

American Abyss

Simulating a Modern American Civil War

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ABSTRACT

In recent years, speculation has arisen in the United States about the possibility of a civil war. Here I introduce a paper simulation of such a war using state-of-the-art lessons about modern civil war that have been developed within the diplomatic/military/intelligence conflict simulation community. According to those lessons, counter-insurgency (COIN) operations are a beastly mess for everyone involved. The simulation allows players to see why: In a modern intra-state conflict, there are many actors at play, each with their own access to the critical resources of media, money, and arms. These actors all have asymmetric aims, which lead to constantly shifting loyalties. The result is a conflict that is unlikely to end until all of the players are completely exhausted. I developed the simulation described in this paper as a warning to those who want to take up arms: Do not.

INTRODUCTION

In the United States, the early decades of the 21st century have proven to be a period of increasing internal tension. The period has seen a decline in confidence in democratic institutions (Pew Research Center, 2018). Incidents of political violence have become commonplace. In 2017, a congressman was shot at a baseball game (Savransky, 2017). Writers on all sides have begun to speak of civil war (Lang, 2017; Kreitner, 2017;

Wright, 2017; Vespa, 2018). Using violence to resolve conflicts seems to be increasingly appealing to an increasing share of the population (Villasenor, 2017).

If such a war were to come, do we know what would it look like? History has shown that when a people has not experienced war for a long time, they develop optimistic visions of it. Americans rushed to the colors in 1861, and Europeans cheered as their sons went to their doom in 1914. For contemporary Americans, *war* has become something that our troops do in a faraway dusty place. The last major battle on American soil was at Pearl Harbor in 1941. It is likely that those today longing for civil war in the U.S. harbor unrealistic expectations about its likely course. Perhaps some dream of a swift governmental overthrow, a putsch that quickly removes one form of rule with another. Others may dream of swift, targeted, armed government action to stamp out the bad movements in our midst (whatever those might be). Optimistic visions of war generally view it as bloodless, noble, and short.

War is nothing of the sort, of course. General Sherman said, “war is hell,” and the blood, sins, and endlessness of contemporary civil conflicts do testify. The modern world provides many examples. Iraq has been in a state of near-constant internal warfare since 2003. In Syria, the government has taken to chemical weapons to overcome the resistance it faces. Northern Ireland was at war with itself for decades until the 1998 Good Friday Agreement finally brought peace. In the 1990s, Yugoslavia descended into barbarism, while Colombia saw fighting among several armed factions and drug lords. As of late 2018, the United States is still trying to pacify Afghanistan: 17 years and counting.

Government security forces around the world have had to wrestle with the many problems raised by this type of conflict. These operations have been labeled *counter-insurgency*, or COIN operations. A serious effort has been made to understand COIN dynamics, in their military, political, economic, social, cultural, and psychological dimensions. Game-like simulations have a long history in military analysis (Hill & Miller, 2017), and accordingly, a COIN-based approach to wargaming has been developed. COIN simulations have proven useful in illustrating just how complex and difficult modern civil war can be.

In this paper I discuss the application of COIN wargaming methods to a civil war simulation in the contemporary United States. The simulation is provided at two levels. First, a highly simplified version suitable for classroom exercises at the secondary school level and above (included in Appendix 1). This version is named *American Abyss: Student Edition*. Second, a far more complex version is available as a modification of an existing COIN wargame. This version, named *2040: American Abyss*, is based on a highly sophisticated simulation of the Colombian civil war in the 1990s. Playing this mod requires the base game *Andean Abyss* (Ruhnke, 2012), as well as the modification materials provided at the following website: <https://edwardcastronova.com/portfolio/american-abyss/>. The goal of the simulation, and the paper, is to allow players to experience what such a war would be like and provide enough insight, one might hope, that players and readers alike might dedicate themselves to preventing this unhappy thing altogether.

COIN OPERATIONS AND COIN SIMULATION

Counter-insurgency became a distinct type of operation as various militaries digested the lessons of the U.S. pacification efforts in Vietnam and similar Soviet efforts in Afghanistan. A shift in military thinking occurred, from nation versus nation thinking to faction versus faction thinking. Warfighting was no longer about locating and destroying the enemy force. It became about managing a complex situation so that the parties A) lost their will to fight and B) settled down into a situation that was desirable for the military actor doing the strategizing. The lessons of Vietnam and countless other examples revealed that pacifying a turbulent situation was about more than weapons. The military had to become familiar with a complex brew of non-military considerations, from public opinion to respect for the sacred.

The complexities of modern intra-state conflict are difficult to understand and convey, naturally. Figure 1 is a diagram of the second day at Gettysburg (Jespersen, 2011).

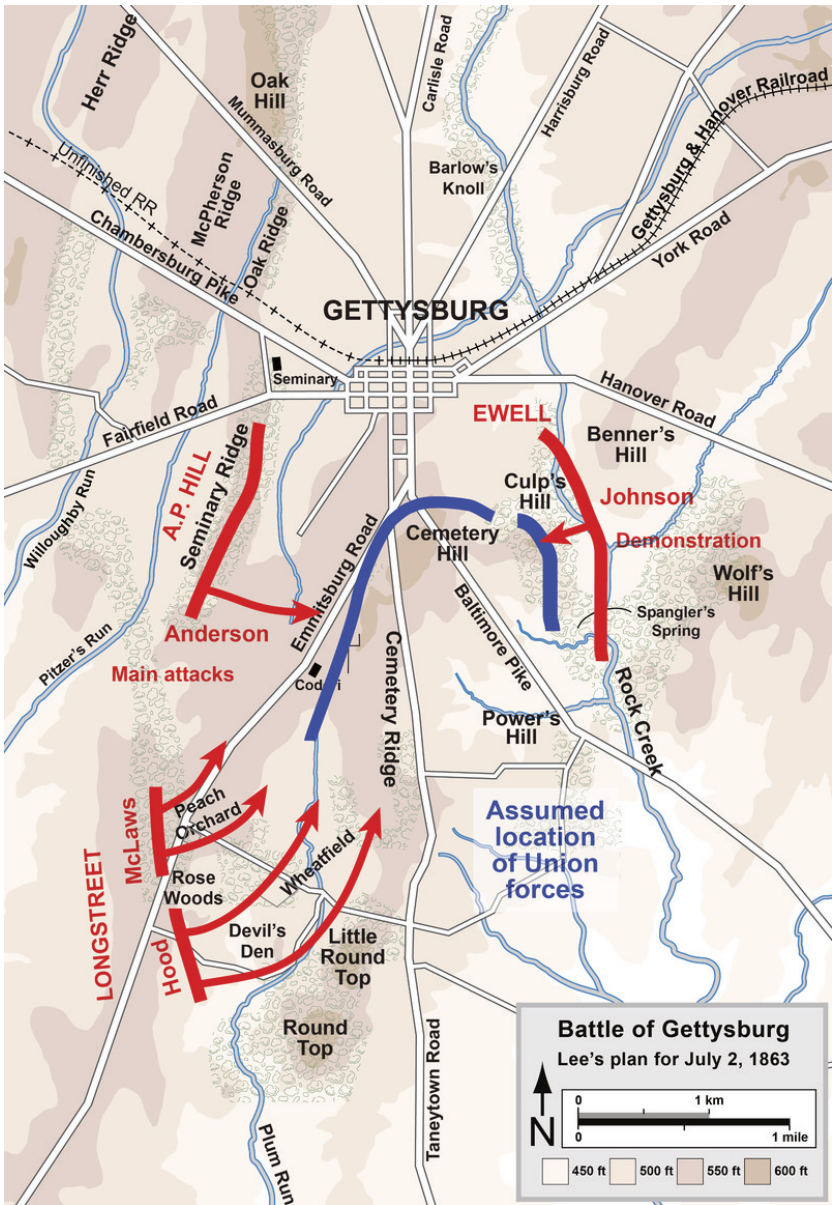


Figure 1. Lee's plan for Day 2 at Gettysburg. (Map by Hal Jespersen, 2011).

While the perceived complexity of the activity displayed in this image may depend on the viewer, it is unquestionably less complex than the diagram

featured in Figure 2, an attempt to summarize the forces at play in the Afghanistan counter-insurgency c. 2007 (Mail Foreign Service, 2010). From 30,000 feet, the message conveyed is clear: The quantity of actors, forces, and fields of conflict is almost innumerable. The resources and incentives of the actors are all at cross-purposes. It is not us versus them but rather all-against-all. One general is reported to have said, “When we understand that [diagram], we’ll have won the war” (Mail Foreign Service, 2010).

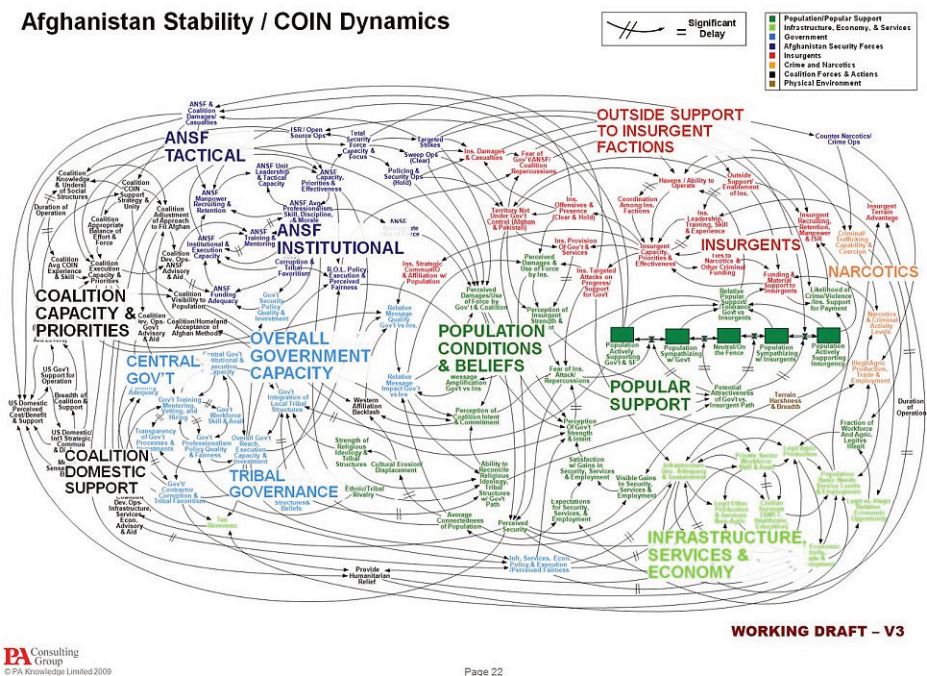


Figure 2. Diagram of Afghanistan conflict. (Mail Foreign Service, 2010)

Just how one can come to understand the diagram is a good question. Looking at it for a long, long time is one approach; conducting a simulation is far better. Complex human systems are almost impossible to grasp in the abstract. Only by interacting with a model (or the real thing) can a person come to the required level of familiarity with the way the system operates. Games are models of human systems and have been used to simulate military encounters for more than two centuries. As strategic thinking adapted into the untidy mess of modern COIN operations, similarly complex game models evolved. COIN operation simulations have

a long history (Combs, 1973) and recently have included video games (McAlinden et al. 2008), agent-based models (Kott & Skarin, 2010), complex network analysis (Giabbanelli, 2014), and genetic algorithms (Lafond & DuCharme, 2011).

Digital simulations are powerful, but face-to-face paper exercises remain an important part of the military simulation environment. Such tabletop simulations are also most appropriate for using with less-experienced groups and in classrooms. In the past decade, the game company GMT has published a series of tabletop simulations of COIN situations. The basic mechanics were designed by CIA analyst Volko Ruhnke (Albert, 2014). Reception within the community of military simulation enthusiasts suggests that Ruhnke's COIN system offers an unflatteringly realistic portrait of the dynamics of modern (and older) civil wars (Albert, 2014; see also discussions about COIN games at ConSimWorld, 2018).

An overview of the COIN system follows. It is based on the author's direct experience with several games in the series, all published by GMT Games, including *Andean Abyss* (Colombia), *Fire in the Lake* (Vietnam) (Herman & Ruhnke, 2018[2014]), *A Distant Plain* (Afghanistan) (Ruhnke & Train, (2018[2013]), *Liberty or Death* (American Revolution) (Buchanan, 2017[2016]), and *Falling Sky* (Roman Gaul) (Ruhnke & Ruhnke, 2016). All of these systems were published in the period 2012-2018. This overview describes the typical features of COIN games, but it should be noted that each game has its own unique features, and some may or may not include one or more of the typical features described here.

A COIN game is played by four people in a space of about 6 hours. One player is the government of the region in question, and a second player is the primary opponent of the government. A third player is an unreliable ally of the government, while the fourth is a wild card of some kind, an armed faction with no interest in politics or government but who stands to benefit from the chaos. In *Andean Abyss*, the government player is the Colombian government, the opposition player is the communist revolutionary movement FARC, the government-ally player is the AUC (the far-right paramilitary), and the wildcard player represents Colombia's large and well-armed drug cartels. In the Afghanistan and Vietnam versions, the unreliable ally of the local government is the United States.

This four-player alignment works in so many different situations because of the underlying nature of civil conflict. There are two opposing factions at war: One in power, and another of opposite political alignment who has exited the normal political process to take up arms. This is the standard Left-Right spectrum, with one side in charge and the other fighting from the underground. The third player emerges as a result of the violence. Once the government is at war with an enemy faction, it becomes criticized by others who desire a more effective, tougher approach to the revolutionaries. Sometimes those others are external, as in Vietnam; sometimes they are internal, as in Colombia. The third player takes up arms in order to “help,” but in fact has its own agenda, distinct from that of the government. The fourth player, finally, arises to profit from the chaos. This player wants none of the others to succeed in their goals but prefers ongoing war. In some cases, this is a tribal-warlord faction, in others it is a crime faction, and it can also be a mixture of both.

Each faction has its own resources and victory conditions. They are assigned standard colors from military simulation practice, where us versus them is depicted as blue versus red, with yellow and green as other parties.

<i>Information for American Abyss Players</i>			
Faction	Color	Resources	Goal
Government	Blue	Tax revenue / military	Control territory
Rebels	Red	Donations / volunteers	Control territory; avoid destruction
Rogue	Yellow	Internal: Donations / volunteers External: Massive foreign funding	Destroy Red; Minimize losses / commitment
Chaos	Green	Crime profits	Make money; avoid destruction

The asymmetry in resources and objectives is what produces the interminable chaos of these conflicts. The most likely alliances would seem to be Blue and Yellow against Red and Green. However, the conflict refuses to stay within these pretty boundaries. Blue can tolerate the existence of Red, so long as it (Blue) is allowed to control a great deal of territory. Red, meanwhile, views its own continued existence as a success. Therefore, Red and Blue could unite to carve up the country. This is anathema to Yellow,

of course, whose *raison d'être* is the destruction of the Red Menace. Not only that, but in cases where Yellow is a vastly wealthy external power (e.g., the United States), Blue has an incentive to siphon resources from Yellow as often as possible.

Meanwhile, the Red/Green pseudo-alliance breaks down because Green wants chaos alone. Green opposes any Red effort to pacify its areas of the country. Moreover, Green may gain from corrupt elements of Blue; and the government may benefit from turning a blind eye to Green's activities.

In short, alliances are possible all across the strategic space. None of them are stable. Instead, whenever one faction seems close to its goals, the other three combine against it. Peaceful balance of power among many poles was achieved in Europe from 1648 to 1914, more or less, and we are learning how amazing that achievement was. In most multi-polar conflicts, war continues until people finally and definitively lay down their arms. It can take a very long time.

In COIN games, action is driven by a unique card-based system of initiative. A large deck of cards sits to the side. Each turn, one card is drawn. That card gives the primary initiative in the turn to one player, and a secondary initiative to another. This means that the first player, player A, gets a full turn. Then, depending on how A conducted his turn, B gets a limited turn. Either or both players may pass, giving the initiative to others. If they do not pass, however, but take actions, they become ineligible for the next card. In practice this system leads to extreme uncertainty about one's scope of action. The deck is built so that every player has access to the same amount of action of the course of the game, but no one has any idea of how active anyone will be in the short to medium term. It becomes a game of seizing opportunity: If an opportunity to strike hard arises, take it now. Do not plan for the future, because the situation will have changed radically by the time you get to move again.

The dynamics of game play are chaotic and it is immensely hard to pursue any kind of long-run vision. It is hard to shape the game. Reversals of fortune are common. Golden opportunities seem to randomly fall in your lap. Investments in long-run capabilities that seem extremely attractive are often far more expensive than is apparent. It may seem like a good

idea to take a break from fighting to train your troops or develop better intel capabilities. But the card actions used to build these capabilities are necessarily not being used to seize whatever opportunities there may be to actually make a move on the map. In a situation where opportunities to affect the on-the-ground situation are rare, failing to take one of these opportunities can be fatal. Thus, players necessarily focus each turn on moving toward their victory conditions in some way. They know full well that by the time they move again, everything they have been doing may have been destroyed by someone else. Yet there is nothing else to do but try to move something forward into the chaos.

COIN games are understood to be among the most frustrating games to play. It is apt. Civil conflicts in the real world are maddeningly frustrating to anyone involved in them. It seems that no one can actually do anything at all, except keep playing.

COIN-ING AMERICA

The political landscape in the contemporary United States is well-suited to a COIN interpretation. The population is bitterly divided on the left-right spectrum. An effort to de-arm the public would surely result in some level of violence, given the Constitutional right to keep and bear arms per the 2nd Amendment to the U.S. constitution. Among several groups, there is sentiment that violent street action may be necessary in order to disrupt harmful narratives and silence harmful actors. Meanwhile, criminal organizations freely use violence in turf battles. As of this writing, thankfully, none of this has evolved to the level of a shooting war. The faction alignments, however, are in place and as I noted above, speculation has been growing that the time for violent conflict may be coming.

What if? If such a thing were to come to pass, how would it play out? One can imagine several scenarios, but I will discuss two in particular. These are only scenarios, not predictions, and neither is favored by the author. What follows is an effort to describe how a future COIN dynamic might evolve given the factions currently present in the United States.

Scenario 1: Leftist rebellion against a rightist government

In this scenario, a right-wing government in Washington, DC is viewed with great distrust by people on the left. For whatever reason, the federal government has lost credibility in the largely urban areas on the coasts of the country. Self-proclaimed “anti-fascist” organizations in these areas have combined into fighting units of variable quality and commitment. Their goal is to “save the country” by overthrowing the DC government. The government has responded by sending U.S. military forces into these areas on pacification operations. Viewing these efforts as half-hearted, rural anti-socialist organizations have combined into vigilante guerilla bands that impose their own justice on rebel areas and people. Meanwhile, criminal organizations have expanded without limit, freely using violence, intimidation, and extortion to protect and extend their networks of drug and human trafficking. The four factions are Blue: Government; Red: Anti-fascists; Yellow: Anti-socialists; and Green: Crime lords.

Scenario 2: Rightist rebellion against a leftist government

In this scenario, a left-wing government in Washington, DC is viewed with great distrust by people on the right. For whatever reason, the federal government has lost credibility in the largely rural areas in the middle of the country. Self-proclaimed “anti-socialist” organizations in these areas have combined into fighting units of variable quality and commitment. Their goal is to “save the country” by overthrowing the DC government. The government has responded by sending U.S. military forces into these areas on pacification operations. Viewing these efforts as half-hearted, urban anti-fascist organizations have combined into vigilante guerilla bands that impose their own justice on rebel areas and people. Meanwhile, criminal organizations have expanded without limit, freely using violence, intimidation, and extortion to protect and extend their networks of drug and human trafficking. The four factions are Blue: Government; Red: Anti-socialists; Yellow: Anti-fascists; and Green: Crime lords.

In other words, given current alignments and resources it is not difficult at all to imagine and describe a four-pole civil conflict in the United States, in

the near- to medium-term future, that would be plausible *regardless* of the ideological alignment of the different factions.

A conflict along these lines may or may not be in America's future, but the COIN system lets us play out, now, what it would be like. Engaging with this kind of simulation is an important and valuable activity for all citizens, of every ideological stripe. The COIN system replaces wild fantasies about warfare with a carefully crafted simulation. The simulation comes much closer to reality, and, as we will see, it is not always a happy thing.

2040: AMERICAN ABYSS

In this section, I introduce two games that use COIN game mechanics to model a civil war in the United States. The first, *American Abyss*, is a simplified classroom-ready simulation based on the fundamentals of COIN conflicts. The second game is a complex modification of Volko Ruhnke's *Andean Abyss*. Here we will discuss the games and highlight their key features and affordances. Materials for playing the games, and everything needed for the student including map, rules, and instructor materials, can be found in Appendix 1 and 2.

American Abyss: Student Edition

COIN situations are complicated, and so are the published COIN simulations. Not everyone has time to learn a highly complex game. Fortunately, the basic lessons can be taught with a simplified version that plays quickly. To this end, I developed a vastly simplified COIN game and set in a futuristic American context. This is *American Abyss: Student Edition* (AASE) and is available in Appendix 1.

AASE is a complete packet suitable for use as a classroom exercise at the middle-school level and above. The total time requirement is 30-60 minutes. The rules of the simplified version are very short, and most of them are printed on the map that comes along with the student edition. In other words, students can look at the rules, right on the board, while they play. There are far fewer pieces, and the map is simply a U.S. map

with seven regions: Northeast, Southeast, Midwest, North Central, South Central, Northwest, and Southwest.

Despite the simplicity, AASE captures the essential dynamics of a COIN situation. The four factions are there: Blue, Red, Yellow, and Green. They each have different pieces and different victory conditions. Blue needs to control regions; Red needs to control some regions but also have a lot of pieces; Yellow needs to destroy Red; and Green needs to have pieces on the board and make a lot of money. The shifting-alliance nature of COIN dynamics is captured by these simple mechanics.

In order to explain to students what these factions are, sex- and ethnic-neutral characters have been invented for them to roleplay. President Blue is President of the United States. Colonel Red is the leader of the rebels. Agent Yellow is a former official who now runs a private anti-red vigilante army. Dr. Green, who retired from the pharmaceuticals industry, is the head of the crime lords. A handout explains who these people are, how they are motivated, how they play the game, and how they win.

AASE requires 27 differently-colored pieces: 12 blue, 9 red, 6 yellow, and 6 green. Any kind of small, properly-colored token will work. They can be taken from other games or purchased at a hobby store. AASE also includes a rules document for teachers (and students, as desired), and also a Teacher's Guide.

In playtests with college freshmen and sophomores, students rather gleefully adopted the personae of President Blue, Colonel Red, Agent Yellow, and Dr. Green.¹ The first games took only a few minutes, because the players did not yet understand how their actions would contribute to the victory of others. For example, a Blue player attacking Red troops may not realize that this aids Yellow's victory condition, which is to have more troops than Red does. In this situation, Blue's success against Red might accidentally give Yellow the victory. As players became more aware of the complex interactions of resources and goals, they began to pay more attention to the victory conditions of the other players. Once this had happened, game length extended considerably and the students began to express a level of puzzled frustration that it was so hard for anyone to win.

1. AASE was playtested in August 2018 with 80 college students in Introduction to Games, course MSCH-C210 at Indiana University.

This realization then led into useful post-game discussions of why the game slowed down, why it was hard to win, why it seemed to go on a much longer time. These discussions supported the ultimate take-away for the students, which was that four-player civil wars can go on for a long time with no apparent winner.

2040: American Abyss

For those willing to embrace the full complexity of contemporary internal conflict, a complete simulation of an American Civil War was developed using the materials of Volko Ruhnke's *Andean Abyss*. To play this game, *2040: American Abyss* (hereafter AA), players must have the following:

- The rules in Appendix 2
- A copy of *Andean Abyss*, by Volko Ruhnke, available from GMT Games
- A game map of the US, which is Figure 3 below

Rules

The rules document is three pages. It explains how the equipment in *Andean Abyss* is to be used when conducting the U.S.-based scenario.

The rules also provide a setup for the two scenarios above (i.e., the leftist rebellion against the rightist government and the rightist rebellion against the leftist government). In the first scenario, the Red pieces are largely on the coasts and in urban areas, while Yellow is in the countryside. In the second, the Red pieces are largely in the countryside while the Yellow pieces are in the coasts and in the cities.

The two scenarios play quite differently. Scenario 1 is often shorter than Scenario 2. It depicts a left-wing revolt against a right-wing government. In this scenario, the rebel bases are in large cities. This is a most dangerous place to be, given the typical mechanics of a COIN situation. Cities are where the government is strong. Governments can easily bring military and economic power to bear in the cities. The cities are connected by lines of transit; the cities are where large numbers of troops and police

can be raised. Getting these troops out to the countryside, and pacifying those rural areas, is typically the problem for the government faction. But in this scenario, the rebels are near at hand: Sitting ducks in Los Angeles, San Francisco, and New York. In playtesting, the government player was generally able to amass troops and police in those areas and snuff out the rebellion there. It was difficult for the Red player to recover. The government tends to win Scenario 1 fairly quickly. Scenario 2 is truly an abyss, a conflict that continues for a long time.

Andean Abyss

The game *Andean Abyss* provides the core rules and all the equipment for the game.

“Core rules” describes the basic mechanics of the COIN system. The *Andean Abyss* rulebook describes the factions and the pieces, and explains how the card mechanics work. The game also includes player aids for the four factions and sets the victory conditions for them. Readers are warned that the COIN system is not easy to learn. Its realism comes at the price of complexity. The complexity is necessary, though, because the underlying political-military dynamics are complex.

The equipment includes wooden playing pieces and a large deck of action cards. Each faction’s pieces are correspondingly colored: Blue for Government, Red for the Rebels, Yellow for the Vigilantes, and Green for the Crime lords.

Using the cards requires extra attention. This card deck was designed for a game about Colombia in the 1990s. Therefore, every card makes reference to events and personalities of that time and place.² This “flavor text” is irrelevant for a game about an American civil war in 2040 and has to be ignored. (In playtests it *has* been interesting to note the parallels between Colombian events and those that could happen in the United States.) Each card has mechanics, however, that can be implemented largely as written, with a few translations. For example, a card may say the government may call an airstrike on any “FARC” base. The faction FARC in Colombia in the

2. In future development, a card deck specifically for this game may be developed. If so, it will be made available at the game’s web site, <https://edwardcastronova.com/portfolio/american-abyss/>.

1990s was the rebel faction against the government. It is the Red faction. Once this is understood, the card can be quickly interpreted as saying that the Blue faction may call an airstrike on any Red base.

In fact, every reference to Colombia in the mechanics of *Andean Abyss* has a simple analog for a U.S. implementation. The *American Abyss* rules specify what these analogs are. With these translations, all of the equipment and cards in *Andean Abyss* can be used for this simulation.



Figure 3. Game map for 2040: American Abyss

Map

Figure 3 shows a map of the United States that has been overlaid with information relevant to a COIN-style game. The country is broken up into regions that are joined by important lines of communication, in our case the Interstate Highway system, with national favorites like I-95 in the east, “the 5 freeway” in the west, and I-80 cutting across the whole country. The map indicates terrain types—forest, mountain, city, etc.—all of which affect movement of forces and execution of operations. Mexico and Canada may come into play, and so there is some game information there as well.

Numbers on the map indicate such things as population size and economic value, while different boxes indicate who controls an area, whose turn it is, and so forth. A numerical track around the edge of the map is used to record how many resources the different factions have, as well as how close they are to their victory conditions.

Concrete steps: How to actually play

- First, obtain a copy of *Andean Abyss* and play it several times until comfortable with the COIN system.
- Print Figure 3 at the size 22" x 34". A high-resolution image is available at <https://edwardcastronova.com/portfolio/american-abyss/>
- Read the *2040: American Abyss* rules in appendix 2 to learn how the *Andean Abyss* pieces are to be used in a future U.S. setting.
- Set up the chosen scenario, invite three other players, and begin.

All told, the game may take as long as 6 hours to complete. Most of the lessons to be learned, however, will come much more swiftly. Within the first hour it will become apparent what sort of a war this would be.

CONCLUSION

Playing through U.S.-future civil war scenarios with students and play-testers led to two revelations of note:

First, given the factional alignments of the contemporary United States, one can easily surmise that any armed civil conflict here would involve more than two factions. Many types of political groups have weapons and seem willing to use them if conditions get bad enough. It seems likely that any civil conflict would expose multiple poles of armed power, left/right, governmental/non-governmental, domestic/foreign, criminal/lawful. This would not be a nice little war; it would be a dumpster fire.

Secondly, it would seem that some scenarios would be shorter than others. An uprising based in coastal urban areas would find itself directly in the crosshairs of the modern state. Massive state power can be projected

into urban areas, whether it be military, psychological, police, or economic power. Blue would have little difficulty responding with tremendous force, should a Red rebellion erupt in urban areas. The conflict would end soon. Now, the unique geographic left-right breakdown in America suggests that any left uprising would probably be an urban one. If so, then the power-politics of this simulation suggest that a left uprising, though possibly bloody, would not last long.

2040: American Abyss was designed with one purpose in mind, and that is to allow players to enact such scenarios within a realistic simulation of the civil war that may come. It is meant to be a tool for exploration. If players pursue more possibilities—if they change the setup, create new mechanics, add different factions, and/or alter the victory conditions—then the game has served its purpose.

REFERENCES

Albert, J. (2014). In the world of role-playing games, Volko Ruhnke has become a hero. *Washington Post*. Retrieved September 13, 2018 from https://www.washingtonpost.com/lifestyle/magazine/in-the-world-of-role-playing-war-games-volko-ruhnke-has-become-a-hero/2014/01/10/a56ac8d6-48be-11e3-bf0c-cebf37c6f484_story.html?noredirect=on&utm_term=.0e6a98b7aaaf

Buchanan, H. (2017[2016]). *Liberty or Death: An American Insurrection* [table-top game]. GMT Games

Combs, R. M. (1973). *An Insurgency Growth Model*. Master's Thesis, Naval Postgraduate School, Monterey, California. <https://apps.dtic.mil/dtic/tr/fulltext/u2/769685.pdf>

ConSimWorld. (observed September 18, 2018). *Era: Contemporary* [online forum]. Retrieved September 18, 2018 from: <http://talk.consimworld.com/WebX/?14@@.ee6dee0>

Giabbanelli, P. J. (2014). Modeling the spatial and social dynamics of insurgency. *Security Informatics* 3(1), 2. <https://doi.org/10.1186/2190-8532-3-2>.

Herman, M. & Ruhnke, V. (2018[2014]). *Fire in the Lake: Insurgency in Vietnam* [table-top game]. GMT Games

Hill, R. R. & Miller, J. O. (2017, December). A history of United States military simulation. In *2017 Winter Simulation Conference (WSC)* (pp.346-364). IEEE. <https://ieeexplore.ieee.org/document/8247799/authors#authors>

Jespersen, H. (2011). *Gettysburg_Day2_Plan* [image]. Retrieved September 13, 2018 from https://en.wikipedia.org/wiki/Battle_of_Gettysburg#Second_day_of_battle

Kott, A. & Skarin, B. (2010). *Insurgency and Security*. in A. Kott, & G. Citrenbaum, G. (Eds.), *Estimating Impact: A Handbook of Computational Methods and Models for Anticipating Economic, Social, Political, and Security Effects in International Interventions* (pp. 239-262). Berlin, Germany: Springer Science & Business Media.

Kreitner, R. (2017). Are we on the verge of another civil war? *The Nation*. Retrieved September 18, 2018 from <https://www.thenation.com/article/are-we-on-the-verge-of-another-civil-war/>.

Lafond, D. & DuCharme, M. B. (2011, April). Complex decision making experimental platform (CODEM): A counter-insurgency scenario. *2011 IEEE Symposium on Computational Intelligence for Security and Defense Applications (CISDA)* (pp. 72-79). DOI: 10.1109/CISDA.2011.5945940

Lang, D. (2017). The simple reason why a second American civil war may be inevitable. *SHTFplan.com* Retrieved February 16, 2019 from http://www.shtfplan.com/headline-news/the-simple-reason-why-a-second-american-civil-war-may-be-inevitable_04212017

Mail Foreign Service (2010). 'When we understand that slide, we'll have won the war:' U.S. generals given baffling PowerPoint presentation to try to explain Afghanistan mess. *Daily Mail Online*. Retrieved September 18, 2018 from <https://www.dailymail.co.uk/news/article-1269463/Afghanistan-PowerPoint-slide-Generals-left-baffled-PowerPoint-slide.html>

McAlinden, R., Durlach, P. J., Lane, H. C., Gordon, A. S., & Hart, J. (2008). *UrbanSim: A game-based instructional package for conducting*

counterinsurgency operations. In *Proceedings of the 26th Army Science Conference*, Orlando, FL 2008.

Pew Research Center (2018). The public, the political system and American democracy. Retrieved September 18, 2018 from <http://www.people-press.org/2018/04/26/the-public-the-political-system-and-american-democracy/>

Ruhnke, A. & Ruhnke, V. (2016). *Falling Sky: The Gallic Revolt Against Caesar* [table-top game]. GMT Games

Ruhnke, V. (2012). *Andean Abyss: Insurgency and Counter Insurgency in Columbia* [table-top game]. GMT Games.

Ruhnke, V. and Train B. (2018[2013]). *A Distant Plain: Insurgency in Afghanistan* [table-top game]. GMT Games.

Savransky, R. (2017). Rep. Steve Scalise shot at GOP baseball practice. *The Hill*. Retrieved September 18, 2018 from <https://thehill.com/blogs/blog-briefing-room/news/337717-report-shooting-near-congressional-baseball-game-practice-field>.

Vespa, M. (2018). Wait-Did Twitter's CEO just share a post calling for 'Civil War,' wiping out the GOP, and how we should be like CA?" *Townhall*. Retrieved September 18, 2018 from <https://townhall.com/tipsheet/mattvespa/2018/04/07/waitdid-twitters-ceo-just-tweet-an-article-calling-for-civil-war-wiping-out-the-gop-and-how-we-should-be-like-ca-n2468673>.

Villasenor, J. (2017). Views among college students regarding the First Amendment: Results from a new survey. *Brookings Institution*. Retrieved online February 16, 2019 at <https://www.brookings.edu/blog/fixgov/2017/09/18/views-among-college-students-regarding-the-first-amendment-results-from-a-new-survey/>

Wright, R. (2017). Is America headed for a new kind of civil war? *The New Yorker*. Retrieved September 18, 2018 from <https://www.newyorker.com/news/news-desk/is-america-headed-for-a-new-kind-of-civil-war>.

APPENDIX 1: AMERICAN ABYSS: STUDENT EDITION

A classroom simulation of the next U.S. civil war

This packet provides a classroom role-playing exercise that lets students explore this question: If a civil war broke out in the United States in the future, what would it be like? The basic lesson of the exercise is that civil wars in the modern era are not like the American Civil War in the 19th century. Modern civil wars are nasty conflicts with multiple armed forces all fighting each other. Nobody wins; the people lose. Students will directly experience how such multi-polar conflict leads to stalemates and endless violence.

The exercise is suitable for middle-school students or above. It is based on a much more complex and realistic simulation that is available from the author on request. Note: The simulation and this exercise are politically neutral. The factions are fictional and have no relation to current political parties.

1. What you need

To do this exercise, you need:

- A map of the US, broken into seven regions (Northeast, Southeast, Midwest, North Central, South Central, Northwest, and Southwest). A suitable map is included below.
- Four sets of colored pawns or playing pieces, Blue, Red, Yellow, and Green (other colors can be substituted):
 - Blue: 12 pieces
 - Red: 9 pieces
 - Yellow: 6 pieces
 - Green: 6 pieces
- Rules
- A six-sided die

- This information packet

2. Running the exercise

Divide the class into groups of at least four students (the exercise will not work with fewer than four students in a group). Each group of four should receive one game set (map, pieces, die, and rules).

In each group, assign one student to each of these roles, and give them the handout explaining their role.

- President Blue. Blue is the President of America, trying to end the civil war.
- Colonel Red. Red is the leader of the rebels, who want to take over the government.
- Agent Yellow. Yellow leads a private outlaw army that is the bitter ideological enemy of the Reds. The Yellows hate the Reds even more than the government does.
- Dr. Green. Green is a former pharmacist who now runs the biggest drug cartel in America. Green wants to expand the criminal empire and make money.

Once the students have looked over their roles, tell them that fighting has broken out among these factions and their job is to make their faction win. Give out the rule sheet and walk through the rules.

Next, let the students play the game for a fixed period, which should be at least 15 minutes and no more than 30 minutes. Tell the students to start over each time someone wins. After a few quick games, the students will begin to see what they have to do to stop others from winning. Once the players understand this, the game will settle into a violent back-and-forth. Have the students keep playing until the time limit is up.

3. After the exercise

Select one or two groups and ask them to tell the class what happened in

their game. It will be a story of people attacking each other back and forth, with shifting alliances and enemies. Then have the class work through these discussion questions.

- Which side fought the most? Which side lost the most? Was any of the groups better than the others?
- When a group became strong, did that last a long time? (No)
- Why was it hard for any player to keep his group on top? (Because the others ganged up on the leader)
- Is it possible in this game for anyone to stop the war by eliminating all enemies? (No)
- Would a situation like this ever lead to a single, clear winner? (No) Why not?
- If this situation happened, what would people have to do in order to end the war? (Put down their guns and negotiate)
- It is impossible for any group to win this kind of war. Does anyone *lose*? (Yes, the civilians)
- What are some things people could do today to help prevent a civil war like this?

4. Additional materials

The rest of the packet includes the various handouts.

- Roles (1 page each)
- President Blue
- Colonel Red
- Agent Yellow
- Dr. Green
- Rules of the game (2 pages)
- Game map (1 page)

5. Acknowledgments

American Abyss: Student Edition is based on *2040: American Abyss*, which is a modification of the game *Andean Abyss*, designed by Volko Ruhnke and published by GMT Games.

Design: Edward Castronova

Art: Edward Castronova

Playtesting: Jeff Lewis, Kevin Klemme, Ben Klemme, Rick Watson, Fall 2018 students in Indiana University's C210 Introduction to Games.

PRESIDENT BLUE

You are President Blue, the President of the United States in the year 2040. You were elected recently but the election was very close. A lot of people don't like your government. A former Army officer named Colonel Red has started a rebellion and has put together a private army. Now these Reds are trying to take over the whole country by force. You have to stop this Red rebellion.

Other things are going wrong too. A former secret agent, Agent Yellow, has also made a private army, but only because Yellow really hates the Reds. Agent Yellow thinks you are too soft on the Reds, so the Yellow army is trying to hunt the Reds down themselves. The Yellow team is on your side for fighting the Reds, but they are crazy and super violent, and they may attack you if they feel like it. If the Yellows get too strong, they might even take over. You have to beat the Reds without letting the Yellows get too strong.

Finally, there is the crime problem. Dr. Green is a big-time drug lord. Green is in charge of an illegal mafia that smuggles drugs and all kinds of bad things into America from other countries. The Green Mafia makes tons of money from all this crime. Since you are the government, it's your job to go after the Greens and fight their dirty operation.

Can you save the government and keep control of America?

President Blue

Pieces: 12 blue Troops

Set up: 2 Troops each in Northeast, Southeast, Northwest, and Southwest

How to win: If you control at least 4 spaces at any time, the game ends and you win!

You control a space if you have more troops than all other groups *combined*.

COLONEL RED

You are Colonel Red, leader of the Rebels. You were in the Army for a long time, but you started to really hate the government and the way everything was going in Washington DC. The final straw was when President Blue was elected. You think Blue is a dictator, so you have launched an armed rebellion to save our democracy. Lots of people have joined your side, so now you a big rebel army under your command. With this army, you have gotten into gun battles with the government and have even started to take over different parts of the country. Your goal is to get the corrupt President Blue out of the White House and take control yourself.

You have started a civil war, but some other things have happened that you did not expect. Some of the people who are on Blue's side are not following the law either. Agent Yellow has raised a private army too, just like yours. But the goal of Yellow's army is not to beat the government but to defeat *you*. The Yellows are kind of crazy and extremely violent. So, while you are trying to beat the government, you also have to keep the Yellow army from beating you by itself.

While all this is going on, the drug lord Dr. Green has started to expand a big criminal mafia across the whole country. This criminal element goes against everything you stand for. There's no point in winning a revolution if the country becomes just a big crime empire. So, you also have to fight against the crime.

Can you save America's democracy?

Colonel Red

Pieces: 9 red Troops

Set up: 2 Troops each in Northwest and Southeast

How to win: Add the troops you have on the map, plus the spaces you control. If this number is greater than 8 at any time, the game ends and you win!

You control a space if you have more troops than all other groups *combined*.

AGENT YELLOW

You are Agent Yellow. You used to work in the government as a secret agent. But you got mad because President Blue was not doing enough to stop the Reds. President Blue spent a long time trying to work things out with the Reds, but you think he should have been throwing them all in jail! You think Colonel Red and all those people are just plain evil. They want to become dictators and destroy American democracy! They must never be allowed to take over the government!

So you decided to have your own private war against the Reds. You put together an army of fighters who hate the Reds as much as you do. Then you started attacking the Reds, without any orders from the top. When the top people heard about that, President Blue tried to have you arrested! So, you ran off into the woods. You will keep fighting the Reds, and the government if necessary, until this war is won.

While all this is going on, you have another worry. Dr. Green, the crime lord, has been expanding a criminal mafia across the country. That is no good either. Those people smuggle all kinds of drugs and bad things into the country and make a huge profit. They have to be stopped too. What good

would it be to defeat the Reds, if the whole country just becomes a big drug smuggling empire?

Can you stop the Reds and save American democracy?

Agent Yellow

Pieces: 6 yellow Troops

Set up: 2 Troops in Northeast

How to win: If you have more troops on the board than the Reds do, at any time, the game ends and you win!

DR. GREEN

You are Dr. Green, a crime lord. You are a brilliant scientist who used to work for a drug company, inventing new kinds of drugs for sick people. Then you realized that you could make a lot more money by inventing party drugs. You set up drug factories in other countries and started to smuggle the party drugs into the United States.

You have made so much money doing this, and you also became the biggest crime lord in the country. When Dr. Green tells people what to do, they do it or they "disappear." As a crime lord, you have your own army of thieves, gangs, and smugglers to fight anyone who becomes an enemy.

This rebellion that Colonel Red has started is a great profit opportunity for you. With the government so busy fighting the Reds (and the Yellows, who are even more crazy), you can expand your crime empire all over the country. To you and your Green Mafia, this chaos means only one thing: Money, money, money!

The problem is how to avoid being noticed. All the other people in this war – President Blue, Colonel Red, and Agent Yellow – are against crime. Any of them could attack you at any time.

Can you expand your criminal empire and make millions of dollars?

Dr. Green

Pieces: 6 green Troops

Set up: 2 Troops in Southwest

How to win: If you have \$15 million AND troops in at least four different spaces, the game ends and you win!

AMERICAN ABYSS: STUDENT EDITION

Rules

American Abyss is a strategy game about a possible future civil war in the US. There are four sides: President Blue, Colonel Red, Agent Yellow, and Dr. Green.

1. Components

To play this game you need:

- A game map. The map shows the continental United States divided into seven different regions: Northeast, Southeast, Midwest, North Central, South Central, Northwest, and Southwest
- Pieces. Each piece represents one Troop. There are 12 blue, 9 red, 6 yellow, and 6 green pieces.
- A six-sided die
- These rules

2. Setup

Lay out the map on a table. Each player takes the pieces in their color (blue, red, yellow, green). Put starting pieces on the map:

- Blue: Two troops each in Northeast, Southeast, Northwest, and Southwest
- Red: Two troops each in Southeast and Northwest
- Yellow: Two troops in Northeast
- Green: Two troops in Southwest

Choose a random player to go first. You are now ready to play.

3. How to play

The game goes around the table clockwise, starting with the first player.

When it is your turn, do the following things in this order. They are all voluntary, you don't have to do them if you don't want to.

- Recruit.
- Take a new troop and put it on the map.
- It can go anywhere you already have Troops.
- If you don't have any Troops on the map, you can put it anywhere.
- Move.
- You can move one group of your Troops from their current space to one adjacent space.
- If you are President Blue (the government), you can move two spaces. It can be one group of Troops going two spaces, or two groups each going one space.
- When leaving a space, the government must always leave one Troop behind as a garrison.
- Fight.

- Select one space where you have Troops and there are also Troops of another faction.
- If there are several enemies there, choose which one to attack.
- Roll the die.
- If the number is **equal to or less than** the number of Troops you have in the space, you win. One enemy Troop is destroyed (it must belong to the enemy you picked). The rest of that enemy's Troops move to an adjacent space. You choose where they go.
- When the Government wins (President Blue), it destroys two Troops.
- If the number rolled is **more than** your total Troops in the space, you lose. One of your Troops is destroyed. You move the rest of your Troops to an adjacent space. You choose where.
- Destroyed Troops go back to the player's stock. They can come back into play.
- Profit (Green only)
- If you are the Green player, check your profit for this turn.
- Your profit is \$1 million for each Troop you have on the board.
- Keep track of your total profits on a separate sheet of paper.

When you have finished your turn, play goes to the next player on your left.

4. Ending the game

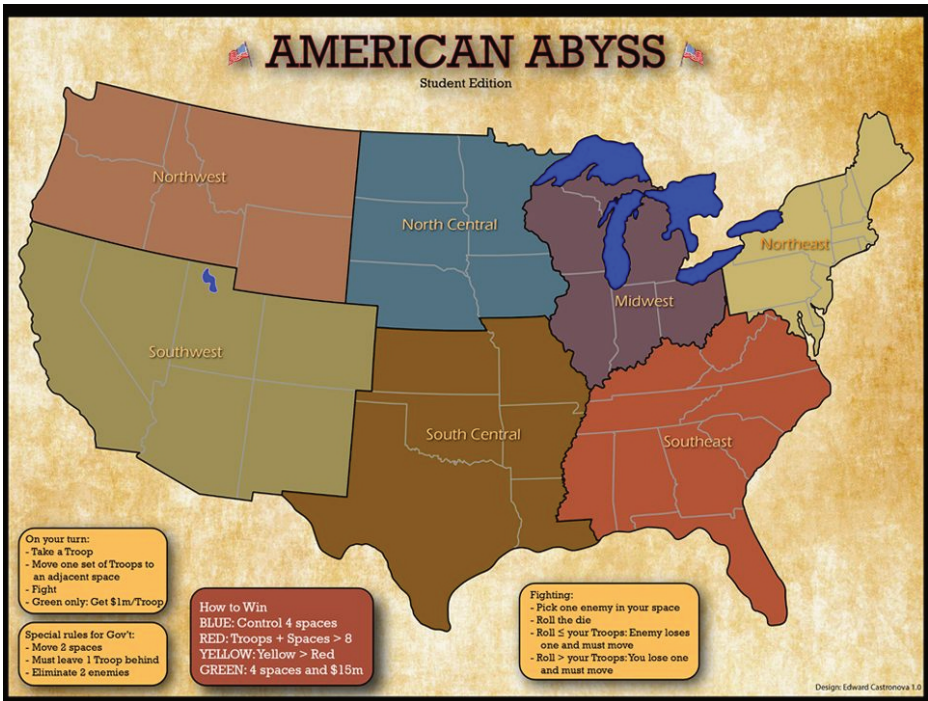
If any player meets their victory condition, the game ends and that player wins. Note: A player controls a space when they have *more* Troops there than all other players *combined*.

- BLUE: If Blue controls at least 4 spaces, Blue wins
- RED: Add the number of Red Troops on the board plus the number of Red-controlled spaces. If this number is greater than 8, Red wins.
- YELLOW: If Yellow has more Troops than Red, Yellow wins.
- GREEN: If Green has at least \$15 million in profit and Troops in at least 4

different spaces, Green wins.

The game continues until one player meets their victory condition.

The players can also decide beforehand how long they want to play (usually 10 – 30 minutes). In this case, the game ends when the time is up. In this case, the winner is the player who is closest to their victory condition.



APPENDIX 2: RULES FOR 2040: AMERICAN ABYSS

Simulating the next U.S. civil war

American Abyss is a four-faction simulation of a modern American civil war. The main struggle is between the government faction (Blue) and the insurgent or rebel faction (Red). Then there is a paramilitary faction (Yellow), which fights the rebels but is outside the law. Finally, there are crime lords (Green), who exploit the chaos to expand their criminal empires. Each faction is an enemy to all the others. Red wants to take

control. Blue wants to retain control and stop the fighting. Yellow wants to defeat Red while building its own private army. Green wants to build a crime network. It is a war of all against all.

The simulation does not depend on right-left politics; it works the same regardless of who is in charge. In one scenario, the government could be Rightist, the rebels Leftist, and the paramilitaries ultra-Rightists. In another, the government could be on the Left, the rebels on the Right, and the paramilitaries on the far Left. The players can decide beforehand whether they are simulating a right-wing rebellion against a left-wing government, or vice versa, or none of the above.

The design goal for *American Abyss* was to explore what a modern American civil war would be like (basically, a dumpster fire). The game is a mod of *Andean Abyss*, designed by Volko Ruhnke and published by GMT Games.

How to Play

To play the game, you need three things.

- A copy of *Andean Abyss* by GMT Games
- The game map, [american_abyss.pdf](#)
- These rules

American Abyss uses the rules, cards, and pieces of *Andean Abyss* but puts the on a map of the continental United States. Simply print out the map, set up the game according to the scenario below, and start playing using the ordinary rules of *Andean Abyss*.

The remainder of these rules handles a few translations and exceptions that will come up.

Factions

In this mod, the four factions are as follows:

- Blue: The Government, which is trying to keep control.

- Red: Rebels, who are trying to overthrow the government.
- Yellow: Paramilitaries, violent extremists who hate the Reds.
- Green: Crime Lords, who are using the chaos to build their criminal empire.

Setup

After choosing sides, players should choose one of two scenarios. The Anti-Socialist Scenario depicts a right-wing rebellion against a left-wing government. The Anti-Fascist Scenario depicts a left-wing rebellion against a right-wing government. After choosing a scenario, set up the board as indicated. Then set up the deck exactly as in *Andean Abyss* and begin play.

ANTI-SOCIALIST SCENARIO

Resources: Blue 40, all others 10. Aid 9. Total Support: 50. Opposition Bases: 20.

Active Support: New England and Cascadia, and all cities except Phoenix.

Active Opposition: Great Lakes, Appalachia, South, Texas, and Big Sky.
Passive Opposition: Florida.

Blue: 2 Police in Washington, 1 Police in every other city. 3 Troops each in Washington, Chicago, Los Angeles, and Atlantic (12 total). Base in Atlantic.

Red: Bases in Great Lakes, Big Sky, Appalachia, South, Texas, Florida (6 total). 2 Guerillas each in Texas, South, Appalachia (6 total). 1 Guerilla each in Big Sky, Great Lakes, Florida, Cascadia, New England, and Atlantic (6 total, 12 overall).

Yellow: Base in New England. 2 Guerillas in New England. 1 Guerilla each in Atlantic, Cascadia, Midwest, and Great Lakes (4 total, 6 overall).

Green: Bases in Midwest, Appalachia, South, Texas, Florida, and Phoenix (6 total). 1 Guerilla each in Texas and Florida (2 total).

ANTI-FASCIST SCENARIO

Resources: Blue 40, all others 10. Aid 9. Total Support: 46. Opposition Bases: 20.

Active Support: Atlantic, Great Lakes, Midwest, Appalachia, South, Florida, and Texas. Washington, Jacksonville, Dallas, Houston, San Antonio, Chicago

Active Opposition: San Francisco, New England, and Cascadia. Passive opposition: Seattle and New York.

Blue: 2 Police in Washington, 1 Police in every other city. 3 Troops each in Washington, Chicago, Los Angeles, and Atlantic (12 total). Base in Atlantic.

Red: Bases in San Francisco, Seattle, New York, Los Angeles, Cascadia, and New England (6 total). 2 Guerillas each in Cascadia, New England, San Francisco, Los Angeles (8 total). 1 Guerilla each in Seattle, Los Angeles, New York, Atlantic (4 total, 12 overall).

Yellow: Base in South. 2 Guerillas in South. 1 Guerilla each in Midwest, Great Lakes, Appalachia, and Texas (4 total, 6 overall).

Green: Bases in Midwest, Appalachia, South, Texas, Florida, and Phoenix (6 total). 1 Guerilla each in Texas and Florida (2 total).

Terms

Clarification of several terms in the *Andean Abyss* rules and player aid cards.

- Government: Refers to the Blue faction.
- FARC: Refers to the Red faction.
- AUC: Refers to the Yellow faction.
- Cartels: Refers to the Green faction.
- El Presidente: Ignore all presidential election mechanics.
- Pipeline: Refers to a Line of Communication of value 3 or more.
- Bogota refers to New York.
- Aid: The Aid mechanic is unchanged. However, Aid is interpreted here as the benefit of increased legal economic activity that happens when

crime is suppressed.

Cards

The cards for *Andean Abyss* refer to events in Colombia and naturally make no sense in an American context. Therefore players should simply ignore the flavor text on the cards. Each card's mechanics, however, should be followed exactly. All the card mechanics are directly applicable to the U.S. map. For example, when a card says "Government conducts free Air Strike in one Forest space," the Blue player conducts a free air strike in a Forest space on the American map: Cascadia, Great Lakes, or South. Players should use their collective common sense to interpret and apply the card mechanics as written. If common sense fails to resolve a question, determine the outcome randomly.

The following cards have additional notes:

- Amazonia. "0 Population Forests" = any 0 Population region in the United States (not Mexico or Canada). Guainia = Big Sky, Vaupes = Prairie, Amazonas = High Plains
- Cano Limon-Covenas. Pipeline = any LoC with value of 3 or more.
- Darien. Choco = Texas. Panama = Mexico. Mexico is a 0-Population Mountain area with room for 2 bases. Sweep does not activate guerillas there.
- Ejercito de Liberacion Nacional. Antioquia = Appalachia
- Hugo Chavez. Venezuela = Canada. Canada is a 0-population Grassland with room for 2 bases. A faction can have no more than 2 pieces there. Canada shares borders with Great Lakes and New England (only).
- NSPD-18. Interpret the "US" here as the European Union. When the government suppresses crime, the legal economy grows, pleasing world markets.
- Occidental and Ecopetrol. Pipeline = any LoC with value of 3 or more.
- Oil Spill. Pipeline = any LoC with value of 3 or more.
- Pinto and del Rosario. Cucuta = Chicago

- Pipeline Repairs. Pipeline = any LoC with value of 3 or more.
- Sucumbios. Ecuador = Canada; see above. (Canada represents both Ecuador and Venezuela.)
- Union Sindical Obrera. Pipeline = any LoC with value of 3 or more. Bogota = New York.

Victory Conditions

The victory conditions are the same as in *Andean Abyss*.

- Blue: Support > 60
- Red: Opposition Bases > 25
- Yellow: Yellow Bases – Red Bases > 0
- Green: Bases > 10 and Resources > 40

Acknowledgements

Design: Edward Castronova

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