and thereby setting conditions for gaining understanding or meaning of each element setting the



stage for a key process in mental combat and wars of wits—that is turning data into information.

7. **SYNCHRONIZATION**—bringing forth and releasing timed pulses of energy that connect across the world but wreaking havoc with connected forces motivated and released at the right place and right time by harmonized action, purpose, strength of motive, and capability.
8. **ANOMALY**—different, aberrant, changed from normal.
9. **TENDENCY**—inclination toward a certain action, behavior, but sometimes an action coming into being.
10. **ANTICIPATION**—pre-knowledge or fore-knowledge of something going to happen; prescience owing to vestiges or traces of cause leading to effect connected by five kinds of links—social/human, technical, functional, organizational, and thought.
11. **INTEGRATION**—integrates and combines like and dissimilar people, organizations, objects, systems, subsystems. Four important aspects of integrative thinking include **HORIZONTAL** thinking in which thought can traverse across boundaries, stove-pipes, domains, and levels of conflict. Horizontal thinking improves relationships and combinations. To perform horizontal thinking people’s minds must involve **SYNTHESIS** where elements, parts, pieces, thoughts, concepts become another and better whole being or object. Another important aspect is **VERTICAL** thinking. This involves people using rigorous **ANALYSIS** and to

**‘deep dive’ and thoroughly know a subject or thought well but in relationship to the whole in which it resides.**

12. **AGGREGATION**—gathering and bonding separate aggregates into a larger whole. This whole is collective and responsive to accepting like and disparate entities into its former boundaries.
13. **COALESCENCE**—is a conjoining of elements, people, machines, and so forth into a whole, which is sometimes viable and sometimes an abomination. This is a powerful word as it helps people and their minds comprehend how to think about evocative but functional words like unifying groups of people and their organizations, fusing differences, and consolidating positions.
14. **RELATIONSHIPS**—connections, links, strands between and among people, people-populated organizations, families, connections, countries, man and context, complex adaptive systems and so forth. Relationships serve to foster purpose, meaning, outcomes, ends, ways, and means. Relationships are at the center of all business, diplomacy, economies, and so forth.
15. **CONNECTEDNESS**—people, organizations, countries, etc., merged into wholes one hopes to be viable and operable. When I speak of connectedness, know I’m also including people, organizations, objects, subsystems, micro-aggregations, macro-aggregations comprising wholes, and many other organisms and entities.

## Slide 29 Integrative Thinking

Here you see a thought model that is in my book about *will*.

Most people are good at **ANALYSIS**, which finds a thinker decomposing the subject at hand and relishing mental work in and vertical thinking as you see in the model.

- With analysis, people break apart ideas, concepts, goals, objectives, capabilities and study each—all necessary, beyond doubt.
  - But they easily fall into the trap of reductionism or falling in love with their knowledge of one or more particular parts or aspects of a whole without knowing and comprehending the whole itself.
    - I'm sure you can see that when people are reductionists, with their intellects, severe limits arise.
  - As such, these people sometimes become stuck in vertical thinking, as it were, endlessly mucking about in the bottom of a vertical domain silo.
  - It is unusual to find the **VERTICAL THINKER** who can synthesize and integrate what they and other people have been thinking about.
- Horizontal thinking still requires 'deep diving' into vertical domain silos where one can or better said must perform detailed, analytic thinking.

- **But they take what they learn in one silo and combine it with what they learn in other silos.**
- **They take the new, synthesized whole, and combine it with one or more horizontal levels of conflict troughs.**

**The need is not only to master the deep thinking silo, but to **SYNTHESIZE** and **INTEGRATE** all vertical silos into a whole via horizontal thinking.**

- **And one must master potential, such as the outcomes of conflict and how this outcome affects other silos at other levels of conflict.**
- **We must realize how each of the ‘stove-pipes in the deep dive thinking connect with and influence the elements in horizontal thinking, e.g., air, ground, sea, space, cyber, information, cognition, depending on the context and situation at hand.**

**Without true integrative thinking, one cannot beat a sophisticated adversary who comes at us across and within all seven domains of conflict and at all four levels of conflict.**

**INTEGRATION is a form of **COMBINATION**.**

- **Integration combines assorted parts, pieces, people, organizations, actions, methods, processes into at least a semblance of a unified whole and even opposites such as horizontal and vertical thinking processes.**
  - **The whole being integrated relies on its antipode—disintegrating what has been integrated.**

- **Holism and **SYNTHESIS** are the absolutes to be capable of integrative thinking.**
- **To effectively use one's comprehension of *will*, they must master and employ, vertical, horizontal, synthetic, holistic, and integrative thinking.**
  - **This mental competence enables people to work comfortably in **MATRIX WAR**.**
    - **They successfully compete in multi-conflict vertical domain silos and at several horizontal levels of conflict troughs, present and influential for the outcomes of any conflict.**

## Slide 30 Appearances and Strength Relative to *Will*

In our understanding of *will* and how to think about it, let us take our contemplation further and move to other elements of *Will* such as determination, perseverance, advantage, disadvantage, passion, and sacrifice.

Given that we know, from reading the book, what each means,

- Question one arises: How can we affect and turn into vulnerabilities these abstract yet concrete elements of our 14 element model of *will*? We know our opponent plans to deny our entreaties, and he will bring his energies to bear to win in this war of wits and mental combat.
- Question two is how can we anticipate and **PROTECT OUR STRENGTHS** from the adversary's attacks or manipulations by using appearances?

So, how do we think about this difficult and admittedly obscure but still worthy subject?

Of course, we have talked about wargaming his wargaming, being in his mind's eye, being in his skin and perceiving as he perceives.

- We have also spoken about our wargaming and using a culturally adept person to be our enemy.

- **We have also talked about using a Red Team to attack our thinking and to attack and challenge our assumptions.**
  - **I want this Red Team to pick out my errors in logic and bias and help me to regain the right path of thinking or if I cannot, then the Red Team can correct these errors.**

**With all of this said, think about appearances and strengths and let us delve into them for a peek into their essences. I start with answering this hypothetical: What is an **APPEARANCE**? I use this definition—an appearance is,**

**The manifestation of an altered state of being materializing in my mind. An appearance has numerous states of manifestation, such as physicality, presence, color, size, depth, width, height, sound, dress, nonverbal behavior, action, cause to effect, outcomes, visions, links, patterns, anomalies, aggregations and so on.**

**An appearance signifies disturbance and a change in the energy in particular operational contexts and within the activities ongoing therein.**

- **Something causes an appearance to manifest sufficiently well to cause us to recognize it as a legitimate presence.**
- **Thus, there is a cause linking to the effect with the effect being appearance.**

- **We must understand cause, link, effect relationships before we can work with appearances and thus gain advantages in the struggle for ascendancy of *wills*.**

**One can thus surmise the presence of people-caused appearances.**

- **We can anticipate such appearances and at least become more intellectually and organizationally nimble.**
- **In addition, one finds appearances coming from within the operational context, e.g., a rainstorm or a sand storm, or fog.**
  - **These appearances though, can advent via natural, contextual, or human-induced data.**
    - **The contextual creation and human realization of new or existing appearances can come from within our four kinds of context.**
    - **Or, they could come from the larger whole, with whom we have conjoined.**
    - **Also, new or existing appearances could come from smaller contexts in which our larger context enfolded.**
      - **Know though, that in this thought, our contextual aggregation has unfolded into a larger contextual aggregation.**



- **These machinations involve aggregation and wholes that we have discussed before where our aggregation unfolds into larger contextual aggregations and our contextual aggregation enfolds smaller contexts into ours.**
- **Each of these appearances you see in the visual can cause perturbation in our operational context.**
  - **What we want with respect to battles of *will* is to use appearances to wither and shake the strengths of the adversary.**
  - **We also want to create appearances that can successfully attack one or more of the adversary's 14-element *will* model.**
  - **We also have to anticipate the adversary's attempts to attack our model of *will* with appearances that he anticipates will shaken our resolve and weaken the strength of one or more of our 14-element thought model of *will*.**
    - **Thus, we need to conclude that there will be **A BATTLE OF APPEARANCES**, raging in the operational context, thus causing more turbulence and leaving vestiges of the presence of appearances.**
    - **Each side in this battle is attempting to induce decay in the 14 element thought models the other side is using and more specifically in the strengths you can see on the visual.**

So, along with physical attributes of *Will's* model, for the most part, the deep thinker always finds many intangible forces at play when considering their appearances relative to “*will*.” Thus, the deep thinker must think about implications.

- With changing settings and passage of time, the means to gain strength can undergo decay particularly as it expends energy.
- The other implication involves the potential decay of the appearances prevalent with both sides that could potentially affect the outcome of the game of *wills*.

Decay, of course, is ‘a way’ to influence an adversary’s **STRENGTH OF INCLINATION TO SACRIFICE** to accomplish goals and objectives and to use capabilities to satisfy his aim, goals, objectives, strategies, and so forth.

- Thus, **WE MUST KNOW THE ADVERSARY’S STRENGTHS**, from two realities—ours and from the adversary’s perspectives.
  - Thus, we can intelligently attempt to induce decay and thus dissipate the power of his strengths.
- Ideally, we wish to induce decay into that which matters to the opponent without him being aware of our manipulations.
  - I am convinced though that if one can find their adversary’s strengths, from his perspectives, of course, then one can vigorously pursue decay.

- Also, of interest to deep thinking people, one realizes that what appears in reality and in the adversary's mind as strength can be susceptible to induced decay.
- Examples of strengths that have to exist before decay comes include those I list on the visual.
- Know too that some of the elements of *will* often seem to be **IMPENETRABLE** to decay such as life-force, purpose, strength of motive, and capabilities.
- Seeming to be **IMPENETRABLE** to either manipulation or direct assault though, should not alter our course of action we designed to assault these elements of *will*.
  - Assaulting the adversary's essential elements of *will* by inducing decay is a good strategy.
  - Of course, the strategy won't always work.
    - But your co-evolutionary system will provide you the knowledge to recognize and adapt better and faster than your adversary.
    - Thus, you will be nimble in mind and in organization, and proceed with finding his weaknesses and using them to assault his strengths.

## **Slide 31 What Needs to Be Done**

**As a thought leader, you are responsible for helping your people learn how to think sufficiently well to read and understand this book of *will*.**

- **Thus, I challenge leaders to read and comprehend this book, develop learning programs that will help their people read, understand, and implement the ideas in this book relative to their many operational contexts.**
  - **Develop deep thinking people, whom I call, Über thinkers and thought pilgrims.**
  - **Bring forth mental proficiency in analysis, synthesis, and holism.**
    - **Implementing the book demands comprehending the book, nimbleness of thought to action, and an eye for important but fleeting pressure points, decisive points, and centers of gravity at work in the 28 cell matrix I introduced in this book.**

**I provide you with models to help you understand and implement the ideas in the book.**

- **The 14-element model of *will* is most important. For the purpose of review, here are this model's 14 elements— 1) life-force, 2) purpose, 3) capabilities, 4) strength of motive, 5) perseverance, 6) determination, 7) advantage, 8) disadvantage, 9) passion, 10) sacrifice, 11) impose, 12) act, 13) assess, and 14) adapt.**

- As we progressed on our journey, we talked about **WARGAMING THE ADVERSARY'S WARGAMING.**
- Also, we talked about a tool for wargaming the adversary's wargaming involves the dictum, '**RIDE THE WILD PENDULUM.**'
  - This dictum, in turn is buttressed by an idea from Clausewitz which is **DUALITY.** The notion of duality provides the reader with a vivid and historical connection reaching out to my mind from *On War*.
- Then, we talked extensively about **CO-EVOLUTION** and **ADAPTATION.** They prove to be of great importance in winning struggles for dominance of *will*.
  - ⇒ Next all people preparing for or actually in conflict have to think deeply about the **18 CONSIDERATIONS OF WILL** that I introduce and explain in the book.
    - Also, of importance, we found and talked about **CHARACTERISTICS OF NONLINEARITY.** It is a thought model with 17 characteristics that always prove important in our thinking about *will*.
      - And, most complicated of all, we learned about the 28 cell model I

created for use with **MATRIX  
WAR.**

## Slide 32 What Needs to Be Done ... cont.

Some people might conclude that this subject is too difficult to learn and apply. I respectfully disagree.

- All of us can gain knowledge about *will* and, with study, learn how to think to the highest standards about imposing their *will* and winning.
- But the win can come only when you successfully consider and counter an adversary's impositions or denial actions.
  - I submit that leaders of all ranks, roles, managers, judges, lawyers, law enforcement officials and trainers, corporate planners, corporate security, college professors, and so forth, have to learn this book and then mentor their youth to read, know, understand, and implement some or all of the ideas in the book.
  - After all, it does lead the reader to take many a deep-think dive into this dense and complicated subject.

Fortunately, my book has a solid foundation that comes from history, philosophy, theory, and original thinking.

- It provides thought models, visuals, and, I use literary techniques to help readers understand *will's* intricacies. Sufficiency of comprehension is an issue.

- **My position is that sufficiency of comprehension of the book is reached when the reader puts the ideas, theory, and concepts into practice.**

**Reading this book and understanding it behooves you to not only help others learn *will's* general theory but to include its intricacies.**

- **All people will benefit from taking this intellectual journey, as you walk with me up the trail to the light of knowledge.**
- **Along the way, I know that you will be thinking about *will*, talking with me about the subject, and because of its density and complexity, you will feel an urge to halt, to take a time out, close your eyes, and travel to your high country and inner sanctum to think about *will* and its implications for you, in your particular context.**
- **When we reach the light of knowledge know that comprehension is yours, and that you have found a certain Nirvana of knowledge that stirs with new ideas between the book covers of *The Power of Will in International Conflict*.**

**As a final review of what I want readers to do, I ask you to:**

- **FIRST**, be certain that you have read every word and studied what you have input into your mind.
- **SECOND** help other people learn '*how to think*' about *will*.
- **THIRD**, put what you learn into practice.



- **FOURTH**, engage in deep think about technical and organizational implications so as to have the machines and organizations to support and optimize this way of thinking!
- **FIFTH**, improve upon my work and uncover even more powerful characteristics of this great phenomenon.

Know that I am hanging this briefing on You Tube and the script to my web site at waynemhall.com. Then, click on 'Contact Us' then click on 'Blog' and there you can find both briefing and a script for each slide.

- The briefing has a small speaker at the lower right hand corner that provides an explanation of each visual with the tutelage of my thoughts some, by the way, are not in the book.
- Thus, I'm hoping you will be at ease presenting all or parts of this briefing and using the script to explain and create interest in reading the book.

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