

# C3i's Game Designer's Notebook

## *My Philosophy Behind*

# Card Driven Game Design

by Mark Herman

### Introduction

Back in the late 20th century, I had the good fortune to publish **We The People**, the first of the Card Driven Games (CDG) genre.

Through my study of the American Revolution certain critical design elements crystallized for me. I felt these elements must be in a game on this subject if it was to be a faithful historical design. In particular there was the nature of guerrilla warfare, and its impact on conflict, that challenged the way I approached this game design. Guerrilla warfare illustrates how to leverage *political context* through

a superior application of *military deception* to confer *strategic initiative* and victory.

It was upon reflection, and years of real world experience, that I came to understand that these factors were dominant in all warfare, not just guerrilla conflict, and they were missing elements in most game designs.

With this as a backdrop I designed **We the People** and my subsequent **For the People** and **Empire of the Sun** CDGs to bring these three key military concepts (military deception, strategic initiative, and political context) more firmly into my wargaming experience. I will use "this C3i Magazine article, with examples from these three titles, to layout how CDGs should weave these elements into their design. I will also try to show how failing to understand and integrate these elements into a CDG can lead to a misuse of this design genre.

#### Military Deception:

"With Ruse One Makes War"  
— *Old Testament*

My day job as a Defense Consultant has brought me into contact with many four star generals and admirals. To further my

professional understanding of my craft I have asked everyone of them a single question, "what is the most important thing that they focus on in warfare." Everyone of them essentially said the same thing, "how to manage risk in an environment of uncertainty." If these senior military men are to be believed the element of warfare that they think is most important is fundamentally missing from most wargames.

This is not to say that wargame designers have not tried to bring this element into board wargaming, but there has always been a cost in playability. We have had hidden units, dummy units, simultaneous movement, search, and double-blind mechanics, but for the most part these have been only partial solutions. Some of my fondest gaming experiences have been double-blind refereed games

where deception is the critical variable. The main reason I play computer games is hidden movement — this is an area where they far surpass board wargames.

Many years ago I worked on a project that tried to analyze the relative merits of two information age concepts:

Dominant Battlespace Awareness (DBA) and Dominant Battlespace Knowledge (DBK). Dominant Battlespace Awareness can be thought of as knowing the strength and whereabouts of the enemy in the area of operations. Dominant Battlespace Knowledge is knowing what the enemy intends to do and how they are going to do it within the area of operations. The basic conclusions that one draws from understanding the merits of these two ideas is DBA is important and confers great tactical advantage, but DBK is what confers strategic advantage. DBA is a physical phenomena that is very amenable to resolution with modern sensor systems, whereas DBK is a mental phenomena that, when achieved, is very powerful, but is very hard to create with any regularity.

When one applies these two ideas to wargames you quickly realize that they do a very good job with DBA. The pieces are arrayed on the map and even if you factor in hidden movement systems, for the most part players have high knowledge and confidence on where his opponents forces are arrayed. Where traditional wargame designs fail is in their poor portrayal of DBK, which circles back to the senior commander conundrum, "how do I manage risk in an environment of uncertainty." From a wargame design perspective, how does one build deception into the design. Obviously my solution is the CDG design.

With this as preamble, the CDG, like most wargames, lets the player know the strength and location of enemy forces. Where the CDG takes a new path is the player does not know what his opponent can do with those forces and where he intends to act.



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An example that always occurs in my **For the People** game is the typical Confederate conundrum; can the Union move the Army of the Potomac under McClellan (or any other 3-rated general)? Even if the Union can move the Army of the Potomac, how often can they do it during the turn? All Confederate decisions from this point onward are being made in



an environment of uncertainty. The Confederate player has to manage risk when he makes his moves due to this uncertainty.

When I am playing the Union and I know that I can only move my big Army one time, the last thing I want to do is tip my hand to my opponent. How I do this as a Union player brings the element of deception into my decision process. To see the difference, play a turn of **For the People** with open hands and one with closed. An even more interesting example is make the experienced player play open hand, and the weaker player play closed hand. It will immediately become evident how different the game plays and why I believe that CDGs have become popular for both face-to-face and internet play.

It is the CDG's ability to bring uncertainty and deception into the gaming experience that also brings stress and tension into the gaming experience. I have had players write me to say that they love **For the People**, but they had to stop playing it for a while because they could not handle the stress. These could be some of the first recorded examples of wargame combat fatigue. What's next, CDG warning labels? All kidding aside, this is the kind of wargaming experience I want to supply to gamers, one where they feel the weight of command, where every decision carries significant ramifications.

An interesting criticism of CDGs that I see on various internet boards is how unrealistic this genre of games is as

compared to traditional wargames. Players continuously tell apocryphal stories of getting poor card draws, while their opponent gets great cards. In a word, they never had a chance. Many players prefer the high level of control that non-CDGs give them over their forces. There is a belief that the traditional style of wargame is a better reflection of skill and historical accuracy. I think that these are all valid

views and reflect the differing standards people apply to their desired entertainment experiences.

**"I have had players write me to say that they love For the People, but they had to stop playing it for a while because they could not handle the stress."**

I think what needs to be added to this equation is what is gained in CDGs? What a player needs to succeed in CDG play is an entirely different set of skills, and a different style of play than before. Having a bad hand is inevitable during a CDG. Having the ability to survive and even prosper with a bad hand requires new skills beyond the ability to count hexes and calculate combat ratios. The ability to deceive your opponent by making an unusual play that brings fear and consternation to your opponent brings the commanders skills of bluff and deception to the forefront. CDGs bring uncertainty to the equation in such a manner that the ability to gain advantage by confusing your opponent becomes the game, just as it is in real warfare. The reason that Sun Tzu's, *Art of War* is still relevant today is its main focus is upon the psychological nature of warfare, which still remains true long after the chariots have left the battlefield.

It should come as no surprise that I think that CDGs are a realistic portrayal of warfare, because they explicitly deal with what professional soldiers deal with; managing risk in an environment of uncertainty. Where CDGs are inferior to traditional wargames is they remove a player's ability to know the best move and totally control their strategy. CDGs are fundamentally different than traditional

wargames and consequently offer a different gaming experience, not better or worse, just different.

## **Strategic Initiative:**

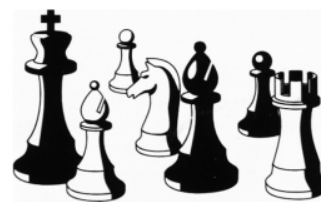
**"Whether in attacking, counter-attacking, or defensive tactics, the idea of attacking should remain central, to always keep the initiative."**

— *Nguyen Giap*

All of the classic wargames share several characteristics, but the most interesting to me is the unwritten way in which initiative occurs as a function of play, and not based on a written rule. Initiative is that intangible factor where ones opponent dances to your tune. For the most part, wargames confer the initiative based on who goes first each game turn. This is usually based on the historical situation, and in most wargames it is a constant during the course of play.

I have experimented in many of my designs with different ways of determining who goes first. In my **Pacific War** (VG, 1985) game, I used a command point bidding mechanic to determine who would have the initiative at a given point in time. One of the first games to explicitly deal with an initiative mechanic was Redmond Simonsen's **Dixie** (SPI, 1976). However, in almost all cases, initiative is determined by a game mechanic.

One of the interesting benefits of the CDG system is initiative just happens as a function of play without rules. It is hard to define, but when I am playing a CDG, I know when I have the initiative and I devise my strategy around how to keep it. I also know when I do not have the initiative and I then devise counterstrategies on how to get it. In a nutshell, having the initiative in a CDG occurs outside the game design, as it does in some of the classical strategy games like Chess and Go.

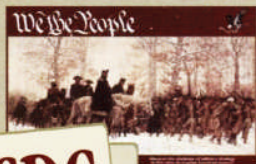


In my *Empire of the Sun* game the Japanese player begins the campaign with the initiative. In many ways, the Japanese performance in the game is determined by how long the Japanese can retain the initiative. The focus of early Allied strategy should be based on how to use their forces and cards to seize the initiative as early as possible, and then begin their counter-offensive. It is usually the Allies inability to seize the initiative in late 1942/early '43 that is the cause of Japanese victory.

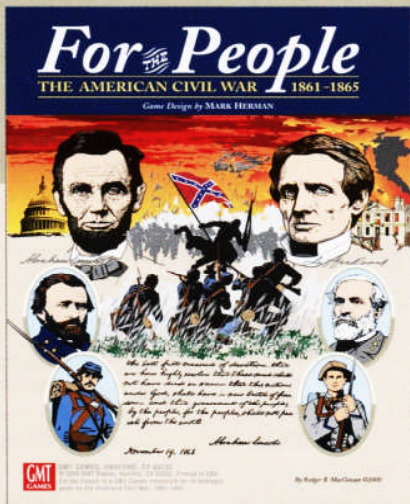
As I continue to do more CDG designs, I continue to work on new game mechanics that allow players to impact initiative in

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"With Ruse One Makes War"— *Old Testament*



**CDG  
System**



## Mark Herman's EMPIRE OF THE SUN THE PACIFIC WAR, 1941-1945



Comb Fleet  
★ HQ  
12 2

What is the most important thing to focus on in warfare?

How to manage risk in an environment of uncertainty.

◆ Mark Herman's first Card Driven Game was Avalon Hill's **We the People** (above), which covered the American Revolutionary War. **We the People** was released in 1993. Mark's second CDG game was **For the People** (right) which covered the American Civil War from 1861-1865. **For the People** won the *Charles S. Roberts Award for Best Game of the Year* in 1998.

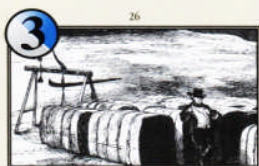


### 3 Cigars



McClellan found Lee's plans for the invasion of Maryland wrapped around three cigars.

Play this card to make an automatic two space interception. Intervening space must be friendly controlled and free of enemy SPs.



### Cotton is King

If played by Union, reduce Confederate SW by 2; if played by Confederate, Confederate gains two SPs due to increased foreign loans. No more than one SP may be placed per Blockade Runner port. If such a port is not available the SP is lost.

Remove from deck if event is played.



### INTELLIGENCE

### Commander Rochefort HYPO Success - JN25 Code break

Intelligence: Ambush

**Bonus:** During all battles of this Offensive, the Allied player achieves a critical hit result on all modified air-naval combat die rolls of 9 or greater.

Remove from play if used as an event.



### US Joint Staff Debate US Inter-Service Rivalry

Flip the US Inter-Service Rivalry Marker from its Strategic Agreement to its Inter-Service Rivalry side. No additional impact if Inter-Service Rivalry is already in effect.

Draw one Strategy Card.

◆ **Impact Cards:** In **For the People** it is the uncertainty around the opponent holding the *Three Cigars* or *Forward to Richmond* cards that can swing the initiative around at a critical moment in the game. Another important card is the *Cotton is King* card. Historically the South self imposed a cotton embargo on themselves. In actuality this was a missed opportunity by the South. This event, if played by the Union, mirrors the historical record, whereby the South makes a mistake. If played by the South they get a chance to rectify this blunder. In either case the impact of an interesting policy on the context of the war is captured within the game.

◆ **Impact Cards:** In **Empire of the Sun** it is the impact that the timely play of the *Commander Rochefort* or *Inter-Service Rivalry* cards can have on which side keeps or gains the strategic initiative. This ability to foil an opponents plan and then follow it up with a counter move not only brings additional uncertainty to game play, but also allows a player to employ historical events to shift, if only for a short time, the all elusive initiative.

Army of N. Virginia 3-3 P2 1	Jackson 3-3 P2 1	Longstreet 2-3 P2 2	Forrest 3-3 2SP 3 1	3 3	Virginia +2
Grant 3-3 P8 1	Meade 1-2 P5 3	Sheridan 3-2 2SP 3 1	Army of the Cumberland 5	5	Army of the Potomac

Akagi 3705 CV 12-12-3	Enterprise 5609 CV 8-12-2	2909 5 4 22-10-2	4612 X W 2-6	Comb Fleet HQ 13 3	1805 XXX 2 Ind 12-12
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Art and Graphic Design by Mark Simonitch and Rodger B. MacGowan

## Game Designs by Mark Herman

### Simulations Publications, Inc.

Across Suez, The Battle for Jerusalem: 1967, Bundeswehr, The First World War, John Carter: Warlord of Mars, Mech War 2, The Next War, October War, Red Sun Rising, The Siege of Tyre  
**Strategy & Tactics Magazine** Raid, Rapid Deployment Force (RDF), Stonewall

### Victory Games, Inc.

Aegean Strike, Central America, Desert Shield Module [for Gulf Strike 3rd Ed.], Flashpoint Golan, France '44, Gulf Strike, Pacific War, The Peloponnesian War

**The Avalon Hill Game Co.** We the People, For the People (1st Ed.).

### GMT Games LLC

Africanus, Great Battles of Alexander, Great Battles of Alexander (Deluxe Ed), Caesar: The Civil Wars, Caesar: Conquest of Gaul, Caesar in Alexandria, Caratacus, Cataphract, Consul for Rome, Diadochoi, Dictator, For the People, Juggernaut, Jugurtha, Lion of the North, Phalanx, Pyrrhic Victory, Salamis, Samurai, Simple Great Battles of History, SPQR, Veni Vidi Vici, War Elephant, War Galley

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ways not achievable in the classic strategy games. This has been the genesis of the reaction card mechanics that have become part and parcel to my **For the People** and **Empire of the Sun** designs. In **For the People** it is the uncertainty around the opponent holding the *Three Cigars* or *Forward to Richmond* cards that can swing the initiative around at a critical moment in the game. In **Empire of the Sun** it is the impact that the timely play of the *Rochefforte* or *Interservice Rivalry* cards can have on which side keeps or gains the strategic initiative. This ability to foil an opponents plan and then follow it up with a counter move not only brings additional uncertainty to game play, but also allows a player to employ historical events to shift, if only for a short time, the all elusive initiative.

Now many players have criticized this feature of CDGs as further proof that they are ahistorical. Comments like, why is it that making a move in Arkansas impacts what I can or cannot do in the East when playing **For the People**? I think that history once again is the guide. The real world ability to regularly coordinate the maneuver of military forces across vast distances has not existed until recent times. Even in the 21<sup>st</sup> century there are only a handful of nations that can regularly coordinate military forces in this manner.

So, why is it that the **Tactics H** (AH, 1958) movement rules, where a player can move all, some, or none of his pieces are considered to be historically accurate? I should note that this simple idea was one of the major breakthroughs in strategy games, as it broke the traditional one move per side **Chess** paradigm, allowing for the intricate maneuvers that are the delight of our hobby. However, since that time we have gone to great lengths to reduce this level of ahistorical coordination ala command and logistic rules to bring greater realism into games. Evolving command rules and how they effect initiative is something that I have actively participated in during my entire design career and is one of the core mechanics to Richard Berg's and my *Great Battles of History* series (GMT Games, from 1991 to today).

CDGs create asymmetric movement of forces and how those maneuvers are affected by strategic initiative through their core card playing mechanic. The historical reality is a senior leader has only so much

command bandwidth that can be distributed across a war. The historical reality is operations in one theater often come at the expense of operations in another. President Lincoln's situational awareness during the American Civil War was formulated sitting on a couch in the military telegraph office near the White House. It is the historical rarity of coordinated maneuvers that make them a unique (e.g., Campaign card) not an ordinary event. To my mind it is the ability of CDGs to naturally create the inability to easily coordinate disparate armies, while reflecting the asymmetric movement of opposing forces that makes CDGs a better historical maneuver model than the traditional **Tactics II** paradigm.

**"A CDG should not be defined as the use of cards in a design. A CDG should be defined as a game that uses cards to create strategy and maneuver from hidden combinatorial options."**

## Political Context:

**"It is clear that war is not a mere act of policy but a true political instrument, a continuation of political activity by other means"**  
— Karl Von Clausewitz

As I have gotten older, I have found myself favoring strategic level games over tactical ones. Don't get me wrong, I still like to pull **La Bataille de la Moskova** (Marshal, 1975) out and immerse myself in Napoleonic tactical formations. However, my fascination with strategic policy and its interaction with warfare has become a major focus for my designs. The hobby has always had strategic and political random event tables. What is different with CDGs is that the CDG *hand of cards* mechanic enables political events to be intimately interweaved with a player's military strategy.

One of my favorite game systems is to utilize a political index as a means for determining the progress of a war. In **For the People** it is the use of the relative levels

of Union and Southern strategic will that is the measure of the conflicts progress. The ability to weave on a game map activities and outcomes with card events opens up a huge number of new political-military combinations. It is this interaction of the card opportunities and player strategy that lets every CDG play-through write its own unique historical script.

Where I think a CDG can go wrong is when it tries too slavishly to follow the actual *historical script*. This is not to say that the *historical script* in the macro should not be built into the fabric of the game design, but binding a CDG design too tightly to the *historical script* tends to reduce strategic options, one of the key strengths of this design genre.

Just to be clear, CDGs are not the best game design solution for every historical situation or level of play. Many historical situations are more restrictive in their historical possibilities and consequently would be poor candidates for a CDG. It also seems that any game that uses cards these days is considered a CDG. I think that this is inaccurate and misses the point. A CDG should not be defined as the use of cards in a design. A CDG should be defined as a game that uses cards to create strategy and maneuver from hidden combinatorial options. It has been this perspective that drives my CDG design philosophy.

To my way of thinking bringing the context of the war directly into the design gives greater purpose and depth to player decisions. It is this ability to explore strategic options in the place of pure battle maneuver skills that sets the CDG genre apart from its traditional roots. The first time that I explored this idea was in a little remembered rule in my **Terrible Swift Sword** (SPI, 1976, designed by Richard Berg) battle module **Stonewall** (SPI, 1978), where the outcome of the *Battle of Kernstown* had an impact on McClellan's Peninsula campaign.

Using the CDG design to bring political context into a game allows players to explore the important events that shape a conflict, such as the *Emancipation Proclamation*. One of my favorite cards in **For the People** is the *Cotton is King* card. Historically the South self imposed a cotton embargo on themselves through the mistaken notion that it would drive the Europeans to intervene in the war to regain

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access to this critical commodity. In actuality this was a missed opportunity by the South to create large overseas accounts while the Union blockade was weak. This event, if played by the Union, mirrors the historical record, whereby the South makes a mistake. If played by the South they get a chance to rectify this blunder. In either case, the impact of an interesting policy on the context of the war is captured and remains one of my favorite features of CDGs.

### Conclusion:

"If men make war in slavish obedience to rules, they will fail." — Ulysses S. Grant

I do not think that U.S. Grant ever designed any wargames, but I think he makes a strong game design point. There is no right way to design a wargame to make it more historical or accurate. It is important to ensure that movement rates, combat results, and other physical factors be reasonably represented in any wargame,

but these factors for me are necessary but insufficient to capture the nature of an historical conflict. What is necessary for me is to not only push cardboard around a map, but to be challenged by the options faced by the historical personages, while managing political and military risk.

President Lincoln knew what he wanted his generals to do. Getting them to do it was the challenge he faced until his death. In **For the People** this is the challenge that I want the players to face. CDGs offer a player some of the frustration that their historical counterparts faced. Players should feel that they are only partially in control of the situation, and that to prevail they must master the game environment better than their opponent. Real wars are full of missed opportunities and mistakes experienced by both sides, but in the end one side prevails. CDGs, like history, measure relative success, since it is almost impossible to ever play perfectly due to the extraordinary number of possible card, unit, and rule

interactions. A player's objective in a CDG is to deal with all of these factors and play better than your opponent to achieve victory.

As a game designer I try to establish my vision for a particular historical situation and then communicate that vision through the game's systems. CDGs were created to explore my vision of the impact of *military deception*, *strategic initiative*, and *political context* on warfare. It is my view that these are some of the most important aspects of historical conflict. CDGs are by no means the last word on game design and are not applicable to all situations. However, when applied to the right situations they bring new dimensions to the gaming experience. Hopefully, understanding the philosophical underpinnings of Card Driven Games will raise the quality of our ongoing debate on game design.



## C3i Magazine's Down in Flames Series Module

The German attack in the West had been long expected by the Allies. However, when the *phony war* finally ended in May 1940, the scale and direction of the assault took them completely by surprise. The British Expeditionary Force and various French units were pushed back to the coast to an eventual perimeter around the town of Dunkirk. From there the Royal Navy was tasked to evacuate as many men as possible – *Operation Dynamo*. The infamous order to “halt the *panzers*” had already been given of course, though none of the defenders could have known that at the time. It had been left to the German *Luftwaffe* to finish the job and crush the Allied remnants.

The British squadrons of the Advanced Air Striking Force and Air Component (AASF) had already been quickly overwhelmed. Though dishing out serious damage to the enemy, by May 15<sup>th</sup> the Royal Air Force had lost almost 250 aircraft, including many *Hurricane* fighters, which were required for the defence of Great Britain herself. The Commander-in-Chief of Fighter Command, Air Chief Marshal Sir Hugh Dowding, recognised the danger. He saw his precious fighters getting frittered away for little purpose so he made a stand and refused to send any further squadrons over to France. Churchill himself, who was



by Toby Pilling

trying to buoy up the crumbling French resistance, later countermanded this order. Only when the Chief of Air Staff backed Dowding was a compromise reached where British Fighter Squadrons would be based in the South of England but carry out sorties over northern France.

This then was the background to the RAF attempt to provide an air umbrella for the evacuation. Over 500,000 British and

French soldiers were within the perimeter and beginning on the 26<sup>th</sup>, it was hoped that around 45,000 might be rescued over the following two days. After that it was thought evacuation would be impossible.

In actual event, over nine days 338,226 Allied troops were brought back on the destroyers and “little ships”. Dowding was forced to husband his resources ruthlessly to maintain a credible defence for the country itself, so only a daily average of sixteen squadrons – many untried and under strength – were able to provide air cover.

The RAF did the best job it could in bad circumstances. Contemporary sources reveal about 106 RAF aircraft were lost in the battle versus 132 from the *Luftwaffe*. Part of the credit for the success of *Operation Dynamo* must go then to the outnumbered RAF, who were much maligned at the time by both the Army and Navy, largely unaware of the battles being fought far above them in the heavens. The experience gained over Dunkirk by the RAF also proved extremely useful in the upcoming Battle of Britain, where Dowding's insistence on preserving his fighters would prove its worth.

