

Illuminati: The Game of Conspiracy

A Close Reading

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ABSTRACT

Illuminati is a humorous game of conspiracy and political intrigue.¹ Designed by Steve Jackson in 1981, it has proven to be enduringly popular through many years of revision and republication. In this paper we examine its latest incarnation, *Deluxe Illuminati*, and closely analyse its operation in terms of the MDA framework of Hunicke, LeBlanc and Zubek [8]. Five general-purpose game-dynamic patterns are discovered that might serve in the understanding and design of other games.

1. INTRODUCTION

Illuminati is a table-top card game about the secret societies and conspiracies that control our lives. Inspired by the *Illuminatus!* novels of Robert Shea and Robert Anton Wilson [14], game designer Steve Jackson created a game in which rival Illuminati (powerful secret societies) vie for control of organisations such as the CIA, the Multinational Oil Companies and the Moonies. It won the Origins Award for Best Science Fiction Board-game in the year of its publication and almost 30 years later the game continues to be popular, proof of its entertaining themes and elegantly crafted design.

In this paper we shall provide a close reading of the game, analysing its rules and its gameplay in order to understand how they create the rich experience of play the game provides. We shall take as our framework the 8 kinds of fun and Mechanics-Dynamics-Aesthetics (MDA) model of Hunicke, LeBlanc and Zubek [8] which help us realise the many kinds of aesthetic experience that the game provides and discover their origins in terms of the rules and interactions of play.

From this analysis we will lift some general-purpose game design patterns that can inform future design problems. In this way we hope to show the value of this kind of close-reading exercise in providing tools for further design.

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2. BACKGROUND

In this section we shall outline the analytical tools we will use to examine the game. Those familiar with MDA, design patterns and the 8 kinds of fun may elect to skip ahead to the description of the mechanics of the game in Section 3 and the analysis of its aesthetics and dynamics in Sections 4 and 5.

2.1 The MDA framework

Games are unusual among works of art and entertainment in the degree to which the experience is in the hands of the audience (the players) rather than the author (designer). Every work of art is naturally open to interpretation and a variety of readings but games are special (albeit not unique) insofar as they are *interactive*, meaning that the events and outcome of the game are decided by the players' actions and not by the author alone. In this way the player acts as both the performer of the work and its audience.

For this reason a game cannot simply be understood in terms of their rules, we must also consider the psychology of the players. Games present the players with choices and how the players respond to these choices determines the kinds of experience they have. The MDA model describes these elements as:

Mechanics: The rules of the game and the associated 'physics' of the game world (real or virtual).

Dynamics: The patterns of interaction that arise as the players play with the mechanics of the game.

Aesthetics: The kinds of experience had by the players as they play the game.

As a game is played the mechanics give rise to dynamics which result in aesthetic experiences. The task of game design can be thought of as starting with a description of a desired experience and working down to the mechanics. The model is valuable as it recognises the existence of dynamics as important design concepts. By identifying and naming dynamics as abstract chunks we can reason more clearly about how games work.

2.2 8 kinds of fun

When talking about the aesthetics of a game Hunicke et al. take care to be more precise than just calling a game 'fun'. They recognise at least eight categories of experience that games can evoke:

Challenge: The experience of problem-solving; facing and overcoming challenges whether physical or mental.

Fellowship: The experience of interacting with others, cooperatively, competitively or otherwise.

Sensation: The experience of sense pleasure: visual, musical, tactile or other.

Drama: The experience of tension and relief that creates a dramatic arc.²

Fantasy: The experience of imagination and pretend.

Discovery: The experience of exploring a world or a system and uncovering its secrets.

Self-Expression: The experience of expressing yourself through art or role-play or other forms of creativity.

Ritual: The experience of meditation through submission to a rote activity.³

It can be argued that these categories are not exhaustive (which the authors freely concede) but they provide a good starting place for distinguishing the difference kinds of pleasure a game can provide.

2.3 Design Patterns

The idea of design patterns was first made popular by Christopher Alexander and his associates in the field of architecture and town planning [2]. It was an effort to distil a language describing the recurring patterns they recognised in their building and planning work, as well as their studies of 'folk' or 'vernacular' architecture around the world. Crucially, they recognised that architecture, like games, is interactive. The experience of an architectural element comes from the kinds of interactions it engenders with the people who use it. Thus we can think of Alexander's design patterns as capturing 'game dynamics' in the sense above.

The advantage of a pattern is that it lifts an abstract idea out of the particulars of its circumstances, gives it a name and identifies its particular causes and effects. Thus the same pattern can be used as a building block to achieve similar effects in different circumstances, and names give us the ability to think and talk about complex dynamics as units.

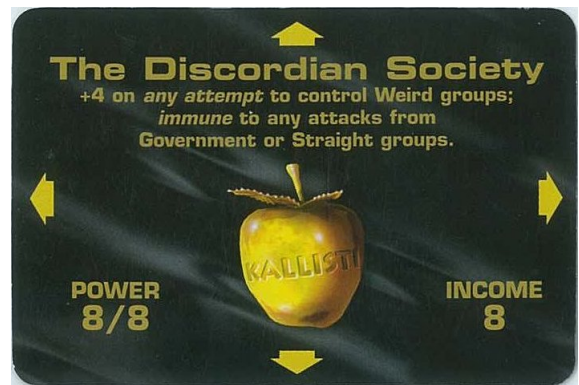
We are attempting to do the same for games. The identification of games design patterns is not new; many designers have realised the need for a common vocabulary to support criticism and innovation in game design [5], [11] as well as academic education [16], [13]. At least two major efforts to build such a vocabulary have been attempted: the catalogue of game design patterns by Björk and Holopainen [4] and the Game Ontology Project by Zagal et al. [1]. These are both important projects, but if we were to criticise them it would be for focusing more on mechanical elements than the dynamics of play.

3. MECHANICS

Deluxe Illuminati is a table top card game for 2 to 8 players (although 3 to 6 players is generally recommended). Each player controls one of a selection of rival Illuminati – secret societies that are vying to take over the world. To

²In the original paper *Drama* was called *Narrative*. I feel that that term too closely connotes 'story' which is not its intent. Tetris has no story but a strong dramatic arc.

³*Submission* in the original. I feel my term is clearer.



(a) The Illuminati card for the Discordian Society.



(b) The Group card for the CIA.

Figure 1: Illuminati cards

gain power, the Illuminati must infiltrate and take control of other organisations: political parties, law-enforcement agencies, consumer groups, or other more esoteric societies. The theme of the game is thus a satirical take on popular conspiracy theories, that link organisation to organisation to form a grand theory of how the 'secret masters' are controlling our lives.

We will outline the essential rules of *Illuminati*, as relevant to the analysis that follows. Many details have been omitted to keep things simple. The complete rules can be found online from the Steve Jackson Games web site [9].

The game is played using a special-purpose set of cards representing the Illuminati and the various organisations (called 'Groups') they control (Figures 1(a) and 1(b)). Players do not initially control any groups except for their Illuminati. There are a number of uncontrolled groups in the centre of the table that do not belong to any player. Players take turns making attacks, either on the uncontrolled groups or on the groups of their opponents, in order to gain control of them.

Each group has three important attributes: Power, Resistance and Income, each a number typically in the range 0 to 7. Power measures the group's attack strength, Resistance its ability to defend, and Income is the amount of money it earns. Money can be used to aid either attacks or defence, as we will describe below. Illuminati cards have no marked resistance as they are immune to attack.

Play proceeds in turns. On her turn a player does the following:

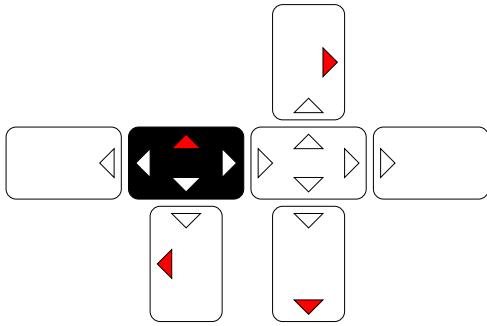


Figure 2: A player's Power Structure is a tree of Groups with the Illuminati card (in black) at the root.

1. **Draw income.** The player takes money for the bank equal to the Income of each group she controls.
2. **Draw a new group.** The player draws a group from the deck and adds it to the set of uncontrolled groups.
3. **Make up to two attacks.** The player may make from zero to two attacks to control groups. If an attack is successful, then the group is added to the player's power structure.

3.1 The Attack to Control

The attack to control is the core mechanic of the game. The attacking player selects one of her groups to initiate the attack (possibly her Illuminati) and names the group being attacked. Success is determined by rolling two six-sided dice. If the number rolled is less than or equal to the difference between the Power of the attacking group and the Resistance of the defender, then the attack is successful and the attacking player gains control of the group. Thus if the attacker has Power 6 and the defender has Resistance 2, the player need to roll 4 or less to succeed.

The chance of success can be modified by spending money, measured in 'megabucks' (Mb). For every megabuck that the attacker spends, the number to be rolled is increased by one, to a maximum of 10. So in the previous example, the attacker could spend 5 Mb and would then only have to roll a 9 or less, increasing her chances of success significantly.

Furthermore, other players can also spend money on the attack either to increase or decrease the number to be rolled. So an opponent could spend 8 Mb to reduce the roll to 1 (impossible on two dice). At this point the attacker may opt to spend more money to increase the roll, or may invite her allies to spend money to assist her. Spending continues until no player wishes to add any more money to either side, at which point the required roll is:

$$Power - Resistance + MoneyFor - MoneyAgainst$$

A roll less than or equal to this value indicates success, otherwise the attack has failed. In any case a roll of 11 or 12 is always considered a failure.

3.2 The Power Structure

Groups once controlled are added to the attacker's Power Structure (Figure 2). This is a tree-like arrangement of cards rooted at the player's Illuminati. Each group has a single

inward-pointing arrow and up to three outward pointing arrows. When a card is added to the hierarchy, its inward-pointing arrow is connected to an unused outward-pointing arrow on the attacking group. If a group has no free arrows then it cannot perform an attack.

Groups in a player's Power Structure have bonuses to their Resistance according to their position. A group immediately connected to the Illuminati gets +10 to its Resistance when defending. A group one away gets +5, and a group 2 away gets +2. Other groups get no bonus.

3.3 Alignments

The other important mechanic is the Alignment system. Groups may have a number of Alignments which reflect their character. The possible alignments are:

Government and its opposite **Communist**

Liberal and its opposite **Conservative**

Peaceful and its opposite **Violent**

Straight and its opposite **Weird**

Criminal which has no opposite

Fanatic which is its own opposite

A group gets +4 to its Power for every alignment which it has in common with the group it is attacking, and -4 for every opposite alignment the opponent has. Two *Fanatic* groups are always considered opposite to each other.

3.4 Goals

The goal of the game is to control a certain number of groups (which varies from 8 to 13 depending on the number of players). Each player also has a Special Goal which is specific to her Illuminati. So for example, the Bavarian Illuminati win if they control groups with total Power of 35 or more, while the Gnomes of Zurich win if they collect 150 megabucks. It is possible (although unlikely) for two players to achieve their goals simultaneously, in which case they share the win.

3.5 Other Mechanics

A number of rules have been omitted in this description. Briefly:

- In addition to Attacks to Control a player can also attack to Destroy or Neutralise, which have different effects but a similar resolution mechanic.
- Some groups (and all the Illuminati) have Transferable Power which allows them to aid in an attack being made by another of the player's groups.
- For a cost, attacks can be made Privileged to avoid other players interfering.
- There are rules that govern the reorganisation of the Power Structure and transfers of money between groups.
- Individual Illuminati and groups have special powers that influence the core mechanics, usually in the form of bonuses to certain attacks.
- Special cards give the player one-off chances to perform powerful actions, such as causing an attack to automatically fail or gaining a large cash bonus.

4. AESTHETICS

There are a number of different qualities that make this game fun. In terms of the 8 kinds of fun, there are elements of Fantasy, Fellowship, Challenge, Drama and Self-Expression. The game shows a remarkable level of integration between these different parts, each one reinforcing the others.

The fantasy of being a ‘secret master’ is suitable for a game which is fundamentally about making clever plans, doing deals with other players and growing a power structure of organisations. This game is not as hard-edged as *Diplomacy*, however. There is an element of satire in the fantasy which makes the game more amusing and friendly. This humour comes about through several sources. The colourful and amusing card art, the punning group names, and the incongruous juxtapositions of groups of different levels of ‘seriousness’ (e.g. when the FBI helps the Moonies to take control of Christmas) all suggest that the conspiracies we are playing are not to be taken seriously.

The randomness in drawing groups and resolving attacks also serves to make the game less purely strategic and changes of fortune are taken more lightly. Which is not to say that the game does not present a challenge. Both tactical and strategic reasoning are needed to win. Deciding which attacks to make, aid or oppose, and with how much money, is a critical and complex choice. Short term victories can leave you vulnerable to attack in the longer term.

Building your power structure is a longer term process with real strategic choices. A good structure is designed to focus on the particular strengths of your Illuminati. Individual powers and goals, as well as the bonuses for common alignments in attacks, lead to structures that are themed in particular ways. Designing your power structure is thus both a strategic challenge and also an enjoyable act of creation. A good structure suggests a amusingly credible conspiracy theory, rather than just a haphazard collection of parts only valued for their powers.

Finally, the game is carefully balanced to avoid isolationism. While each player is pursuing her own private goal, the attack mechanism allows them to directly interfere in each other’s actions, and the control of certain powerful or otherwise valuable groups is a common source of contention. Such groups may change hands several times in play. There is also a strong ‘Tall Poppy Syndrome’ dynamic in which ad-hoc alliances form to oppose a player who is close to winning. Such alliances tend to be short-lived however as the tides of fortune ebb and flow.

5. DYNAMICS

We now shall look in more detail at the core dynamics of the game in the short and the long-term. The attack resolution process dominates the short-term dynamics while in the longer term the strategic management of money and the growth of the power structure are important.

5.1 Resolving attacks

The heart of the game is the bidding war that is the attack resolution process. In a turn-taking game it is easy for the players to become disengaged when it is not their turn as there is little for them to do but wait. This is because most board-games offer only indirect competition (as in a foot-race) rather than direct competition (as in a boxing match). *Illuminati* has two ways of permitting direct competition: 1)

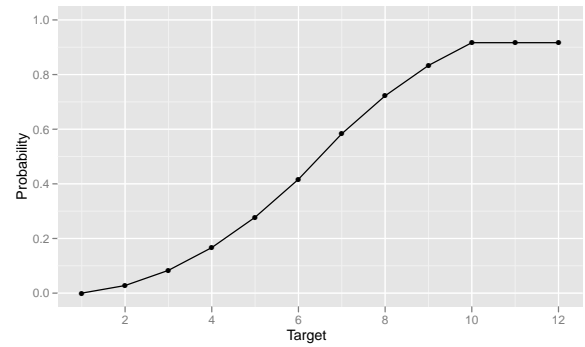


Figure 3: The probability of success in an unopposed attack.

the ability to attack other player’s groups, and 2) the ability to interfere in other players’ attacks.

We will examine the attack process as a single player game, a two player game and a many player game.

5.1.1 Attacks Involving One Player

As a single player game, bidding on an uncontrolled group is fairly straightforward. Having established the amount of power available and the resistance of the group, we can calculate the base target for the dice roll:

$$Base = Power - Resistance$$

We now need to decide how much money is appropriate to spend to increase the chance of success. To do this, we need to decide on the money value of the card. There is no set value for any card, rather it depends on the player’s particular goals and circumstances, but it could reasonably be estimated in terms of the group’s Power and expected Income over the life of the game. Knowing this value, we then maximise the value of the equation:

$$Payoff = Value * P(Roll < Base + Money) - Money$$

The probability distribution P is the cumulative distribution for two dice capped at 10, as shown in Figure 3. Notice that the curve is non-linear, meaning that money spent to raise the target from 6 to 7 is more valuable than money spent raising it from 9 to 10 or from 2 to 3. Naive players tend to increase the target to 10 on every attack, but more experienced players are aware that increasing the target beyond 7 has diminishing returns.

The optimal policy shown in Figure 4. If the base target is less than 2 and the value is also low (in the bottom-left of the graph) then it is not worth attempting the attack at all as the base target is unachievable and any money spent will only lead to a negative expected payoff. It is also not worth spending any money on groups that are worth less than 7 Mb, although if the base target is achievable (top left) the attack may still be worthwhile.

For more valuable groups it is always worth increasing the target to at least 7, and to as much as 10 if it is valuable enough. An interesting feature of the graph is the discontinuity in the bottom right. For a sufficiently valuable group you should spend all or nothing (which validates the naive policy to some degree).

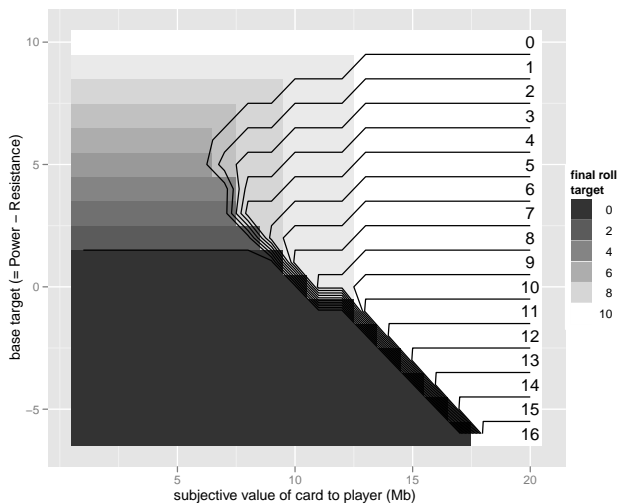


Figure 4: The optimal policy for unopposed attacks. Contours are labelled with the amount to spend.

5.1.2 Attacks Involving Two Players

Analysis gets more complicated when two players battle over a group. The situation is now a variation on the *All-Pay Auction* that has been studied in game theory literature [7]. The term describes a collection of games in which players make bids for a prize. As in an ordinary auction, the highest bidder wins, but every player has to pay their bid regardless of whether it won or not. Such mechanisms are used to model situations such as R&D races or political contests. It is well established that human players are very poor at playing such games rationally and have a strong tendency to over-bid.

As bidding is done publicly and over many rounds (rather than a single round of private bids) the situation becomes more complex still, and begins to resemble the Dollar Auction game described by Shubik [15]. In that game, an auctioneer offers to sell a dollar note in a public all-pays auction. The first bidder might bid 5 cents, the second 10, and so the auction proceeds until the first player bids 95c and the second bids \$1. It would seem to end there until the first player realises that a bid of \$1.05 will only cost him a net 5c (if he wins) while failing to bid will cost 95c. So he bids \$1.05, and his opponent naturally responds with \$1.10. This bidding spiral has no limit.

The same situation arises in the two-player attack resolution process in *Illuminati*. The attacker spends money to raise the target roll to 10. The defender then reduces it to 1. These are now sunk costs – money already spent – and rationally the attacker is presented with the original question again. If it was worth spending money on the group the first time then presumably it is worth spending the same amount again (depending, of course, on the original base target). Often this results in both players exhausting their treasuries and ending up back where they started. The players could have agreed on that result in advance without spending any money and both would have been better off, but the temptation to defect from such an agreement is very strong.

As a result the game presents a major challenge to players' self-control. It is easy to fall into the trap of over-spending

The All-Pay Auction (public)

Mechanics:

- Multiple players compete for a reward of fixed value.
- Each invests a certain amount of resources (time, money, effort, etc.) to win the reward.
- Players are aware of each other's investments and may increase their investment to outspend their opponents.
- Only the player who commits the most will win.
- All invested resources are lost.

Dynamics:

- A spiral of bidding in which each attempts to minimise their losses.
- The final amount spent by any player can far exceed the value of the reward.
- In repeated play cooperation can arise in which it is agreed that only one player (changing on each turn) will bid and win, but this alliance is fragile and the temptation to defect is strong.

Aesthetics:

- *Fellowship*: A strong competition to win, reinforced by the cost incurred.
- *Drama*: On the first experience, a hesitation and dawning realisation as the bids pass the value of the reward.
- *Challenge*: A challenge to one's self-control not to overspend.
- *Fellowship*: In repeated many-player version complex political relationship emerge.

on an attack, leaving you vulnerable to the later attacks of other players. Most people naturally suffer from the 'sunk cost fallacy' [3] which leads us to believe that pulling out of a losing battle after committing a lot of resources is to let those resources 'go to waste'. This attitude often leads to good money being thrown after bad. Resisting this behaviour is difficult, even when we are aware of it.

5.1.3 Attacks Involving Many Players

When more than two players are involved in the auction the cost of attack or defence can be shared among several people. Generally such attacks only happen when one player is close to winning or controls a group that gives them a significant advantage over the others, in which case they may face unified opposition from the other players. This results in the familiar negative feedback loop of most multiplayer competitive games, which we term the *Tall Poppy Syndrome*: the game gets harder when you are doing well because the other players ally against you with a combined strength greater than your own.

Like any negative feedback loop, this dynamic tends to

Tall Poppy Syndrome
<p>Mechanics:</p> <ul style="list-style-type: none"> • Three or more players (or teams). • A single winner. • A publicly known measure of each player’s closeness to winning. • An ability for players to ally to oppose another with combined strength greater than either individually.
<p>Dynamics:</p> <ul style="list-style-type: none"> • A negative feedback loop in which the leading player faces co-ordinated opposition from several other players, until such time as their lead is diminished or another threat arises. (‘The tall poppy gets cut down to size.’)
<p>Aesthetics:</p> <ul style="list-style-type: none"> • <i>Drama</i>: A tendency towards equilibrium and a potential lengthening of the game. • <i>Challenge</i>: A greater challenge felt by the leader as they face co-ordinated opposition. • <i>Fellowship</i>: A temporary sense of teamwork among the opponents.

Free riding
<p>Mechanics:</p> <ul style="list-style-type: none"> • Multiple players. • A common goal that benefits all players if achieved. • A fixed cost to achieve the goal that can be shared among players as they choose.
<p>Dynamics:</p> <ul style="list-style-type: none"> • Some players may choose not to contribute to the cost of achieving the goal but still gain the benefit (‘take a free ride’). • The other players must decide whether to pay the free-rider’s share of the cost, thus gaining a smaller benefit and letting the defector get away with it, or to refuse and cause everyone to miss out in order to punish the defector.
<p>Aesthetics:</p> <ul style="list-style-type: none"> • <i>Challenge</i>: A difficult social decision-making problem. • <i>Fellowship</i>: Antipathy created between free-riders and paying players.

lengthen the game and equalise players, but it relies on politics which makes it unstable. If there are enough players, individuals may be tempted to avoid joining the alliance and let the other players bear the cost, a pattern recognised in political science as *Free Riding* [12]. Blatant refusal to take part requires chutzpah and will earn the ire and possible retaliation of the other players. A cleverer approach is to carefully arrange your finances so that you are not actually able to assist. This takes forethought on the part of the player, but allows them to protest that they would honestly help if they could, but their money is committed elsewhere.

A clever policy is to keep your head down and disguise your strength, aiding in group attacks without overcommitting yourself. Most of your strength (although not all) is public information, but there is a lot to keep track of in the game and the other players can fail to notice your power if their attention is elsewhere. Experienced players will look out for this tactic and deliberately point out opponents who are being too quiet, but nobody can keep track of everything.

It is this political complexity that gives the game its social aesthetics. Players are motivated to work together to achieve common goals, but are always on the look out for a personal advantage. Scheming and deceit are common. Yet the randomness of the game means that even the best laid plans can go disastrously wrong, which keeps the game from becoming too serious.

5.2 Long term strategy

Individual attacks are the tactical units of play, but to win the game you also need a long term strategy. In particular, there are two important resource management problems: balancing spending of money on attacks and defence, and growing a well-designed power structure.

5.2.1 Managing money

Money is the most dynamic resource in the game. It is earned through group income and spent on both attacks and defence. It is the timing of this cycle that is important. Each player draws income at the beginning of their turn. They have an opportunity to spend some of it on immediate attacks, but must then wait for every other player to play before it is replenished. During this time they may have to weather attacks from other players and they may wish to contribute to combined attack or defence costs. Finding yourself without funds when an opponent attacks you can have disastrous consequences.

This pressure to hold on to your money counters the pressure to spend arising from the attack dynamic, leaving the player with an interesting choice. Do they spend money on their turn to gain control of a group with obvious immediate benefit? Or do they hold onto their money to protect against attacks that may come later? The opposition of short-term and long-term benefits is a classic human dilemma [6] and a common pattern in games.

The importance of this choice is exacerbated by the inherent positive feedback loop in the resource economy. The more money you have the more successful attacks you can make and the better you can hang onto the groups you control. The more groups you control, the more income you have and thus the more money you make. However this loop only operates as long as you are willing to take the risk of making attacks. Taking the ‘safe’ option and hoarding your money will only allow risk-taking players to overtake you.

Short-term vs. Long-term benefits
<p>Mechanics:</p> <ul style="list-style-type: none"> • The player is presented with a choice between two options. • One option has obvious immediate benefit but long-term risk. • The other option has little immediate benefit but less long-term risk.
<p>Dynamics:</p> <ul style="list-style-type: none"> • The player is faced with a dilemma between short and long-term benefits. Human beings are generally poor at optimising such decisions as the alternatives are difficult to compare.
<p>Aesthetics:</p> <ul style="list-style-type: none"> • <i>Challenge:</i> A difficult decision about future risks. • <i>Drama:</i> Tension as the player waits to see if the choice pays off.

Emergent construction
<p>Mechanics:</p> <ul style="list-style-type: none"> • Atomic resources which can be connected together. • Players choose how to incrementally build a structure from multiple atoms. • Local relationships between pieces favour certain kinds of connection in a non-linear way.
<p>Dynamics:</p> <ul style="list-style-type: none"> • Larger scale patterns emerge in the structure as many pieces combine.
<p>Aesthetics:</p> <ul style="list-style-type: none"> • <i>Challenge:</i> Finding the best arrangement to optimise the constraints between them. • <i>Discovery/Creative Expression:</i> The structure that results is partly an discovered emergent property of the system and partly the deliberate creation of the player. • <i>Sensation/Fantasy:</i> The higher-level patterns in the structure can have artistic interest as visual art, music, or story.

5.2.2 Growing Power structures

This game could be played with just the dynamics discussed so far and the result would be an entertaining competitive and political experience, but it would lack some of the character that makes *Illuminati* special. One of the fun things that comes out of the complete game is the narrative of organisations attacking, controlling and infiltrating each other. If this narrative was just based on the Power, Resistance and Income of groups, it would be fairly arbitrary and characterless. It is the addition of Alignments and their resulting effects on the player’s Power Structure that gives the game flavour.

The first important factor in deciding the story of the game is the player’s choice of *Illuminati*. The special power and goal of each *Illuminati* are usually themed towards a certain subset of cards. Thus the Discordian Society, for example, has the goal of acquiring five Weird groups and special powers that give a bonus to such attacks and protect against attacks from Straight and Government groups. A player choosing to play the Discordians has made both a strategic and an aesthetic decision.

Special goals and powers suggest an overall theme for a player’s power structure, but it is the alignment-based attack bonuses that make individual games unique. A +4 bonus to attack is a significant advantage, so once the player has a powerful card of a particular alignment they are likely to seek out others of the same alignment to attack. The result is a thematic structure in the tree of groups with related groups clustered together. Groups with more than one alignment serve as ‘key changes’ in the structure, connecting together branches of different themes.

An example will help to illustrate this. In a recent game the Discordian Society took control of Microstuff, a powerful group with Straight, Conservative and Criminal alignments. It may seem odd for an *Illuminati* with a strong Weird bias to control a powerful Straight group, but immunity to attacks

from Straight groups is a powerful incentive to do so.⁴

Microstuff went on to take control of the Moral Minority (Conservative, Straight, Fanatic) and the TV Preachers (Straight, Fanatic) forming a branch of the Power Structure with a strong Straight/Conservative theme. Meanwhile the Income from these groups was being siphoned into the Discordian Society to fund its attacks on less powerful Weird groups: the Tabloids, the Druids and Public Art. And so a separate Weird-themed branch grew on the opposite side of the tree.

Since the fictional identity of each group is closely related to its alignments, what emerges can be read as a wild conspiracy theory between groups with seemingly innocent connections. It cannot be described as a ‘story’ in the familiar sense of the word, but fits perfectly with the insane logic of the conspiracy theorist, and thus with the theme of the game.

This is an example of *Emergent Construction* where high-level abstract patterns emerge from local rule-based interactions between low-level elements [10]. Patterns are seeded from the random draw of the cards, but reinforce themselves and grow throughout the structure. In a typical game less than half the groups in the deck actually enter play, so the structures and stories that arise will differ on every occasion.

Emergent patterns are fascinating to explore in their own right, but *Illuminati* also provides the player choice in how they grow. Thus the player can rightly feel that contributed some of their personal creativity to the result – stories are both ‘found’ and ‘made’.

⁴Microstuff and some of the groups that follow come from the Y2K Expansion which adds many modern-day organisations to the 1982 game.

6. CONCLUSIONS

Much more that could be said about the many special case rules that create their own eddies in the overall flow of the game, but the elegance of *Illuminati* is that these additions are special variations of the strong core dynamics we have described above. There is a simplicity and coherency at the heart of the game which makes it easy to play, but an emergent complexity which provides enduring novelty and challenge.

Yet the dynamics also resonate strongly with the theme of the game. This is not just an abstract game arbitrarily 'skinned' with a shallow fantasy. The sense of conspiracy is reinforced by the political machinations of attack and defence and by the stories that emerge from growing power structures. It is not hard to see why this game is regarded as a classic.

In analysing this game, we hope we have also shown the utility of the MDA model for understanding games. In particular, an understanding of the emergent dynamics of play is essential to explain the experience of this game. The patterns we have found by identifying and abstracting these dynamics can serve us in understanding other games, and in the deliberate design of new games with similar aesthetics.

Finally, we would like to encourage more close readings of this nature and the growth of a community of academic criticism of games. We know a lot about games, but we do not really know what we know until we have to explain it to others.

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