

Artistas del diseño: Mexican Drug Cartels?

A Monograph

by

MAJ Megan M. Ennenga
US Army



School of Advanced Military Studies
US Army Command and General Staff College
Fort Leavenworth, KS

2021

Approved for public release; distribution is unlimited

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 20-05-2021		2. REPORT TYPE Monograph		3. DATES COVERED (From - To) JUNE 20 – MAY 2021	
4. TITLE AND SUBTITLE Artistas del diseño: Mexican Drug Cartels?			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) MAJ Megan M. Ennenga			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301			8. PERFORMING ORG REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Advanced Military Studies Program			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT Mexican drug cartels demonstrate traits of Army Design Methodology (ADM) in their operations. A two-level resemblance of Army design activities is threaded in the evolution of Mexican drug cartels, and individually among the examined cartels. Supportive of ADM, the Sinaloa cartel presents an environmental frame of understanding. The Mexican government poses a problem frame for the cartels to counter and overcome. To address the problem, the cartels diversify criminal activities and escalate their use of violence while achieving their end state. Specifically, the rise of the Zetas highlights an operational approach founded in violence, while the New Generation Jalisco Cartel provides a reframe in the environment. Examining cartel operations through the lens of ADM revealed how organizations not traditionally associated with military design thinking may employ common conceptual planning and problem-solving techniques to accomplish strategic objectives. Military practitioners may also empathize with the flexible competency required for organizational learning and adaptability to changing situations in complex environments that drug cartels exhibit.					
15. SUBJECT TERMS Mexico; drug cartels; DTO; Army Design Methodology; ADM					
16. SECURITY CLASSIFICATION OF: UNCLASSIFIED			17. LIMITATION OF ABSTRACT (U)	18. NUMBER OF PAGES 45	19a. NAME OF RESPONSIBLE PERSON
a. REPORT (U)	b. ABSTRACT (U)	c. THIS PAGE (U)			19b. PHONE NUMBER (include area code) 913-758-3300

Monograph Approval Page

Name of Candidate: MAJ Megan M. Ennenga

Monograph Title: *Artistas del diseño: Mexican Drug Cartels?*

Approved by:

//signed/1 APR 21/RAH// _____, Monograph Director
Ricardo A. Herrera, PhD

//signed/27 MAR 21/JQR// _____, Seminar Leader
Jacob Q. Robinson, LtCol

//signed/11 May 21/BAP _____, Director, School of Advanced Military Studies
Brian A. Payne, COL

Accepted this 20th day of May 2021 by:

_____, Assistant Dean of Academics for Degree Programs
Dale F. Spurlin, PhD and Research, CGSC

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the US Army Command and General Staff College or any other government agency. (References to this study should include the foregoing statement.)

Fair use determination or copyright permission has been obtained for the inclusion of pictures, maps, graphics, and any other works incorporated into this manuscript. A work of the US government is not subject to copyright, however further publication or sale of copyrighted images is not permissible.

Abstract

Artistas del diseño: Mexican Drug Cartels?, by MAJ Megan M. Ennenga, 45 pages.

Mexican drug cartels demonstrate traits of Army Design Methodology (ADM) in their operations. A two-level resemblance of Army design activities is threaded in the evolution of Mexican drug cartels, and individually among the examined cartels. Supportive of ADM, the Sinaloa cartel presents an environmental frame of understanding. The Mexican government poses a problem frame for the cartels to counter and overcome. To address the problem, the cartels diversify criminal activities and escalate their use of violence while achieving their end state. Specifically, the rise of the Zetas highlights an operational approach founded in violence, while the New Generation Jalisco Cartel provides a reframe in the environment. Examining cartel operations through the lens of ADM revealed how organizations not traditionally associated with military design thinking may employ common conceptual planning and problem-solving techniques to accomplish strategic objectives. Military practitioners may also empathize with the flexible competency required for organizational learning and adaptability to changing situations in complex environments that drug cartels exhibit.

Contents

Acknowledgements	v
Abbreviations	vi
Figures	vii
Introduction	1
Theoretical Framework	4
Contextual Understanding of the OE	8
Framing the OE	12
Framing the Problem	17
Framing Solutions	23
Diversification	23
Violence.....	27
Reframing.....	31
Significance and Implications	35
Conclusion.....	39
Bibliography	41

Acknowledgements

I want to thank my homie—Moises Jimenez—for randomly bringing up drug cartels in conversation and discussing the idea for this monograph (pours liquor onto the carpet!). To LTC Hoey—for his initial insights to get me going. And to everyone who asked if I was alive, researching, and writing—thank you for checking on me throughout the process.

Abbreviations

ADM	Army Design Methodology
CJNG	New Generation Jalisco Cartel [<i>Cártel de Jalisco Nueva Generación</i>]
DTO	Drug Trafficking Organization
PAN	National Action Party [<i>Partido Acción Nacional</i>]
PRI	Institutional Revolutionary Party [<i>Partido Revolucionario Institucional</i>]
TCO	Transnational Crime Organization
TOC	Transnational Organized Crime

Figures

Figure 1. Areas of Cartel Influence	2
Figure 2. Army Design Methodology	6

Introduction

Historically, smuggling and the trade of contraband goods have proved a viable way to make money for the poor, peasant farmers in Mexico's state of Sinaloa. The rural Mexican farmlands were the ideal breeding ground for trafficking organizations to build an illegal drug industry. Over time, these Sinaloa farmers increased their involvement in the opium and marijuana drug trade and expanded their operations into other profitable venues. It was with the fall of the major Colombian drug cartels that improved the strategic positions of Mexico's illicit drug business and spurred the rise of Mexico's cartels by the early 1990s.¹ See Figure 1 for cartel areas of influence in Mexico. The establishment and growth of the Sinaloa cartel frame the operational environment for a basis of understanding Mexico's drug cartels.

As with any business venture, there are challenges and issues the organization must address. Reliable supply chain and logistics processes are essential to moving the crop from farmer to consumer.² The very nature of drug trafficking complicates these processes further as cartels look to grow and transport illegal drugs across thousands of miles and international borders. Drug cartels have continually struggled against governments and policies that challenge their business, as was the case in the 1930s when the Mexican government routinely used soldiers to destroy Sinaloa crops.³ Both the illicit drug industry and government actions continue to coexist. Government interventions have led drug traffickers to adjust to neutralize those actions and keep their business alive. The political environment framed problems for the drug cartels to overcome.

¹ "Sinaloa Cartel," InSight Crime, last modified March 2019, accessed 18 September 2020, <https://www.insightcrime.org/mexico-organized-crime-news/sinaloa-cartel-profile/>.

² Tom Wainwright, *Narconomics: How to Run a Drug Cartel* (New York: PublicAffairs, 2017), 17.

³ Malcolm Beith, "A broken Mexico: allegations of collusion between the Sinaloa cartel and Mexican political parties," *Small Wars & Insurgencies* 22, no. 5 (November 2011): 793, accessed 18 September 2020, <https://doi.org/10.1080/09592318>.

DUE TO COPYRIGHT RESTRICTIONS,
IMAGES ARE NOT INCLUDED
IN THIS ELECTRONIC EDITION.

An inability to acknowledge or recognize changes in the environment or confront problems with innovative practices have been and continue to be detrimental for businesses. Mexican drug cartels understand the various challenges and have adapted to solve and manage the problems. First, cartels diversified their operations to increase revenue streams when government interventions caused them to fragment and downsize. Secondly, Mexican cartels, particularly the Zetas, advanced the use of violence to shape their operating environment. The Zetas countered government actions with their own militarized violence that changed the

landscape of Mexican cartel development.⁴ The cartels framed solutions to respond to the changing conditions in the environment and address its associated problems.

The adaptations made by the Mexican drug cartels have influenced emerging actors within the marketplace and created opportunities and developments that surged from the illegal drug economy. Contending with the political environment, diversifying operations to increase profits, and employing extreme violence essentially create the conditions for the rise of a hybrid cartel. *Cártel de Jalisco Nueva Generación* (CJNG), the New Generation Jalisco Cartel, reframed the volatile operating environment and pursued an opportunity to unseat Mexico's previously dominant drug cartels. The cartel heads reframed to better understand the environment and recognize opportunities and threats.

These instances loosely exemplify vital features in Mexican drug cartels' evolution and provide scope to study their operations. Profit motivates drug cartels; making money serves as their strategic objective. Over time, the persisting thread involves a resilient and flexible business model—mindful deviations responding to a changing business environment while still accumulating profits for the cartels to succeed. Mexican drug cartels demonstrate patterns of operation that bring to mind the US Army's Design Methodology (ADM) and the associated concepts and activities of framing an operational environment, framing problems, framing solutions, and reframing. At a macro-level, these design activities outline Mexican drug cartels' collective progression over time. At a micro-level, each drug cartel individually illustrates design concepts congruent to changes in the environment.

None of this is not to say the cartels sit around a table and consciously plan and solve problems according to ADM. Instead, cartel activities emphasize how their business models reflect deliberate flexibility in a complex environment. Actors within the environment try to minimize them, but the cartels still meet their strategic ends—something any organization today

⁴ "Zetas," InSight Crime, last modified April 4, 2012, accessed 18 September 2020, <https://www.insightcrime.org/mexico-organized-crime-news/zetas-profile/>.

strives to do. This is not to say that any existing group that reveals a semblance of longevity exhibits design concepts. However, observers might discern how cartels apply elements of ADM to their business practices that military practitioners can appreciate. The cartels assess their operational environment and frame ways to reach their desired profitable end state, and then operate in an iterative manner to adjust to changing conditions. By no means does ADM constitute an all-encompassing framework to examine Mexican drug cartels, nor is it meant to—but even nominal findings concerning their operations may enhance understanding of US military design capabilities and of other analogous groups in today's competitive environment.

Whether described as an armed group, transnational criminal organization, non-state actor, terrorist group, drug trafficking organization (DTO), illicit business, or the like, Mexican drug cartels demonstrate Army design aspects regardless of their naming convention.⁵ Literature uses several terms for the categorical group that drug cartels belong. Though it is essential to note the differences in the terms and what they mean, consider the assorted expressions as irrelevant to the conceptual basis of design and its application from the cartel perspective. The terms prove interchangeable for this study, which is significant because of the mix-and-match possibilities compared to other groups operating in various complex environments. Again, the essence remains that drug cartels execute sophisticated and deliberate operations due to their understanding of the operational environment, which indicates key components in ADM to recognize and solve problems.

Theoretical Framework

Examining Mexican drug cartel operations through ADM's doctrinal lens offers an alternative perspective that military practitioners can apply to other complex situations. Although drug cartels do not explicitly use ADM, its planning and thinking characteristics can be seen in cartel operations.

⁵ Categorization of drug cartels, i.e., armed groups, terrorist groups, DTO, etc., affects policies and legal authorities used by states and organizations to counter cartel operations. The type of group is less critical for examining drug cartel operations from their internal viewpoint.

Army leaders use both conceptual and detailed planning methods to solve problems. The conceptual piece focuses on a broader purpose and objective for the organization to accomplish, while detailed planning considers the "particulars" of operations towards accomplishing the larger goals.⁶ The key to this conceptual thinking is ADM. As defined, ADM is "a methodology for applying critical and creative thinking to understand, visualize, and describe problems and approaches to solving them."⁷ The four ADM activities, while not prescriptive, broadly describe how it can be employed. The four main activities are framing an operational environment, framing problems, framing solutions, and reframing.⁸

Framing operational environments gives contextual understanding to current conditions in order to visualize a desired future state. It involves "selecting, organizing, interpreting, and making sense of interrelated variables and the relevant actors in an operational environment."⁹ The environmental frame incorporates a historical and cultural perspective for how the situation developed, factors that contribute to the current context, and likely trends in the environment going forward that may impact the desired future.¹⁰ It attempts to understand how the complex variables came to be, the current state, and how the situation might evolve.

Framing problems involves identifying issues or obstacles that may prevent the organization from achieving its desired future state, the opportunities and threats among actors, and necessary changes needed to progress towards attaining the end state.¹¹ During this part of ADM, the planning team analyzes connections among the multitude of variables contributing to

⁶ US Department of the Army, Army Doctrine Publication (ADP) 5-0, *The Operations Process* (Washington, DC: Government Publishing Office, 2019), 2-8, Fig. 2-3.

⁷ Ibid., 2-16, para 2-89.

⁸ US Department of the Army, Army Techniques Publication (ATP) 5-0.1, *Army Design Methodology* (Washington, DC: Government Publishing Office, 2015), 1-3, para. 1-15.

⁹ Ibid., 3-1, para. 3-5.

¹⁰ Ibid., 3-2, para. 3-7.

¹¹ Ibid., 4-2, para. 4-6.

the problem set.¹² Problems rarely have an isolated influence. The team uses systems thinking to observe the environment and views the problem as a system of problems within the broader environment.¹³

Organizations need to achieve the desired end state, so they determine "what needs to be done" to reach their success. Framing solutions is a way to solve the problem by developing operational approaches.¹⁴ With the desired future conditions in mind, ADM planning efforts concentrate on broad action solutions and incorporate elements of operational art.¹⁵ See Figure 2 for a depiction of this process.

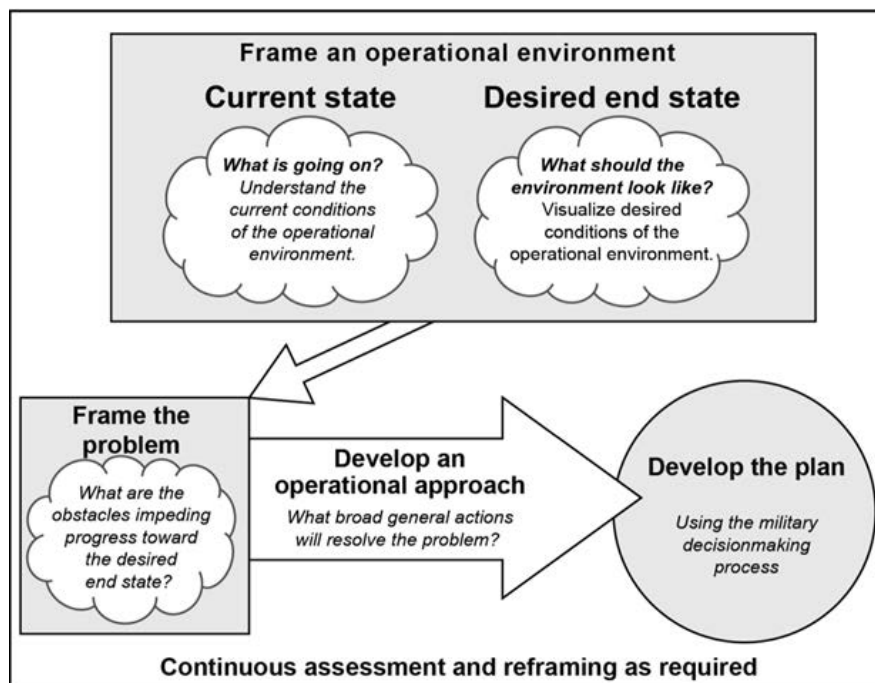


Figure 2. Army Design Methodology. US Department of the Army, Army Techniques Publication (ATP) 5-0.2-1, *Staff Reference Guide*, vol. 1, Unclassified Resources (Washington, DC: Government Publishing Office, December 7, 2020), 11.

¹² Ibid., 4-3, para. 4-10.

¹³ Ibid., 1-8, para. 1-39.

¹⁴ US Army, ATP 5-0.1, 5-2, para. 5-3.

¹⁵ Ibid., 5-2, para. 5-6.

At any time in the process, changes in the operational environment may lead to reframing. Throughout ADM, constant assessment occurs to ensure the operational approach remains feasible to the changing conditions. By definition, "a reframe is a shift in understanding that leads to a new perspective on the problem or its resolution."¹⁶ While executing operations, conditions change in the environment, and things may occur that no longer make the solution viable. The group recognizes this variance and reframes or iteratively restarts ADM in order to learn and remain relevant.¹⁷

It is with this framework that Mexican drug cartels provide an analogous illustration of the four ADM activities. The Sinaloa cartel's operations define the environmental frame and situation for other Mexican cartels to compare. Government involvement created problems for the drug cartels to overcome as each political administration varied its activities to counter the illicit drug trade. The obstacles posed by government actions influenced the cartels to generate innovative solutions. Two visible operational approaches the drug cartels used to counter the government actions were diversifying their income sources beyond solely drug smuggling and using violence to shape conditions in their environment. As a whole, the Mexican drug cartels continuously reframed and adapted. They generally evolved beyond the large, traditional cartels and became smaller, dispersed ones to remain agile organizations, ready to face business demands. The CJNG, in particular, typifies reframing. It emerged out of the fluctuating environment and demonstrated a new reality among Mexican drug cartels.¹⁸ CJNG now shapes the current context of the operating environment as a dominant cartel, and ADM iteratively starts again with understanding the new environment.

¹⁶ Ibid., 6-2, para. 6-12.

¹⁷ Ibid., 6-2, para. 6-13.

¹⁸ Lucy La Rosa and David Shirk, *The New Generation: Mexico's Emerging Organized Crime Threat* (San Diego: Justice in Mexico, 2018), 1.

Contextual Understanding of the OE

Several factors, such as history, geography, economics, and culture, collectively shape the contemporary operational environment for the Mexican drug cartels and provide a foundation for applying ADM to their operations.¹⁹ Each of the elements interrelates and establish both the structural and interactive complexity within the environment.²⁰

History intertwines Mexico and the United States. There is a shared history of varying levels of conflict and cooperation along the border that underpins their relations. Proximity and history continue to highlight relations between both countries in today's environment concerning the illegal drug trade. The United States introduced and started the drug trade with Mexico in the early twentieth century. Drug trafficking in Mexico began in the mountains of Sinaloa during the Second World War.²¹ The United States required opiates for the war effort, so it turned to Mexico for its heroin supply.²² Marijuana was similar; the United States had a supplier to its south that was capable of meeting pharmaceutical and recreational drug needs. Between the 1930s and 1960s, Mexico supplied as much as 95 percent of the marijuana consumed in the United States.²³ This interdependence between the two countries for heroin and marijuana allowed the drug trade to flourish. Demand and varying legal restrictions in the United States increased during the 1960s, which caused heroin and marijuana prices to rise and profits to follow suit. On the other side of the border, this pushed the illegal activity beyond Sinaloa and into neighboring Mexican states to

¹⁹ According to JP 3-0, an operational environment is "a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander." The cartels are an actor within the OE.

²⁰ US Army, ATP 5-0.1, 3-1, para. 3-2.

²¹ Fernando Pacheco, "Narcofearance: How has Narcoterrorism Settled in Mexico?" *Studies in Conflict & Terrorism* 32, no. 12 (December 2009): 1026, accessed 18 September 2020, <https://doi.org/10.1080/10576100903319797>.

²² Francisco González, "Mexico's Drug Wars Get Brutal," *Current History* 108, no. 715 (February 2009): 72, accessed 31 December 2020, <https://online.ucpress.edu/currenthistory/article/108/715/72/108975/Mexicos-Drug-Wars-Get-Brutal>.

²³ Michael Lyman, *Drugs in Society: Causes, Concepts, and Control*, 8th ed. (New York: Taylor & Francis, 2017), 157.

expand the illicit drug trade. By the 1970s, Mexico's golden quadrangle became a key cultivation zone for illegal activity.²⁴ The notorious mountain region was void of law enforcement and close to the United States.²⁵ US distributors and users continued their demand back on the other side of the border.

US intervention in the Colombian cocaine drug market was another critical interaction in the Mexico-United States' shared drug history and was the precursor for today's context. "As the Colombian cocaine boom gathered momentum in the 1980s and the United States law enforcement began patrolling the Caribbean, the Colombians went in search of an alternate route to the US and discovered one in Mexico."²⁶ US involvement in Colombia's drug market created a vacuum in the drug trade for the Mexican drug trafficking networks to exploit. By the 1990s, cocaine trafficking routes had shifted from the Caribbean to Mexico causing a "massive expansionary shock" to the drug market.²⁷ Traffickers added cocaine to their distribution of marijuana and heroin in the United States, and it became another layer in the illegal drug trade complexity. Mexico's proximity to the United States and spatial relationship among actors in the region exposed interrelated environmental factors. The Mexican cartels could take advantage of Mexico's location to the US and their two-thousand-mile shared border.²⁸ History was connected by geography, and both influenced economics. For Mexican traffickers—a primary consumer to their north, a primary cocaine supplier to their south, and the means to produce heroin and marijuana—illustrates the underlying business prerogatives of cartel operations.

²⁴ The golden quadrangle in Mexico consists of the states of Durango, Sonora, Chihuahua, and Sinaloa.

²⁵ Pacheco, "Narcofearance," 1026.

²⁶ Patrick Radden Keefe, "The Snow Kings of Mexico," *New York Times Magazine* (June 17, 2012): 38.

²⁷ Andreas Schedler, "The Criminal Subversion of Mexican Democracy," *Journal of Democracy* 25, no. 1 (January 2014): 9, accessed 18 September 2020, http://muse.jhu.edu/content/crossref/journals/journal_of_democracy/v025/25.1.schedler.html.

²⁸ Paul R. Kan, "Mexican Cartels as Vicious Firms," *Small Wars Journal* (March 15, 2015), accessed 25 November 2020, <https://smallwarsjournal.com/jrnl/art/mexican-cartels-as-vicious-firms>.

As with all businesses, profit serves as the desired end state for the cartels' operations and drives their strategic business outlook. The Mexican drug cartels' economic aim parallels the military end state that drives continued purpose and action for military operations. The drug cartels have limited overarching political goals or social intentions to compete with the Mexican state.²⁹ Instead, the ultimate goal is to make money by bringing the product to market in the most efficient way possible to maximize profits.³⁰ The second and third-order effects of their business operations influence the political and social realms due to the environment's interconnectivity. However, the drug cartels are profit-making enterprises. As alluded to, basic supply and demand economic principles apply to the drug cartels. Some argue that "America's 'insatiable demand for illegal drugs' is what drives the clandestine industry. It's no accident that the world's biggest supplier of narcotics and the world's biggest consumer of narcotics just happen to be neighbors."³¹ Consistent with this cross-border interconnectivity is the positive feedback loop within Mexico that has also influenced internal drug demand. Furthermore, Mexican drug cartels have "groomed a domestic market for marijuana, methamphetamine, and heroin" and created within Mexico a consumer market for drugs they produce.³² Another economic aspect for drug cartels that raises the complexity of their operations is the illegal character of them.

Though both are profit and market-driven, drug cartels and legitimate businesses' primary difference is drug cartels operate in an illicit shadow economy. Drug cartels "oversee logistical networks that are more complex and sophisticated than their commercial counterparts, because they must move both product and profits undercover, constantly maneuvering to avoid

²⁹ As opposed to insurgencies or other potential non-state actor groups vying for power against the state.

³⁰ June S. Beittel, "Mexico: Organized Crime and Drug Trafficking Organizations," *Current Politics and Economics of the United States, Canada, and Mexico* 21, no. 2 (2019): 191, ProQuest Ebrary.

³¹ Keefe, "The Snow Kings of Mexico," 37.

³² Kan, "Mexican Cartels as Vicious Firms."

interdiction."³³ Thus, the complexity of the operational environment fundamentally increases for the drug cartels. The products the cartels work with can be illegal or legal, but the way the illegal goods get to the user is similarly illegal. There is market competition with numerous actors involved, which adds complexity as the various players try to control the entire distribution chain or at least critical parts of it. Since the cartels are in the criminal shadows, they do not have legal remedies to resolve business disputes or issues. The state arguably tries to reduce the drug market, thereby influencing other criminal markets to emerge.³⁴ Moreover, the "dirty" money has to flow back through an undercover chain as it reenters the marketplace. These simplifications about illicit market complexity, when applied to the Mexican context, indicate a possible criminal sub-culture embedded in society.

Culture adds to the current context of the operational environment as it intertwines with the basic environmental factors of history, geography, and economics. For Mexico, a narcoculture influences the social element that has evolved within society. It has been thought that "the opportunity fully to eliminate the narco threat groups, before they became entrenched in Mexican society, was likely missed."³⁵ There have been shifts over time for which drug might dominate the trafficking market, but overall demand trends are not decreasing. Actions to eliminate specific cartels would only change suppliers temporarily as the actors in the illegal drug market rebalance. There is also a sensationalized view of drug kingpins and an idealized identity for those in the drug business. As Ed Vulliamy notes in *Amexica: War Along the Borderline*, "When the narco trafficker looks in the mirror, he sees not a criminal but a romantic bandit."³⁶ Drug traffickers

³³ Douglas Farah, "Central America's Northern Triangle: A Time for turmoil and Transitions," *PRISM* 4, no. 3 (2013): 91, accessed 18 September 2020, <https://www.jstor.org/stable/10.2307/26469830>.

³⁴ Kan, "Mexican Cartels as Vicious Firms."

³⁵ Robert J. Bunker and John P. Sullivan, "Cartel evolution revisited: Third phase cartel potentials and alternative futures in Mexico," *Small Wars & Insurgencies* 21, no. 1 (March 2010): 48, accessed 18 September 2020, <https://doi.org/10.1080/09592310903561379>.

³⁶ Ed Vulliamy, *Amexica: War Along the Borderline*, 2nd ed (New York: Picador, 2011), 10.

have symbolized brave resistance to the corrupt government for the poor Mexicans to idolize.³⁷ But it goes far beyond the cartel leader or figurehead. Cartel activities and drug trafficking have a social basis. Thousands of workers keep the drug supply chain moving and serve as an informal class willing to support the illicit trade.³⁸ A peasant farmer trying to earn a living serves a function in the illegal drug market. The farmer's profits then flow into the legal economy as he buys various goods. Additionally, a culture of corruption in Mexico supports the illicit activities. Although some argue Mexico does not have an endemic corruption problem, the drug cartels and their interactions with various actors in the system offer evidence to the contrary.³⁹ The drug cartel and its criminal network have a permissive space within Mexican society. Yet, in broadening the context, drug cartels and organized crime have operating space within many societies.

Framing the OE

The Sinaloa cartel sets the environmental frame for analyzing Mexican drug cartel operations. An evaluation of this original key actor of the Mexican drug cartels and how it developed and endured, establishes a baseline for understanding the current state and future potential of Mexican drug cartels. Cartel design tendencies originate from Sinaloa's development and operations.

There was an equitable diffusion of the illicit drug economy when the Colombian cartels regressed, affecting the rise of Mexican drug cartels. The early Mexican drug trade was based on familial ties. In 1982, Miguel Félix Gallardo created the Guadalajara cartel, also known as La Familia.⁴⁰ Considered one of the founders of modern Mexican cartels, Gallardo's network

³⁷ David Epstein, "Devils, Deals and the DEA," ProPublica, December 17, 2015, accessed 17 September 2020, <https://www.propublica.org/article/devils-deals-and-the-dea>.

³⁸ Joel S. Herrera, "Cultivating Violence: Trade Liberalization, Illicit Labor, and the Mexican Drug Trade," *Latin American Politics and Society* 61, no. 3 (August 2019): 135, accessed 23 November 2020, https://www.cambridge.org/core/product/identifier/S1531426X19000086/type/journal_article.

³⁹ Beith, "A broken Mexico," 796.

⁴⁰ Pacheco, "Narcofearance," 1026.

included several other DTO leaders at the time, including Joaquín "El Chapo" Guzmán, who would become Sinaloa's central kingpin.⁴¹ Gallardo effectively split the organization into the Tijuana, Juárez, and Sinaloa cartels, and divided smuggling routes for each cartel after he was captured by Mexican authorities in 1989.⁴² "The Arellano Félix brothers set up camp in Tijuana. The Carrillo Fuentes family moved to Juárez. Guzmán and his partner, Héctor Luis Palma Salazar, remained in the Sinaloa area."⁴³ During this same period, Mexico's role in the international drug trade transitioned. Mexican traffickers assumed the cocaine trafficking business and evolved from just couriers to actual wholesalers.⁴⁴ The present forms of the Mexican cartels had emerged, and battles started among the factions soon after that.

Geography has influenced the Sinaloa cartel's advantageous posture and relevance in the drug trade from the beginning. Agriculture in Sinaloa was the cartel's fertile source and remains so today. Indeed, "The West Coast state of Sinaloa with its long coastline and difficult-to-access areas remains favorable for drug cultivation and forms the heartland of Mexico's drug trade."⁴⁵ If the government attacked the drug industry at production or cultivation points, cartel operations moved to a new location or replanted destroyed crops.⁴⁶ Like Mexico as a whole, the Sinaloa cartel benefited from regional flow and cocaine transit through Mexico by expanding its territorial influence, trafficking routes, and basing. The cartel operated in seventeen Mexican states.⁴⁷ Not only did the Sinaloa cartel conduct offshoring of certain business activities in Honduras, the DTO operated beyond the region in an estimated fifty-four countries.⁴⁸ The United

⁴¹ June S. Beittel, *Mexico: Organized Crime and Drug Trafficking Organizations*, R41576 (Washington, DC: Congressional Research Service, July 28, 2020), 17, accessed 13 September 2020, <https://fas.org/sgp/crs/row/R41576.pdf>.

⁴² Keefe, "The Snow Kings of Mexico," 38.

⁴³ "Sinaloa Cartel," InSight Crime.

⁴⁴ Beittel, "Mexico: Organized Crime," 194.

⁴⁵ Beittel, "Mexico: Organized Crime," 195.

⁴⁶ Herrera, "Cultivating Violence," 146.

⁴⁷ "Sinaloa Cartel," InSight Crime.

⁴⁸ Wainwright, *Narconomics*, 106.

States considered the Sinaloa cartel a primary cartel for trafficking drugs.⁴⁹ As noted by Latin American analyst June S. Beittel, "By some estimates, Sinaloa had grown to control 40-60% of Mexico's drug trade by 2012 and had annual earnings calculated to be as high as \$3 billion."⁵⁰ Globalization has affected cartel operations and expanded its market influence beyond the Americas. Sinaloa's expansion is an example of the opportunity globalization has had on the illegal drug industry, and the operational reach Mexico's DTOs have.

The Sinaloa cartel employed several methods as part of their business model to remain a powerful actor among the Mexican cartels for the past thirty years. Unlike some others, the Sinaloa cartel maintained a horizontal distribution of power and decision-making authority. Guzmán might be considered the group's kingpin.⁵¹ However, multiple leaders sustained the cartel at different levels or functions.⁵² There is less of a hierarchical structure than other cartel organizations; the leaders maintain "their own separate but cooperating organizations, while the cartel's operations in foreign countries, and even within Mexico, are often outsourced to local partners."⁵³ The small-team structure highlights a business lesson learned from the Sinaloa cartel—members are empowered because they all have a role, and risk is distributed across the teams throughout the organization.⁵⁴ This semi-autonomous and decentralized structure of their

⁴⁹ Malcolm Beith and Jan-Albert Hootsen, "El Chapo Is Going Down. How Many Drug Lords, Assassins, Politicians and Policemen Will He Take with Him?" *Newsweek*, October 27, 2017, 5, ProQuest Ebrary.

⁵⁰ Beittel, *Mexico: Organized Crime*, 19.

⁵¹ Former President Obama identified the Sinaloa cartel in the Kingpin Act of 2009. "Fact Sheet: Overview of the Foreign Narcotics Kingpin Designation Act," The White House, Office of the Press Secretary, April 15, 2009, accessed 01 January 2021, <https://obamawhitehouse.archives.gov/the-press-office/fact-sheet-overview-foreign-narcotics-kingpin-designation-act>.

⁵² El Chapo has been jailed three times and escaped twice. Sinaloa cartel survived his previous two arrests. Tessa Berenson, "Timeline of El Chapo's Major Escapes and Captures," *Time*, January 8, 2016, accessed 17 September 2020, <https://time.com/4173454/el-chapo-capture-escape-timeline/>.

⁵³ "Sinaloa Cartel," InSight Crime.

⁵⁴ Devin Liddell, "3 Business Lessons from the Sinaloa Drug Cartel," *Fast Company*, August 1, 2014, accessed 25 November 2020, <https://www.fastcompany.com/3033847/3-business-lessons-from-the-sinaloa-drug-cartel>.

illicit drug network allowed for adaptability within the high flux environment.⁵⁵ The organizational flexibility and fluid structure resonate with the potentials in ADM. An organization that can observe and adapt to the environment while still reaching the end state conditions is essential to design.

Collusion with Mexico's political, military, and economic elite helped the Sinaloa cartel maintain control of the illegal drug industry. State and federal connections have aided its business survival over time. Indeed, "The history of allegations of collusion between the Sinaloa cartel and the Mexican government goes back a long way. The Mexican drug trade, after all, began in Sinaloa under the watchful eye of the PRI, the *Partido Revolucionario Institucional* (Institutional Revolutionary Party)."⁵⁶ Whether the cases are ultimately proven or not, the many instances of corrupted public officials working with the Sinaloa cartel persist. Mexican authorities charged ten army officers for providing the Sinaloa cartel with information regarding their planned actions against them in June 2009.⁵⁷ Former Mexican President Felipe Calderón's public security minister was arrested in December 2019 and indicted on charges of accepting millions of dollars in bribes from the Sinaloa cartel between 2006 and 2012.⁵⁸ During Guzmán's trial in 2019, one of his associates testified that former President Peña Nieto had accepted a bribe from Guzmán to protect the Sinaloa drug business.⁵⁹ These collusion allegations must not dismiss the most obvious ones—Guzmán escaped two different high-security prisons, once in 2001 and the other

⁵⁵ Beittel, *Mexico: Organized Crime*, 16.

⁵⁶ Beith, "A broken Mexico," 790.

⁵⁷ Graham Turbiville Jr., "Firefights, raids, and assassins: tactical forms of cartel violence and their underpinnings," *Small Wars & Insurgencies* 21, no. 1 (March 2010): 131, accessed 18 September 2020, <https://doi.org/10.1080/09592310903561577>.

⁵⁸ "Former Mexican Secretary of Public Security arrested in Texas," Justice in Mexico, December 19, 2019, accessed 18 September 2020, <https://justiceinmexico.org/former-mexican-secretary-of-public-security-arrested-in-texas/>.

⁵⁹ Emily Palmer and Alan Feuer, "El Chapo Trial: The 11 Biggest Revelations From The Case," *New York Times*, February 3, 2019, ProQuest Ebrary.

in 2015.⁶⁰ The Sinaloa cartel influences local security forces to the highest levels of government. It became a line of effort to penetrate the institutions trying to stop the cartel's operations, which has successfully assisted its operational design.

The Sinaloa cartel selectively chooses diplomacy over military action but can employ violence if connections fail or change, and "It often opts for the bribe over the bullet and alliances over fighting, but it is not above organizing its forces to overrun areas that it wants to control by force."⁶¹ The mix of diplomatic and military capabilities have facilitated the organization's ability to shift as arrangements change. Beittel notes that "El Chapo was responsible for horrific violence, but he was a wildly successful kingpin because he mostly relied on his intelligence and ability to do deals."⁶² His methods were not without their risks, however. In 2008, the Beltrán Leyva Organization (BLO) split from the Sinaloa federation after Guzmán provided intelligence that led to their leader's arrest.⁶³ After being united since 2002, the Juárez cartel similarly left the alliance during the same timeframe. Guzmán allegedly ordered a kill on one of Juárez cartel's leaders. A "turf war" started between the Sinaloa and Juárez cartels for the Juárez plaza drug trafficking route.⁶⁴ Then, when the Tijuana cartel leadership changed in 2010, Sinaloa leadership made an agreement to use the Tijuana plaza.⁶⁵ There has been constant instability in the Sinaloa cartel's quest to build a monopoly within the illegal drug trade. Picking and choosing alliances, violence, or both has been deliberate and part of the business plan. The various plazas serve as decisive points for cartel operations as the groups attempt to control trafficking flow along the

⁶⁰ Amanda Macias, "There's something peculiar about the 2 prisons Mexican drug kingpin 'El Chapo' escaped from," Business Insider, July 25, 2015, accessed 01 January 2021, <https://www.businessinsider.com/the-2-prisons-mexican-drug-kingpin-el-chapo-escaped-from-were-nearly-identical-2015-7>.

⁶¹ "Sinaloa Cartel," InSight Crime.

⁶² Beith and Hootsen, "El Chapo Is Going Down," 4.

⁶³ Beittel, "Mexico: Organized Crime," 209.

⁶⁴ Beittel, *Mexico: Organized Crime*, 20.

⁶⁵ *Ibid.*, 18.

routes or major accesses of advance for drug transit. Alliance connections and their changes resemble phasing and transitions within cartel operations as organizational structure divides and efforts adjust.

Today, the Sinaloa cartel and CJNG, a group that emerged out of the Sinaloa cartel in 2010, are the two dominant cartels and enemies of one another. There are several other trafficking groups, but Sinaloa and CJNG "meet the traditional conception of cohesive organizations with a large footprint."⁶⁶ Sinaloa maintains the most extensive international footprint, but CJNG is rapidly expanding throughout Mexico and beyond. Over time, the Sinaloa cartel has diversified and become a poly-drug trafficking organization committed to trafficking multiple types of drugs.⁶⁷ Though the cartel is still one of the most powerful organized crime groups, the future of the big, traditional Mexican cartels seems unclear. Only time will tell if the Sinaloa cartel can flex and remain a prominent actor within the drug business. For thirty years, the organization has improvised and adapted to the changing environment to remain relevant.

Framing the Problem

Changes in the Mexican political environment presented the drug cartels with a problem situation they needed to address. Though the cartels' desired end state remained clear, government actions attempted to prevent the cartels from reaching their business objectives. The Mexican government's overall desired end state dealing with the illicit drug economy changed depending on the administration: pre-2000; Vicente Fox administration from 2000-2006; Felipe Calderón administration from 2006-2012; Enrique Peña Nieto administration from 2012-2018; and Andrés Manuel López Obrador administration from 2018-present. Changes in government involvement added complexity to the operational environment and compounded interrelated issues the cartel had to maneuver. National Mexican government actions only begin to magnify the problem set.

⁶⁶ Peter Orsi, "A Snapshot of Mexico's Cartel Landscape Amid Rising Violence," *Associated Press News*, March 18, 2020, accessed 22 December 2020, <https://apnews.com/article/1aea8224e3f6f949026f748663a62bcd>.

⁶⁷ Drug Enforcement Administration, *2019 National Drug Threat Assessment* (Washington, DC: Department of Justice, December 2019), 99.

However, the political economy, government policies, and legal aspects of the illegal drug industry extend well beyond Mexico's borders yet have influence within Mexico.

The drug cartels experienced relative impunity prior to 2000, which affected social and economic entrenchment for cartel operations in Mexico. At first, the Mexican government minimally interfered with the drug cartels. Instead, decades of single party rule under the PRI largely tolerated and protected the cartels as corrupted officials had a monopoly on state control.⁶⁸ Mexico's integration into the profitable cocaine market beginning in the 1970s further entrenched the protective relationship and limited competition among the DTOs. Moreover, as Beittel notes, "For many years the Mexican government pursued an overall policy of accommodation. Under this system, arrests and eradication of drug crops took place, but due to the effects of widespread corruption the system was 'characterized by a working relationship between Mexican authorities and drug lords.'"⁶⁹ The informal agreements between actors built a foundation for coexistence and corruption seen today, but also curbed its violence since all involved took a cut from drug trafficking profits. However, by the early 1990s, the PRI's power started to decrease, and the political openings it created influenced who had control over the drug trade. The "long-standing dynamics" and "unwritten understandings" between the political establishment and drug lords started to change and violence began to erupt.⁷⁰ Besides coexistence and corruption, government involvement with the illicit drug trade early influenced the adaptable system it has become.

The national political environment decisively changed in 2000 when National Action Party (PAN, *Partido Acción Nacional*) defeated the PRI. A trend toward political democratization

⁶⁸ Luis Astorga and David A. Shirk, *Drug Trafficking Organizations and Counter-Drug Strategies in the U.S.-Mexican Context* (San Diego: Center for U.S.-Mexican Studies, University of California at San Diego, 2010), 8.

⁶⁹ Beittel, "Mexico: Organized Crime," 194.

⁷⁰ Shannon O'Neil, "The Real War in Mexico: How Democracy Can Defeat the Drug Cartels," *Foreign Affairs* 88, no. 4 (July/August 2009): 65, accessed 31 December 2020, <https://www.jstor.org/stable/20699622>.

altered the natural tendency of the operational environment that had previously favored drug cartel operations, and for the first time in Mexico's history, PRI lost the presidency. Vicente Fox and the center-right PAN assumed power, but even before the national-level political change, PRI's influence was eroding locally. "The inefficiencies of new authorities allowed both DTOs and implicated political actors to break away from the old rules of the game."⁷¹ New opportunities developed for actors involved. A change in market competition for the plazas no longer controlled by the government altered the drug-related violence that has become synonymous with the Mexican drug cartels. Government officials could no longer promise impunity of drug traffickers, which influenced the level of violence and "upended the equilibrium that had developed."⁷²

Fox administration initiatives concerning the illegal drug trade fell short of their goals. The government's objective of defeating the cartels was optimistic as they truly did not understand the nature of DTO threat. "Fox purged and reorganized the federal police forces. . . . This policy, though effective at raising the number of individuals arrested and drug shipments confiscated, fell far short."⁷³ Moreover, the reorganized police forces "succumbed to bribes and threats of the criminal syndicates," who were jockeying for territory and resources considering their system was just disrupted.⁷⁴ Deep-seated cultural corruption was not going away. The Fox administration failed to implement structural reforms in the Mexican criminal justice system, which plagued future presidents as well. Effective judicial and penal reforms needed to quell drug crimes did not take shape.⁷⁵ Ultimately, the operational environment morphed into a lingering

⁷¹ Herrera, "Cultivating Violence," 133.

⁷² Beittel, "Mexico: Organized Crime," 32. Such as the Federal Security Directorate, which oversaw domestic security from 1947 to 1985, and organized crime.

⁷³ González, "Mexico's Drug Wars Get Brutal," 74.

⁷⁴ Ibid., 74.

⁷⁵ Pacheco, "Narcofearance," 1038.

security crisis for the next president and was wrought with violent DTOs who were trying to regain market stability and ineffective police forces were trying to gain control.⁷⁶

More environmental changes occurred when the Calderón administration took over in 2006. Under Calderón's PAN government, Mexico enacted a militarized security strategy against the cartels and a proclaimed "kingpin" policy to aggressively counter the drug cartels. To date, Calderón's strategy was the most drastic shift in the operational environment for the cartels to contend with.⁷⁷ At the beginning of his presidency, there were four dominant DTOs: the Tijuana/Arellano Felix Organization (AFO), the Sinaloa cartel, the Juárez/Vicente Carrillo Fuentes Organization (CFO), and the Gulf cartel.⁷⁸ But these large stable organizations disintegrated by the end of Calderón's term in 2012 consequently from his initiatives. Some analysts suggested the four evolved into seven groups but fragmented further to between nine and twenty organizations depending.⁷⁹ Regardless of the exact number, the kingpin strategy spurred succession struggles, shifted alliances, created smaller criminal organizations, and made the existing groups more violent.⁸⁰ Some evidence suggests Calderón's approach used the anti-drug operations to suppress political dissenters and to further marginalize individuals, unrelated to drugs, who opposed the government's actions.⁸¹ This also isolated groups for the cartels to recruit from. Cartels started to hire specialized cells to defend against rival cartels and Mexico's army.⁸² Critics mention that "killing became normalized and dehumanized under the banner of the 'drug

⁷⁶ Schedler, "The Criminal Subversion," 5.

⁷⁷ Or considered by some as a logical step in the force used against the drug cartels. The Fox administration showed the ineffectiveness of law enforcement against the DTOs.

⁷⁸ Bunker and Sullivan, "Cartel evolution revisited," 35.

⁷⁹ Beittel, "Mexico: Organized Crime," 196.

⁸⁰ "Mexico's Drug Wars: Bloodiest Year to Date," *Stratfor Worldview*, December 20, 2010, accessed 18 September 2020, <https://worldview.stratfor.com/article/mexican-drug-wars-bloodiest-year-date>.

⁸¹ Julien Mercille, "Violent Narco-Cartels or US Hegemony? The political economy of the 'war on drugs' in Mexico," *Third World Quarterly* 32, no. 9 (2011): 1647, accessed 12 August 2020, <https://www.jstor.com/stable/41341189>.

⁸² Pacheco, "Narcofearance," 1032.

war."⁸³ As the cartels began to change in response to the heightened security situation, the Calderón administration failed to implement structural reforms like the Fox administration had failed to do previously. Rather, using the military to police drug trafficking addressed surface issues without responding to deeper problems.⁸⁴

The PRI regained the presidency in 2012 when Enrique Peña Nieto won on a platform that countered Calderón's strategy. Many saw the PRI as "best equipped to reduce violence and hasten economic growth, despite concerns about its reputation for corruption."⁸⁵ Although Nieto intended to shift the government's strategy, his administration continued military and federal police operations but with control moving under Mexico's interior ministry.⁸⁶ A difference from the Calderón administration was the kinetic operations against the cartels were less vocalized in the government's narrative. "Nieto [wanted] to maintain some distance from the struggle against the cartels. He [sought] to portray the cartels as a secondary issue [so that he could] focus his efforts on issues he [deemed] critically important to Mexico's future, like education reform, banking reform, energy reform and fostering the Mexican economy."⁸⁷ He was able to implement some policy corrections from past administrations while also quieting the violence rhetoric.⁸⁸ Unfortunately, Nieto's administration was "beset by corruption scandals" that left him and his political party the least popular since the polling surveys began in the 1990s.⁸⁹ The domestic

⁸³ Stephen Eisenhammer, "Bare Life in Ciudad Juarez: Violence in a Space of Exclusion," *Latin America Perspectives* 41, no. 2 (March 2014): 102, accessed 18 September 2020, <https://www.jstor.org/stable/24575500>.

⁸⁴ Schedler, "The Criminal Subversion," 6.

⁸⁵ Clare Ribando Seelke, *Mexico: Background and US Relations*, R42917 (Washington, DC: Congressional Research Service, May 12, 2020), 1, accessed 15 September 2020, <https://fas.org/sgp/crs/row/R42917.pdf>.

⁸⁶ Beittel, "Mexico: Organized Crime," 186.

⁸⁷ Scott Stewart, "Understanding Pena Nieto's Approach to the Cartels," *Stratfor Worldview*, May 16, 2013, accessed 22 December 2020, <https://worldview.stratfor.com/article/understanding-pena-nietos-approach-cartels>.

⁸⁸ Schedler, "The Criminal Subversion," 17.

⁸⁹ Irene Plagianos and Kate Linthicum, "Witness Links Ex-President to Cartel," *Los Angeles Times*, January 16, 2019, ProQuest Ebrary.

politics situation in Mexico was crumbling and had not fundamentally threatened the illicit drug market. Historical ties to PRI's corruption and impunity towards the cartels continued as a market force. The Nieto presidency gave the cartels time to maneuver the organizational fragmentation and reestablish a pecking order among the DTOs.

President Andrés Obrador was elected in 2018 to replace Nieto. He leads a new, progressive party in Mexico, called *Morena*, and campaigned on fighting corruption and finding new ways to combat crime and manage the illegal drug industry. Obrador's rhetoric includes a "hugs, not bullets" stance that emphasizes eliminating "root social causes of criminality such as poverty, inequality and joblessness."⁹⁰ He plans to address the socio-economic aspects of criminal violence with increased funding for education, skills training, and employment alternatives.⁹¹ Also, like his predecessors, Obrador is trying to improve Mexico's federal law enforcement and public security structure. He made strides in February 2019 when one of his initiatives to create a national guard was approved and is in line to eventually replace Mexico's Federal Police.⁹² Just two years into Obrador's presidency, Mexico still faces security concerns, economic recession, and the Covid-19 pandemic.⁹³ A relative uncertainty with the effectiveness of Obrador's social and security initiatives offers the DTOs time to probe the operational environment and capitalize on opportunities and threats that arise. For example, it is thought the criminal groups have adapted to the Covid-19 environment by using it for political and social outreach to tighten or expand their control of people and areas. The Covid-19 situation weakened

⁹⁰ Orsi, "A Snapshot of Mexico's Cartel."

⁹¹ Laura Calderón, Kimberly Heinle, Octavio Ferreira, and David Shirk, *Organized Crime and Violence in Mexico: Analysis Through 2018* (San Diego: Justice in Mexico University of San Diego, April 2019), 45.

⁹² *Ibid.*, 50.

⁹³ Seelke, *Mexico: Background and US Relations*, 4.

government capabilities, increased unemployment, and favored the agile illicit business networks.⁹⁴

Framing Solutions

Diversification

Framing solutions during ADM produces operational approaches that broadly resolve the problem.⁹⁵ Holistically, the Mexican government posed obstacles for the drug cartels who had to manage the issues concerning the domestic political environment if they were going to survive. Developing solutions and operational approaches towards the desired end state are the essence of Army design. Mexican DTOs recognized that diversifying their operations and means available enabled profit success despite being targeted by the government.

The major drug cartels became polydrug organizations as a way to expand revenue opportunities within the illegal drug market. Demand may drive supply, but the cartels proved highly adaptive to the changing market demands. Polydrug enterprises take part in cultivating, producing, distributing, and transshipping multiple drugs.⁹⁶ The Mexican cartels started by cultivating, producing, and distributing marijuana and heroin, but then augmented those efforts as the major transit hub for cocaine and further expanding into the methamphetamine market and synthetic opioids, such as fentanyl. Cartel efforts successfully exploit the ebbs and flows of demand, and like the relationship of Mexico's drug traffickers with the government, it is a rapidly changing environment.⁹⁷

⁹⁴ "Virus-proof Violence: Crime and COVID-19 in Mexico and the Northern Triangle," International Crisis Group, November 13, 2020, accessed 01 January 2021, <https://www.crisisgroup.org/latin-america-caribbean/83-virus-proof-violence-crime-and-covid-19-mexico-and-northern-triangle>.

⁹⁵ US Army, ATP 5-0.1, 5-1, para. 5-2.

⁹⁶ Christopher Paul, Colin Clarke, and Chad Serena, "Contemporary Violence and the Broader Context in Mexico," in *Mexico Is Not Colombia: Alternative Historical Analogies for Responding to the Challenge of Violent Drug-Trafficking Organizations* (Santa Monica, CA: RAND Corporation, 2015), 30, accessed 12 August 2020, <https://www.jstor.com/stable/10.7249.j.ctt6wq9m8.10>.

⁹⁷ Beittel, "Mexico: Organized Crime," 192.

The methamphetamine market opportunity provides an example of market interdependencies and the drug cartels overcoming government policies. In 2005, the United States passed the Combat Methamphetamine Epidemic Act to reduce domestic production, which increased Mexico's production by reducing competition. However, Mexico enacted similar legislation that regulated precursor chemicals, so the cartels diversified to circumvent the restrictions. The DTOs found alternative methods of manufacturing for the precursor chemicals sourced in China.⁹⁸ They were able to produce methamphetamine that was both pure and potent, while less expensive to make since it used less restricted chemicals that were easier to obtain and hide.⁹⁹ Not only did the DTOs diversify within the drug market, but they also diversified their activities beyond drug trafficking.

The fragmented cartels compensated for lost revenue by diversifying their operations in other illicit activities. A fallout from government interventions was the fractured cartels found maneuver space in multiple criminal economies. The major drug cartels have continually been involved in several illicit markets besides solely drug trafficking, but a major trend to diversify revenue streams came in response to Calderón's strategy. Mexican DTOs turned to "extortion, kidnapping, auto theft, oil smuggling, human smuggling, retail drug sales, and other illicit enterprises" when they diversified.¹⁰⁰ The Zetas were the first major organized crime group that widely broadened their activities."¹⁰¹ The cartels' operational approach relied on multiple lines of operations to earn profit. Cartels "branching out mimics the behavior of legitimate companies. Firms looking to grow . . . strike out into new markets where they believe their existing expertise could give them a head start."¹⁰² It is not surprising that transnational criminal networks have the

⁹⁸ Drug Enforcement Administration, *2019 National Drug Threat Assessment*, 47.

⁹⁹ *Ibid.*, 51.

¹⁰⁰ Beittel, "Mexico: Organized Crime," 183.

¹⁰¹ Joel Hernández, "Terrorism, Drug Trafficking, and the Globalization of Supply," *Perspectives on Terrorism* 7, no. 4 (August 2013): 46, accessed 12 August 2020, <https://www.jstor.com/stable/26296983>.

¹⁰² Wainwright, *Narconomics*, 195.

general resources and risk aversion to pursue what may be profitable. Regardless of diversification as a growth strategy or as a survival strategy, the drug cartels broadened their activities to face the problem set and attain their strategic aim.

Expanding operational locations is another aspect of diversifying the DTOs implemented to respond to government enforcement. The drug cartels moved or changed locations for their operations both internally and abroad. For example, when the Calderón PAN government took over traffickers avoided municipalities with a closely elected PAN mayor. Mayors named municipal police chiefs and set the local policies, so PAN members worked with other PAN members for a politically aligned federal and local response to the drug trade. The crackdowns in certain locations caused the drug cartels to simply change their routes. This also causally effected violence to grow and move to other areas.¹⁰³

The natural movement and expansion beyond Mexico's borders are outcomes of the balloon effect. As a by-product from the problem frame, the cartels spread their cultivation areas and smuggling routes to other countries in Latin America. Traffickers' adaptability to law enforcement efforts influenced the "contamination" of more countries.¹⁰⁴ Sinaloa cartel's globalization provides the greatest example of cartel outreach. Another example was a trend in cocaine movement patterns that surfaced in 2009 due to Calderón's initiatives. More cocaine shipments started to make extra stops in a Central American country before onward shipment to Mexico. Though more costly and higher risk, the drug cartels incorporated multi-stage transportation systems in their operations.¹⁰⁵ Lines of operations, tempo, operational reach, and basing are elements of operational art found in the expansion of locations used by the DTOs. A

¹⁰³ Melissa Dell, "Trafficking Networks and the Mexican Drug War," *The American Economic Review* 105, no. 6 (June 2015): 1746, accessed 12 August 2020, <https://www.jstor.com/stable/43495438>.

¹⁰⁴ Lyman, *Drugs in Society*, 135.

¹⁰⁵ Federal Bureau of Investigation, "Kevin L. Perkins and Anthony P. Placido Assistant Director, Criminal Investigative Division and Assistant Administrator for Intelligence Drug Enforcement Agency, Federal Bureau of Investigation: U.S. Senate Caucus on International Narcotics Control," May 5, 2010, accessed 01 January 2021, <https://archives.fbi.gov/archives/news/testimony/drug-trafficking-violence-in-mexico-implications-for-the-united-states>.

secondary effect from changing cocaine shipment patterns due to Calderón's militarism against the cartels was a relationship reemergence between DTOs and gangs.

With unceasing illicit drug demand and drug cartel operations expanding in Mexico and regionally, some DTOs built depth in their organizational structure by depending more heavily on gangs as part of the supply chain. For decades, the cartel-gang relationship was simple and revolved around cartels using gangs as their foot soldiers and oversee cocaine shipments from Colombia. However, as the cartels tried to gain market dominance and freedom from government intervention, they were able to capitalize on the parallel evolution of Central American gangs that had been growing and strengthening as part of their own evolutions. "The gangs were simply too big to ignore and too useful as a potential workforce not to take into account."¹⁰⁶ Thus, the Mexican cartels refined their drug transport networks by giving gangs a greater role in security and protection of the cocaine shipments.¹⁰⁷ The cartels also enabled gang activity and violence with payments to the gangs in cocaine. The positive feedback loop introduced more money and stake for the gangs to control territory, which further armed the gangs as they moved multi-kilo loads of cocaine while also receiving their own cut.

The Mexican drug cartels countered government interference in their business activities by diversifying their operations, expanding their capabilities, and modifying their means to accomplish their objectives. In multiple ways, diversifying served as a line of operation within the cartels' business models and contributed to their overall end state of earning greater revenues. From the beginning of the illegal drug trade anticipation of an evolution toward diversification seemed inevitable. Yet, a steeper trend toward diversification by the DTOs ensued to respond to the heightened government involvement. This business growth further connected more actors in the system and resulted in greater complexity for government entities to deal with.

¹⁰⁶ Douglas Farah, "Central American Gangs: Changing Nature and New Partners," *Journal of International Affairs* 66, no. 1 (Fall/Winter 2012): 59, ProQuest Ebrary.

¹⁰⁷ *Ibid.*, 61.

Violence

Indicative of ADM, the drug cartels developed solutions and operational approaches that countered the obstacles posed by the political environment to remain market forces in the illegal drug trade. Another characteristic of the cartels' solution frame is understanding a threshold of violence to address problems in the operational environment. One cartel in particular, the Zetas, employed a new business model encompassing organized crime to ascend as a key actor among the Mexican cartels. The Zetas' approached and solved the problem by monopolizing violence and shaping conditions through force to attain their objectives.

A more general discourse about DTOs using violence to achieve their ends gives context for the Zetas using violence to a new degree. In relation to economics, the cartels use violence in some way and at various points along the supply chain to support further economic activities. It is a common line of effort for the cartels to employ. Furthermore, argues Beittel, "Violence is used by traffickers to settle disputes, and a credible threat of violence maintains employee discipline and a semblance of order with suppliers, creditors, and buyers."¹⁰⁸ Violence serves as an intrinsic "market regulator" in the illicit drug trade since the industry cannot resolve issues by legal means.¹⁰⁹ Along the spectrum of use, some argue that violence can disrupt business objectives and bring unwanted attention to the cartel's activities.¹¹⁰ This suggests the cartels tend to limit violent acts to not attract enforcement's attention, which is seemingly counter to the Zetas' outward and blatant use of violence. When considering government institutions within the system, an inverse trend develops between institutional stability and cartel violence. The more cohesive the state's security apparatus, the less incentives for traffickers to employ violence. Whereas during institutional changes the state may be unstable, and violence can manifest itself

¹⁰⁸ Beittel, "Mexico: Organized Crime," 184.

¹⁰⁹ Herrera, "Cultivating Violence," 131.

¹¹⁰ Kan, "Mexican Cartels as Vicious Firms."

in new ways.¹¹¹ This theory underlies the problem frame and gives credence to the Zetas' emergence during a time of significant political changes in Mexico.

The Zetas' background highlights how the organization grew out of violence. They started as an enforcer gang for the Gulf cartel. In the late 1990s, the Gulf cartel had an internal power struggle after their former leader was extradited to the United States. Osiel Cárdenas indirectly took over and looked for security assurances since he did not have the same span of control as his predecessor.¹¹² As a new cartel boss managing a highly contested trafficking route, Cárdenas needed protection. Cárdenas' bodyguard, Arturo Guzmán Decenas, recruited men from the Mexican military to protect Cárdenas and kill his rivals.¹¹³ The first part of the Zetas' development ensured the Gulf cartel became the most powerful DTO in the state of Tamaulipas and along Mexico's Gulf coast.¹¹⁴ The Gulf cartel leadership weakened during the next phase in the Zetas' evolution under the leadership of Z-3, Heriberto Lazcano, who seized the opportunity to grow the organization when Cárdenas went to prison in 2003.¹¹⁵ "As the Zetas grew in power," notes InSight Crime, "the group became more independent and formed an informal alliance with the Gulf cartel. Together they were known as the Company."¹¹⁶ The Zetas started largely as cartel gunmen and gained power within the organization beyond just a shadow enforcer group. Then, it was through their violent propensities that allowed them to be more than just employees within the company.

¹¹¹ Angelica Duran-Martinez, "To Kill and Tell? State Power, Criminal Competition, and Drug Violence," *Journal of Conflict Resolution* 59, no. 8 (December 2015): 1385, accessed 23 August 2020, <http://journals.sagepub.com/doi/10.1177/0022002715587047>.

¹¹² Guadalupe Correa-Cabrera, *Los Zetas Inc.: Criminal Corporations, Energy, and Civil War in Mexico* (Austin: University of Texas Press, 2017), 21, Kindle.

¹¹³ Guzmán became "Z-1" and the founder of Los Zetas, literally "The Zs." Some of Los Zetas served in the Mexican special forces unit known as *Grupos Aeromoviles de Fuerzas Especiales* (GAFE).

¹¹⁴ Samuel Logan, "A Profile of Los Zetas: Mexico's Second Most Powerful Drug Cartel," *Combating Terrorism Center Sentinel* 5, no. 2 (February 2012): 5.

¹¹⁵ "Zetas," InSight Crime.

¹¹⁶ Correa-Cabrera, *Los Zetas Inc.*, 24.

Violence-oriented operations shaped the Zetas' relevancy as they became one of the most powerful Mexican cartels by 2012. The Zetas found their opportunity in an aggressive operational approach to seize and hold territory as a way to reach their profit end state. Originally, Nuevo Laredo served as a decisive point for the Gulf cartel as the main trafficking node the Zetas protected in Tamaulipas. The Zetas continued to secure Nuevo Laredo but also introduced a new method in the region of widespread territorial control. The Zetas "sought territorial domination in which they could then tax all illicit activities operated in or moved through that territory."¹¹⁷ A second-order effect from this approach was the group's ability to diversify revenue streams. The Zetas used historical transit networks and also secured land for nefarious activities beyond drug trafficking. Some contend that "their main asset is not drug smuggling but organized violence. They have amassed significant power to carry out an extractive business model—thus generating revenue from crimes."¹¹⁸ Their business model relied on controlling territory with violence.

Part of the novelty of the Zetas was their small cell organizational structure that was not based on familial ties or relationships like the Sinaloa cartel. Instead, the Zetas used their military discipline and paramilitary training to exercise violence and expand their turf. These cells were independent and controlled their respective areas united by a paramilitary disposition.¹¹⁹ The Zetas used upgraded weapons and military resources. They had caches and safehouses with grenades, antitank weapons, and other high-caliber weapons.¹²⁰ Their expansion incorporated the operational art element of basing. Each Zeta cell served as a base that could be linked together to extend the group's operational reach, another element of operational art. The Zetas assumed the mantle of the Gulf cartel, and at the height of their power, controlled Mexico's eastern

¹¹⁷ Farah, "Central America's Northern Triangle," 98.

¹¹⁸ Beittel, "Mexico: Organized Crime," 207.

¹¹⁹ Correa-Cabrera, *Los Zetas Inc.*, 53.

¹²⁰ George Grayson and Samuel Logan, *The Executioner's Men* (New Brunswick, NJ: Transaction, 2012), 61.

seaboard.¹²¹ They had cells in twenty-one Mexican states, presence in other Central American countries, as well as operations in the United States.¹²²

Another aspect to the Zetas' ability to control territory was their use of fear and terror to achieve their end state as opposed to operations founded in corruption. The Zetas used relatively more extreme tactics including torture, beheadings, and mutilation.¹²³ Inflicting fear and terror through spectacular violence served as a line of effort within Los Zetas' operational approach. Further, the Zetas grew within the psychological realm, not just physical territory. For example, they are known for filming executions of victims and then broadcasting the footage.¹²⁴ Prioritizing extreme violence differed from the Sinaloa cartel, which preferred corruption. Some authors note the lack of an entrenched corruption network with Mexican authorities influenced the Zetas' decline.¹²⁵

Today, the Zetas are less powerful than during their peak in 2012. Many analysts debate their influence and scope of control after being heavily targeted by government efforts that dismantled the group's cohesion particularly after successive blows to the Zetas' founders. *Cártel del Noreste* and the Old School Zetas are two rival factions that have rebranded themselves from the original Zetas and operate as spin-off organizations.¹²⁶ Some argue the Zetas are still conducting criminal operations, just under different names and within different industries beyond drug trafficking.¹²⁷ The *2019 National Drug Threat Assessment* recognizes the Zetas as one of the six Mexican TCOs that impact the United States, smuggling illicit drugs out of their power

¹²¹ Hernández, "Terrorism, Drug Trafficking," 47.

¹²² Correa-Cabrera, *Los Zetas Inc.*, 41.

¹²³ Lisa Campbell, "Los Zetas: operational assessment," *Small Wars & Insurgencies* 21, no. 1 (March 2010): 66, accessed 18 September 2020, <https://doi.org/10.1080/09592310903561429>.

¹²⁴ Hernández, "Terrorism, Drug Trafficking," 50.

¹²⁵ Beith and Hootsen, "El Chapo Is Going Down," 3.

¹²⁶ Beittel, *Mexico: Organized Crime*, 23.

¹²⁷ Correa-Cabrera, *Los Zetas Inc.*, 240.

base in Nuevo Laredo, Mexico.¹²⁸ Despite the relative unknown whereabouts or activities of the once dominating group, the Zetas' legacy in Mexico's drug trafficking business is how their solution frame transformed the operational environment using unconcealed violence and overt military tactics while still achieving their financial goals.¹²⁹

Reframing

The reframing activity in ADM helps commanders adapt their operations to changing conditions in the environment. As a generalized group, Mexican drug cartels have monitored and assessed the environment to ensure their progress towards achieving end state conditions of maximizing profits. Their decades of relevancy only reconfirm this adaptability that is intrinsic to reexamining the environment in order to make successful decisions. One of Mexico's most powerful cartels today seemingly pieced together the positive attributes of other cartels' operations and made their own. CJNG emerged as a hybrid cartel that understood the environment, projected a future state, built their organization and operated accordingly. A secondary reframing example associated with CJNG's emergence and operations occurred after Sinaloa cartel's Guzmán was arrested in 2016. CJNG recognized the opportunity and reframed their operational approach after the major event occurred with their main rival.

CJNG emerged as its own organization in 2012 led by Nemesio Oseguera Cervantes, or "El Mencho," but the cartel has roots dating back to the 1970s. Their origins stem from the illicit drug cultivation by the Valencia family in Michoacán. The family used an avocado business to hide their marijuana and opium poppy cultivation and established the Milenio cartel.¹³⁰ Problems posed by government authorities and rival organizations caused the Milenio cartel to move to Jalisco and align with the Sinaloa cartel in the late 1990s. The protection of the Sinaloa cartel facilitated the group's expansion into cocaine trafficking and methamphetamines.¹³¹ However,

¹²⁸ Drug Enforcement Administration, *2019 National Drug Threat Assessment*, 101.

¹²⁹ Correa-Cabrera, *Los Zetas Inc.*, 89.

¹³⁰ La Rosa and Shirk, *The New Generation*, 2.

¹³¹ *Ibid.*, 4.

when BLO and the Juárez cartel split from Sinaloa in 2008 and with the death of Milenio's conduit to Sinaloa in 2010, a Milenio-Sinaloa future seemed uncertain. Two Milenio factions erupted and each sought support from larger cartels; one of these factions again aligned with the Sinaloa cartel. By 2013, CJNG ascended out of the shadows of being a Zetas-like enforcer organization for the Sinaloa cartel.¹³² It surfaced as a blend of existing cartels' successes operating for its own profitable end state.

Within the changing environment, CJNG materialized as a hybrid of the DTOs. "The TTPs inherited from precursor [organized crime groups] gave the CJNG a running start as it entered the Mexican drug trafficking system after numerous groups were already fully established," writes security studies scholar Nathan P. Jones.¹³³ CJNG was first known for being Sinaloa cartel's "Zetas Killers" where they used extreme violence and paramilitary operations. Sinaloa cartel sent CJNG to Veracruz to fight the Zetas. One of the first blatant attacks by CJNG members was a massacre of thirty-five people in 2011.¹³⁴ CJNG shows clear ties to the Zetas' overt violence. As an offshoot from the Sinaloa cartel, CJNG naturally learned about diversification as a polydrug, global organization to increase revenue opportunities and operational reach. CJNG has two Pacific Ocean ports near Jalisco favorable for its operations. CJNG ships methamphetamine to Europe and Asia and imports chemical precursors from China.¹³⁵ Important to CJNG's rise is the lucrative methamphetamine market, which is its primary specialty and coincides with their geographical advantage.¹³⁶ Control of the strategic ports serve as decisive points for CJNG's continued growth and expansion.

¹³² Beittel, *Mexico: Organized Crime*, 27.

¹³³ Nathan P. Jones, "The Strategic Implications of the *Cártel de Jalisco Nueva Generación*," *Journal of Strategic Security* 11, no. 1 (Spring 2018): 22, accessed 18 September 2020, <https://scholarcommons.usf.edu/jss/vol11/iss1/3/>.

¹³⁴ Michael Lohmuller, "Jalisco Cartel New Generation (CJNG)," InSight Crime, last modified July 8, 2020, accessed 18 September 2020, <https://www.insightcrime.org/%20mexico-organized-crime-news/jalisco-cartel-new-generation/>.

¹³⁵ Jones, "The Strategic Implications," 27.

¹³⁶ Josh Eells, "The Next-Generation Narco," *Rolling Stone*, July 2017, 2, ProQuest Ebrary.

Growth by incorporating "orphan" cells is another feature of CJNG's hybrid nature that is notable to its business model. CJNG grew its organizational structure by consolidating various fragmented criminal groups much like CJNG was originally adopted by the Sinaloa cartel.¹³⁷ CJNG capitalized on the fractured operational environment created by government intervention. Not only did this create conditions for the group to become its own DTO but then be able to integrate others. Since CJNG became better established, the cartel committed to advantageous alliances as a way to build influence. The line of effort was to develop ties to former Sinaloa partners to grow CJNG against the Sinaloa cartel, a main rival. The group leveraged alliances and played various organized crime groups against one another while staying flexible with its inclusion to build supremacy.¹³⁸ CJNG's flexible relations and current competition with rival cartels characteristically encompass violence, extortion, and collusion. However, the shift in focus towards rival cartels as the bane of CJNG's problem set today only comes after their fight against government authorities.

Government actions suppressing the illegal drug trade continued to pose problems for the drug cartels during Nieto's administration. Conflict ensued between the up-and-coming CJNG and the Mexican government with tensions escalating in 2015. In March 2015, alleged CJNG associates ambushed Mexican federal police in the deadliest shooting of the gendarmerie, which killed five officers.¹³⁹ A couple weeks later, CJNG tried to assassinate Jalisco's commissioner of public security spraying his vehicle with more than 200 bullets and two grenades.¹⁴⁰ In early April 2015, CJNG ambushed a police convoy killing ten, the highest amount in a single attack on Mexican police since 2010. In a report of the incident, "the ambush started with a burning vehicle

¹³⁷ Jones, "The Strategic Implications," 24.

¹³⁸ La Rosa and Shirk, *The New Generation*, 19.

¹³⁹ Robert J. Bunker, "Mexican Cartel Tactical Note #24: Gendarmerie Ambushed in Ocotlan, Jalisco State by Narco Commando—5 Killed, 8 Wounded," *Small Wars Journal*, May 20, 2015, accessed 18 September 2020, <https://smallwarsjournal.com/jrnl/art/mexican-cartel-tactical-note-24>.

¹⁴⁰ Eells, "The Next-Generation Narco," 7.

obstructing the path of the convoy. Once the convoy stopped, the cartel attacked with heavy gunfire. It was characterized as a well-planned and executed military-style assault at a chokepoint to establish a kill zone."¹⁴¹ On 1 May 2015, Mexican military forces intervened in Jalisco to target CJNG and capture their leader, El Mencho, in Operation Jalisco.¹⁴² On the same day, CJNG shot down a Mexican military helicopter with a rocket-propelled grenade that killed six soldiers as part of a coordinated show of force against the federal forces; the attack was the first time that army aircraft had been hit by an organized crime group in Mexico.¹⁴³ However, the government's concerted efforts against CJNG were short lived. Guzmán escaped prison a few weeks later, and Mexican authorities shifted their efforts and resources away from targeting CJNG operations.¹⁴⁴ CJNG saw this timeframe as a phase and transition in its own development and capitalized on the changing strategic environment.

The deliberate reframing moment for CJNG coincided with Guzmán's escape in 2015 and rearrest in January 2016. CJNG reevaluated its strategy and focused efforts on other splintered cartels rather than government authorities. The group's violence towards the police changed to violence towards DTO competitors.¹⁴⁵ Supportive of ADM, the arrest and uncertainty for the Sinaloa cartel was an opportunity in the environment for CJNG to adjust their solution frame to the evolving conditions.¹⁴⁶ With CJNG's end state profit objective largely apparent, the group saw a more expansive and dominating future. The Sinaloa cartel fragmented into three competing groups and jockeyed for overall cartel leadership, which CJNG has been able to exploit.¹⁴⁷

¹⁴¹ Sullivan and Bunker, "Mexican Cartel Tactical Note #25."

¹⁴² Lohmuller, "'Operation Jalisco' in Mexico."

¹⁴³ Carla Selman and Diego Moya-Ocampos, "Risks to aviation and property increase in Mexico's Jalisco state, violence likely to spread to Colima and Nayarit," *Jane's Intelligence Weekly*, May 5, 2015, accessed 21 October 2020, <https://customer-janes-com.lumen.cgscarl.com/MilitarySecurityAssessments/Display/jiwb33621-jiwb-2015>.

¹⁴⁴ La Rosa and Shirk, *The New Generation*, 15.

¹⁴⁵ Eells, "The Next-Generation Narco," 8.

¹⁴⁶ US Army, ATP 5-0.1, 6-2, para. 6-12.

¹⁴⁷ La Rosa and Shirk, *The New Generation*, 15.

Symbolic of the rift between CJNG and the Sinaloa cartel occurred in August 2016 when CJNG members kidnapped Guzmán's sons at a restaurant in Puerto Vallarta. Mexico's drug trade had two main actors, and they were in conflict with one another.¹⁴⁸

Today, CJNG is considered one of the most dominant and well-armed Mexican cartels. The group's fast growth has given it a presence in twenty-seven Mexican states by 2020.¹⁴⁹ Its leader is evading capture and is a top target for both Mexican and US officials, yet the group's overall leadership structure remains cohesive. An internal splinter group, Nueva Plaza Cartel, broke off from CJNG in 2017, but has not signaled any challenge to CJNG's progress.¹⁵⁰ The cartel has exploited the weakening Sinaloa cartel by extending operational reach in Mexico and abroad and vying for decisive trafficking points previously controlled by rivals. CJNG's success in becoming a well-established DTO in the Mexican landscape has a clear reframing moment in the trajectory of the organization's operations. The group started as a hybrid cartel competing against rival DTOs and targeting government authorities to grow in power but altered its strategy as it assessed the environment and recognized new opportunities. CJNG's shift in main effort to target the Sinaloa cartel after Guzmán's arrest contributed to the cartel's development.

Significance and Implications

Through the course of the study, ADM has served as a lens to examine Mexican drug cartel operations and to evaluate the practice of design. Though the cartels did not purposely operate using the ADM framework, the connections to Army design thinking and analyzing its application to solve their problems demonstrates cues for the military practitioner regarding historical practice of operational art.

¹⁴⁸ Patricia Escamilla-Hamm, John P. Sullivan, Nathan P. Jones, and Robert J. Bunker, "Mexican Cartel Strategic Note #32: Former Governor Assassinated in Puerto Vallarta, Jalisco," *Small Wars Journal* (December 23, 2020), accessed 28 December 2020, <https://smallwarsjournal.com/jrnl/art/mexican-cartel-strategic-note-no-32-former-governor-assassinated-puerto-vallarta-jalisco>.

¹⁴⁹ Beittel, *Mexico: Organized Crime*, 28.

¹⁵⁰ "Jalisco Cartel New Generation (CJNG)," InSight Crime.

The DTOs collectively curtailed ongoing problems in the operational environment and thrived. Focus on the Mexican political environment over time as shaping the general problem set was by no means comprehensive. Yet, in using just one aspect, it magnified why the Mexican cartels have excelled. The cartels endured because of their coherent strategic aim—to make profit. Having an end state objective to drive operations, anticipate actions, and deal with future problems proved to be a distinguishing factor. Any change in the environment always had a consistent desired end state to reframe immediately. Burn the cartels' crops, then the cartels would regrow. Militarize counterdrug operations, then the cartels would build-up their weapons capabilities. Kill or capture cartel leaders, then the next man would continue the business. The cartels continually adapted and revised their operations against the government due to a common purpose in mind.

This also cascaded to other problems in the environment the cartels faced, primarily among one another as market competitors. For example, in vying for control of territory or routes, using alliances for advantage, or escalating violence, the prevalence for design thinking was still bounded by a clear end state. Whether competing against the government, rival cartels, or other obstacles in the operational environment, cartel operations were flexible. They could adapt and mold to constantly changing conditions since their business models always hinged on making revenue. The overarching “ends” allowed for an expansive spectrum of “ways” to conduct operations. Additionally, their organizational structures encouraged the same. DTOs had flexible and resilient organizations that allowed them to remain adaptable to constantly changing conditions.

With a strategic goal to enable the cartels' actions, exploring cartel operations from a planner's standpoint showed other design tendencies and operational art elements used in their business models. The drug cartels sought to control decisive points. They worked to own and protect key trafficking routes and border crossings as part of the distribution network. Once operations expanded and diversified, decisive points included ports and other criminal functions enabling operations such as a legitimate business to cover their illicit activity. Drug cartels

incorporated a semblance of lines of operations and lines of effort. For the Sinaloa cartel, the main effort remained traditional drug trafficking. Drug trafficking lines of operation looked like various supply chain paths from source to user. Shaping operations and lines of effort to establish favorable conditions for the decisive operation included coercion, violence, and other criminal activities. The real significance stems from how deliberate drug cartels operate, and the inability for the government to suppress their illicit activity.

While examining cartel operations, the ADM implications are most resounding from a Mexican government perspective trying to devise operational approaches to counter the drug cartels. The reversal of intended study was valuable. In the government's approach to confront the drug cartels, the observer can see the government's policies showed a lack of understanding. For decades in the twentieth century the state had a regulatory role in the drug industry, but with gradual political liberalization the state lost control. Both government actors and DTOs were caught in a transition. The drug cartels resorted to violence without institutional protection as they tried to reestablish their power in the illicit market.¹⁵¹ Mexico's government saw the change in violence as the problem instead of system instability. Calderón's militaristic panacea was a notable example of misunderstanding and poor identification of amounting trends facing government authorities. Some argue that by "relying heavily on the use of military force, Calderón intensified the unbalanced strategies that his predecessors had already tried."¹⁵² Institutions, infrastructure, and policy solutions were required to progress Mexico's security structure.

A further example of improperly understanding the systems and network interconnectedness of the drug cartel operations relates to government actions against the kingpins. Government attempts and successes at pursuing cartel leadership triggered more uncertainty in the environment. Good intentions are not enough in design thinking. The

¹⁵¹ Herrera, "Cultivating Violence," 133.

¹⁵² Schedler, "The Criminal Subversion," 5.

enforcement approach effectively created more cartel factions and more rival violence inherent to organizational power struggle. The kingpin strategy showed how fast actions can spiral when dealing with complex adaptive systems. Again, the authorities wanted to address violence, but in turn unintentionally generated more system flux without dismantling the foundations of the drug network substantially beyond replaceable figureheads. Understanding the shadow financial structure within the interconnected web exudes complexity. Focusing on a law enforcement and military response can be counter-productive to the entrenched economic and social aspects in the drug trade. Chasing and catching the kingpin might have a favorable narrative for the government while have counterintuitive impact within the system. The networked, horizontal structure of some cartels could withstand the government's attacks on the hierarchical or vertical structure of the DTOs.

On the other hand, perhaps the Mexican government does understand the operational environment. Understanding the environment and figuring out the right problem in design may not be enough either. Assessment, in this case of the government's strategy to counter the drug cartels, exposed another significant aspect for the military planner to embrace.¹⁵³ Monitoring the situation and evaluating progress to recommend adjustments for improvement is difficult in a complex environment. The drug cartels had a clear strategic objective to assess and reframe—to make profit. However, the focus for Mexico's various strategies was less clear and understanding their indicators of effectiveness suffered. One example related to the violence problem was how decreased homicide rates may not be an indication of law enforcement success, rather the DTO could have negotiated a truce among themselves or solidified control of a territory to have no competitors in the area or made a political arrangement.¹⁵⁴ A delineation of a threshold of violence used by armed groups is a key dynamic in the environment but hard to measure. If homicide rates serve as guides for government activity but were ultimately masked by a multitude

¹⁵³ According to JP 3-0, assessment is the determination of the progress toward accomplishing a task, creating a condition, or achieving an objective.

¹⁵⁴ Farah, "Central America's Northern Triangle," 91.

of other factors in the environment, then minimal progress towards an objective of reducing homicides will result.

Conclusion

Activities and characteristics of ADM are present in Mexican drug cartel operations. There was a two-level resemblance of Army design concepts threaded in the development of Mexican drug cartels, and individually among the examined cartels. The historical evaluation, using ADM as a tool, alludes to DTOs ascribing to a seemingly purposeful arrangement of actions and flexibility in operations towards an end state objective. This indicates a possible level of proficiency in anticipating future environments and executing strategic planning.

The Sinaloa cartel presented a frame for understanding Mexican drug cartels while highlighting elements of operational art in its growth and expansion. Throughout aggregate cartel operations, the Mexican government consistently posed a problem frame for the drug cartels to counter and overcome. Two solution approaches the cartels used to thwart government interference of their operations were the diversification of criminal activities and the use of violence. The rise of the Zetas demonstrated an operational approach founded in violence to accomplish business aims. Finally, CJNG exemplified a reframe in the trajectory of Mexico's drug cartels. The CJNG showed emergence in the environment of a hybrid cartel that combined successful solutions among existing cartels to flourish as its own organization. The group also had a deliberate reframing moment internal to their operations that supported ADM.

Viewing Mexican drug cartel operations through the lens of ADM revealed how disassociated organizations to military design thinking may employ analogous conceptual planning and problem solving towards accomplishing a strategic objective. It showed how the drug cartels exhibit design aspects in the understanding, preparation, and conduct of actions to achieve success against vulnerable actors while reaching their end state. In applying ADM to operations conducted by the cartels, military practitioners and other observers may empathize with the flexible competency required for organizational learning and adaptability to changing

situations in complex environments. The cartels have a coherent strategy with a clearly defined aim, achievable end state, and are adaptable based on the operational environment while nesting ways and means.

To suggest the drug cartels truly have the foresight and anticipation of the future operational environment and deeper understanding of problems and their causes they must address might be a stretch and beyond the scope of this research. The abundance of secondary sources attributes a higher level of future vision and planning that may not exist without incorporating in-depth analysis of present operations using primary source material. However, analysis clearly shows that Mexico's DTOs conduct operations that resemble the traits and characteristics of ADM, making this study useful for examining similar complex problems.

Bibliography

- Astorga, Luis, and David Shirk. *Drug Trafficking Organizations and Counter-Drug Strategies in the U.S.-Mexican Context*. San Diego: Center for U.S.-Mexican Studies, University of California at San Diego, 2010.
- Beith, Malcolm. "A broken Mexico: allegations of collusion between the Sinaloa cartel and Mexican political parties." *Small Wars & Insurgencies* 22, no. 5 (November 2011): 787–806. Accessed 18 September 2020. <https://doi.org/10.1080/09592318>.
- Beith, Malcolm and Jan-Albert Hootsen. "El Chapo Is Going Down. How Many Drug Lords, Assassins, Politicians and Policemen Will He Take with Him?" *Newsweek*. October 27, 2017. ProQuest Ebrary.
- Beittel, June S. "Mexico: Organized Crime and Drug Trafficking Organizations." *Current Politics and Economics of the United States, Canada, and Mexico* 21, no. 2 (2019): 181–223. ProQuest Ebrary.
- . *Mexico: Organized Crime and Drug Trafficking Organizations*. R41576. Washington, DC: Congressional Research Service, July 28, 2020. Accessed 13 September 2020. <https://fas.org/sgp/crs/row/R41576.pdf>.
- Berenson, Tessa. "Timeline of El Chapo's Major Escapes and Captures." *Time*, January 8, 2016. Accessed 17 September 2020. <https://time.com/4173454/el-chapo-capture-escape-timeline/>.
- Bunker, Robert J. "Mexican Cartel Tactical Note #24: Gendarmerie Ambushed in Ocotlan, Jalisco State by Narco Commando—5 Killed, 8 Wounded." *Small Wars Journal*. May 20, 2015. Accessed 18 September 2020. <https://smallwarsjournal.com/jrnl/art/mexican-cartel-tactical-note-24>.
- Bunker, Robert J., and John P. Sullivan. "Cartel evolution revisited: Third phase cartel potentials and alternative futures in Mexico." *Small Wars & Insurgencies* 21, no. 1 (March 2010): 30–54. Accessed 18 September 2020. <https://doi.org/10.1080/09592310903561379>.
- Calderon, Laura, Kimberly Heinle, Octavio Ferreira, and David Shirk. *Organized Crime and Violence in Mexico: Analysis Through 2018*. San Diego: Justice in Mexico University of San Diego, April 2019.
- Campbell, Lisa. "Los Zetas: operational assessment." *Small Wars & Insurgencies* 21, no. 1 (March 2010): 55–80. Accessed 18 September 2020. <https://doi.org/10.1080/09592310903561429>.
- Correa-Cabrera, Guadalupe. *Los Zetas Inc.: Criminal Corporations, Energy, and Civil War in Mexico*. Austin: University of Texas Press, 2017. Kindle.
- Dell, Melissa. "Trafficking Networks and the Mexican Drug War." *The American Economic Review* 105, no. 6 (June 2015): 1738–1779. Accessed 12 August 2020. <https://www.jstor.com/stable/43495438>.
- Drug Enforcement Administration. *2019 National Drug Threat Assessment*. Washington, DC: Department of Justice, December 2019.

- Duran-Martinez, Angelica. "To Kill and Tell? State Power, Criminal Competition, and Drug Violence." *Journal of Conflict Resolution* 59, no. 8 (December 2015): 1377–1402. Accessed 23 August 2020. <http://journals.sagepub.com/doi/10.1177/0022002715587047>.
- Eells, Josh. "The Next-Generation Narco." *Rolling Stone*. July 2017. ProQuest Ebrary.
- Eisenhammer, Stephen. "Bare Life in Ciudad Juarez: Violence in a Space of Exclusion." *Latin America Perspectives* 41, no. 2 (March 2014): 99–109. Accessed 18 September 2020. <https://www.jstor.org/stable/24575500>.
- Epstein, David. "Devils, Deals and the DEA." ProPublica. December 17, 2015. Accessed 17 September 2020. <https://www.propublica.org/article/devils-deals-and-the-dea>.
- Escamilla-Hamm, Patricia, John P. Sullivan, Nathan P. Jones, and Robert J. Bunker. "Mexican Cartel Strategic Note #32: Former Governor Assassinated in Puerto Vallarta, Jalisco." *Small Wars Journal* (December 23, 2020). Accessed 28 December 2020. <https://smallwarsjournal.com/jrnl/art/mexican-cartel-strategic-note-no-32-former-governor-assassinated-puerto-vallarta-jalisco>.
- Farah, Douglas. "Central American Gangs: Changing Nature and New Partners." *Journal of International Affairs* 66, no. 1 (Fall/Winter 2012): 53–67. ProQuest Ebrary.
- . "Central America's Northern Triangle: A Time for Turmoil and Transitions." *PRISM* 4, no. 3 (2013): 88–109. Accessed 18 September 2020. <https://www.jstor.org/stable/10.2307/26469830>.
- Federal Bureau of Investigation. "Kevin L. Perkins and Anthony P. Placido Assistant Director, Criminal Investigative Division and Assistant Administrator for Intelligence Drug Enforcement Agency, Federal Bureau of Investigation: U.S. Senate Caucus on International Narcotics Control." May 05, 2010. Accessed 01 January 2021. <https://archives.fbi.gov/archives/news/testimony/drug-trafficking-violence-in-mexico-implications-for-the-united-states>.
- González, Francisco. "Mexico's Drug Wars Get Brutal." *Current History* 108, no. 715 (February 2009): 72–76. Accessed 31 December 2020. <https://online.ucpress.edu/currenthistory/article/108/715/72/108975/Mexicos-Drug-Wars-Get-Brutal>.
- Grayson, George, and Samuel Logan, *The Executioner's Men*. New Brunswick, NJ: Transaction Publishers, 2012.
- Hernández, Joel. "Terrorism, Drug Trafficking, and the Globalization of Supply." *Perspectives on Terrorism* 7, no. 4 (August 2013): 41–61. Accessed 12 August 2020. <https://www.jstor.com/stable/26296983>.
- Herrera, Joel S. "Cultivating Violence: Trade Liberalization, Illicit Labor, and the Mexican Drug Trade." *Latin American Politics and Society* 61, no. 3 (August 2019): 129–153. Accessed 23 November 2020. https://www.cambridge.org/core/product/identifier/S1531426X19000086/type/journal_article.

- InSight Crime. "Jalisco Cartel New Generation (CJNG)." Last modified July 8, 2020. Accessed 18 September 2020. <https://www.insightcrime.org/%20mexico-organized-crime-news/jalisco-cartel-new-generation/>.
- . "Sinaloa Cartel." Last modified March 2019. Accessed 18 September 2020. <https://www.insightcrime.org/mexico-organized-crime-news/sinaloa-cartel-profile/>.
- . "Zetas." Last modified April 4, 2012. Accessed 18 September 2020. <https://www.insightcrime.org/mexico-organized-crime-news/zetas-profile/>.
- International Crisis Group. "Virus-proof Violence: Crime and COVID-19 in Mexico and the Northern Triangle." November 13, 2020. Accessed 01 January 2021. <https://www.crisisgroup.org/latin-america-caribbean/83-virus-proof-violence-crime-and-covid-19-mexico-and-northern-triangle>.
- Jones, Nathan P. "The Strategic Implications of the *Cártel de Jalisco Nueva Generación*." *Journal of Strategic Security* 11, no. 1 (Spring 2018): 19–42. Accessed 18 September 2020. <https://scholarcommons.usf.edu/jss/vol11/iss1/3/>.
- Justice in Mexico. "Former Mexican Secretary of Public Security arrested in Texas." December 19, 2019. Accessed 18 September 2020. <https://justiceinmexico.org/former-mexican-secretary-of-public-security-arrested-in-texas/>.
- Kan, Paul R. "Mexican Cartels as Vicious Firms." *Small Wars Journal* (March 15, 2015). Accessed 25 November 2020. <https://smallwarsjournal.com/jrnl/art/mexican-cartels-as-vicious-firms>.
- Keefe, Patrick Radden. "The Snow Kings of Mexico." *New York Times Magazine*. June 17, 2012.
- La Rosa, Lucy and David Shirk. *The New Generation: Mexico's Emerging Organized Crime Threat*. San Diego: Justice in Mexico, 2018.
- Liddell, Devin. "3 Business Lessons from The Sinaloa Drug Cartel." *Fast Company*, August 1, 2014. Accessed 25 November 2020. <https://www.fastcompany.com/3033847/3-business-lessons-from-the-sinaloa-drug-cartel>.
- Logan, Samuel. "A Profile of Los Zetas: Mexico's Second Most Powerful Drug Cartel," *Combating Terrorism Center Sentinel* 5, no. 2 (February 2012): 5–7.
- Lohmuller, Michael. "'Operation Jalisco' in Mexico: New General, Same Police." InSight Crime. May 6, 2015. Accessed 18 September 2020. <https://www.insightcrime.org/news/brief/mexico-selects-army-general-to-lead-operation-jalisco/>.
- Lyman, Michael. *Drugs in Society: Causes, Concepts, and Control*, 8th ed. New York: Taylor & Francis, 2017.
- Macias, Amanda. "There's something peculiar about the 2 prisons Mexican drug kingpin 'El Chapo' escaped from." *Business Insider*, July 25, 2015. Accessed 01 January 2021. <https://www.businessinsider.com/the-2-prisons-mexican-drug-kingpin-el-chapo-escaped-from-were-nearly-identical-2015-7>.

- Mercille, Julien. "Violent Narco-Cartels or US Hegemony? The political economy of the 'war on drugs' in Mexico." *Third World Quarterly* 32, no. 9 (2011): 1637–1653. Accessed 12 August 2020. <https://www.jstor.com/stable/41341189>.
- O'Neil, Shannon. "The Real War in Mexico: How Democracy Can Defeat the Drug Cartels." *Foreign Affairs* 88, no. 4 (July/August 2009): 63–77. Accessed 31 December 2020. <https://www.jstor.org/stable/20699622>.
- Orsi, Peter. "A Snapshot of Mexico's Cartel Landscape Amid Rising Violence." *Associated Press News*. March 18, 2020. Accessed 22 December 2020. <https://apnews.com/article/1aea8224e3f6f949026f748663a62bcd>.
- Pacheco, Fernando. "Narcoterrorism: How has Narcoterrorism Settled in Mexico?" *Studies in Conflict & Terrorism* 32, no. 12 (December 2009): 1021–1048. Accessed 18 September 2020. <https://doi.org/10.1080/10576100903319797>.
- Palmer, Emily, and Alan Feuer. "El Chapo Trial: The 11 Biggest Revelations From The Case." *New York Times*, February 3, 2019. ProQuest Ebrary.
- Paul, Christopher, Colin Clarke, and Chad Serena, "Contemporary Violence and the Broader Context in Mexico." In *Mexico Is Not Colombia: Alternative Historical Analogies for Responding to the Challenge of Violent Drug-Trafficking Organizations*, 11-52. Santa Monica, CA: RAND Corporation, 2015. Accessed 12 August 2020. <https://www.jstor.com/stable/10.7249.j.ctt6wq9m8.10>.
- Plagianos, Irene, and Kate Linthicum. "Witness Links Ex-president to Cartel." *Los Angeles Times*, January 16, 2019. ProQuest Ebrary.
- Schedler, Andreas. "The Criminal Subversion of Mexican Democracy." *Journal of Democracy* 25, no. 1 (January 2014): 5–19. Accessed 18 September 2020. http://muse.jhu.edu/content/crossref/journals/journal_of_democracy/v025/25.1.schedler.html.
- Seelke, Clare Ribando. *Mexico: Background and US Relations*. R42917. Washington, DC: Congressional Research Service, May 12, 2020. Accessed 15 September 2020. <https://fas.org/sgp/crs/row/R42917.pdf>.
- Selman, Carla and Diego Moya-Ocampos. "Risks to aviation and property increase in Mexico's Jalisco state, violence likely to spread to Colima and Nayarit." *Jane's Intelligence Weekly*. May 5, 2015. Accessed 21 October 2020. <https://customer-janes-com.lumen.cgscarl.com/MilitarySecurityAssessments/Display/jiwb33621-jiwb-2015>.
- Stewart, Scott. "Understanding Pena Nieto's Approach to the Cartels," *Stratfor Worldview*. May 16, 2013. Accessed 22 December 2020. <https://worldview.stratfor.com/article/understanding-pena-nietos-approach-cartels>.
- Stratfor Worldview*. "Mexico's Drug Wars: Bloodiest Year to Date." December 20, 2010. Accessed 18 September 2020. <https://worldview.stratfor.com/article/mexican-drug-wars-bloodiest-year-date>.

Sullivan, John P., and Robert J. Bunker. "Mexican Cartel Tactical Note #25: Ambush Kills 15; Injures 5 Police in Jalisco." *Small Wars Journal*. July 16, 2015. Accessed 28 December 2020. <https://smallwarsjournal.com/jrnl/art/mexican-cartel-tactical-note-25-ambush-kills-15-injures-5-police-in-jalisco>.

The White House, Office of the Press Secretary. "Fact Sheet: Overview of the Foreign Narcotics Kingpin Designation Act." April 15, 2009. Accessed 01 January 2021. <https://obamawhitehouse.archives.gov/the-press-office/fact-sheet-overview-foreign-narcotics-kingpin-designation-act>.

Turbiville Jr., Graham. "Firefights, raids, and assassins: tactical forms of cartel violence and their underpinnings." *Small Wars & Insurgencies* 21, no. 1 (March 2010): 123–144. Accessed 18 September 2020. <https://doi.org/10.1080/09592310903561577>.

US Department of the Army. Army Doctrine Publication 5–0, *The Operations Process*. Washington, DC: Government Publishing Office, 2019.

———. Army Techniques Publication 5-0.1, *Army Design Methodology*. Washington, DC: Government Publishing Office, 2015.

———. Army Techniques Publication 5-0.2-1, *Staff Reference Guide, Volume I Unclassified Resources*. Washington, DC: Government Publishing Office, 2020.

Vulliamy, Ed. *Amexica: War Along the Borderline*, 2nd ed. New York: Picador, 2011.

Wainwright, Tom. *Narconomics: How to Run a Drug Cartel*. New York: PublicAffairs, 2017.