2021

Entanglements in migration: climate, violence, and poverty in the Northern Triangle

Entanglements in Migration: Climate, Violence, and Poverty in the Northern Triangle

Angelina Downs

Pardee School of Global Studies
International Relations Honors Thesis
Professor Jeffrey Rubin
April 16, 2021

Abstract

The study of migration is characterized by a multidisciplinary approach. Violence, poverty, and climate change are often analyzed as separate drivers of migration, with some research analyzing these factors in pairs. There is, however, a gap in the literature discussing migration in a multi-variable way. Anna Tsing's model of entanglement offers a more nuanced approach. Focusing on places where drivers influence each other broadens the lens in which we view migration, and better reflects the actual reasons behind it. We can see this in analyzing migration in the Northern Triangle, where violence, poverty, and climate change interact.

Table of Contents

List of Abbreviations

FAO	Food and Agricultural Organization
COPECO	Comisión Permanente de Contingencias (Permanent Contingency Commission)
CVI	Climate Change Vulnerability Index
ENSO	El Niño-Southern Oscillation
FMLN	Frente Farabundo Martí para la Liberación Nacional (Furibund Martí National Liberation Front)
ICA	International Coffee Agreement
IOM	International Organization of Migration
IPCC	International Panel on Climate Change
MBR	Maya Biosphere Reserve
NOAA	National Oceanic and Atmospheric Association
TPS	Temporary Protected Status
WFP	World Food Program

1. Introduction

The study of migration is characterized by a multidisciplinary approach, frequently executed using the framework of a push-pull model. [1] This push-pull model posits that certain factors "push" people out of their place of origin at the same time as other factors "pull" them toward a different location.[2] For example, poor economic conditions in Central America push people out, while the economic prospects in the United States pull people in. These approaches frequently analyze drivers of migration singularly and only occasionally in pairs.[3] However, much of the literature ignores the ways that various drivers of migration intertwine to form complicated and nuanced pushes for migration.[4] Using Anna Tsing's illustration of the complex, interconnected world of matsutake mushrooms – explored in her examination of forest management practices, the economics of international markets, US race relations, and the biology of forests – I argue that the connections between individual drivers of migration should be analyzed with an emphasis on the ways in which they feed into each other and become entangled. Understanding these entanglements is significant in tackling the issues driving migration, as well as understanding how they evolve as newer drivers of migration, like climate change, emerge.

The International Organization of Migration (IOM) defines climate migration as:

> The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border.[5]

---

[1] Castles, Stephen. "International Migration at a Crossroads." *Citizenship Studies* 18, no. 2 (February 17, 2014): 190–207. https://doi.org/10.1080/13621025.2014.886439.
[2] Castles 2014
[3] Haas, Hein de. "The Internal Dynamics of Migration Processes: A Theoretical Inquiry." *Journal of Ethnic and Migration Studies* 36, no. 10 (December 1, 2010): 1587–1617. https://doi.org/10.1080/1369183X.2010.489361.
[4] Morales-Muñoz, Héctor, Srijna Jha, Michelle Bonatti, Henryk Alff, Sabine Kurtenbach, and Stefan Sieber. "Exploring Connections—Environmental Change, Food Security and Violence as Drivers of Migration—A Critical Review of Research." *Sustainability* 12, no. 14 (January 2020): 5702. https://doi.org/10.3390/su12145702.
[5] "Key Migration Terms." International Organization for Migration, January 17, 2020. https://www.iom.int/key-migration-terms#Climate-migration.

This definition implies migration driven by a primary driver, yet by following this reason we get to the center of entanglements. First, we will examine the literature covering the distinct, separate drivers of climate change, violence, and poverty in the Northern Triangle. We will also examine how these drivers are discussed in pairs. Then, we will discuss the methodology used in *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* by Anna Tsing, which discusses the concept of entanglement to explore the complicated nature of the movement, marketing, and biology of the matsutake mushroom, and how that can be extended to the ways drivers of migration entangle. Finally, we will explore the case study of the Maya Biosphere Reserve in northern Guatemala, where multiple factors of migration entangle.

1. Background

Climate and Migration in the Northern Triangle

The International Panel on Climate Change (IPCC) has cited climate change as potentially having the single greatest impact on migration as early as 1990.[6] In Central America, major weather events such as hurricanes and drought are only further exacerbated by climate change and are causing people to migrate today.[7] The Northern Triangle is particularly vulnerable because of its high reliability on agricultural production and poor economic position globally.[8] Hurricane Eta and Hurricane Iota, hurricanes that occurred back-to-back in the 2020 Atlantic hurricane season, are two examples. Both hurricanes came within the context of a particularly active hurricane season, which scientists link to an increase in global temperature.[9] Hurricane Eta, the third strongest hurricane ever recorded in the Atlantic hurricane season, ultimately killed 74 Hondurans, 53 Guatemalans, and one Salvadoran. Heavy flooding, landslides, and strong winds destroyed 457 homes and cut off 41 communities in Honduras, which was hit the hardest by Eta.[10] In Guatemala, landslides destroyed over 200 homes, with 96 people still missing as a result.[11] Two weeks later, Hurricane Iota, the second strongest hurricane ever recorded in the Atlantic hurricane season, made landfall. Iota hit several countries in Central America, but in the Northern Triangle specifically, Honduras was primarily affected. The hurricane exacerbated the damage just caused by Hurricane Eta, raising the death toll by 16

---

[6] Brown, Oli "IPCC — Intergovernmental Panel on Climate Change: Sixth Assessment Report." 2020. Accessed January 12, 2021. https://www.ipcc.ch/.
[7] Brown 2020
[8] Brown 2020
[9] Brown 2020
[10] Tisch, Chris. "At Least 13 Dead in Central America from Eta as Forecasters Watch Florida Impact." *The Tampa Bay Times*, November 5, 2020. https://www.tampabay.com/hurricane/2020/11/05/at-least-13-dead-in-central-america-from-eta-as-forecasters-watch-florida-impact/.
[11] Castañeda, José Miguel. "Giammattei: 'Eta Dejó Pérdidas Por Más De Q3 Mil Millones.'" *Soy502*, November 16, 2020. https://www.soy502.com/articulo/giammattei-eta-dejo-perdidas-mas-q3-mil-millones-63338 .

people in Honduras.[12] According to the Comisión Permanente de Contingencias (Permanent Contingency Commission, or COPECO), a Honduran government entity made to coordinate disaster relief efforts, approximately 366,123 people were affected by the hurricane.[13]

The consequences of such severe hurricanes, driven by a warming climate, reach beyond the immediate death toll. The consequences of Hurricane Mitch, the second-deadliest Atlantic hurricane on record, are still felt today. The 1998 hurricane most heavily impacted Honduras, killing approximately 7,000 people.[14] Landslides and flooding ensured the hurricane was felt long after it left, causing approximately 3.8 billion dollars in damage, or approximately 70 percent of Honduras' annual GPD.[15] Over 20 years later, Honduras is still recovering from Hurricane Mitch. Hurricane Mitch was also responsible for a massive increase in both internal and external displacement. In the aftermath, approximately 70 percent of the population was cut off from fresh water sources, and 70 percent of crops were destroyed.[16] 1.5 million people, or 20 percent of the population, were left homeless.[17] Many of these displaced people moved towards the United States, with a significant uptick in apprehensions of Hondurans on the Mexico-Guatemala border shortly after the hurricane.[18] In response, the United States extended Temporary Protected Status (TPS) to Hondurans, which is set to expire in October of 2021.[19]

---

[12] Trigueros, Ariel. "A La Fecha Se Registran 16 Hondureños Muertos Tras Paso De Iota." *La Prensa*, November 19, 2020. https://www.laprensa.hn/honduras/1423481-410/reporte-muertos-honduras-paso-iota-derrumbes-deslizamientos-inundaciones.

[13] Trigueros 2020

[14] "DAT: The International Disasters Database." EM. Accessed April 16, 2021. https://www.emdat.be/.

[15] The Inter-American Development Bank. "Central America After Hurricane Mitch The Challenge of Turning a Disaster into an Opportunity." Central America After Hurricane Mitch - Honduras, 2000. https://web.archive.org/web/20051219114814/http://www.iadb.org/regions/re2/consultative_group/backgrounder2.htm.

[16] The Inter-American Development Bank 2020

[17] The Inter-American Development Bank 2020

[18] "Hurricane Mitch - Migration News: Migration Dialogue." Hurricane Mitch - Migration News | Migration Dialogue, February 1, 1999. https://migration.ucdavis.edu/mn/more.php?id=1721_0_2_0.

[19] Obinna, Denise N. "Transiciones e Incertidumbres: Migration from El Salvador, Honduras and Guatemala." *Latino Studies* 17, no. 4 (12, 2019): 484-504. doi:http://dx.doi.org.ezproxy.bu.edu/10.1057/s41276-019-00209-8. https://ezproxy.bu.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-

The severity of Eta and Iota pushed the government of Honduras to ask the United States to further extend TPS.[20] The frequency and unusual strength of these hurricanes are no longer rare occurrences, and the subsequent devastation to homes and crop land, not to mention the loss of thousands of lives, is only predicted to get worse as the climate continues to warm.[21]

Global warming hasn't just increased the severity and frequency of hurricanes. Climate change-exacerbated drought is also becoming a pressing issue. Central America generally experiences long seasons of drought that are made worse by the El Niño-Southern Oscillation (ENSO) climate pattern. The ENSO is characterized by two phases: as winds shift and the sea warms, the tropics experience a period of dry, warm weather, called El Niño, that ends when La Niña, the second phase of the ENSO, brings a period of cool, wet weather.[22] The changes in the frequency and severity of the phases of the ENSO cycle are difficult to predict as the climate continues to warm. However, according to the National Oceanic and Atmospheric Association (NOAA), under more aggressive greenhouse gas emissions scenarios, the frequency of ENSO shifts as well as the severity of weather events caused by the ENSO will only get worse. Like hurricanes, the frequency and severity of drought in the Northern Triangle is made worse by climate change. According to a UN backed study published in 2017, there is a correlation between the number of migrants coming from the Northern Triangle and increased severity and frequency of droughts.[23] A large factor contributing to the Northern Triangle's vulnerability to

---

journals%2Ftransiciones-e-incertidumbres-migration-el%2Fdocview%2F2312045873%2Fse-2%3Faccountid%3D9676.

[20] United States Citizenship and Immigration Services. "Continuation of Documentation for Beneficiaries of Temporary Protected Status Designations for El Salvador, Haiti, Nicaragua, Sudan, Honduras, and Nepal." Federal Register, December 9, 2020. https://www.federalregister.gov/documents/2020/12/09/2020-27154/continuation-of-documentation-for-beneficiaries-of-temporary-protected-status-designations-for-el.

[21] Brown 2020

[22] The National Drought Mitigation Center. "ENSO and Drought Forecasting." National Drought Mitigation Center. Accessed April 16, 2021. https://drought.unl.edu/Education/DroughtIn-depth/ENSO.aspx.

[23] The World Food Programme (WFP), The Inter-American Development Bank (IADB), The International Fund for Agricultural Development (IFAD), The Organization of American States (OAS), and The International Organization

drought is the location of the Dry Corridor, a dry, forested area that spans the length of Central America and is especially vulnerable to drought. Approximately 62% of households in the Northern Triangle live in the Dry Corridor.

Starting in 2009 with more severe periods in 2014 and 2018, prolonged drought still continues to affect the region today and push migration. The severity and length of these droughts is directly connected to climate change.[24] The climate change-exacerbated El Niño cycle during this period is also a significant contributing factor to these events; the consequences of this now decade-long period of drought are extensive and critical. 50 to 90 percent of crops in the Northern Triangle were wiped out between 2006 and 2016, according to the Food and Agricultural Organization (FAO).[25] Between 2010 and 2015, the time period associated with the onset of the prolonged drought, migration from the region increased by 500 percent.[26] Without the infrastructure to aid farmers who had little else to support themselves, these back-to-back droughts have destroyed the livelihood of many families who rely on subsistence farming to live.

These droughts also began to bring climate to the front of migrants' reasoning for moving. After the 2014 and 2018 droughts, Honduran farmers migrating to the United States began to actively acknowledge climate change as the reason for their migration.[27] Whereas in previous years climate change was not necessarily the reason for migrating, the increased

---

for Migration (IOM). "FOOD SECURITY AND EMIGRATION Why People Flee and the Impact on Family Members Left behind in El Salvador, Guatemala and Honduras ." The United Nations Sustainable Development Goals, 2017. https://www.un.org/sustainabledevelopment/blog/2017/08/emigration-and-food-insecurity-in-central-american-dry-corridor-focus-of-new-un-backed-study/.

[24] The World Food Program (WFP) et al, 2017

[25] F.A.O. In: Diaz T, Burgeon D, editors. Dry Corridor in Central America: Food and Agriculture Organization of the United Nations; 2016.

[26] Balsari, S., Dresser, C. & Leaning, J. Climate Change, Migration, and Civil Strife. *Curr Envir Health Rpt* **7,** 404–414 (2020). https://doi.org/10.1007/s40572-020-00291-4

[27] Semple, Kirk. "Central American Farmers Head to the U.S., Fleeing Climate Change." The New York Times. The New York Times, April 13, 2019. https://www.nytimes.com/2019/04/13/world/americas/coffee-climate-change-migration.html.

severity and frequency of weather events like hurricanes and periods of drought, which are caused by climate change, are beginning to be noticed by those forced to migrate. Migration is only predicted to increase as climate change worsens. Although various organizations offer different projections of migration caused by climate change, their numbers tend to vary by millions of people. For example, the World Bank Group estimates between 1.4 and 2.1 million climate migrants will come from Central America and Mexico by 2050.[28]

According to one study conducted by Morales-Muñoz et al. concerning the amount of literature on the ways violent conflict, environmental change, and food security intertwine to drive migration globally, there is in general a severe lack of focus on environmental change in conjunction with multiple other drivers of migration. They found 58 publications discussing the environment alone or the environment in conjunction with one other driver of migration. In contrast, they only found five publications that discussed all three drivers together.[29] This only begins to shed light on the gap in the literature, as their study only covers these three variables. The literature that does explore climate change in conjunction with one other variable often does it in a fairly unidirectional way, with little room to explore the multiple connections between climate change and other drivers of migration.[30] In "Vulnerability and Adaptation to Climate Change of Rural Inhabitants in the Central Coastal Plain of El Salvador" by Martha Aguilar et al., researchers calculated the Climate Change Vulnerability Index (CVI) of people living in the

---

[28] Rigaud, Kumari K., Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, Jacob Schewe, Susana Adamo, Brent McCusker, Silke Heuser, and Amelia Midgley. "Groundswell: Preparing for Internal Climate Migration." *World Bank f*(2018).

[29] Morales-Muñoz et al. 2020

[30] Harvey, Celia A., Milagro Saborio-Rodríguez, M. Ruth Martinez-Rodríguez, Barbara Viguera, Adina Chain-Guadarrama, Raffaele Vignola, and Francisco Alpizar. "Climate Change Impacts and Adaptation among Smallholder Farmers in Central America." *Agriculture & Food Security* 7, no. 1 (August 14, 2018): 57. https://doi.org/10.1186/s40066-018-0209-x.

central coastal plain of El Salvador. They use socio-cultural factors, economic factors, and the threat level of current and predicted environmental degradation to determine how vulnerable a certain population is to climate change. In their research, though, there is little room left for complexity. The factors they lay out are examined with the assumption of a linear connection. Although they put forward subfactors under each of the three relevant categories, these subfactors are isolated from each other in their analysis. There is not any entanglement, and the complex ways that they feed into and take away from each other are left out of the discussion. Climate change vulnerability, in this example, is a result of variables that act in distinct, singular ways.[31]

The analysis of climate change as a singular driver of migration ignores the context in which climate change operates. It places emphasis on a causal event (a prolonged drought, for example) and the subsequent effect (the increased movement of peoples, for example). While this is important, it leaves gaps in the reasoning of people migrating after these events. What else was happening when this drought hit? How are individuals accidentally, or purposefully, contributing to climate change by simply trying to survive? What else exacerbates their drive to migrate, but also how do these factors contribute to their ability to migrate? In typical analysis, there is little attention paid to the multifaceted context of a particular situation. Looking at these factors in an entangled way, rather than a simple chain reaction between climate change and farmers' ability to cope, allows the intertwining of multiple factors and provides a better picture of why people are migrating.

---

[31] Nelson, Andrew and Kenneth M. Chomitz. "The Forest-Hydrology-Poverty Nexus in Central America: An Heuristic Analysis." *Environment, Development and Sustainability* 9, no. 4 (November 2007): 369–85. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10668-006-9027-6

Violence and Migration in the Northern Triangle

The study of migration in the Northern Triangle often sits in the context of violence. This violence stems from several sources: the police or military, paramilitary groups, current or past political conflict, or gangs and cartels.[32] All of these actors work – at times in conjunction with each other, like in the case of street gangs and cartels – to perpetuate violence in the region. Hiskey et al. establishes that violence is the predominant driver of migration from Honduras and El Salvador, and that it has a significant impact on the reasoning behind Guatemalan migrants' movement. Homicide, high levels of rape, assault, and other forms of violence make the Northern Triangle one of the most statistically violent regions in the world.[33] According the most recent available data from the World Bank (2018), El Salvador, Honduras, and Guatemala are in the top 20 most violent countries globally based on homicide rate alone. El Salvador, ranked first globally, had a homicide rate of 52 per 100,000 people; Honduras, ranked fifth globally, had a homicide rate of 39 per 100,000 people; and Guatemala, ranked 19th globally, had a homicide rate of 23 per 100,000 people.[34] Violence has remained high since then. According to Insight Crime, in 2019 El Salvador's homicide rate was 36 per 100,000 people, with a total of 2,390 homicides; Honduras' was 41.2 per 100,000 people, with a total of 3,996 deaths; and Guatemala's was 21.5 per 100,000 people, with a total of 3,578 murders.[35] The consequences of

[32] Hiskey, Jonathan T., Abby Córdova, Mary Fran Malone, and Diana M. Orcés. "Leaving the Devil You Know: Crime Victimization, US Deterrence Policy, and the Emigration Decision in Central America." Latin American Research Review 53, no. 3 (2018): 429–47. http://dx.doi.org.ezproxy.bu.edu/10.25222/larr.147.
[33] World Bank "Intentional Homicides (per 100,000 People)." Data, 2018. https://data.worldbank.org/indicator/VC.IHR.PSRC.P5?most_recent_value_desc=true&view=map.
[34] World Bank, 2018
[35] Asmann, Parker, and Eimhin O'Reilly. "InSight Crime's 2019 Homicide Round-Up." InSight Crime, February 2, 2021. https://insightcrime.org/news/analysis/insight-crime-2019-homicide-round-up/.

the global shutdown due to COVID have significantly decreased homicide rates in 2020, although they still remained some of the highest both regionally and globally.[36]

Homicide rates in the Northern Triangle collectively point toward a larger picture of violence, set within multiple variables. One of these variables is the sustained high levels of post-war violence. El Salvador and Guatemala both experienced prolonged periods of political violence during two civil wars that began in 1979 and 1960 respectively.[37] Guatemala's conflict was predominantly based on issues of land distribution, which was significantly skewed in favor of white, wealthy Guatemalans descendent from Spaniards. This conflict significantly strengthened the capacities of the Guatemalan government to commit violence because of the development of specialized military death squads and the empowerment of state security forces to commit extreme acts of violence through increased funding and little oversight.[38] This was possible in part because of the millions of dollars the United States funneled to Guatemala to fuel their anti-communist agenda and combat leftist groups.[39] Thousands were disappeared, several remote villages were massacred, and the Guatemalan government, through military and police, repeatedly violated the rights of seemingly any citizen who stood against them. At the same time, several of these leftist groups formed their own paramilitaries, fighting back against these massacres and human rights violations. After a decade of tenuous peace talks, the Guatemalan Civil War officially ended in 1996, although notably this did not mean an end to the high levels of violence that characterize a state in perpetual political conflict.[40]

---

[36] Asmann, Parker, and Katie Jones. "InSight Crime's 2020 Homicide Round-Up." InSight Crime, March 25, 2021. https://insightcrime.org/news/analysis/2020-homicide-round-up/.
[37] Yuichi Kubota. "Explaining State Violence in the Guatemalan Civil War: Rebel Threat and Counterinsurgency." *Latin American Politics and Society* 59, no. 3 (2017): 48-71.
[38] Amelia Hoover Green. "Armed Group Institutions and Combatant Socialization." *Journal of Peace Research* 54, no. 5 (2017): 687-700.
[39] Kubota 2017
[40] Kubtoa 2017

El Salvador's civil war was also bloody, albeit shorter than Guatemala's, and was also based on issues surrounding land reform. Several attempts at land redistribution were thwarted by the military, Salvadoran elite, and the United States, which actively supported any anti-leftist groups in the Northern Triangle. The Furibund Martí National Liberation Front (hereafter FMLN), a leftist group that sought land reform in order to create better economic equality, fought against the increasingly violent Salvadoran government. Like in Guatemala, death squads and other specially trained military groups, trained in part using American tactics and funded by American money, enacted mass disappearances, massacres, and committed a multitude of other human rights violations. As a result of the civil war, corruption of the police and military in El Salvador, like in Guatemala, became a much larger issue, being more empowered than ever before to commits acts of violence with impunity. This has continued to be a problem long after the end of the war, with peace accords being signed in 1992. Like the Guatemalan peace accords, the official end to the political conflict did not mean an end to the high levels of violence in the region.[41]

Although both civil wars ended in the 1990s, their affects are still felt today. Displacement as a consequence of these wars was massive. A fifth of El Salvador's population fled, and many people (both refugees and combatants) spilled over into neighboring Honduras to escape violence in Guatemala and El Salvador, sometimes inadvertently bringing violence with them.[42] Many view the peace talks that officially ended the conflicts as performative and ineffective.[43] There are several reasons for the ineffectiveness of these prolonged peace talks in

---

[41] Green 2017

[42] Susan D. Burgerman. "Building the Peace by Mandating Reform: United Nations-Mediated Human Rights Agreements in El Salvador and Guatemala." *Latin American Perspectives* 27, no. 3 (2000): 63-87.

[43] Méndez, María José. "The Violence Work of Transnational Gangs in Central America." Third World Quarterly 40, no. 2 (February 2019): 373–88. https://doi.org/10.1080/01436597.2018.1533786.

terms of decreasing violence in the Northern Triangle. One significant factor is the continued empowerment of government security forces to commit acts of violence.[44] During both civil wars, the focus on training the military to perform extreme acts of violence beyond combat combined with American cash flow created a lasting effect on the power of the military, which already held significant political power previous to the civil wars.[45] Although there have been some attempts at decreasing the power of militaries in the Northern Triangle during period of liberal government, these attempts have done little to curb the prolific corruption, sustained political and social power, lack of community trust, and general continuity of abuses.[46]

Those who left groups that perpetuated conflict during the civil wars, both former rebels and former military, are also some of the violent actors contributing to emigration. In "The Violence Work of Transnational Gangs in Central America," Maria José Méndez discusses how the lack of integration for former rebels and ex-military, including those belonging to special forces groups trained in extreme forms of violence, created thousands of people with no other way to generate income other than to participate in what she calls "violence work."[47] "Violence work" is the use of violence as an economic necessity and those who participate hire themselves out as violent actors in order to cope in the precarious economies of the Northern Triangle. Méndez discusses this in the context of the gangs and cartels of the region. There is a market for both small-scale violence, or violence committed between community members, and larger-scaled violence, like violence perpetuated in the name of a transnational organized crime group. Former combatants, especially those trained in specific forms of torture or murder, are highly

[44] Pérez, Orlando J. Civil-Military Relations in Post-Conflict Societies. Routledge Studies in Latin American Politics. London: Routledge, 2015.
[45] Pérez 2015
[46] "Confronting Violence in Post-War Guatemala: An Introduction" by Timothy Smith and Thomas Offit
[47] Méndez 2019

valued by cartels to commit acts of communicative violence. On a smaller scale, gang members participate in both. Larger, more infamous gangs, like MS-13, in addition to participating in violence as a way to show membership, are also hired by cartels to perpetuate communicative violence.[48]

Gangs in the Northern Triangle began to stream in during the late 1980s, coincidentally during the idle of both the Guatemalan and Salvadoran civil wars. The most prolific and infamous gangs in the Northern Triangle, MS-13 and Calle 18, originally formed in the United States between Mexican and Salvadoran immigrant communities. During the 1980s, and especially in the 1990s, the US began deporting members of both gangs back to their home countries. Like in the empowerment of the military and police in the Northern Triangle, and in the creation and deportation of gangs into already vulnerable areas, the United States was also a significant part in the presence of cartels in the region. The issue of cartels began to grow in force around the year 2000, after US efforts to exterminate groups trafficking through the Caribbean instead pushed these groups to traffic through Central America.[49] Violence associated with cartels is highest in areas where they launder money, which primarily occurs in Guatemala and Honduras.[50] Violent coercion, in part done by hiring gang members, is also used to acquire land in order to participate in other lucrative illicit activities like illegal deforestation and coerce communities into compliance. The War on Drugs also facilitated an influx of arms into the Northern Triangle (and into Latin America at large) further exacerbating violence in the region.[51]

---

[48] "Montreal MP Probes the Sub-Culture of Gangs in Canada - Americas Quarterly". *Americas Quarterly*. November 12, 2009. Retrieved September 30, 2020.
[49] Americas Quarterly 2009
[50] Hiskey et al. 2018
[51] Landa-Blanco, Miguel, Cheon, Hyunjung, Reyes Flores, Luis Gerardo, Spohn, Cassia, and Katz, Charles Max. "Violence in Honduras from 2008 to 2018." *Injury Prevention* 26, no. 2 (2020): 191-93.

Gangs are the second factor in the make-up of violence in the Northern Triangle. At times, gang members will work in tandem with cartels to commit acts of violence or to participate in illegal trafficking. However, unlike cartels, whose primary objective is to make money through illicit trafficking, gangs' primary source of income is through violence.[52] Gangs and cartels, and the political and military machines in the Northern Triangle that perpetuate violence are all, in part, driven by US intervention. Without US intervention, the severity of conflict, as well as the presence of gangs and cartels, may not have ever been as significant an issue as it is today. Although this paper is not meant to focus on the history of neocolonial American intervention in Latin America, and especially in the Northern Triangle, it is important to note the significant American contributions to exacerbating conflict in the region. Although this research is not focused specifically on the role of the United States in driving migration in, it is important to note the connections that American interference has to violence and economic precariousness in the region

In "The Violence of Citizenship in the Making of Refugees", María Josefina Saldaña-Portillo makes the connections between foreign political interference and the creation of violence as a driver of migration, with the United States contributing millions of dollars to interfering in Central American governments during the 20th century.[53] Not only did the US fund violence in the region, but it also directly contributed to the severity and type of violence found there. Specialized Central American military groups, who committed particularly horrific violence during the Guatemalan and Salvadoran civil wars, were often trained by American security

[52] Méndez 2019
[53] Greenwald, Glenn. "The CIA's Murderous Practices, Disinformation Campaigns, and Interference in Other Countries Still Shape the World Order and U.S. Politics." The Intercept, May 21, 2020. https://theintercept.com/2020/05/21/the-cias-murderous-practices-disinformation-campaigns-and-interference-in-other-countries-still-shapes-the-world-order-and-u-s-politics/.

forces. The United States' interference in Central America (broadly in the name of the War on Drugs) not only pushed tons of arms into the region, but it also provided police with military training in the name of cracking down on organized crime. Instead of stopping cartels, however, this only made the police more akin to an active military force than local mitigators of conflict. As a result, police violence in the region is a large contributor to the issue of violence as a whole.[54] As Saldaña-Portillo points to, this also means that migration from the Northern Triangle coming to the United States is, in part, the fault of the US.

The literature on violence driving migration considers post-war violence from unintegrated combatants, violence stemming from organized crime, and violence coming from the state security forces, or more "official" sources. As violence is an often-cited factor in what drives migrants from the Northern Triangle, the literature on violence as a driver of migration is fairly focused on violence as it exists alone. Although there exists a broad range of literature covering the sources of violence in the Northern Triangle, as discussed in this section, the analysis occurs within a vacuum. The statistics Morales-Muñoz et al. gathered discussing the amount of environmental change studies are very similar to those found on studies covering violent conflict in conjunction with other drivers of migration. They found 51 studies discussing violence on its own or violence in conjunction with one other driver. In contrast, only five studies were found that discussed all three factors in their study together.[55] Violence exacerbates and is exacerbated by multiple factors, in addition to and beyond these three. By reaching beyond violence, and integrating both economic issues and climate change, a more complex and nuanced picture begins to emerge.

---

[54] Clavel, Tristan. "Militarization and Crime: Central America's Dangerous Gamble." InSight Crime, November 21, 2017. https://insightcrime.org/news/analysis/militarization-and-crime-central-americas-dangerous-gamble/.
[55] Morales-Muñoz et al. 2020

Poverty and Migration in the Northern Triangle

Economic vulnerability is another major driver of migration – it is commonly cited that most migrants are economic migrants.[56] The Northern Triangle specifically is no stranger to economic inequality. Although the GDPS of Guatemala, El Salvador, and Honduras have been on the rise in the past two years, according to the World Bank, poverty is still high in each country due to severe wealth disparity. Poverty is a multidimensional issue, and in the Northern Triangle, it is characterized by food insecurity and debt. While the economies of all three countries in the Northern Triangle are steadily growing, a significant percentage of each population is still living in poverty. This disparity, itself exacerbated by a rural-urban divide, exacerbates poverty. Honduras' GDP, for example, has grown by at least 2 percent every year since 2017.[57] But, according to the World Bank, poverty in Honduras continues to be extremely high at 48.3 percent.[58] Guatemala's GDP has grown at 3.5 percent for the past five years, yet poverty still remains high.[59] El Salvador is the only country in the Northern Triangle that has made strides towards equal wealth distribution, although their GDP growth has stalled recently, averaging about 2.3 percent in the past three years, and poverty, again, still remains an issue.[60] The consequences of this continued poverty drive migration from the Northern Triangle.

Although not the sole indicator of poverty, food insecurity is a significant and pervasive problem in the region. In Guatemala, for example, only 40 percent of households have secure

---

[56] Van Lange, Paul A. M. van, Maria I. Rinderu, and Brad J. Bushman. "CLASH: Climate (Change) and Cultural Evolution of Intergroup Conflict." *Group Processes & Intergroup Relations* 21, no. 3 (April 2018): 457–71. https://doi.org/10.1177/1368430217735579.
[57] Honduras Overview." World Bank. 2018. https://www.worldbank.org/en/country/honduras/overview.
[58] World Bank "Honduras Overview" 2018
[59] "Guatemala Overview" World Bank. 2018 https://www.worldbank.org/en/country/guatemala/overview
[60] El Salvador Overview" World Bank 2018 https://www.worldbank.org/en/country/elsalvador/overview

access to food.[61] In one study published in 2017 by the World Food Program (WFP), results revealed that households interviewed in Guatemala, Honduras, and El Salvador spent about two-thirds of their income on food. Migration away from the Northern Triangle further exacerbates the issue by cutting down on the available workforce. If not offset by remittances from family members who have already migrated, migration can significantly impact food security. Small-holder farms in Guatemala, Honduras, and El Salvador, with both their incomes and their access to food beholden to a competitive global market, are especially vulnerable.[62] The selling and accumulation of the land of subsistence farmers by larger plantations or cartels also increases food insecurity in a given area.[63] People are not guaranteed to benefit from the large amount of money cartel activity attracts, and most do not, which further exacerbates food insecurity in areas with strong criminal presence. [64] These factors exacerbate food insecurity and reinforce poverty, as those who rely on their land are now unable to reliably grow food to eat or to sell.

Debt is another aspect of poverty that drives migration in the Northern Triangle, especially for those who make repeated attempts to migrate. In "The Coercive Power of Debt: Migration and Deportation of Guatemalan Indigenous Youth," Lauren Heidbrink interviews young indigenous Guatemalans who were forced into attempting to migrate over and over again in order to pay off their debt, often chosen by their families because of their status as young, able-bodied men. Expected to adjust quicker and get better work in the United States, the repeated deportations of these youths has created a cycle of money owed to coyotes and other

---

[61] World Bank "Guatemala Overview" 2018

[62] McSweeney, Kendra, David J. Wrathall, Erik A. Nielsen, and Zoe Pearson. "Grounding Traffic: The Cocaine Commodity Chain and Land Grabbing in Eastern Honduras." *Geoforum* 95 (October 1, 2018): 122–32. https://doi.org/10.1016/j.geoforum.2018.07.008.

[63] McSweeney et al. 2018

[64] Berg, Louis-Alexandre, and Marlon Carranza. "Organized Criminal Violence and Territorial Control: Evidence from Northern Honduras." *Journal of Peace Research* 55, no. 5 (September 1, 2018): 566–81. https://doi.org/10.1177/0022343317752796.

groups who loan money to migrants. Starting from a place of poverty, their migration has ultimately only exacerbated their economic position.[65]

The literature on poverty in the Northern Triangle connects it to historical and current trends in the region's relationship to the rest of the world. For example, like violence, the United States also contributes to the economic precariousness driving migration from Central America. In "Migration as Resistance to Global Capitalism: From Cause to Action in the Migration of Central American Children to the United States," Edwin Lopez argues that globalization drove the surge of minors seeking entrance into the United States in 2014. He discusses how, in response to increasingly dire economic disenfranchisement in their home countries, minors migrated towards the United States in the summer of 2014 seeking relief. The proliferation of international corporations, as well as a history of failed US-backed neoliberal economic reform across the Western Hemisphere, contributes to the persistence of wealth inequality and high levels of poverty in the region.[66]

The Northern Triangle is also, in multiple ways, reliant on the United States for continued capital flow. As previously discussed, many people rely on remittances from their family members who have already migrated to survive. But the governments of the region also receive massive amount of funding from the United States, with the intent to spur economic growth. According to the Center for Strategic and International Studies, the United States set aside 1.8 billion dollars in appropriations in FY 2018. They gave over 401 million dollars in foreign aid to

---

[65] Heidbrink, Lauren. "The Coercive Power of Debt: Migration and Deportation of Guatemalan Indigenous Youth." *The Journal of Latin American and Caribbean Anthropology* 24, no. 1 (2019): 263–81. https://doi.org/10.1111/jlca.12385.

[66] Lopez, Edwin. "Migration as Resistance to Global Capitalism: From Cause to Action in the Migration of Central American Children to the United States, Summer 2014." *Perspectives on Global Development & Technology* 16, no. 1–3 (January 2017): 34–59. https://doi.org/10.1163/15691497-12341419.

Guatemala, Honduras, and El Salvador in the same year. Globally, the Northern Triangle obtained 3.1 billion dollars in foreign direct investment from FY2017-2019. Unfortunately, these multi-billion dollar attempts at investment to spur the stalling economies of the Northern Triangle have not stopped migration, and poverty continues to be an important driver pushing people out.

2. Two-Factor Driven Migration

There is a small body of research that discusses drivers of migration in pairs. Unlike literature that discusses singular drivers of migration, this research offers a slightly more nuanced view of drivers. It offers a brief transition between migration driven by a single factor and multiple-factor migration, bringing us one step closer to the intricate explanations entanglement provides.

Violence and Climate Change

Several studies cite climate change as an exacerbating factor in driving violent conflict.[67] In "CLASH: Climate (Change) and Cultural Evolution of Intergroup Conflict" by van Lange et al., researchers found that climate is associated with violence in 82 percent of published studies and temperature is associated with violence in 83 percent of published studies.[68] Their own research connects violence and climate change in several ways. They posit that warmer climates allow for a more short-term approach to life, with little future-oriented decision making. The consequences of violence are less severe because the warm climate makes other aspects of survival, like access to food, much easier. In contrast, those who live in colder climates have adapted to think long-term, potentially being able to mitigate violence in favor of cooperation for the sake of survival.[69] However, as temperatures become dangerously hot, they become an additional stressor, threatening crop stability and making violence in warmer climates worse.

In "Climate Change and Levels of Violence in Socially Disadvantaged Neighborhood Groups," Dennis Mares found that heat levels and levels of violence in disadvantaged

[67] Hsiang, Solomon M, and Burke, Marshall. "Climate, Conflict, and Social Stability: What Does the Evidence Say?" *Climatic Change* 123, no. 1 (2013): 39-55.
[68] van Lange et al. 2018
[69] van Lange et al. 2018

neighborhoods in the US are correlated.[70] The warmer it gets, the more people will be forced to interact with each other in less-than-comfortable conditions, and the higher chance of a violent conflict. In light of the estimated 2 to 4 degree Fahrenheit temperature change predicted if global warming continues on its current path, combined with the already occurring upward trend in temperature globally, this is especially concerning for mitigating the effects of climate change on violence.[71]

Poverty and Violence

Poverty is connected to increased exposure to violence. In "A New Social Contract for the Northern Triangle" Daniel Runde and Mark Schneider connect the economic disparity of Honduras, Guatemala, and El Salvador to the high levels of violence in the region as a whole. Their proposal cites poor economic performance as the reason for the extremely high rates of homicide in the region in the aftermath of the Guatemalan and El Salvadoran civil wars. The use of extortion by street gangs and transnational organized crime groups against already poor people perpetuates issues of poverty, and continues to destabilize the region both economically and in terms of violence. This destabilization, created by this two-factor influence, continues to push migration in the region.

Climate Change and Poverty

Because of its precarious economic position and poor infrastructure, the Northern Triangle is severely affected by climatic shifts towards warmer weather. It cannot recover the way that wealthier areas or countries can. In "Poverty and Climate Change: Introduction,"

[70] Lustgarten 2020
[71] The World Food Program (WFP) et al, 2017

Stephane Hallegatte, Marianne Fay, and Edward Barbier research on the connections between climate change and poverty. In light of this body of research, the authors argue that, because of their lack of assets and income, the effect climate change has on poverty is not accurately represented in the GDPs of countries.[72] Instead, they argue the focus should be put on other socioeconomic indicators to determine the impact climate has on poverty. Not only do they acknowledge the especially debilitating effect climate change has on poor people, they also examine literature making the connection as it flows in the opposite direction. Poverty leaves people vulnerable to climate change, but climate change also exacerbates poverty and keeps people in economically precarious positions. Climate and poverty are connected, and drive migration individually and by exacerbating each other. The literature that pairs climate change, poverty, and violence together offers a bridge into examining multi-factor driven migration. This approach not only constructs a direct connection between two drivers of migration, it also begins to acknowledge a multi-directional flow, or entanglement, of multiple factors.

[72] Hallegatte, Stephane, Marianne Fay, and Edward B. Barbier. "Poverty and Climate Change: Introduction." *Environment and Development Economics* 23, no. 3 (06, 2018): 217-233. doi:http://dx.doi.org.ezproxy.bu.edu/10.1017/S1355770X18000141. https://ezproxy.bu.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fpoverty-climate-change-introduction%2Fdocview%2F2039258964%2Fse-2%3Faccountid%3D9676.

3. Entanglement

Anna Tsing's Model

In *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Anna Tsing explores the world of the matsutake mushroom. In her exploration, she critiques the "summing up" of knowledge in order to make it more easily digestible. Instead, she argues for an emphasis to be put on the places where units of analysis complicate each other. She describes this method multiple ways: "unpredictable encounters," "open-ended assemblages," "collaboration," "contaminated diversity," "transformative relationships," or entanglements. It is a method that emphasizes the ever-changing and, most importantly to this paper, relational nature of units of analysis, rather than isolating them in order to gather information.[73] In migration, the "units of analysis" are the often separated, individual drivers of migration. Poverty, violence, and climate change are too often separated into singularly analyzed categories in order to better digest each driver, but this leaves out crucial parts of the story, as well as places where multiple drivers touch, unanalyzed. In contrast, Tsing's method places an emphasis on these places of entanglement.[74]

Tsing explores multiple examples of these entangled encounters. The ecology and economy of the matsutake mushroom relies on multiple overlapping parts, each stemming from sources that themselves overlap. The matsutake mushroom is almost exclusively found in human-disturbed environments, or places of "contaminated relationality," where the relationships between organisms found "naturally" are affected by, and in turn affect, human interference. In Oregon, the matsutake did not arrive in the eastern cascades until decades after

[73] Tsing, Anna Lowenhaupt. *Mushroom at the End of the World: on the Possibility of Life in Capitalist Ruins*. S.l., NJ: PRINCETON UNIVERSITY PRES, 2015. 6-29
[74] Tsing 2015, 33 - 34

industrialized timber extraction had destroyed acres of ponderosa pine. After this destruction, the government reestablished these forests with fir and lodgepole in a flawed attempt at environmental restoration. Matsutake exist in a symbiotic relationship with these trees, which exist in the eastern cascades because of the capitalist destruction of the environment for the sake of profit. This capitalist drive for resource extraction is one thread of the matsutake, paired with the capitalist exploitation of workers. Many pickers came after working "normal" jobs that barely allowed them to live. One picker describes his experience working at Walmart, where, after severely injuring his back with no access to regular paid time off, he was put on medical leave. He decided picking matsutake mushrooms was much more profitable than working at Walmart, where he received little pay and no benefits, and now picks full time.

Still, others are veterans of war, unable to function well in "normal" society because of their experiences overseas. They pick because it allows them to make money while avoiding triggering their PTSD. War is another, albeit unexpected, thread in the entanglement of the matsutake. In addition to predominantly white Vietnam War veterans, many pickers are Southeast Asian refugees, or come from families who are in the United States because of conflict in Southeast Asia. War plays a large part in the reasoning of both American veterans and Southeast Asian refugees who pick matsutake. As discussed previously, veterans take advantage of the isolation to avoid triggering mental health issues set out from their combat experience. In contrast, their experiences with conflict became an advantage for many Southeast Asian pickers, who use their skills honed during years of guerrilla fighting to better navigate the forest, an advantage when picking elusive matsutake. Camps are also formed along the lines of divisions created during conflict. Southeast Asian pickers camp along lines established in Thai refugee camps. Groups of these Southeast Asians picking matsutake are incredibly ethnically and

culturally diverse, with camps full of Hmong, Mien, Lao, Cham, and Khmer peoples. Pickers' experience with war contributes to what drew them to matsutake, and influences how they interact with the matsutake industry and the environment matsutake grow in.

Yet another thread is the global economy in which matsutake exist. Matsutake is a truly global commodity; Tsing touches on picking season in the US, Japan, China, and Finland, but acknowledges there is still more to learn in Morocco, Korea, and Bhutan. The market for matsutake lies mostly in Japan, where it is viewed as a delicacy and is difficult to find. In discussing the matsutake market, Tsing takes into account the multiple economic perspectives of those working as matsutake pickers. For example, she discovers major differences in the ways the matsutake market is perceived depending on nationality, race, and linguistic ability. Many Americans, both white and Southeast Asian pickers, do not speak Japanese, and must rely on middlemen in order to sell their product. This language barrier leads many to often misunderstand the market. For example, one posting offering a high price for Japanese matsutake was misunderstood as an offer for any kind of matsutake. The lack of Japanese pickers in places where a large amount of matsutake grow, like the American northwest, means that people pick only knowing that their mushrooms are going to Japan without any context on the actual business. They know the mushrooms will be lucrative, but they technically do not have any access to their market without the necessary people to contextualize the market.

This international market defies typical capitalist American desires, a connecting thread to the previously discussed capitalist desires that created matsutake in the United States in the first place. The urge to cut out the middleman and to have complete access to markets is impossible with matsutake. The pickers are only beholden to themselves, but while many pickers do desire to sell directly to Japan, most cannot because of the language barrier, their lack of

connections to the Japanese market, and a general cultural misunderstanding of matsutake's value in Japan. Multiple cultural and linguistic interactions and misunderstandings characterize the matsutake economy, gathering multiple threads. [75]

Around this thread of international markets lies another thread concerning race, including the rifts between white and Southeast Asian pickers and American perceptions of the Asian market for matsutake. White pickers avoid Southeast Asian pickers and tend to pick matsutake with different perceptions and goals. For example, while both groups of pickers cite "freedom" as part of the reason why they pick, white pickers participate in a much more "Americanized" version of freedom, specifically a more conservative one. White pickers almost never register to pick, trespass often, live predominantly in solitude, and emphasize the traditional masculinity found in living alone in the woods. To them, this is freedom. Southeast Asian pickers, in contrast, often register for licenses. They also trespass to pick, but they face significantly more risk of being fined for picking illegally, what many informants call "driving while Asian." Southeast Asian pickers tend to stick together while camping, albeit with segregation of different ethnic groups. Their perceptions of freedom rely less on individuality and separation from the government and more so on the ability to freely move and practice culturally.

The perceptions of American pickers also contribute to the thread of racial and ethnic perceptions creating the entangled story of matsutake. White pickers were convinced that matsutake were valuable because they were considered aphrodisiacs in Japan (which is false). There were some who were convinced the Chinese government drafted people into picking, when in reality Chinese pickers were just as independent as the American pickers. Perceptions of

[75]Tsing 2015, 58

other nations, which seem to be partly based on white American racial perceptions of Japanese and Chinese people, contribute to how the market functions.

Domestic race relations, language barriers, and American perceptions of the world contribute significantly to the story of matsutake. They are often separately studied factors that, when looking at where they interact, form a larger picture of how they function separately and together. The reality of these different factors, rather than the sterile examination of each individual factor in a vacuum, creates the broader matsutake market. To quote Tsing:

> Ethnographers and journalists give us reports of survival, flourishing, and distress, here and there. Yet there is a rift between what experts tell us about economic growth, on the one hand, and stories about livelihood, on the other.[76]

Matsutake mushroom exist in a bed of entangled threads— ethnic conflict, war, capitalist exploitation, informal economies, ecology, and cultural assimilation, to name a few. There are other threads she sees, including her surprise at finding Japanese-Americans in the camps and their unique history in the United States of forced assimilation during and after World War II. She discusses this contrast to the experiences of Southeast Asians, who, through sheer political chance, came in the 1980s and experienced assimilation in a completely different way, and in contrast to her own experiences as an Asian-American. Tsing constantly reveals more parts, and more entanglements, of the matsutake story.

Tsing makes the point to show that one cannot understand matsutake mushrooms if you do not first understand the complex, interconnected world they grow in. In exploring the connections that make up the world of the matsutake mushroom, Anna Tsing collects evidence ranging from multiple disciplines and groups. She is explicit in her insistence that this evidence is a patchwork of interconnected ideas and occurrences, supporting her examination of survival

[76] Tsing 2015, 68

after capitalism through the complex story of the matsutake mushroom and the forests it grows in. In a similar way, understanding the interconnected nature of the numerous drivers of migration will help to illuminate more about why migration happens, guiding policy, public, and academic views in a direction that allows for more nuance in discussing a process that millions of people, many of them unwillingly, experience. This concept of entanglements is also useful in looking at the ways that climate change, as well as other well-studied factors driving migration in the Northern Triangle, interact in more complicated ways than the literature currently covers.

Literature Examining Entanglement

There is a small body of literature which examines multiple drivers of migration in relation to each other.[77] However, the literature analyzing drivers of migration primarily analyzes them singularly or in conjunction with only one other driver of migration. Unlike Tsing's model, which emphasizes collaboration between units of analysis rather than isolation, the majority of literature discussing violence, climate, or poverty as drivers of migrations only considers the ways that they drive migration individually, without entanglement. Taking this into account, Muñoz-Morales et al. propose a causal loop model to conceptualize the ways that drivers of migration interact with each other, with indicators (marked in Figure 1 by double lines) to show a delay in the impact of a driver as interactions take place over time. It emphasizes "causal effects", where the arrows point to the factor another reinforces. It visually represents the connections between violent conflict, food security, and environmental change, the three drivers of migration they discuss in their paper.

[77] Morales-Muñoz et al. 2020

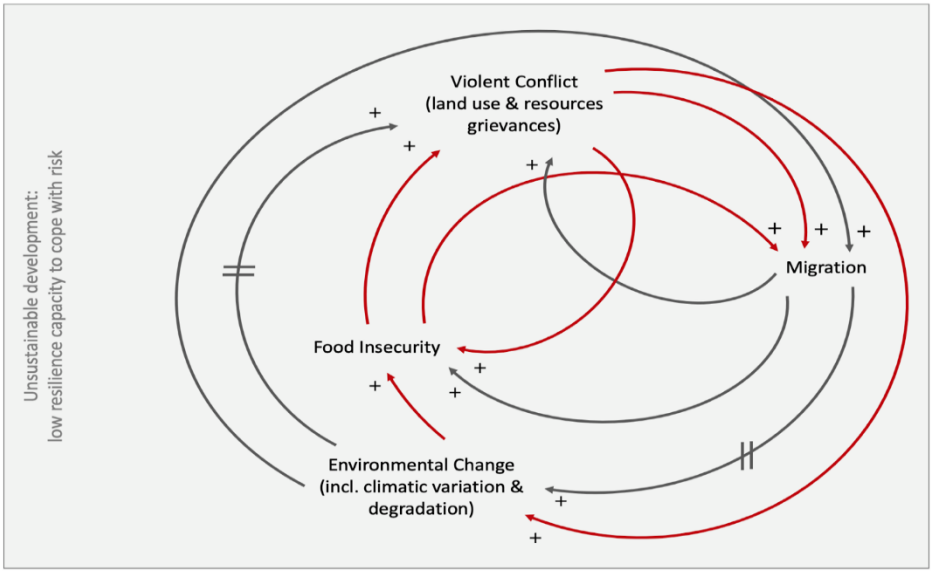

Figure 1: The causal loops used to explain the connections between food insecurity, violence conflict, and environmental change as drivers of migration in Morales-Muñoz et al. Source: Morales-Muñoz, Héctor, Srijna Jha, Michelle Bonatti, Henryk Alff, Sabine Kurtenbach, and Stefan Sieber. "Exploring Connections—Environmental Change, Food Security and Violence as Drivers of Migration—A Critical Review of Research." *Sustainability* 12, no. 14 (January 2020): 5702. https://doi.org/10.3390/su12145702.

Although this method of laying out the complicated ways that three drivers of migration intertwine is one step in the right direction, the causal loops model as a way to view drivers of migration in a more complicated and nuanced view is not complicated enough and suggests an unimportant commonality between different drivers of migration. For example, land use, which they categorize as falling under violent conflict, could, in the model of entanglement, be viewed as individual drivers that sometimes align and sometimes act in completely separate ways outside of violent conflict. Land use can be tied to violent conflict over land, but it can also be tied to economically-based adaptation strategies those in precarious socioeconomic conditions are forced to take. For example, in Harvey et al., it was found that 46 percent of farmers who acknowledged experiencing the effects of climate change adapted by changing the way they used

their land, with many of them deciding to plant trees.[78] In the same study, 32 percent of the same group of farmers who acknowledged climate change were experiencing food insecurity.[79] While violence was not explicitly cited in this example, the changes in land use could have a negative effect on the amount of violence present in a region where environmental change and food insecurity are also issues. Those farmers who planted trees are actively fighting against the consequences of climate change and environmental degradation. This in turn could potentially have a negative effect on the presence of violence in the region and help to increase the viability of the land farmers are planting on. Their contributions to pushing back against the consequences of climate change could also benefit those experiencing food insecurity. By collectively planting trees, they could potentially improve a neighbor's ability to grow food. In this way, land use moves beyond a factor of violence in driving migration. It becomes an active variable in the entangled structure of migration, becoming an aspect of both socioeconomic position and climate change. This is especially important when viewing these drivers of migration in the broader context of a complicated economic, political, and environmental situation, beyond the consequences of the three factors discussed in their research. The causal loop model proposed here does not allow for sufficient detail in exploring the ways that drivers of migration entangle.

Entanglement allows for a more specific look into the correlations between drivers of migration (in a similar way that Tsing manages to connect biological functioning of a particular, man-made ecosystem with the consequences of race relations between Southeast Asian refugees and white people in Oregon). It allows us to look at how they influence each other and are influenced, how in some scenarios they may flow in a straight line and in others they double

[78] Harvey et al 2018
[79] Harvey et al. 2018

back on each other. It's important in order to discuss migration in a nuanced way without looking at broad categories and assuming they have a linear causality.

Building Entanglements

Simplifying the ways that migration is driven ignores that migration is a complex act, driven by multiple overlapping factors and often done when there are few or no other options. The issues of studying one factor of migration, and determining its overall importance to the phenomenon as a whole, are exemplified in "Environmental Influences on Human Migration in Rural Ecuador" by Clark Gray and Richard Bilsborrow. Their research focuses on how environmental change is affecting migration in rural Ecuador. Although this research is not specific to the Northern Triangle, it is an example of what hyper-focusing on one factor of migration can leave out. In their paper, they conclude that environmental influences are not affecting out migration from rural Ecuador, and that many rural Ecuadorians are able to cope with the effects of climate change.[80] While their research is thorough, and their conclusion is not necessarily incorrect, it ignores all the other aspects surrounding climate change in rural Ecuador. Their paper explores to what extent climate specifically is affecting migration, but in controlling for just climate-related factors, they ignore how climate interacts with access to land, economic vulnerability, levels of violence, and other drivers of migration. In order to determine the extent to which climate is affecting migration from Ecuador, it is important to look at how climate interacts with other drivers in addition to how it directly affects migration. By leaving out the former analysis, a whole set of climate change-related drivers is left unanalyzed.

[80] Gray, Clark, and Richard Bilsborrow. "Environmental Influences on Human Migration in Rural Ecuador." *Demography* 50, no. 4 (August 2013): 1217–41. https://doi.org/10.1007/s13524-012-0192-y.

In research focusing on the Northern Triangle, articles studying one or, more rarely, two drivers of migration reveal a network of entangled drivers. For example, in "Market Shocks and Climate Variability: The Coffee Crisis in Mexico, Guatemala, and Honduras," Hallie Eakin, Catherine M. Tucker and Edwin Castellanos interview coffee growers in Mexico, Guatemala, and Honduras and record their responses to the consequences of global market shocks. Particular focus is put on the end of the International Coffee Agreement (ICA) in 1989, which lowered the value of their coffee in combination with drought destroying their capacity to grow. The responses to the downturn in profitability of coffee grown by small-scale farmers has varied. The larger farms, which are in the minority, were able to keep up somewhat, while smaller farms, the vast majority, struggled. Some hoped for government regulations that would help their situation, although the ones that were enacted were largely ineffective because of the bureaucracy behind them, which required documentation of sale that most farmers did not have and did not correctly disseminate information about the programs. Many attempted to vary the crops they grew and diversify by changing the way they used their land. They switched from growing coffee, a crop that relies on shade provided by highland jungle and the natural terracing of the mountainside, to growing sugarcane, maize, or clearcutting for pastureland. They found that coffee growers associated this increase in deforestation with the droughts that were affecting their crops so detrimentally, and yet they seemed unable or unwilling to change the way they interacted with the land. According to the authors, this coffee crisis has also exacerbated the issue of emigration in the areas studied.[81] Here lies the entanglement.

Climate change's magnified effect on coffee growers in Honduras and Guatemala, due to their position in agriculture as well as their economic position, is partially not due to anything

[81] Eakin, Hallie, Catherine M. Tucker, and Edwin Castellanos. "Market Shocks and Climate Variability: The Coffee Crisis in Mexico, Guatemala, and Honduras." *Mountain Research and Development* 25, no. 4 (2005): 304–9.

they are doing specifically, like emitting large amounts of greenhouse gases, but it is instead being fueled by their deforestation. They recognize that deforestation is exacerbating the issue, but are left with little other economic choice except to attempt to diversity. Government programs are of no help to them, and they are largely completely reliant on the quality of their small plots of land and the predictability of the climate for their incomes. Economically, they are forced to make shifts to more lucrative crops like sugarcane or maize, which require more water and less forest cover than coffee, while also knowledgably exacerbating their own situation. Ultimately, many are choosing to migrate in response to this mixture of economic, climate, and, in part, political drivers. In this specific example, we can see the ways that drought, deforestation, land accessibility, lack of access to cash flows, and a non-functioning political system mesh to create an entangled driver of migration.

As previously discussed, drought is connected to a warming climate as well as the effects deforestation has on the water cycle, and in turn results in the inability to grow food. For those with little access to money (or lack of access to cash flows), who rely on agriculture both for their income and also for their capacity to eat, changes must be made in order to survive. However, options for change are limited because of inability to access land, another consequence of systemic poverty. So, the combination of systemic poverty and climate change interact here to push farmers to clear cut forests or diversify their crops to more lucrative, but ultimately unsustainable, products. Drought is exacerbated by these decisions, but it also is what drives them. Their poverty, which is why drought puts so much pressure on them, is also driven by another set of violent, political and historical factors. They are poor in part because of a history of unequal land distribution in Honduras and Guatemala. In Guatemala, this issue drove a decades-long civil war, which propagated violence that further pushed these farmers into

economic insecurity that is still felt today.[82] Although not discussed in the article, the history and current reality of violence in the region, which in turn is connected to disputes over land distribution that affect the capacity of farmers to survive today, meshes with the rest to exacerbate all drivers of migration, and in turn is exacerbated by all drivers of migration. The consequences of these violent conflicts, a continued status quo of little land redistribution and an ineffective government, are also a part of this entanglement. This connects to Tsing's point that the places where perspectives diverge form the larger picture, that the complicated, overlapping nature of seemingly disconnected factors of race, ecology, and culture form the matsutake market. These seemingly disconnected factors are inextricable from each other, and work in various ways to exacerbate each individual driver.

These are not the only examples of the ways that different drivers of migration entangle to create a larger picture. To bring in a factor not discussed in the research on coffee growers in Honduras and Guatemala, violence in the Northern Triangle and the ways it interacts with other drivers of migration is another important aspect of entanglement. As previously discussed, Van Lange et al. found that climate is associated with violence in 82 percent of published studies and temperature is associated with violence in 83 percent of published studies.[83] Economic conditions are also relevant to these existing entanglements, as they can make or break an individual's ability to accommodate change in their place of origin or be forced to migrate. In the Northern Triangle, despite regulations, deforestation (specifically of the illegal nature) is a growing issue. Small subsistence farmers are often pointed to as the culprits, but other actors play a larger role in deforesting areas that, for decades, had been largely protected by indigenous rights groups and conservationists. Specifically, cartels and the violence and land degradation

[82] Haggerty, Richard A. "El Salvador: A Country Study" (1990)
[83] Van Lange, et al. 2018

they enact have become a growing issue in Central America since the early 2000s. Organized crime groups are a driving force behind illegal deforestation. It is incredibly profitable, and easier to traffic to lucrative northern markets than cocaine and other drugs.

The US War on Drugs had a significant impact on the presence of cartels in the Northern Triangle. It pushed cartels out of the Caribbean and back into Central America, while at the same time providing Central American (and other Latin American) governments with arms, training, and economic incentives to violently stop drug trafficking.[84] Central America, and particularly Honduras and Guatemala, became hubs for the transit of cocaine and the laundering of money, in part because of this shift in cocaine routes and in part because of the high levels of corruption present.[85] These shifts ultimately were extremely lucrative for cartels, not only because they became centers for money laundering, but also because they expanded cartels' sources of illicit income from cocaine trafficking into logging, cattle ranching, palm oil farming, and the selling of clear-cut land. In "Illegal Logging in the Tropics: A Synthesis of the Issues," Ramsay Gavenel and Ilmi Granoff expand on this issue. Internationally, cattle ranching, palm oil farming, and simply selling clear-cut land is more lucrative than the subsistence farming already being done by local people.

Kendra McSweeney et al. outline the issue of cartel invasion of eastern Honduras, and the violent consequences of this invasion. They found that, as cartels moved into the well-hidden wooded areas that are largely viewed as inaccessible or undesirable by the government and are primarily occupied by indigenous people, they began to enact a system of coercion backed by

[84] Hiskey et al. 2018
[85] Berg & Carranza 2018
McSweeney et al. 2018.
Hiskey et al. 2018

economic inventive and violent threats.[86] Cartels and the various people they hire to work for them have had a significant impact on the levels of violence in the Northern Triangle. In areas where cartels are rapidly coopting and deforesting land, threats are also made with more personal nuance in mind. Land grabbing is done through the nuanced integration of "middle-men" into local communities that previously were extremely protective of their land.[87] These "middle-men," who marry into local families and typically run small businesses through which cartels launder their money, operate under a dual economic and violence-driven system in order to force peasants into selling their land while simultaneously getting them to convert it into a form that is more profitable. In addition to violence, they leverage debt, food prices, and knowledge of interpersonal conflicts.

McSweeney et al.'s research reveals another factor contributing to entanglement in drivers of migration. Rural peasants are too poor and marginalized to fight back against their illicit invaders. This position of economic disparity puts them at the mercy of violence perpetuated by cartels. As cartels buy out more plots of land, the only way to create an income is to work for them. Peasants are employed to illegally clear land, work on cattle ranches and farms, and generally paid off to look in the other direction. Their participation, which is done out of economic necessity, further exacerbates their precarious economic position by worsening the environmental conditions around them and contributing to the widespread issue of drought through deforestation. Deforestation, an issue that is rising in significance in the Northern Triangle, is a significant contributor to more intense and frequent drought.[88] Climate-change driven drought and deforestation are intrinsically connected, and, like factors driving migration,

[86] McSweeney et al. 2018.
[87] McSweeney et al. 2018.
Berg & Carranza 2018
[88] Brown 2020

feed into each other. Reduction in forest cover in tropical climates increases the vulnerability of tropical forests to fire damage, caused both by drought and by purposefully set forest fires.[89] This creates a cyclical issue: the higher the temperatures rise (due to climate change), the more vulnerable forests will be to forest fires, and both of these factors are exacerbated by a rapid forest-cover loss caused primarily by illegal logging.[90]

Climate change goes hand in hand with ecological degradation. In Central American, prolific logging has contributed significantly to the issue of climate-change driven drought. Deforestation has contributed to several issues, including illegal logging from cartels and logging from peasants whose land is no longer viable. Peasants are forced to move because of infertile land or nearby threats. The factor of cartel violence and coercion McSweeney et al. explore becomes part of a larger entanglement of migration factors when looking at in the context of other literature exploring other singular drivers of migration. Ultimately, this increases the dispossession of people living in these rural places and exacerbates migratory pressures.[91] In this way, those who will be most affected by climate change are also those being coerced into actively participating in their own climatic demise. This is in no way meant to blame communities forced, whether through violence, socioeconomic position (which will be expanded upon later) or a combination of both. Rather, it's meant to draw connections previously not drawn in literature concerning the rise of cartel-related violence in the Northern Triangle, which in and of itself has been acknowledged in causing migration, and in the high levels of deforestation exacerbating the issues of drought.

---

[89] Armenteras, Dolors, Cerian Gibbes, Carla A. Vivacqua, Juan Sebastián Espinosa, Wania Duleba, Fabio Goncalves, and Christopher Castro. "Interactions between Climate, Land Use and Vegetation Fire Occurrences in El Salvador." *Atmosphere* 7, no. 2 (February 2016): 26. https://doi.org/10.3390/atmos7020026.
[90] Bagley, Justin E., Ankur R. Desai, Keith J. Harding, Peter K. Snyder, and Jonathan A. Foley. "Drought and Deforestation: Has Land Cover Change Influenced Recent Precipitation Extremes in the Amazon?" *Journal of Climate* 27, no. 1 (January 1, 2014): 345–61.
[91] McSweeney et al. 2018.

An additional entanglement, wherein those who perpetuate violence are also victims of a system of increasingly strong economic pressures, is discussed in the 2019 article titled "The Violence Work of Transnational Gangs in Central America" by María José Menendez. According to José Menendez, cartels are not themselves the direct perpetrators of violence. Instead, they hire out former members of the military, ex-rebels, gang members, and, in some cases, local middle-men to carry out their "violence work."[92] José Menendez argues that, after over 30 years of civil war and prolonged peace processes in the Northern Triangle, the subsequent lack of socioeconomic integration of former militants, sustained high levels of violence, and generally poor national economies has created a sort of economy around paying people to commit violence. Gangs are also a part of this economy of violence, as their presence in the region has aligned closely with the period of political violence that created thousands of soldiers and ex-rebels who no longer fit in a post-civil war world. They too have suffered from a lack of economic integration, and, like their non-gang affiliated neighbors, live in positions of economic disparity that drove them to this work. In countries with a high cartel presence and few economic prospects, violence is a highly lucrative option, and those who are willing to participate in it can profit immensely.[93] The violence that is committed, however, is predominantly violence committed by poor people against others in a similar socioeconomic position. Just as peasants are economically and physically forced to participate in the deforestation of their own land, so too are poor people in the Northern Triangle often forced to do violence work for the sake of making money.

[92] Méndez 2019
[93] Hiskey et al. 2018

4. Case Study: The Maya Biosphere Reserve

On the border between Guatemala and Mexico, in an area that is rapidly becoming just as dangerous for migrants as the US-Mexico border, lies the Maya Biosphere Reserve (MBR).[94] Separated into four core regions of conservation, the MBR was created during the 10-year peace processes after the Guatemalan civil war.[95] This area has long been a transit zone and a place where vulnerable communities attempt to escape colonial violence, civil war, economic issues, and environmental events.[96] It is currently a place where (primarily indigenous) Guatemalan peasants consistently interact with both political and non-political perpetuators of violence, where unsustainable levels of deforestation occur, and where many migrants escaping north must cross through.[97]

In "Migration to the Maya Biosphere Reserve, Guatemala: Why Place Matters," David Carr tracks the origins of the initial wave of migration to the MBR that occurred in the 1980s, 1990s, and early 2000s. In his interviews, he discovers multiple explanations for why people migrated to the MBR, including being violently targeted as alleged rebels, moving to the MBR to join other rebels who had already fled, the destruction of croplands after mudslides in rural Guatemala, the consequences of Hurricane Mitch (which include the loss of property and the destruction of agriculture), insufficient access to capital, and the expense of land in other parts of rural Guatemala that had already been consolidated by cattle ranchers and plantations.[98] These factors built on each other to form an exodus to the MBR from other rural parts of Guatemala. Carr uses three case studies to explore the reasons why people went to the MBR, but one is

---

[94] Devine, Jennifer A., David Wrathall, Nate Currit, Beth Tellman, and Yunuen Reygadas Langarica. "Narco-Cattle Ranching in Political Forests." *Antipode* 52, no. 4 (2020): 1018–38. https://doi.org/10.1111/anti.12469.
[95] Devine et al. (2020)
[96] Carr, David L. "Migration to the Maya Biosphere Reserve, Guatemala: Why Place Matters." *Human Organization* 67, no. 1 (Spring 2008): 37–48. http://dx.doi.org.ezproxy.bu.edu/10.17730/humo.67.1.lvk2584002111374.
[97] Devine et al. 2020
[98] Carr 2008

particularly helpful in illustrating this point. People interviewed from the town of Nueva Concepción cited small land size, a growing population, flooding after Hurricane Mitch, a lack of government preparedness to avoid the flooding, and violence as reasons for migrating to the MBR. Many could not afford to buy more land to support their rapidly growing families, and after flooding from Hurricane Mitch destroyed the topsoil, those who were already in economically precarious positions could not afford to grow enough food. The violence of the civil war was also cited, in conjunction with these other factors, as driving people out.

Expanding beyond Carr's research, which singularly connects each of these "push" factors to another "pull" factor in the MBR, Guatemala City, or the US, we can see that the reserve is still characterized by these kinds of interweaving drivers of migration. As discussed previously, after the end of the Guatemalan Civil War, which encompasses the scope of Carr's research, Guatemala was faced with a wave of violence stemming both from former combatants and new cartel pathways being forged into Central America. In the early 2000s, cartels began operating here as anti-drug policies in Guatemala shifted drug routes.[99] This marks the beginning of actors of cartel-driven violence "replacing" violence driven by the Guatemalan Civil War and interacting with the environment in ways that significantly impact forest cover and drought in the MBR.

In "Narco-Cattle Ranching in Political Forests" by Jennifer Devine et al., published in 2020, the authors discuss the forests of the MBR in the context of overlapping factors of politics, violence, poverty, and a growing illicit cattle ranching industry. According to their research, the violence perpetuated against peasants in this region is done for one of two reasons – either peasants refuse to work as day-laborers for the cartels, or they refuse to sell their land to cartels.

[99] Devine et al. 2020

Many peasants do not risk this violence, fully aware that the corrupt local and national government will do little to stop it, and instead become partners in the exacerbation of their own poverty. Those who do the labor of massive deforestation are also the ones that will suffer from the extreme drought that kills any sort of small-agricultural living they were previously able to derive from the forest. This is in no way an attempt to blame poor farmers for their own poverty, nor for the grotesque violence that is often perpetuated against them. Rather, the forced involvement of peasants living in the MBR is emblematic of an aspect of this entanglement. Threats of violence are effective against poor people with little power, and those people who are being forced into these environmentally precarious positions are also the ones who will suffer the most from the environmental backlash.

In order to understanding what is driving movement to the MBR, and what is exacerbating drivers of migration in the MBR, Anna Tsing's model of entanglement reveals more than the typical, singular analysis of drivers. By looking at the multiple drivers of migration, in this case by examining several studies in order to see a larger picture, unexpected connections between, for example, the poverty residents of the MBR experience, the accelerating deforestation in the region, and worsening droughts. The MBR is a specific area of Guatemala that is emblematic of a broader trend. As migration increases, and climate change continues to affect the way people live in both predictable and unpredictable ways, the model of entanglement will become even more important. It relies on the unexpected to create a picture, just as Tsing draws connections between Finnish environmentalists and Hmong migrants to the US, between the unique Japanese market for one, rare mushroom and the biology of forest regrowth. Tsing's entanglements are essential to understand the context of the matsutake mushroom, and, in extending her argument, understanding her capitalist critique. Examining migration through the

lens of entanglement allows for a picture that encompasses more, and therefore can better address better the issues migrants face.

5. Conclusion

In the field of migration, there is a broad range of multidisciplinary literature establishing various drivers of migration in the northern triangle. However, the literature discussing drivers of migration rarely discusses multiple drivers simultaneously. Anna Tsing's methodology of entanglement offers a way to do this by focusing not on the individual drivers, but on the places where they touch and interact with each other. In connecting various, multidisciplinary sources, the bigger picture of migration from the Northern Triangle can better be seen.

The limitations of my research are primarily based on data limitations. Climate change is difficult to predict, and at times the connection between extreme weather events and climate change are not clear. Additionally, although violence is a prolific issue in the Northern Triangle, the specific data on levels of violence is most likely underreported. This paper is also far from an exhaustive list of every way that drivers of migration connect to each other. Just as Tsing acknowledges in her argument that she must present a broad picture in order to reach some level of entanglement, so too must drivers of migration be approached from a broad lens in order to see where they contaminate each other. Additional research is necessary to determine where more drivers entangle, especially in light of the rapidly growing body of literature studying how climate change drives migration.

The study of migration is already multidisciplinary. By focusing on the ways drivers of migration touch each other, and entangle together in significant and unexpected ways, we can better provide a cohesive analysis of migration and see the larger picture of migration more clearly. This paper also focused specifically on the Northern Triangle. Migration fueled by multiple drivers is also significant in other locations globally. Migration coming from conflict zones in Africa and the Middle East, and Southeast Asia, where rapidly rising seas threaten

islands, are just two examples of areas where this research can be extended to study how location-specific drivers interact.

References

"2003 John Audley et al._NAFTAs Promise and Reality-Lessons from Mexico for the Hemisphere.Pdf," n.d.

"2013 David Ucko_Counterinsurgency in El Slvador-The Lessons and Limits of the Indirect Approach.Docx," n.d.

Aguilar, Martha Y., Tomas R. Pacheco, Jaime M. Tobar, and Julio C. Quiñónez. "Vulnerability and Adaptation to Climate Change of Rural Inhabitants in the Central Coastal Plain of El Salvador." *Climate Research* 40, no. 2–3 (December 10, 2009): 187–98. https://doi.org/10.3354/cr00805.

Amelia Hoover Green. "Armed Group Institutions and Combatant Socialization." *Journal of Peace Research* 54, no. 5 (2017): 687-700.

Appleby, Kevin. "Strengthening the Global Refugee Protection System: Recommendations for the Global Compact on Refugees." *Journal on Migration and Human Security* 5, no. 4 (December 1, 2017): 780–99. https://doi.org/10.1177/233150241700500404.

Armenteras, Dolors, Cerian Gibbes, Carla A. Vivacqua, Juan Sebastián Espinosa, Wania Duleba, Fabio Goncalves, and Christopher Castro. "Interactions between Climate, Land Use and Vegetation Fire Occurrences in El Salvador." *Atmosphere* 7, no. 2 (February 2016): 26. https://doi.org/10.3390/atmos7020026.

Arrocha, William. "Combating Xenophobia and Hate through Compassionate Migration: The Present Struggle of Irregular Migrants Escaping Fear and Extreme Poverty." *Crime, Law and Social Change* 71, no. 3 (April 2019): 245–60. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10611-019-09833-w.

Asmann, Parker, and Eimhin O'Reilly. "InSight Crime's 2019 Homicide Round-Up." InSight Crime, February 2, 2021. https://insightcrime.org/news/analysis/insight-crime-2019-homicide-round-up/.

Asmann, Parker, and Katie Jones. "InSight Crime's 2020 Homicide Round-Up." InSight Crime, March 25, 2021. https://insightcrime.org/news/analysis/2020-homicide-round-up/.

Baez, Javier, German Caruso, Valerie Mueller, and Chiyu Niu. "Droughts Augment Youth Migration in Northern Latin America and the Caribbean." *Climatic Change* 140, no. 3–4 (February 2017): 423–35. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10584-016-1863-2.

Bagley, Justin E., Ankur R. Desai, Keith J. Harding, Peter K. Snyder, and Jonathan A. Foley. "Drought and Deforestation: Has Land Cover Change Influenced Recent Precipitation Extremes in the Amazon?" *Journal of Climate* 27, no. 1 (January 1, 2014): 345–61.

Battiston, Diego, Guillermo Cruces, Luis Felipe Lopez-Calva, Maria Ana Lugo, and Maria Emma Santos. "Income and Beyond: Multidimensional Poverty in Six Latin American Countries."

Social Indicators Research 112, no. 2 (June 2013): 291–314. https://doi.org/10.1007/s11205-013-0249-3.

Bebbington, Anthony J., Denise Humphreys Bebbington, Laura Aileen Sauls, John Rogan, Sumali Agrawal, César Gamboa, Aviva Imhof, et al. "Resource Extraction and Infrastructure Threaten Forest Cover and Community Rights." *Proceedings of the National Academy of Sciences of the United States of America* 115, no. 52 (December 26, 2018): 13164–73. https://doi.org/10.1073/pnas.1812505115.

Benedicte Bull. "Towards a Political Economy of Weak Institutions and Strong Elites in Central America." *European Review of Latin American and Caribbean Studies*, no. 97 (2014): 117-28.

Berg, Louis-Alexandre, and Marlon Carranza. "Organized Criminal Violence and Territorial Control: Evidence from Northern Honduras." *Journal of Peace Research* 55, no. 5 (September 1, 2018): 566–81. https://doi.org/10.1177/0022343317752796.

Blanco-Gómez, Pablo, Patricia Jimeno-Sáez, Javier Senent-Aparicio, and Julio Pérez-Sánchez. "Impact of Climate Change on Water Balance Components and Droughts in the Guajoyo River Basin (El Salvador)." *Water* 11, no. 11 (November 2019): 2360. https://doi.org/10.3390/w11112360.

Bouroncle, Claudia, Pablo Imbach, Beatriz Rodríguez-sánchez, Claudia Medellín, Armando Martinez-valle, and Peter Läderach. "Mapping Climate Change Adaptive Capacity and Vulnerability of Smallholder Agricultural Livelihoods in Central America: Ranking and Descriptive Approaches to Support Adaptation Strategies." *Climatic Change* 141, no. 1 (March 2017): 123–37. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10584-016-1792-0.

Brown, Oli "IPCC — Intergovernmental Panel on Climate Change: Sixth Assessment Report." Accessed January 12, 2021. https://www.ipcc.ch/.

Buhaug, Halvard, Tor A. Benjaminsen, Espen Sjaastad, and Ole Magnus Theisen. "Climate Variability, Food Production Shocks, and Violent Conflict in Sub-Saharan Africa." *Environmental Research Letters* 10, no. 12 (December 2015): 125015. https://doi.org/10.1088/1748-9326/10/12/125015.

Carr, David L. "Farm Households and Land Use in a Core Conservation Zone of the Maya Biosphere Reserve, Guatemala." *Human Ecology* 36, no. 2 (2008): 231–48.

———. "Migration to the Maya Biosphere Reserve, Guatemala: Why Place Matters." *Human Organization* 67, no. 1 (Spring 2008): 37–48. http://dx.doi.org.ezproxy.bu.edu/10.17730/humo.67.1.lvk2584002111374.

Castañeda, José Miguel. "Giammattei: 'Eta Dejó Pérdidas Por Más De Q3 Mil Millones.'" *Soy502*, November 16, 2020. https://www.soy502.com/articulo/giammattei-eta-dejo-perdidas-mas-q3-mil-millones-63338.

Castles, Stephen. “International Migration at a Crossroads.” *Citizenship Studies* 18, no. 2 (February 17, 2014): 190–207. https://doi.org/10.1080/13621025.2014.886439.

Chappell, M Jahi, Hannah Wittman, Christopher M Bacon, Bruce G Ferguson, Luis García Barrios, Raúl García Barrios, Daniel Jaffee, et al. “Food Sovereignty: An Alternative Paradigm for Poverty Reduction and Biodiversity Conservation in Latin America.” *F1000Research* 2 (November 6, 2013): 235. https://doi.org/10.12688/f1000research.2-235.v1.

“Chapter 8-Collective Violence.Pdf,” n.d.

Clavel, Tristan. “Militarization and Crime: Central America's Dangerous Gamble.” InSight Crime, November 21, 2017. https://insightcrime.org/news/analysis/militarization-and-crime-central-americas-dangerous-gamble/.

“DAT: The International Disasters Database.” EM. Accessed April 16, 2021. https://www.emdat.be/.

Devine, Jennifer A., David Wrathall, Nate Currit, Beth Tellman, and Yunuen Reygadas Langarica. “Narco-Cattle Ranching in Political Forests.” *Antipode* 52, no. 4 (2020): 1018–38. https://doi.org/10.1111/anti.12469.

Di Tella, Rafael, and Ernesto Schargrodsky. “Do Police Reduce Crime? Estimates Using the Allocation of Police Forces After a Terrorist Attack.” *American Economic Review* 94, no. 1 (February 1, 2004): 115–33. https://doi.org/10.1257/000282804322970733.

Eakin, Hallie, Catherine M. Tucker, and Edwin Castellanos. “Market Shocks and Climate Variability: The Coffee Crisis in Mexico, Guatemala, and Honduras.” *Mountain Research and Development* 25, no. 4 (2005): 304–9.

Ebrahimi, Sanaz Honarmand, and Marinus Ossewaarde. “Not a Security Issue: How Policy Experts De-Politicize the Climate Change–Migration Nexus.” *Social Sciences* 8, no. 7 (July 2019). http://dx.doi.org.ezproxy.bu.edu/10.3390/socsci8070214.

“El Salvador Overview” World Bank 2018 https://www.worldbank.org/en/country/elsalvador/overview

Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, International Organization for Migration, and World Food Programme. *The Linkages between Migration, Agriculture, Food Security and Rural Development: Technical Report*, 2018. http://www.fao.org/3/ca0922en/ca0922en.pdf.

“Gale Academic OneFile - Results - ISSN (15452476) And Document Title (‘Water Scarcity and Agricultural’) And Volume Number (19) And Start Page (112) And Issue Number (3) And Date (...” Accessed March 4, 2021. https://go-gale-com.ezproxy.bu.edu/ps/i.do?ty=as&v=2.1&u=mlin_b_bumml&it=DIourl&s=RELEVANCE&p=AONE&qt=SN%7E1545-

2476%7E%7ETI%7E%22Water+Scarcity+and+Agricultural%22%7E%7EVO%7E19%7E%7ESP%7E112%7E%7EIU%7E3&lm=DA%7E120200000&sw=w.

"Gale OneFile: LegalTrac - Document - Ganging Up on Immigration Law: Asylum Law and the Particular Social Group Standard; Former Gang Members and Their Need for Asylum Protections." Accessed March 2, 2021. https://go-gale-com.ezproxy.bu.edu/ps/i.do?p=LT&u=nellco_bpll&id=GALE|A550067457&v=2.1&it=r.

Gray, Clark, and Richard Bilsborrow. "Environmental Influences on Human Migration in Rural Ecuador." *Demography* 50, no. 4 (August 2013): 1217–41. https://doi.org/10.1007/s13524-012-0192-y.

Greenwald, Glenn. "The CIA's Murderous Practices, Disinformation Campaigns, and Interference in Other Countries Still Shape the World Order and U.S. Politics." The Intercept, May 21, 2020. https://theintercept.com/2020/05/21/the-cias-murderous-practices-disinformation-campaigns-and-interference-in-other-countries-still-shapes-the-world-order-and-u-s-politics/.

Guatemala Overview" World Bank. 2018 https://www.worldbank.org/en/country/guatemala/overview

Haas, Hein de. "The Internal Dynamics of Migration Processes: A Theoretical Inquiry." *Journal of Ethnic and Migration Studies* 36, no. 10 (December 1, 2010): 1587–1617. https://doi.org/10.1080/1369183X.2010.489361.

Haggerty, Richard A. "El Salvador: A Country Study" (1990)

Hannah, Lee, Camila I. Donatti, Celia A. Harvey, Eric Alfaro, Daniel Andres Rodriguez, Claudia Bouroncle, Edwin Castellanos, et al. "Regional Modeling of Climate Change Impacts on Smallholder Agriculture and Ecosystems in Central America." *Climatic Change* 141, no. 1 (March 2017): 29–45. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10584-016-1867-y.

Harvey, Celia A., Milagro Saborio-Rodríguez, M. Ruth Martinez-Rodríguez, Barbara Viguera, Adina Chain-Guadarrama, Raffaele Vignola, and Francisco Alpizar. "Climate Change Impacts and Adaptation among Smallholder Farmers in Central America." *Agriculture & Food Security* 7, no. 1 (August 14, 2018): 57. https://doi.org/10.1186/s40066-018-0209-x.

Heidbrink, Lauren. "The Coercive Power of Debt: Migration and Deportation of Guatemalan Indigenous Youth." *The Journal of Latin American and Caribbean Anthropology* 24, no. 1 (2019): 263–81. https://doi.org/10.1111/jlca.12385.

Hiskey, Jonathan T., Abby Córdova, Mary Fran Malone, and Diana M. Orcés. "Leaving the Devil You Know: Crime Victimization, US Deterrence Policy, and the Emigration Decision in Central America." *Latin American Research Review* 53, no. 3 (2018): 429–47. http://dx.doi.org.ezproxy.bu.edu/10.25222/larr.147.

"Honduras Overview" World Bank. 2018https://www.worldbank.org/en/country/honduras/overview

Hsiang, Solomon M., and Marshall Burke. "Climate, Conflict, and Social Stability: What Does the Evidence Say?" *Climatic Change* 123, no. 1 (March 2014): 39–55. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10584-013-0868-3.

"Hurricane Mitch - Migration News: Migration Dialogue." Hurricane Mitch - Migration News | Migration Dialogue, February 1, 1999. https://migration.ucdavis.edu/mn/more.php?id=1721_0_2_0.

Imbach, Pablo, Megan Beardsley, Claudia Bouroncle, Claudia Medellin, Peter Läderach, Hugo Hidalgo, Eric Alfaro, et al. "Climate Change, Ecosystems and Smallholder Agriculture in Central America: An Introduction to the Special Issue." *Climatic Change* 141, no. 1 (March 2017): 1–12. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10584-017-1920-5.

"Intentional Homicides (per 100,000 People)." Data, 2018. https://data.worldbank.org/indicator/VC.IHR.PSRC.P5?most_recent_value_desc=true&view=map.

"IOM UNCCD Desertification 2019 FINAL.Pdf." Accessed March 14, 2021. https://environmentalmigration.iom.int/sites/default/files/IOM%20UNCCD%20Desertification%202019%20FINAL.pdf.

Johnson, Richard L., and Murphy Woodhouse. "Securing the Return: How Enhanced US Border Enforcement Fuels Cycles of Debt Migration." *Antipode* 50, no. 4 (2018): 976–96. https://doi.org/10.1111/anti.12386.

"Key Migration Terms." International Organization for Migration, January 17, 2020. https://www.iom.int/key-migration-terms#Climate-migration.

Lambin, Eric F., B. L. Turner, Helmut J. Geist, Samuel B. Agbola, Arild Angelsen, John W. Bruce, Oliver T. Coomes, et al. "The Causes of Land-Use and Land-Cover Change: Moving beyond the Myths." *Global Environmental Change* 11, no. 4 (December 1, 2001): 261–69. https://doi.org/10.1016/S0959-3780(01)00007-3.

Landa-Blanco, Miguel, Hyunjung Cheon, Luis Gerardo Reyes Flores, Cassia Spohn, and Charles Max Katz. "Violence in Honduras from 2008 to 2018." *Injury Prevention* 26, no. 2 (April 1, 2020): 191–93. https://doi.org/10.1136/injuryprev-2019-043536.

Lange, Paul A. M. van, Maria I. Rinderu, and Brad J. Bushman. "CLASH: Climate (Change) and Cultural Evolution of Intergroup Conflict." *Group Processes & Intergroup Relations* 21, no. 3 (April 2018): 457–71. https://doi.org/10.1177/1368430217735579.

Levy, Barry S., Victor W. Sidel, and Jonathan A. Patz. "Climate Change and Collective Violence." *Annual Review of Public Health* 38, no. 1 (March 20, 2017): 241–57. https://doi.org/10.1146/annurev-publhealth-031816-044232.

Liscow, Zachary D. "Do Property Rights Promote Investment but Cause Deforestation? Quasi-Experimental Evidence from Nicaragua." *Journal of Environmental Economics and Management* 65, no. 2 (March 1, 2013): 241–61. https://doi.org/10.1016/j.jeem.2012.07.001.

Lopez, Edwin. "Migration as Resistance to Global Capitalism: From Cause to Action in the Migration of Central American Children to the United States, Summer 2014." *Perspectives on Global Development & Technology* 16, no. 1–3 (January 2017): 34–59. https://doi.org/10.1163/15691497-12341419.

Lorenzen, Matthew. "The Mixed Motives of Unaccompanied Child Migrants from Central America's Northern Triangle." *Journal on Migration and Human Security* 5, no. 4 (December 1, 2017): 744–67. https://doi.org/10.1177/233150241700500402.

Luiselli, Valeria, and Lizzie Davis. *Tell Me How It Ends: an Essay in Forty Questions*. London: 4th Estate, 2017.

Magner, Tara. "Refugee, Asylum, and Related Legislation in the US Congress: 2013–2016." *Journal on Migration and Human Security* 4, no. 4 (December 1, 2016): 166–89. https://doi.org/10.1177/233150241600400401.

Mares, Dennis. "Climate Change and Levels of Violence in Socially Disadvantaged Neighborhood Groups." *Journal of Urban Health* 90, no. 4 (August 2013): 768–83. https://doi.org/10.1007/s11524-013-9791-1.

"Market Shocks and Climate Variability: The Coffee Crisis in Mexico, Guatemala, and Honduras on JSTOR." Accessed March 2, 2021. https://www-jstor-org.ezproxy.bu.edu/stable/3674435?sid=primo&seq=1#metadata_info_tab_contents.

Maurer, Edwin P., Nicholas Roby, Iris T. Stewart-Frey, and Christopher M. Bacon. "Projected Twenty-First-Century Changes in the Central American Mid-Summer Drought Using Statistically Downscaled Climate Projections." *Regional Environmental Change* 17, no. 8 (December 1, 2017): 2421–32. https://doi.org/10.1007/s10113-017-1177-6.

McNeish, John-Andrew, Skarlleth Martinez Prado, and Hugo Frühling Ehrlich. "Community-Based Policing in Nicaragua: Do the Claims of Communitarian, Proactive and Preventative Hold True?" *Journal of Human Security* 15, no. 2 (2019): 7–20. http://dx.doi.org.ezproxy.bu.edu/10.12924/johs2019.15020007.

McSweeney, Kendra, Erik A. Nielsen, Matthew J. Taylor, David J. Wrathall, Zoe Pearson, Ophelia Wang, and Spencer T. Plumb. "Drug Policy as Conservation Policy: Narco-Deforestation." *Science* 343, no. 6170 (January 31, 2014): 489–90. https://doi.org/10.1126/science.1244082.

McSweeney, Kendra, Nazih Richani, Zoe Pearson, Jennifer Devine, and David J. Wrathall. "Why Do Narcos Invest in Rural Land?" *Journal of Latin American Geography* 16, no. 2 (2017): 3–29.

McSweeney, Kendra, David J. Wrathall, Erik A. Nielsen, and Zoe Pearson. “Grounding Traffic: The Cocaine Commodity Chain and Land Grabbing in Eastern Honduras.” *Geoforum* 95 (October 1, 2018): 122–32. https://doi.org/10.1016/j.geoforum.2018.07.008.

Méndez, María José. “The Violence Work of Transnational Gangs in Central America.” *Third World Quarterly* 40, no. 2 (February 2019): 373–88. https://doi.org/10.1080/01436597.2018.1533786.

Meyers, Eytan. “Theories of International Immigration Policy -- A Comparative Analysis [1].” *International Migration Review* 34, no. 4 (December 22, 2000): 1245–1245.

“Migration and Global Environmental Change: Future Challenges and Opportunities,” n.d., 234.
Migration, Citizenship and Identity, 2017. https://www-elgaronline-com.ezproxy.bu.edu/view/9781785360992.xml.

Mikadze, Kirsten. “Uninvited Guests: NGOs, Amicus Curiae Briefs, and the Environment in Investor-State Dispute Settlement.” *Journal of International Law and International Relations* 12, no. 1 (2016): 35–81.
"Montreal MP Probes the Sub-Culture of Gangs in Canada - Americas Quarterly". *Americas Quarterly*. November 12, 2009. Retrieved September 30, 2020.

Mora, Camilo, Daniele Spirandelli, Erik C. Franklin, John Lynham, Michael B. Kantar, Wendy Miles, Charlotte Z. Smith, et al. “Broad Threat to Humanity from Cumulative Climate Hazards Intensified by Greenhouse Gas Emissions.” *Nature Climate Change* 8, no. 12 (December 2018): 1062–71. https://doi.org/10.1038/s41558-018-0315-6.

Morales-Muñoz, Héctor, Srijna Jha, Michelle Bonatti, Henryk Alff, Sabine Kurtenbach, and Stefan Sieber. “Exploring Connections—Environmental Change, Food Security and Violence as Drivers of Migration—A Critical Review of Research.” *Sustainability* 12, no. 14 (January 2020): 5702. https://doi.org/10.3390/su12145702.

Nardulli, Peter F., Buddy Peyton, and Joseph Bajjalieh. “Climate Change and Civil Unrest: The Impact of Rapid-Onset Disasters.” *Journal of Conflict Resolution* 59, no. 2 (March 1, 2015): 310–35. https://doi.org/10.1177/0022002713503809.

Nawrotzki, Raphael J., Lori M. Hunter, Daniel M. Runfola, and Fernando Riosmena. “Climate Change as a Migration Driver from Rural and Urban Mexico.” *Environmental Research Letters* 10, no. 11 (November 2015): 114023. https://doi.org/10.1088/1748-9326/10/11/114023.

Nelson, Andrew, and Kenneth M. Chomitz. “The Forest-Hydrology-Poverty Nexus in Central America: An Heuristic Analysis.” *Environment, Development and Sustainability* 9, no. 4 (November 2007): 369–85. http://dx.doi.org.ezproxy.bu.edu/10.1007/s10668-006-9027-6.

Pérez, Orlando J. Civil-Military Relations in Post-Conflict Societies. Routledge Studies in Latin American Politics. London: Routledge, 2015.

Pries, Ludger. “The Momentum of Transnational Social Spaces in Mexico-US-Migration.” *Comparative Migration Studies* 7, no. 1 (August 16, 2019): 34. https://doi.org/10.1186/s40878-019-0135-5.

Raleigh, Clionadh. “The Search for Safety: The Effects of Conflict, Poverty and Ecological Influences on Migration in the Developing World.” *Global Environmental Change*, Migration and Global Environmental Change – Review of Drivers of Migration, 21 (December 1, 2011): S82–93. https://doi.org/10.1016/j.gloenvcha.2011.08.008.

Raleigh, Clionadh, Hyun Jin Choi, and Dominic Kniveton. “The Devil Is in the Details: An Investigation of the Relationships between Conflict, Food Price and Climate across Africa.” *Global Environmental Change* 32 (May 1, 2015): 187–99. https://doi.org/10.1016/j.gloenvcha.2015.03.005.

Ravenel, Ramsay M., and Ilmi M. E. Granoff. “Illegal Logging in the Tropics: A Synthesis of the Issues.” *Journal of Sustainable Forestry* 19, no. 1–3 (October 2004): 351–71. https://doi.org/10.1300/J091v19n01_16.

Ritchie, Hannah, and Max Roser. “CO_2 and Greenhouse Gas Emissions.” Our World in Data, May 11, 2020. https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions.

Rivera, Mauricio. “The Sources of Social Violence in Latin America: An Empirical Analysis of Homicide Rates, 1980–2010.” *Journal of Peace Research* 53, no. 1 (January 1, 2016): 84–99. https://doi.org/10.1177/0022343315598823.

Saldaña-Portillo, María Josefina. “The Violence of Citizenship in the Making of Refugees: The United States and Central America.” *Social Text* 37, no. 4 (141) (December 1, 2019): 1–21. https://doi.org/10.1215/01642472-7794343.

Semple, Kirk. “Central American Farmers Head to the U.S., Fleeing Climate Change.” The New York Times. The New York Times, April 13, 2019. https://www.nytimes.com/2019/04/13/world/americas/coffee-climate-change-migration.html.

Sesnie, Steven E., Beth Tellman, David Wrathall, Kendra McSweeney, Erik Nielsen, Karina Benessaiah, Ophelia Wang, and Luis Rey. “A Spatio-Temporal Analysis of Forest Loss Related to Cocaine Trafficking in Central America.” *Environmental Research Letters* 12, no. 5 (May 2017): 054015. https://doi.org/10.1088/1748-9326/aa6fff.

Smith, Timothy J., and Thomas A. Offit. “Confronting Violence in Postwar Guatemala: An Introduction.” *The Journal of Latin American and Caribbean Anthropology* 15, no. 1 (2010): 1–15. https://doi.org/10.1111/j.1935-4940.2010.01060.x.

Sof&iacute, Silvia, a Mardero Jim&eacute, nez, Birgit Schmook, Santana Navarro Olmedo, Zachary Christman, Claudia Radel, and Betsabe de la Barreda Bautista. “Water Scarcity and Agricultural and Conservation Policies: Old and New Challenges for Mexican Smallholder Maize Production

in the Protected Forests of the Mexico-Guatemala Border." *Journal of Latin American Geography* 19, no. 3 (October 1, 2020): 112–33.

Staal, Arie, Stefan C. Dekker, Marina Hirota, and Egbert H. van Nes. "Synergistic Effects of Drought and Deforestation on the Resilience of the South-Eastern Amazon Rainforest." *Ecological Complexity* 22 (June 1, 2015): 65–75. https://doi.org/10.1016/j.ecocom.2015.01.003.

Staal, Arie, Bernardo M. Flores, Ana Paula D. Aguiar, Joyce H. C. Bosmans, Ingo Fetzer, and Obbe A. Tuinenburg. "Feedback between Drought and Deforestation in the Amazon." *Environmental Research Letters* 15, no. 4 (April 2020): 044024. https://doi.org/10.1088/1748-9326/ab738e.

Susan D. Burgerman. "Building the Peace by Mandating Reform: United Nations-Mediated Human Rights Agreements in El Salvador and Guatemala." *Latin American Perspectives* 27, no. 3 (2000): 63-87.

Swanson, Kate, and Rebecca Maria Torres. "Child Migration and Transnationalized Violence in Central and North America." *Journal of Latin American Geography* 15, no. 3 (2016): 23–48. https://doi.org/10.1353/lag.2016.0029.

Tellman, Elizabeth. "Mapping and Modeling Illicit and Clandestine Drivers of Land Use Change: Urban Expansion in Mexico City and Deforestation in Central America." Ph.D., Arizona State University, 2019. http://search.proquest.com/docview/2228222051/abstract/5F5B37FB1C834D4APQ/1.

Theisen, Ole Magnus. "Climate Change and Violence: Insights from Political Science." *Current Climate Change Reports* 3, no. 4 (December 2017): 210–21. https://doi.org/10.1007/s40641-017-0079-5.

The Inter-American Development Bank. "Central America After Hurricane Mitch The Challenge of Turning a Disaster into an Opportunity." Central America After Hurricane Mitch - Honduras, 2000. https://web.archive.org/web/20051219114814/http://www.iadb.org/regions/re2/consultative_group/backgrounder2.htm.

The National Drought Mitigation Center. "ENSO and Drought Forecasting." National Drought Mitigation Center. Accessed April 16, 2021. https://drought.unl.edu/Education/DroughtIn-depth/ENSO.aspx.

Tisch, Chris. "At Least 13 Dead in Central America from Eta as Forecasters Watch Florida Impact." *The Tampa Bay Times*, November 5, 2020. https://www.tampabay.com/hurricane/2020/11/05/at-least-13-dead-in-central-america-from-eta-as-forecasters-watch-florida-impact/.

"Transiciones e Incertidumbres: Migration from El Salvador, Honduras and Guatemala - ProQuest." Accessed April 5, 2021. https://search-proquest-com.ezproxy.bu.edu/docview/2312045873?pq-origsite=primo&accountid=9676.

Trigueros, Ariel. “A La Fecha Se Registran 16 Hondureños Muertos Tras Paso De Iota.” *La Prensa*, November 19, 2020. https://www.laprensa.hn/honduras/1423481-410/reporte-muertos-honduras-paso-iota-derrumbes-deslizamientos-inundaciones.

Tsing, Anna Lowenhaupt. *The Mushroom at the End of the World*. *The Mushroom at the End of the World*. Princeton University Press, 2015. https://www-degruyter-com.ezproxy.bu.edu/document/doi/10.1515/9781400873548/html.

Ucko, David H. “Counterinsurgency in El Salvador: The Lessons and Limits of the Indirect Approach.” *Small Wars & Insurgencies* 24, no. 4 (October 1, 2013): 669–95. https://doi.org/10.1080/09592318.2013.857938.

United States Citizenship and Immigration Services. “Continuation of Documentation for Beneficiaries of Temporary Protected Status Designations for El Salvador, Haiti, Nicaragua, Sudan, Honduras, and Nepal.” Federal Register, December 9, 2020. https://www.federalregister.gov/documents/2020/12/09/2020-27154/continuation-of-documentation-for-beneficiaries-of-temporary-protected-status-designations-for-el.

Van Hear, Nicholas, Oliver Bakewell, and Katy Long. “Push-Pull plus: Reconsidering the Drivers of Migration.” *Journal of Ethnic & Migration Studies* 44, no. 6 (May 2018): 927–44. https://doi.org/10.1080/1369183X.2017.1384135.

Van Lange, Paul A. M., Maria I. Rinderu, and Brad J. Bushman. “Aggression and Violence around the World: A Model of CLimate, Aggression, and Self-Control in Humans (CLASH).” *Behavioral and Brain Sciences* 40 (2017): e75. https://doi.org/10.1017/S0140525X16000406.

Vogt, Wendy A. “Crossing Mexico: Structural Violence and the Commodification of Undocumented Central American Migrants.” *American Ethnologist* 40, no. 4 (2013): 764–80. https://doi.org/10.1111/amet.12053.

Wamsler, Christine, and Nigel Lawson. “Complementing Institutional with Localised Strategies for Climate Change Adaptation: A South–North Comparison.” *Disasters* 36, no. 1 (2012): 28–53. https://doi.org/10.1111/j.1467-7717.2011.01248.x.

“Watersheds-in-Guatemala-2001.Jpg (788×1197).” Accessed March 7, 2021. https://www.gifex.com/images/0X0/2011-11-23-15007/Watersheds-in-Guatemala-2001.jpg.

Weiner, Myron. “Bad Neighbors, Bad Neighborhoods: An Inquiry into the Causes of Refugee Flows.” *International Security* 21, no. 1 (June 22, 1996): 5–43.

World Bank. “Groundswell: Preparing for Internal Climate Migration.” Text/HTML. Accessed April 15, 2021. https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration.

The World Food Programme (WFP), The Inter-American Development Bank (IADB), The International Fund for Agricultural Development (IFAD), The Organization of American States (OAS), and The International Organization for Migration (IOM). “FOOD SECURITY AND EMIGRATION Why People Flee and the Impact on Family Members Left behind in El Salvador, Guatemala and Honduras .” The United Nations Sustainable Development Goals, 2017. https://www.un.org/sustainabledevelopment/blog/2017/08/emigration-and-food-insecurity-in-central-american-dry-corridor-focus-of-new-un-backed-study/.

Wood, Geof. “Staying Secure, Staying Poor: The ‘Faustian Bargain.’” *World Development* 31, no. 3 (2003): 455–71.

Yuichi Kubota. "Explaining State Violence in the Guatemalan Civil War: Rebel Threat and Counterinsurgency." *Latin American Politics and Society* 59, no. 3 (2017): 48-71.