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Games We Play: Strategy, Rule-Sets, Ideology

Institute For The Study of Insurgent Warfare

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particular simulation is a better glimpse at the assumptions of the opposition.

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corruption). While one of these is simply a grim repurposing of a product that was immediately loathed by the Kennedy estate, the other one teaches us something about strategic planning (in a very limited gamestate) which underlies the assumptions of Occupy Wall Street (at least while it existed). While i sincerely doubt that the planners and leaders at Occupy were busily simulating the outcomes of their plans using Monopoly (or at least i am inclined to hope that they were even marginally more competent than that) it does showcase that their idea of victory was simply getting a high enough level of participation. And this raises the question: what would an anarchist strategy game even look like? There is no universally agreed upon win condition for “anarchy” (is it the overthrow of capitalism where we then debate the proper implementation of anarchism according to a mutually agreed upon definition of freedom? property destruction derailing some projects? the end of the surveillance state? something we can’t really speak about until it happens?) and how do we reach that goal (a certain mass of people agreeing to a particular definition of anarchy? one big union? a sort of decentered liberalism? the end of 2,000+ years of technological development?). Simulating such a thing is nigh impossible even given the intense complexity of something like economic systems (accepting the premise that collapsing the economy is the real goal given economists themselves are arguably extremely bad at predicting economic behavior) or voting patterns (if we take the accelerationist track to economic devastation and say electing Rand Paul is the means of accomplishing that goal). Even simulating some sort of limited engagement (how can we beat the cops on their own turf) requires questions about what that means (fighting to a standstill? holding the street? or something more like a military engagement?) . This isn’t to say games can’t simulate a strong level of verisimilitude like the small squad tactics of Frozen Synapse or Rainbow Six. But rather that there are inherent limitations to simulations and what they can teach even if all that is offered from a

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were not so much about “winning” a nuclear war as making initiating an exchange unthinkable); in Civilization you do not win by being a pleasant civilization to live in, for providing adequate food or housing or conserving resources but rather by using those conditions as raw material to fuel a victory. Games teaching strategy will impart the biases of the games creators (and therefore it is impossible to state that there is a game which actually teaches perfect strategic thinking). From an anarchist and specifically insurrectionary standpoint, this seems like an unhelpful conclusion: it is impossible to learn total strategic dominance from any particular simulation and simulation is reflective of both the limited information of the producers of the game and the idea of what victory means. Most recently the RedPill subreddit threatened to invade New Zealand and seemed unaware of what a ridiculous idea this is¹⁸ including the assertion that playing Call of Duty would be helpful in the operation of an M16. While reddit is a garbage dump of humanity (and TheRedPill is among the most loathsome groups of individuals gathered under the Reddit umbrella), this is illustrative of how absurd the notion that one could conquer a nation with a functional military utilizing the skills offered by a video simulation. However, there is something useful within simulations.

Learning the rules to a game allows one to see the viewpoint of the person that designed it and, by extension, limitations and blindspots to their thinking. Additionally, one can reverse engineer a game and create their own experience out of the ruleset offered to them. This can range from using a video game meant to show the accuracy of the Warren Commission’s findings in the assassination of JFK by allowing you to play the role of Lee Harvey Oswald to play HORSE to the Occupy Wall street alterations to the rules of Monopoly (which also reflect the idea that a certain mass of tent cities somehow irreversibly stops

¹⁸ www.reddit.com

ing;’ specifically win states needed to be developed and AI’s modeled that pursued those win states in what was a convincingly human manner.

Generally speaking, games require a “win state” which is a set of conditions when met allow a player to win. In a more civilian context let’s look at Civilization as a franchise. The most recent entry (Civilization 5) has win states that can only be described as extremely “American” one wins through Military Dominance, being the head of the United Nations, achieving technological dominance and colonizing outer space or through becoming a cultural hegemon. By creating a series of win conditions (checkmate in chess or clearing off an opposing army in original kreigspiel) gives rise to a series of efficient ways to achieve such an outcome. Creating a set of best practices to accomplish static goals leads to a narrowing of potential strategies. By way of example, to win a game of Civilization there are only a few ways to pursue victory based off of which civilization you pick (each is optimized for a few win conditions with a few that are completely counter-intuitive for the advantages granted to that particular civilization). Additionally, the resources allocated to your civilization (which are semi-randomized) create an optimum path to achieving victory. Choosing the Zulu makes military victory the best option (given the advantages granted in warfare) meaning that to achieve victory one has to rush having the necessary components for the military and to conquer the other civilizations quickly because technological progress is somewhat lagged for the Zulu. There are inherent limitations to this as a simulation: the ruleset creates a restrictive playstyle because the baked in assumptions limit the ways in which you can win. For this to work every single variable has to be correct (and to make a game a number of variables that are quite complex must be simplified). Tied to this is the creation of fairly streamlined win-states which also reflect the biases of the creators (the nuclear plans developed by RAND

“Consider for example the proceedings that we call “games”. I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?-Don’t say: “There must be something common, or they would not be called ‘games’ “-but look and see whether there is anything common to all. -For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don’t think, but look! -Look for example at board-games, with their multifarious relationships. Board games, what are some? Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost. -Are they all ‘amusing’? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball games there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis.”

-Ludwig Wittgenstein §66, Philosophical Investigations

Games are intertwined with the history of modern warfare and, thus, as a particularly durable method by which particular ways of thinking and visions of grand strategy or individualized tactics are learned even from relatively simple games. Chess has its origins as a courtly game to teach strategy as does Go, hence their use by Deleuze to differentiate visions of

strategy.¹ A full and nuanced history of games (Chess for example), and their use as training tools for particular military aptitudes (for example *Kreigspiel* as a variant of chess), is lengthy enough to be beyond the scope of this piece. For the purposes of this paper, we will be focusing exclusively on wargaming in order to avoid the excessive exegesis of simply documenting every game used by a court or military institution to instill a particular trait, skill or strategy. Wargaming itself, as Wittgenstein generalizes to all gaming, is a fairly wide field held together by family resemblance. Wargaming encompasses almost all forms of military simulation ranging from the “grand strategy” games such as the *Civilization* series by Sid Meyer to jingoistic simulations of armed conflict like the *Call of Duty* series; from those which take place in grim dark dystopian futures (*Warhammer 40,000*), to mirror army games (a simple example being *Stratego*, and a more complex example being Guy Debord’s *Kreigspiel*),² and set piece grand strategy games (*Risk* is a simple example, while *Diplomacy* is a far more complex one which encompasses comparatively less global conflict and formalized-rather than informal-diplomacy).

However, these games provide varying degrees of verisimilitude abstracted from actual conflict and war, although simulations also exist where players stand “in” the game utilizing either simulation arms or simulating the war room simulating

¹ *A Thousand Plateaus*, 352 plagiarized somewhat directly by RAND in *Networks and Netwars* in a directly militarized understanding of both games.

² As *Kreigspiel* has a number of iterations it is worth noting that *Kreigspiel* can mean a Prussian military analog to contemporary wargames such as *Warhammer* or more realistic historically rooted wargames (although with less complex die-based rules for resolving conflict), to a chess variant (rooted in the Prussian military game where players play in ignorance of the position of their opponents pieces with a referee to declare if a move is legal) and finally Debord’s game. For purposes of clarity if context does not immediately indicate which is being spoken of the games will be written as *Kreigspiel*, *Kreigspiel* (Debord) and *Kreigspiel* (Chess variant).

only war time use of nuclear weapons was the United States unveiling them by nuking Hiroshima and Nagasaki).

Originally this was solved by war room exchanges where teams (representing the USSR and the USA) were fed information by a moderator (some of it incomplete) and made decisions. The moderator then made a series of guesses about the outcome and gave another round of information to the participants who made another set of moves.¹⁵ While these games were viewed positively by some politicians (while John Kennedy never participated he was intrigued by their application as much of his cabinet had glowing reviews), military commanders found the intrusion on their turf to be insulting and openly resented the simulations believing them to be a waste of time. Additionally, the simulators themselves were flummoxed by what was actually accomplished by the exercise. While RAND and other civilian scientists were certain that utilizing systems theory they had access to better answers in the absence of more qualifiable data that had existed for previous war simulations.¹⁶ That is, in the absence of real data on what the exchange of nuclear weapons would look like (because nuclear weapons were largely detonated in areas lacking real population density or particularly diverse terrain).¹⁷ This is combined with the real lack of understanding the geopolitical goals of the opposition, necessitating a degree of roleplaying (the war room simulations, which were extremely time consuming) or where computers frequently made counter intuitive decisions (IVAN the AI for the USSR was prone to bombing navies which (theoretically) inflicted so much economic damage the USA would capitulate. The simulation necessitated some “gam-

¹⁵ If this sounds like the earliest versions of *Kreigspiel* this is not incidental.

¹⁶ cf. Ghamari-Tabrizi p. 164–165

¹⁷ The pacific atoll bombs were significantly larger than the ones detonated in Hiroshima and Nagasaki and affected unevacuated people but mostly the United States has repeatedly bombed deserts.

repeated practice in laboratory-staged simulations of future war. Throughout the 1950s, the *avant-garde* among military and their consultants determinedly arrogated authority for strategic planning from the lived experience of senior officers to the civilian virtuosi of the techniques of Monte Carlo, systems analysis, operational war-gaming, man-machine studies, and other innovations in simulating combat operations.¹³

In essence, weapons which almost completely erased the efficacy of ground troops (a single nuclear bomb could unleash more devastation at a far lower cost than several battalions of ground troops) also changed the questions related to strategy. No longer was it necessary to simulate (theoretically) the engagement between forces of nearly equal (or at least comparable) strength where victory was attained by strategic vision and utilization of the surrounding area. Rather, war was (in the eyes of strategic planners) the purview of technocrats who would be capable of finding a winning density of nuclear weapons and applicable targets to make the United States the sole superpower.¹⁴ The immediate problem was how to simulate the exchange of weapons between two superpowers (once the USSR acquired a nuclear arsenal) when there were no historical battles to provide data for a simulated exchange (the

¹³ Ghamari-Tabrizi, Sharon. "Simulating the Unthinkable: Gaming Future War in the 1950s and 1960s" *Social Studies of Science* vol 30, no 2, 164 available at msrc.fsu.edu

¹⁴ This doesn't mean the United States abandoned the idea of ground force engagements but rather that ground force engagements were also becoming the ground of strategic planning for a group of technocrats. For the rise of RAND corporation amongst this an excellent resource is *Soldiers Reason*, for their role in nuclear strategy consult *Wizards of Armageddon* and for their poor decision making when it became questions of human beings in a theater of war see *The Best and the Brightest*.

the strategizing behind conflict. This is not to say that every wargame is utilized by the military (which would be patently false), or that all wargames teach a real military skill. *Call of Duty* is a sterling example of a game which doesn't teach anything about military tactics yet teaches jingoism very effectively. Alternatively, the more interesting inquiries—rather than those interested in some complete history of wargames—lie in the questions: 'What do wargames teach?'; 'How is this teaching accomplished?'; and 'What are the limitations of wargaming?'

Thus this inquiry concerns itself, at its core, with verisimilitude and authenticity. I.e., the aim of wargaming is to teach the player something about warfare then the wargame, in theory, should mimic warfare in a way that makes the rules and game meaningful to that end. This doesn't necessarily mean that well developed or effective wargaming should require a standing army to simulate the game's maneuvers in real time, or even require particularly elaborate stage, but the pedagogy of the game needs to match way of thinking that is being encouraged. One exemplary extremum is the game *CandyLand*; , there is no (military/strategy) benefit to playing *CandyLand*.

As *CandyLand* is meant to teach color recognition, there is no way to gain an edge (other than by discretely cheating by stacking cards), because movement on the board is dictated by color matching the next space of the color of the card you draw. To reiterate, while *CandyLand* is a rule based game, it teaches something of no particular value to military thinkers and lacks any truly helpful input—from the perspective of game theoreticians—in learning to think strategically, nor about military strategy in particular. In theory, relatively abstract games teach players some level of strategic thinking. For example, chess is a game of strategy, specifically one that aims to teach about learning and anticipating your opponent's moves. The game has very little to do with military strategy directly. However, the aim of most (contemporary) wargames is to move from ab-

straction to very concrete methods of teaching military strategy.

Although certainly responding to a less dramatic inadequacy, *Instructions for the Representation of Tactical Maneuvers under the Guise of a Wargame* (Kriegspiel) was developed by Baron von Reisswitz to bring wargames of the Prussian officer corps more in line with what they were actually tasked with doing. That is, games “in existence at the time were based on the ancient game of chess (itself dating in the modern sense the Middle Ages and further back in more primitive forms) or else on some type of card game. Despite multiple variations of the standard game of chess, games of the period were non-representational and didn’t require the player to make decisions using the same types of logic that a real life military commander would.”³ Baron von Reisswitz thus created a scaled model map where two players mediated by an umpire made movements. Reisswitz’ game contained only rules for movement and had no rules for inflicted casualties; the outcomes of player decisions (from each side or player) per round is left to the discretion of the umpire. The younger Reisswitz (the son of the originator) made a number of mechanical improvements to the original game including the distribution of larger maps to each team.⁴ On these larger terrain boards, pieces were moved by the umpire for the viewing of spectators, and the umpire himself.

³ Tactical Wargamer, “The Origins of Wargaming” tactical-wargamer.com/articles/gamehistory/gamehistory1.htm

⁴ Originally Kriegspiel (the shortened name of Baron von Reisswitz’ game, *Instructions for the Representation of Tactical Maneuvers under the Guise of a Wargame*) involved revealed and unrevealed pieces, each player got to look at the board with the pieces they knew the locations of exposed to them, wrote down their move and then the board had to be re-arranged for the other player (no rules existed for conflicts with more than 2 sides). By issuing both sides a map, spectators could watch the battle unfold and maps could be updated quickly to reflect the position of pieces. This removed an enormous time sink from the original edition of the game.

Weapons developers and military strategists even from the get go had difficulty seeing eye to eye, as documented in *The Social History of the Machine Gun*, military strategists saw no value to a weapon capable of firing thousands of bullets in a continuous stream frequently placing it with artillery (where its lack of accuracy made it effectively useless) believing that wars were won by heroic charges (like they were before the implementation of even rudimentary rapid fire designs). This failure to adopt was reflected in the British being almost suicidally wedded to mass charges against machine gun nests manned by the quick adopting Germans. As bombing (specifically bombing against “bottlenecks”, see previous issue) became more and more of a focus for conventional warfare the defensive and offensive potentials for bombing became more the purview of thinkers disconnected from the military apparatus because their skillset was divorced entirely from traditional warfighting and was strongly tied to questions of the efficacy of bombing (specifically how to maximize impact of truly powerful explosives as opposed to the artillery shelling of previous wars). The biggest pivot within this was the development of the atomic bomb; as Sharon Ghamari-Tabrizi notes:

The most striking effect of the attainment of a scientifically-based strategic asset (namely, atomic and thermonuclear weapons) was the debasement (or at least supersession) of the personal wisdom of the senior officer rooted in combat experience, in favour of institutions arising from

of the aerial fighting will be done by drones where the real military question is how quickly we can produce useable drones). In short: theoretically these interests work in harmony creating reasonable technology of great efficiency and excellent utility; more often than not these interests create the sort of useless geegaws that populate the pages of *The Baroque Arsenal* as kickbacks between military leaders and defense contractors creates an endless cycle of useless junk.

military but rather formalized it. On the other hand the rise of gunpowder weapons, aircraft, artillery, telecommunications and most importantly the atomic bomb necessitated the rise of a class of non-soldiers who specialized in the efficient production of material. For example the efficiency of artillery has always been linked to a strong cohort of engineers or, more importantly, how the rise of gunpowder armies (prior to the capacity to “fix” atmospheric nitrogen) lead to the necessity of large numbers of engineers to make enormous amounts of standardized gunpowder. These and many other newly technological changes required a new sort of command (one which rather than being skilled in the “great game” of war was skilled in the management and production and distribution of supplies effectively), essentially a sort of weaponized economist or engineer.

While strategy certainly still played a part in modernized warfare, a complex bureaucracy managing men, supplies and the production of arms became wedded to military enterprise because regardless of the tactical brilliance of a commander the inability to field a meaningful military (that is one with sufficient ammunition, high quality weapons (measured in range, rate of fire or both), accurate or powerful cannons {or other artillery) or, as we ease closer to the era of world wars, complex machinery like tanks, bombers, naval destroyers and other incredibly complex machines which not only had to be created but had to be created with designs which accomplished military aims without introducing crushing debt.¹²

¹² It is probably worth noting that the military and design specialists do not see eye to eye, for example the A1O “Warhog” is probably one of the few American fighter planes that is built for contemporary engagements (it strafes deadly machine gun fire and has a low top speed making it excellent for fighting an insurgency) but “sky jocks” would rather fight a theoretical dogfight between high tech sound barrier surpassing jet fighters and while government simulation indicates that there is no particular value in improving such a technology (in a theoretical war between a comparably powerful nations all pilots will be dead in the first few hours of engagement and most

These larger boards also served to change the scale of the conflict; this empowered players with the ability to launch brigade level maneuvers in-game, and codified rules for new combat situations, in addition to those marked by the provision of odds tables to more accurately account for damage. Both versions of Kriegspiel were well received by the Kaiser’s court and some officers. Specifically, the version by Reisswitz the younger was immediately popular with elements of the military, to the point that it spawned several officers’ clubs, and was even disseminated within the military by order of the Kaiser himself. Despite the resounding success of his game in some quarters, Reisswitz the younger ultimately committed suicide after being effectively exiled and passed over for meaningful promotion. Speculatively, his suicide was related to the “anti-Kriegspiel feeling [had] arisen in some quarters. Some of the older generals were of the opinion that the game would give young officers an inflated idea of their abilities to manage Brigades and Divisions and leave them dissatisfied with ordinary regimental service:’s From a technical and ideological standpoint this abridged history has brought up two important points:

1. simulation necessitates numerous rules to resolve actions and those rules can be of increasing complexity
2. military elements are necessarily distrustful of simulation standing in for actual experience.

Focusing on the first element [the second will be bracketed until later], one of the inherent difficulties to a simulation of armed conflict is the numerous variables to have to be accounted for for a reasonable level of verisimilitude. Additionally, to do this either definitive computations need to be made (i.e. the time intensive process of accounting for every bullet from each unit engaged in whatever period of time a round represents along with elements such as cover, visibility,

weather, terrain, etc.) which is theoretically impossible, having the umpire make an educated guess (which is unsatisfying) or to create a streamlined table for doing rough but qualified computations.

While this provides the player with an (ostensibly) satisfying answer it also can become unmanageable to get through moves quickly (even in a game that rather than having individualized soldiers is built of blocks representing units, battalions, etc.). As that is 1 individual action (that has to be tallied to know when a unit is broken or exterminated) in a conflict that contains many units all of which potentially attack each other, taking a number of qualifications as to what table to consult before applying damage and then tracking the losses inflicted on every unit on the board. If one eschews tables and instead adds a degree of uncertainty in outcome (substituting die rolls derived from tables with modifiers and their own mechanics) this exponentially slows the game down as more and more rules must be consulted to determine the necessary mechanics to resolve combat (even on the battalion level which then can become more and more complex as representation moves from macro units to individual soldiers, material or vehicles or ammunition counts & etc.). However, each level of immersion added such as breaking battalions into units, squads, or fireteams or even individual soldiers alternately forcing resource management (fuel, ammunition, provisions, etc.) increasingly forces numerous calculations and tallies to occur as the game advances.

This is, naturally, somewhat tedious and there are a number of solutions to the division between “people who want to move in the direction of modelling and to develop this aspect [verisimilitude in accounting for all of the factors in calculation] in further depth, and others who are more content with approximations in the idea that it is really intuition, strategic nous, that is being inculcated and superficial resemblance to

terms of interaction (let’s say Warhammer) is capable of being reduced into a computer playing field which can track all available legal moves and positions and keep rules for things like point-buy systems¹¹ and resolving conflict by applying all the tables necessary for conflict resolution from a difficult set of tables to choose from. The awkward wedding of this form of simulation to military planning was the product of a number of transformations in warfare. Firstly, the advent of modern warfare (or at least warfare where highly advanced scientific equipment and counter-measures have to be deployed) reduced the significance of top military commanders. Concretely: what would normally be considered logistics (in the earliest form of military usage the baggage train that brought food, water and other necessary supplies to an army that was largely made up of infantry) became of increasing importance as the scientific production of arms and strategic weapons became less about pure military knowledge and more about scientific knowledge. While many military transformations in logistics failed to displace traditional military leadership; consider the difference between the individuated tents of Greek armies where every soldier was in charge of their own rations and consequently was an army incapable of traveling long distances as every champion brought a number of non-combat comforts along with him and the more professional Roman armies fundamentally changed warfare (allowing for armies to travel further and standardizing the kit of many units) it did not change the command structure of a

¹¹ Since War hammer has so many different units while there are rules for commanders and the necessity of certain command structures along with vast differences in the application of each unit the simplified way of having simulated conflict is assigning point values to each unit and having every conflict dictated by armies of equal strength based off of the point based purchase of armies with a hard cap (i.e. a 400 point army duel). More realistic military simulations may use a different permutation where resources are applied to building units (tanks, jetcraft, ICBM batteries etc.) along with their maintenance and garrison costs & etc.

predetermined outcome that isn't random enough to remove any element of strategy.

The problem with this is that it is not well simulated on tabletops as the only way to provide a range of outcomes is to randomize outcomes with dice. While you can ultimately set dice outcomes to basically any integer (for example you could simulate a higher base # by increasing the number of dice to give a higher lower range ex. 1d20 has a range of 1–20 with all outcomes having a 5% chance while the probability of different #s is marginally skewed with 2d10 with a range of 2–20 if you were looking for a more specific range (i.e. a high floor with a range of uncertainty around it) you could have a chart like $200+2d6$ which would give a range of 202–212 these of course can only give a good outcome to the degree that the ranges meaningfully map to anything and to account for more and more variables would require more and more charts to provide inputs the core generation of some sort of score (damage for instance).

COMPUTERS FACILITATING CALCULATION

One of the major changes for this, although obviously for hobby gamers pens, paper, dice and miniatures still suffice and provide a strong hobby, was the advent of computers. Computers provide “convenient feedback to the player as to the state of the game” simply because computers are good at tracking a number of variables and providing (or at least applying) rules.¹⁰ While in terms of civilian applications for hobby gaming this has a strong impact, theoretically a heavily rule based system with incredibly dense rules for resolving combat and a number of skills to be tracked in

¹⁰ www.youtube.com

the mechanics of war is thereby sufficient:⁵ This tension or division can be traced by the difference between fairly obtuse rulesets and heavy amounts of calculation (as favored by players of modern *Kriegspiel* or other versions of tactical wargaming like *Warhammer*⁶). Alternately, some versions of wargaming inherently simplify combat actions such as Guy Debord's version of *Kriegspiel*⁷ where players are set up mechanically identical pieces as they wish to and then fight for control of the board with relatively simple movement and combat rules (every piece has an offensive and defensive score and a range). This creates a much more simple combat than measuring distance, consulting a table and rolling die to determine damage (in the most simplified wargames).

The technical aspect that slows Debord's *Kriegspiel* is rules related to lines of communication.

As the rules note:

All units must remain in direct connection with their own lines of communication, or be adjacent to a friendly unit in communication. If not, the unit goes offline and becomes inert. Units are free to move out of communicative range, but once offline they may not move, attack, or defend themselves.

⁵ Bousquet, Antoine. “Marshalling the Real: War and Simulation”. thedisorderofthings.com

⁶ *Warhammer* has the advantage of not dealing with “real units or things” so while the rules are almost impenetrably obtuse there is no real argument about how much damage a *krak* grenade would do as a *krak* grenade only exists in the world of *warhammer* while simulating the damage of an AK47 assault rifle along with its range and accuracy is a question that can be answered with physics and thus players can become embroiled in largely technical arguments about the outcome of their selected actions. Given the (generalized) usage of wargaming to teach modern military strategy it is doubtful that military colleges encourage their cadets playing *Warhammer*, however it does illustrate an almost endlessly complex set of rules.

⁷ Those interested in the history of Debord's game can turn to www.bookforum.com

(However any nearby friendly units will still lend their defense to offline units.) Relay units are an exception: they may move freely in and out of communication, yet will only relay the arsenal's signal if in direct line of sight.

Lines of communication are blocked by mountains and by enemy units. However communication passes freely through mountain passes and is not blocked by enemy relays!

Because of the complexity of what a legal move is (because you can move out of a line of communication becoming an inactive unit) and making sure that both the immobile lines of communication radiating from your arsenals and relays keep all of your units within communication (or at least that you are sure of which units are in and out of communication) this requires quite a bit of time (using strings, rulers or dry erase markers) despite the relatively simple rules of combat this game quickly becomes time consuming. Of course Debord's game was not oriented around combat but on lines of communication (a very skilled player could theoretically defeat their opponent by capturing both relays and cutting connection between their opponents arsenals putting the entire opposing army offline). As a wargame one might say that for Debord combat was the least interesting aspect, rather he was interested in how communication is a necessary aspect and how it is managed. However, the game (consisting of 5 unit moves and 1 attack per turn) crawls as you must constantly track units that are online and offline. There is, despite this, one way to quickly expedite play by leaving tracking and a list of legal moves (including which moves would put a unit offline) which is to pass the task of tracking such things to a computer leaving players to focus on

their moves rather than dedicating their time to being certain of the online/offline status of their pieces.⁸

One of the "selling points" to fixed value combat is that it allows for unencumbered skilled play; that is: a well executed maneuver will always have the same theoretical value (in terms of damage) yet this creates a sort of static chessboard effect where there are no sudden reversals, failures of units to execute properly or suboptimal damage dealt against an exposed enemy for any of a variety of factors. That is, there are no surprises in such a game as there is no space for "luck". On the other hand: dice or other forms of randomized outputs randomize outcomes to the point where an outcome is largely inscrutable. As Craig Stern notes "for a tactical combat system to work, the player has to be able to figure out the likely results of his or her potential actions."⁹ With dice rolls resolving combat, there is the potential that a series of tactical blunders are rewarded by sheer luck and a series of brilliant moves go up in flames due to botched rolls. While military planning would like to work with degrees of certainty for outcomes absolute outcomes will cloud the capacity for accounting for alternate outcomes while truly random (or close to random) outcomes will obscure any potential for learning what constitutes a good strategy. In terms of design, the goal is for a strong degree of confidence in outcome with the ability to see potential drawbacks to an error in execution (otherwise rube goldberg like strategies would be perfect) and to simulate this there needs to be some degree of non-

⁸ r-s-g.org

⁹ <http://sinisterdesign.net/the-battle-system-i-wish-rpgs-would-stop-using/>; an observant reader may note that I am frequently jumping from questions of game design for console/pc gaming and actual military gaming. Generally speaking, while there is often a superficial separation between the two, questions regarding design are fundamentally the same even if one has fairly drastic impacts (i.e. effects Pentagon planning for military engagement) and the other generally has to ask questions of "fun." However, both are intent on creating an immersive ruleset that conveys a particularity of combat which at least superficially binds them together.