Analysis of the Effects of Large-Scale Disasters on the Behavior of Non-State Violent Actors in Countries Already Under Duress

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Abstract

Over the course of human civilization, humanity has been exposed to major disruptions of normalcy due to the onset of naturally occurring large-scale disasters. In the midst of disaster, some societies have also dealt with intrastate conflicts that strain the already depleted resources necessary for the survival and support of established institutions and governance. At the forefront of my research is the ongoing COVID-19 pandemic which established itself in the fourth quarter of 2019 and has since then taken hundreds of thousands of lives and deteriorated several economies around the world. For this paper, I will be analyzing the effects that disasters have with respect to the behavior of non-state violent actors (NSVAs) and subsequent influence on conflict continuation, escalation, and de-escalation, as well as the NSVAs ability to legitimize themselves in the view of the state and international community. I will be drawing on existing literature, including the Ripe Moment Theory presented by Joakim Kreutz, to help explain behavior and conflict before, during, and after a disaster; will be utilizing the ACLED Conflict Database to track conflict intensity both before and during the pandemic; and will be providing case studies from multiple regions around the world to provide different contexts for distinct NSVAs. At the end of this paper, I come to the conclusion that the behavior of the NSVA and conflict continuation, escalation, and/or de-escalation, in the midst of a disaster, is both moderately dependent of the condition of the regime type, as well as the overall ambitions of the actors in question, whether that be political motivations or motivations of other interests. Additionally, I argue that states and NSVAs must come to a mutual agreement in the establishment of relief services, and that states should attempt to negotiate with the NSVA in the facilitation of the appropriate resources and guidance.

Introduction

During the concluding months of the year 2019, a new deadly virus, COVID-19, originating from Wuhan, China, had begun to spread rapidly across the world, without borders . According to Johns Hopkins University, at the moment of writing this paper, nearly 63 million people have been infected, and about 1.5 million have died from the virus ("COVID-19 Map", 2020). The consequences of the virus have been severe; from global economic recessions to widespread panic and strict enforcement of pandemic related restrictions, governments all over the world have been struggling to contain the proliferation of the virus and 'flatten the curve'. While governments are busy fighting the virus and allocating extensive resources to its citizens, non-state violent actors have taken advantage of weakened governments and have started their own campaigns for the management of resources to populations in order to gain greater legitimacy and support, as well as cooperating with the government, and in some cases, continuing or escalating conflict.

Analysis of the behavior of non-state violent actors does not provide a concrete pattern in which all actors fall into. Instead, the behavior relies on the past and current environments in which they operate help predict the behavior of actors in future events. The culmination of this paper cannot be applied to all situations; however, I hope to give a starting point to understand the conditions and series of events that causes NSVAs and governments to either change or continue their behaviors in the midst of a disaster.

Defining Disaster and Definitional Accommodations

Over the course of the research done for this paper, I have come across various definitions that both fit and do not fit both the scope of the independent variable, the COVID-19 pandemic, that I am using to focus this research on. Therefore, I have discarded the concrete definitions of natural disaster, epidemic, pandemic, and global health crisis for the broader and greater-encompassing definition of disaster. This definitional choice was made in order to allow for greater implementation of the results as well as the qualitative and quantitative data represented in this paper to other events outside of the norm of the local or global community and to allow myself to introduce significant features of Kreutz' research into the behavior of non-state violent actors in the midst of a natural disaster (2014) into this paper, where I focus on a global health crisis; a phenomenon which does not fall under the narrow category of natural disaster.⁴⁰

To encompass a broader body of events that may occur around the world I have adopted two definitions of 'disaster' that closely relate to each other and mangle them; one from the World Health Organization (WHO), and the other from the International Federation of the Red Cross and Red Crescent (IFRC). As defined by the IFRC, "[a] disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources" ("What is a disaster?", 2020). In addition, the WHO defines disaster as "an occurrence disrupting the normal conditions of existence and causing a level of suffering that exceeds the capacity of adjustment of the affected community" ("Disasters & Emergencies", 2002, p. 3).

Through the interlacing of both definitions, we can conclude that a disaster involves three

⁴⁰ Kreutz (2014) uses the term "armed separatist challengers" in place of my use of non-state violent actors (NSVA).

key characteristics: the disruption of the condition of a community; the inability of a community to fully cope with the situation using its own resources; and the suffering of a community due to the destruction of human life, capital, and environment. This creation of an all-encompassing definition of ambiguous events allows it to be utilized in cases pertaining to earthquakes, hurricanes, pandemics, famine, drought, and others within the broad category. Therefore, the use of this paper can be applied to different events that may take place or have already taken place in order to better understand the behaviors of certain actors.

On the subject of the characterization of regime type and its polity, it is essential to define the main terms associated with the classification of regime types that will be used in this paper. For this, I will be using the "Center for Systemic Peace's" (creators of the Polity IV Project) definitions of democracy, anocracy, and autocracy. The Center defines democracy along three elements: "the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders," "the existence of institutionalized constraints on the exercise of power by the executive," and "the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation" (Marshall et al., 2018, p. 14). Furthermore, the Center defines anocracy as systems of government that are in "transitions' from one mode of authority to another" and "incomplete transitions' and the appearance of 'incoherent' polities" (Marshall et al., 2018, p. 9). This can be seen as a government stuck in the transition period in which the country utilizes policies seen in both democratic as well as autocratic countries. Autocracy, as defined by the Center, is "[sharply restricting] or [suppressing] competitive political participation," "their chief executives are chosen in a regularized process of selection within the political elite", and when "in office they exercise power with few institutional constraints" (Marshall et al., 2018, p. 15).

Existing Literature to Be Utilized

In order to better understand how the different actors behave in the event of a disaster, we must pull theoretical approaches from existing literature which provides both qualitative and quantitative data supporting specific theories. The primary theoretical arguments that I will tie into this paper come from Joakim Kreutz' paper "From Tremors to Talks: Do Natural Disasters Produce Ripe Moments for Resolving Separatist Conflicts?" and Kalyvas' "A Theory of Selective Violence." Additionally, I will be using the papers, "COVID-19 and Armed Conflict," by Tobias Ide, and "Violent Non-State Actors and COVID-19: Challenge or Opportunity." Each of these papers provides information pertinent to explaining behavior as well as understanding conflict continuity and legitimization of NSVAs on the political level.

The first, and most important, piece of research that I will be reviewing is Joakim Kruetz', "From Tremors to Talks." Over the course of his paper, Kreutz focuses primarily on the behavior of actors in Indonesia in the time period from 1990 – 2004 and looks at how the 2004 tsunami has affected ceasefires, negotiations, and peace agreements. To do this, he introduces his argument that natural disasters create a "ripe moment for conflict resolution" since the government needs to allocate its resources towards disaster response at the given moment (2012, p. 482). Over the course of his research, Kreutz has come up with the Ripe Moment Theory; the theory that external shocks to a state create incentives for the State to initiate conflict resolution actions for those it is fighting against (2012, p. 483). The 'Ripe Moment Theory' has some restrictions and assumptions, however. It assumes that the actors engaged in the armed conflict are rational, in that they calculate the cost-benefit of their actions in the wake of a disaster

(Kreutz, 2012, p. 484). Additionally, it assumes that the government is trying to stay in power and that they are trying to maintain the public's support as well as keep a positive public opinion (Kreutz, 2012, p. 485). Finally, the theory argues that when a state government is experiencing an increase in demand for resources from the public, it is more willing to negotiate with non-state violent actors (Kreutz, 2012, p. 483).

Utilizing the 'Ripe Moment Theory,' and generating both qualitative and quantitative data into an empirical analysis, Kreutz looks at 405 different disaster events in 21 different countries, between the years 1990-2004, and has 50 different rebel groups (2012, p. 484). Looking at conflict data from 12 months prior, then 12 months after the disaster event, Kreutz finds support for his 'Ripe Moment Theory.' In his results, Kreutz finds that the onset of a disaster is a catalyst for an increase in talks and ceasefires, and additionally finds that the onset of a disaster does not relevantly act as a catalyst for ceasefires (2012, p. 493). In addition to these results, Kreutz also finds that a disaster that occurs outside of a conflict zone is more likely to be a catalyst for talks, ceasefires, and peace agreements (2012, p. 493).

In addition to this study, Kreutz also introduces a study on regime type with respect to the 'Ripe Moment Theory,' and their likelihood to participate in either talks, ceasefire, or peace agreements. He finds that talks are probable in both democracies and non-democracies; ceasefires are more probable in democracies and have a significantly low probability in non-democracies; and finally, he finds that peace agreements have a very low probability in both democracies and non-democracies (2012, p. 494).

In conclusion, Kreutz paper highlights important data that I will be using to explain the behaviors of non-state violent actors during disaster events and their interactions with the standing government. As we can understand, the COVID-19 pandemic has generated shocks to countries around the world, causing both governments and non-state actors alike to seek out terms to provide support to the populations; whether it be for popular support and legitimization, or because of political or social pressure.

The second academic paper that is important to my research is "COVID-19 and Armed Conflict" by Tobias Ide (2020). Ide's paper takes a look at how NSVAs have reacted to the COVID-19 pandemic and how they take advantage of grievance and opportunity structures, which influence armed conflict with respect to increasing or decreasing levels of violence and conflict onset (Ide, 2020, p. 1). Over the course of his paper, Ide finds that three countries; Afghanistan, Colombia, and Thailand, have experienced a decrease in violence by NSVAs in order to increase their popular support through the provision of aid (2020, p. 8). Ide also finds, however, that five countries have witnessed an increase in armed activity by NSVAs in India, Iraq, Libya, Pakistan, and the Philippines (2020, pp. 9-10).

Ide adds "that high levels of disease prevalence and the associated loss in life expectancy reduces the relative risks of individuals for joining dangerous activities like rebellion" (2020, p. 4). This ties directly into the 'collective action problem' that Ide introduces, where, based on individual cost-benefit analyses, it is less costly to join, in this case, a rebel group, than to not join.

Through the use of the collective action problem, Ide argues that "high levels of disease prevalence and the associated loss in life expectancy reduces the relative risks of individuals for joining dangerous activities like rebellion" (2020, p. 4). Attaching itself to the collective action problem, Ide adds that "GDP decline and poor health are also among the established predictors of civil war" (2020, p. 2). Through this, he is conveying the idea that poor government control

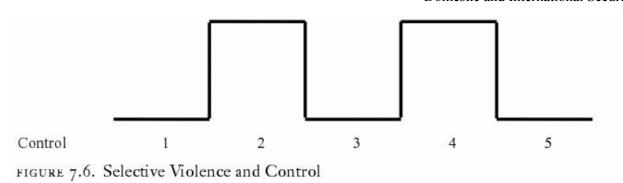
over economic and social services increases grievances against the State, providing a ripe moment for the collective action problem to play out among individuals, and increase the likelihood of conflict onset or escalation (2020, p. 2). While he finds that some countries have seen a decrease in violence, Ide adds that although there may be a decline in violence, there is still the possibility of violence escalation in the future as groups regroup and recruit for larger scale conflict (2020, p. 11).

This paper is useful in understanding the reasons in which individuals turn to non-state groups in order to provide personal protection and obtain sufficient resources for themselves when the government is unable to provide or isn't providing. Through the use of the collective action problem and the idea of grievances and opportunity, Ide sets a foundation for understanding cost-benefit analysis during a pandemic, which can be broadly used in conjunction with the broad definition of disasters. In addition, Ide presents and looks at specific case studies in the eight countries listed above, in which some will be expanded on later in this paper.

The third significant research set that I will be using to explain the behavior of actors in the midst of a disaster is Kalyvas', "A Theory of Selective Violence," in his book "The Logic of Violence in Civil War." Within this chapter, Kalyvas explains many different approaches as to the behavior of the incumbent government, insurgent forces, and civilians. However, later in the chapter, Kalyvas adds a theory and model of the use of violence (a behavior) by the incumbent and/or the insurgents, given certain environmental conditions. He starts on the idea that the "theory of selective violence [is] a joint process" and that "actors operating in a regime of fragmented sovereignty must rely on selective violence to deter defection" (Kalyvas, 2011, p. 173).

While much of this chapter looks at defection and denunciation during civil war, Kalyvas introduces a theory with equal importance that looks at the use of violence based on territorial control. He assumes that "[p]olitical actors maximize territorial control" and "when one actor abandons a territory, the rival actor moves in" (Kalyvas, 2011, p. 196). Additionally, Kalyvas notes that although his theory focuses on the aspect of civil wars, he notes that "the theory can be further refined and expanded... [allowing] the derivation of robust hypotheses about the variation of violence across wars, as well as across several types of violence – from organized crime to terrorism and genocide" (2011, p. 208). Through the addition of this, Kalyvas grants the use of this theory to be expanded on in other scenarios; which I plan on doing with relation to disasters and group behavior.

Turning our attention to his theory of the use of violence with respect to control, Kalyvas notes that there are five levels of control and violence type behavior, and simplifies it on a two-dimensional graph (2011, p. 204). Kalyvas' theory revolving around control and violence says; when control by either an government/insurgent/criminal/or other violent group is high, then the violence will be low (zones 1 and 5); whereas, on the other hand, if the control is low, then he expects violence to be high (zones 2 and 4). In zone 3, where both actors have equal control, the level of violence is expected to be low due to both actors attempting to win over the populace, therefore not risking violence (2011, p. 204).



Source: Kalvvas, 2011, p. 204

With relation to this paper and the behaviors of non-state violent actors, Kalyvas' theories can be applied to better understand the circumstances in which groups may agree to either conflict escalation or de-escalation through the control variable and how it is used to predict whether or not the actor will use violence. When looking at this through the scope of a disaster, I expect to see zones of control between the government and NSVAs, in which resources help determine who the populace turns to for governance related purposes, thereby legitimizing an actor.

Research and Hypotheses

As shown in previous sections, the term, 'disaster' has a broad meaning and can act as a catalyst for the emergence of new events within the dimensions of conflict and legitimization of non-state violent actors. When a disaster has a significant effect on a country, it diverts resources, aid, money, and manpower to relief missions in order to mitigate the damage done to the State.

Through the union of the ripe moment theory, collective action problem, and the theory of selective violence, I come up with two main research questions:

1. How does the COVID-19 pandemic affect the legitimization of non-state violent actors within countries whose governments have limited resources and outreach?

2. How does COVID-19 affect conflict continuation, escalation, and/or de-escalation? While I focus on the COVID-19 pandemic, I plan this paper to be applicable to disaster's in general and am using the current state of the world as a primary example for proof of concept.

For my hypotheses, I will be setting dependent and independent variables, as well as recognizing a control variable. The independent variable (IV) is the COVID-19 pandemic and was chosen due to the fact that it is an international disaster that has had a great effect on the current status of a country and its systems. I assume that over the period of time that this paper is being written that the pandemic will be ongoing and not drastically change.

For my dependent variables (DV), I have come up with four different variables that can change based on the current state of a disaster (ongoing or ended). The first dependent variable that I want to introduce is the *response of groups*. Under this DV, the response of groups is characterized in a couple different ways. The first way in which the response of groups is characterized is in how they react. Reactions can consist of doing nothing, increasing activity in the political landscape of the country, enforcing guidelines, along with many more. The response of the group will help in the determination of the group's goals and their capabilities as

a non-state actor. Another way in which response will be measured is whether or not they continue normal operations or divert their resources to providing relief and aid to the local population.

The third, fourth, and fifth dependent variables each relate to one another and can occur concurrently with each other depending on the current state of the disaster. The first of the three is *conflict continuation*. In conflict continuation, NSVAs can decide whether or not to continue their conflict with the State in the same capacity that they were prior to the onset of the disaster. The second of the three is *conflict escalation* and is when the NSVA increases their fight with the State and allocates more resources to their fight in order to push the State into greater levels of distress. The third of the three is *conflict de-escalation* and can occur when the NSVA eases their use of force against the State or ceases their force altogether . Conflict de-escalation does not necessarily imply direct cooperation and an end to the conflict, but can include ceasefire agreements, disengagement of forces, or withdrawal from the conflict for a period of time.

In addition to the IV and DVs presented, I have drawn up one conditional variable, *regime type*. The political stance of the regime, in many ways, can predict the type of behavior a country's government and military would have to a disaster, as well as their likelihood of reacting in certain ways to the NSVA. Types of regimes range on the polity scale from -10 to 10, with -10 being fully autocratic and 10 being fully democratic. Within and among the labels of autocratic and democratic lay different subsets of regime type that can include, but are not limited to; full democracy, democracy, open anocracy, closed anocracy, and autocracy (Marshall et al., 2018).

With the variables now defined, I will turn to my first hypothesis, which states:

H1: The onset of a disaster provides fertile ground for non-state violent actors to legitimize themselves among the international community and their local population.

I predict that when a disaster occurs, NSVAs, who have greater political ambitions, are more likely to try and win the hearts and minds of the population through different means. Through winning the hearts and minds of the people, these groups will be able to effectively gain the support within the country's political landscape and can secure their legitimacy in the international landscape through recognition by different countries for their relief efforts.

The second hypothesis that I will turn to is:

H2: The onset of a disaster de-escalates conflict and violent behavior of non-state violent actors.

For this hypothesis, I predict that in the midst of a disaster, NSVAs will, instead of escalating or continuing conflict with the state, they will de-escalate in order to allocate additional resources to local populations, as well as to keep local populations under control through the provision of their own rules and systems of governance.

When a disaster hits a country, we have seen instances in which groups actively ask the government for help in order to provide necessary aid to their populations ("Bringing Within Reach", 2020, p. 1). In turn, this cooperation between actors actively de-escalates conflict through the mutual building of a relationship between the NSVA and government around a similar cause ("Bringing Within Reach", 2020, p. 2).

Even though disaster may positively impact conflict de-escalation, there are places in which NSVAs already have the foothold they need on the population, and thus do not need to dis-engage from conflict. This leads to my third hypothesis:

H3: The onset of a disaster does not deescalate conflict, but instead has an adverse effect and escalates the violent behavior of NSVAs.

When looking at the aspect of conflict escalation in the midst of a disaster, I take into account the goals of the NSVA as well as the resources and the foothold they have in their space of influence.

The final hypothesis that I will be presenting deals with the conditioning variable and the incumbent. In this I argue that:

H4: In States below the democracy governance type polity score threshold, there should be an increase in conflict amid a disaster, and in States under democratic governance type, there should be a decrease in conflict amid disaster.

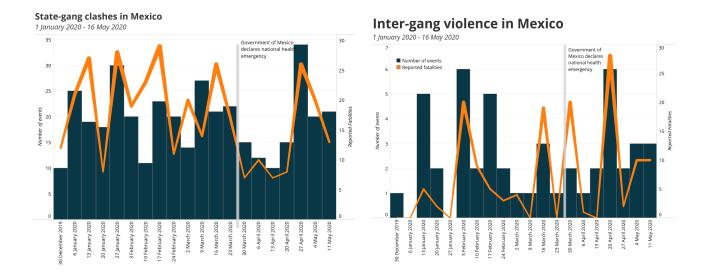
I come across this assumption as democratic states should be more willing to listen to their populations as governments face re-election. Autocratic governments, I predict, are more likely to increase their use of violence because they are less likely to have to answer to their populations, and are more likely to attempt to control dissent within their State.

With these four hypotheses spelled out, I will turn to both qualitative and quantitative research to either prove or disprove them and provide current case studies through news articles and research papers in order to provide concrete support for my arguments. While my list is not exhaustive, I have picked out areas of the world with the most coverage and have plentiful data generated over the years, which help draw out a clear pattern.

Case Studies

Mexico

The situation, as it relates to the COVID-19 pandemic, in Mexico is complex and involves many NSVAs which are characterized as cartels and fight both amongst each other as well as against the incumbent government. Among the cartels in Mexico, six separate cartels, the two most prominent being the Gulf and Sinaloa Cartels, have started disaster relief and enforcement efforts in territories under their control. Looking at Mexico broadly, the ACLED database shows that for conflict events and fatalities between the months of January 2020 and May 2020, there have been spikes in both, reaching a new homicide record for the State in March 2020 (Gutierrez et al., 2020). Additionally, ACLED finds that in Mexico, the states of Baja California, Sonora, Nuevo Leon, Jalisco, Colima, and Mexico have seen an exponential increase in violence against civilians after March 2020.



Even though Mexico has been a hot spot with cartel violence for many years, the pandemic has created ways of the cartels to gain an upper hand on the government and to win social control over the populations (Bunker & Sullivan, 2020, p. 12). According to Bunker and Sullivan, the Mexican cartels have been engaged in activities that are seen as equivalent to the provision of humanitarian aid, and have been using this aid to gain the public support and to use it as propaganda, to further their claims that they are the "protector of the community" (2020, p. 1). Additionally, Bunker and Sullivan recognize two other unique activities that cartels have started to engage in; "special taxing of businesses to provide that aid, and quarantine enforcement" (2020, p. 12).

While some groups do not have the resources on hand to provide aid to their respective populations, Jones and Hale find that many have turned to "Social Banditry" and "Robin Hood" strategy (2020, p. 1; Bunker & Sullivan, 2020, p. 12). The "Robin Hood" strategy is the taking of resources from the government and the rich and giving it to the poor or suffering communities in order to undermine government attempts to help the communities (Bunker & Sullivan, 2020, p. 12). "Social Banditry" is when "cartels [publicize] their distribution of food via pantries to portray themselves as "Robin Hoods" (Jones & Hale, 2020, p. 1). By using these strategies to win over the population, the cartels are able to cement their legitimacy in which they operate and can then utilize the local populations to their advantage, whether it be as lookouts or as "a layer of protection when authorities target them" (De Cordoba, 2020, p. 1; Jones & Hale, 2020, p. 2).

Over the past couple months, since the COVID-19 pandemic started, as well as during instances of other disasters to hit Mexico, drug cartels have been sending out aid packages to their local populace in order to help them make it through the pandemic. These aid packages often come in boxes that advertise the cartel and contain items such as: oil, sugar, rice, cereal, coffee, cookies, tuna, soups, milk, as well as household products such as "toilet paper... and soap" (Bunker & Sullivan, 2020, p. 1; Bunker & Sullivan, 2020, p. 5). So far, it is estimated that cartels have handed out aid packages in 11 of Mexico's States, and the provision of these is seen as a phenomenon of the Mexican cartels (Bunker & Sullivan, 2020, p. 12; De Cordoba, 2020, p. 2).

In addition to providing aid to their local populace, Mexican drug cartels have also been enforcing quarantine and curfews as well as imposing punishment on dissenters. This has been seen in use by the Sinaloa Cartel, who operate in and around the Mexican State of Jalisco ("Sinaloa Cartel", 2019). Bunker and Sullivan note that both the Sinaloa Cartel and the Los Grandos Cartel have been enforcing a quarantine and curfew, while the Sinaloa Cartel has been issuing punishment through the use of hitmen who are armed with a wooden paddle (2020, p. 6; 2020, p. 10). By enforcing these restrictions on movement, the Cartels have been greatly increasing their legitimacy to the State of Mexico to the point that the President is considering the possibility of amnesty to some members for their support (Bunker & Sullivan, 2020, p. 1).

Regime and Polity

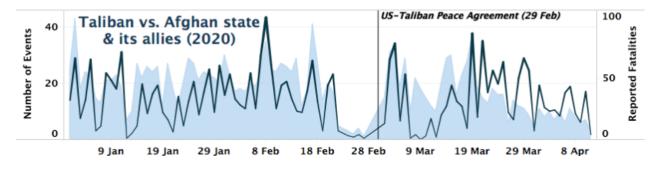
According to the CIA World Factbook, the government of Mexico is a federal presidential republic, with a national congress and judicial branch. The legal system is reportedly influenced by US constitutional law and involves judicial review ("The World Factbook: Mexico", 2018). As of 2015, Mexico's federal presidential republic earned a Polity IV score of 8, giving it the status of "Democracy" (Marshall et al., 2018).

Afghanistan

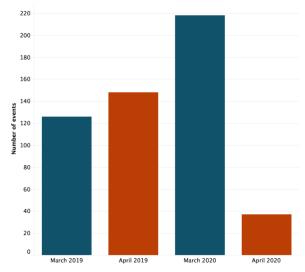
Similar to the drug trade in Mexico, the Taliban are a non-state violent actor that profits off of poppy in Afghanistan in order to produce heroin. The Taliban, however, are also designated as a terrorist organization and are working towards legitimacy on the international stage. In February 2020, the Taliban and the United States signed a peace deal as the United States prepared to demobilize troops to the country. Despite the deal, The Economist finds that since the deal and since the pandemic started, Taliban attacks have risen 70% ("The Taliban", 2020).

Although the Taliban are seen as a terrorist network by many countries, they have been involved with the government of Afghanistan for decades. After the September 11, 2001 attacks, the United States overthrew them from power. Since then, however, they have been making a more legitimate comeback into power. In response to COVID-19, they have opened up their territories to the Afghanistan Health Ministry, as well as the WHO, who says it is directly working with the group on COVID-19 related challenges. The Taliban are also taking a direct approach to the utilization of their resources and have been seen deploying "hygiene workers dressed in white personal protective clothing and carrying spraying tanks" as well as converting schools into quarantine centers (Marx et al., 2020, p. 2).

Given the impact of COVID-19 on Afghanistan and the response by the Taliban to push themselves into a 'for the people' role, they have acknowledged the fact that because they have so little cases, they will continue fighting (Marx et al., 2020, p. 1). When analyzing conflict data from Afghanistan as it relates to the Taliban, after the US-Taliban Peace Agreement, there has been a decrease in overall conflict events that take place. Prior to the Peace Agreement, events and fatalities were still occurring at a high rate despite the ongoing pandemic. These numbers are available below and show that while the Peace Agreement hasn't shown a long-term positive effect, the onset of COVID-19 has a correlative effect on the decrease of violence.



Source: Kishi, 2020





Source: Mehvar, 2020

Regime and Polity

The CIA World Factbook characterizes the government of Afghanistan as a presidential Islamic republic with a national assembly and judicial branch of various court systems, the highest being the Supreme Court ("The World Factbook: Afghanistan", 2018). As of the year 2015, Afghanistan received a Polity IV score of 1, up from -7 between 1996 to 2004. A score of 1 gives Afghanistan the status of a "Open Anocracy," however the Polity IV Project characterizes the country as a "Failed State" (Marshall et al., 2018)

Lebanon

In Lebanon, the country is uniquely divided into two regions, North and South, both under the same government, however the South is mainly under the control of the Iranian-backed, anti-Israel Shiite Hezbollah movement. Due to the State support and resources that Hezbollah has, "[t]he paramilitary group is marshalling its deep resources in the fight against coronavirus using a corps of volunteers, doctors and facilities to carve out a prominent role in the crisis-driven response" of the incumbent (Knecht, 2020, p. 1). By allocating its own resources, while funding and providing support to the health ministry, Hezbollah is "fill[ing] gaps in state services to gain influence" and is trying to further legitimize itself into State politics and on the international community by taking pressure off of the State (Todman, 2020, p. 7; Trew, 2020, p. 6). Similar to the Taliban in Afghanistan, Hezbollah is trying to show that only they can control the pandemic in Lebanon and that they have the necessary resources to do so (Todman, 2020, p. 6).

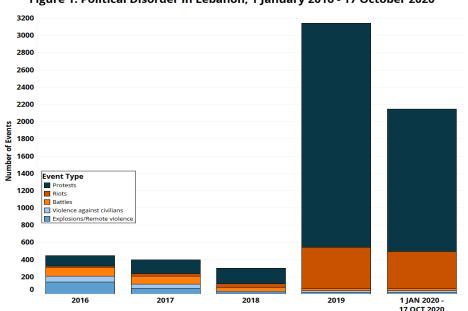


Figure 1: Political Disorder in Lebanon, 1 January 2016 - 17 October 2020

Source: Carboni, 2020

Hezbollah has also been taking a direct approach to fighting off the virus and providing relief aid to those under its control. Reuters reported that "[Hezbollah] rolled out one of two new testing centers, a fleet of ambulances – many equipped with ventilators – and an entire hospital repurposed for coronavirus patients" (Knecht, 2020, p. 3). In addition to this they have been sending their own doctors to government run hospitals as well as setup a "call center, three quarantine centers with 170 beds and a capacity to scale up to 1,000, and 64 social committees to

monitor the needs of families hit by the economic fallout" (Knecht, 2020, p. 7). Due to the sharp increase of resources to the population under their control as well as to the populations under government control, Hezbollah is further solidifying itself as being able to provide for the people and govern the people, thus setting itself up as a legitimate political actor.

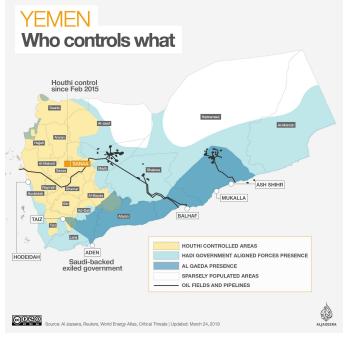
Since November 2019, Lebanon has experienced an increase in both peaceful and violent (riot) protests as well as a decrease in battles, violence against civilians, and explosions/remote violence with respect to previous years (Carboni, 2020). The most prominent events that have been taking place in Lebanon are primarily around the four cities of Beirut, Tripoli, Saida, and Zahle.

Regime and Polity

Regarding the government of Lebanon, the CIA characterizes their system as a parliamentary republic with a National Assembly and a judicial system consisting of courts at various levels, the highest being the Supreme Court ("The World Factbook: Lebanon", 2018). The Polity IV Project, as of 2015, gives Lebanon a polity score of 6, which characterizes it as a "Democracy" (Marshall et al., 2018).

Yemen

The final country of interest that has been severely torn by civil war in the past decade and has been affected by the COVID-19 pandemic is Yemen. For many years, Yemen has been struggling with famine and civil war, which has severely impacted the ability of the government to allocate necessary resources to key populations and is currently home to the world's worst humanitarian crisis in which "millions remain at risk of starvation" (Aksoy, 2020, p. 1). This situation has allowed strong non-state violent actors to intervene in Yemeni territorial sovereignty with the backing of the rogue regime in Iran.



Source: Chughtai & Edroos, 2019

According to the ACLED data on Yemen, the southern regions of the country have witnessed a sharp increase in conflict events and fatalities, one month after the country reported its first COVID-19 case. In September 2020, there was an additional period of exponentially higher conflict events between the Houthi's and anti-Houthi forces, as well as other NSVAs operating in-country (Carboni, 2020). In addition to the increase in conflict, Yemen has experienced a decrease in drone and airstrikes since the beginning of the pandemic (Carboni, 2020)

In the far northwestern area of Yemen, the Iranian-backed Houthi rebel movement holds tight control of major cities and populations, and currently exercises its own central control over its areas of influence. While the government is occupied with the ongoing conflict and famine, the Houthi's have taken it upon themselves to establish their own countermeasures to the COVID-19 pandemic in order to increase their own narratives (Alasrar, 2020, p. 2). According to Alasrar, the Houthi's leadership is deflecting the blame for the spread of the pandemic onto their adversaries, primarily stating that the "spread of the epidemic is a result of 'Saudi-led aggression'" (2020, p. 3).

In response to the pandemic, the Houthi leadership within Yemen, in conjunction with Iranian support, has begun to provide relief services and disaster resources within their sphere of influence. Accordingly, the Houthi movement has announced that they will be combatting the virus in many ways, including, "establishing a hotline to report cases and symptoms, training medical teams in districts under their control, opening medical quarantine units, and introducing testing for suspected cases" (Alasrar, 2020, p. 4). While this seems like a legitimate plan, the Houthi movement's trust is relatively low among the population due to previous failures in mitigating relief efforts, however, if successful, this will help legitimize the movement under the influence of their controlled populations.

Regime and Polity

In Yemen, the CIA writes that the government is "in transition," and consists of a parliament and a judicial system with various courts, the highest being the Supreme Court ("The World Factbook: Yemen", 2018). As of 2015, the Polity IV Project gives Yemen a polity score of 3, which marks it as a "Open Anocracy" (Marshall et al., 2018).

Analysis and Findings

Up until this point in the paper, I have provided concrete information on the nature of a disaster, have defined regime types, presented hypotheses based off of published theoretical papers, and have provided qualitative and quantitative data in case studies to show the affect that non-state violent actors have during situations involving disasters. In this next section, I will take each hypothesis and, using the information presented, show evidence as to whether or not the hypothesis holds or does not hold. The outcomes will not be a catch all, but instead be a starting point for understanding specific behaviors in certain areas of the world and regime types.

Through the use of the ACLED database as well as the Polity IV Project database, I was able to compare and contrast the different case studies involved and correlate that data with my hypotheses. In my first hypothesis, in which I hypothesize that disasters allow non-state violent actors to legitimize themselves among the international community as well as the local populations; from the data presented, I conclude that in three out of the four cases presented, this hypothesis holds. Via the legitimization witnessed being attributed to the groups, the Ripe Moment Theory helps explain hypothesis 1.

In Mexico, the Cartels have gained footholds within their respective communities in which they can then use to benefit themselves against the government. Additionally, the Mexican government has recognized the behaviors of the Cartels and has considered offering amnesty in exchange for the humanitarian aid they are providing to the populace. In this case, the government is legitimizing them by recognizing their status as groups who hold territorial control, thus providing a pathway to the political sphere of Mexico.

In Lebanon and Afghanistan, both the Taliban and Hezbollah have similar approaches in the way they have responded and are both already involved in the political landscapes of their respective countries. However, as noted before, they have most recently taken advantage of the pandemic to further their own political ambitions with both the international community and the local populations under their territorial control. Each has shown interest over the years of furthering their political power in their country's government and have taken steps to increase their legitimacy during the pandemic. We have witnessed both providing healthcare assistance to their populations as well as providing the enforcement of safety measures to help mitigate the spread of COVID-19.

The Taliban, a former government of Afghanistan before the United States overthrew them after 9/11, has been working its way back up to power through international channels. The pandemic has allowed them to further solidify their position through their allowance of the World Health Organization into their territories as well as creating quarantine centers and administering personal protective equipment (Marx et al., 2020, p. 2).

Hezbollah's approach in Lebanon, as mentioned previously, has taken a stance parallel with the Lebanese government and health ministry, setting up new healthcare infrastructure and employing thousands of physicians (Diwan & Abi-Rached, 2020, p. 4). While the group currently has 13 out of 128 seats in the Lebanese Parliament, their actions during the pandemic could help increase their influence, especially in the South. ("Interior Ministry", 2018)

In the case of the Houthis in Yemen, although they are attempting to provide aid to their local populations, many years of conflict has exponentially decreased their ability to gain public trust and support. Prior to the pandemic, Yemen was in the middle of the world's worst humanitarian crisis, and has only gotten worse (Aksoy, 2020, p. 1). According to Fatima Alasrar, while the Houthis have been setting up care services in areas under their control, their trust is exponentially low due to their failures in the past (2020, p. 4). Because of this, it can be inferred that their position in politics is not considered legitimate and is degrading.

Therefore, given these four case studies and the information that comes with them, while not apparent in every situation, the onset of a disaster can and does have an effect of the legitimization of non-state violent actors as long as they manage their resources, cooperate with the State, and provide sufficient relief efforts to the population.

The second set of hypotheses that I will be going over is the idea that disaster de-escalates conflict between non-state violent actors and the government or other groups, and that disaster increases conflict between non-state violent actors and the government or other groups. When going through the data on these hypotheses', I find that the results given the case studies are inconclusive based on a number of factors. For this, the ACLED database will be my primary source of data, which shows conflict events in correlation with time, particularly in the time-period after the pandemic began.

In Yemen, the country experienced a sharp increase in conflict events and fatalities beginning in May 2020, one month after the pandemic was first declared within their borders

(Carboni, 2020). Since then there has been a relatively steady amount of conflict events within the country, however this number still exceeds pre-COVID numbers (Carboni, 2020). Most of the ongoing fighting in Yemen is most likely due to the low trust factor that the population has with the Houthis, and over the control of aid resources, which are currently scarce as the Houthi's blame Saudi Arabia's blockade, given the famine and pandemic are ongoing, (Alasrar, 2020, pp. 3-4).

Much like Yemen, Mexico has seen an increase in violence among non-state violent actors, most notably with the cartels. In Mexico, with the many cartels operating within the borders, the groups often claim territorial control over areas. While a disaster is ongoing, and resources and supplies become limited, there is not only an increase in fighting with the government, but among cartels with homicides increasing by about 2.2% "during the first quarter of 2020 (Jones & Hale, 2020, p. 1). Duncan Wood, the Director of the Mexico Institute, supports that claim saying that "in Mexico violence has gone up through the pandemic" ("Violent Non-State", 2020, p. 2).

In the previous hypothesis, I stated that there is a possibility to have less conflict between the government and the cartels while they provide for their populations and legitimize themselves within the State. However, among the cartels, there is an expected increase in violence due to the territorial claims and resources that come with them. As the groups look to provide greater resources to their 'constituents,' they are more likely to expand into rival group territories, thus sparking violence. In addition, Jones & Hale add that violence has not decreased in Mexico during the pandemic because the disease is seen as having a 2% chance of death associated with it, whereas the cartels are seen as a greater threat than combating the disease (2020, p. 5).

In Lebanon, while there has been a rise in riots, violence against civilians and remote violence and explosions have dramatically decreased in comparison to the past three years. While riots are a type of violence, they can include a multitude of different groups or individuals; whereas, instances of explosions and other remote violence activity, which is more likely the work of a non-state violent actor group, have declined. Therefore, Lebanon's case has mixed results and adds to the inconclusiveness of this hypothesis.

The final piece of hypotheses 2 and 3 is the case of Afghanistan, who despite the peace deal signed in February, has witnessed a fluctuation of political violence among non-state violent actors within the country. As shown in the table on page 18, there is a relative decrease in violence in the country with relation to the onset of the pandemic. ACLED states that most violence attributed to the Taliban happens outside of Taliban controlled territory, and is against the government, however, is lower compared to data of Taliban violence in the previous year (Kishi, 2020; Mehvar, 2020). In conjunction with the data, I can conclude that COVID-19 has caused violence by non-state violent actors, specifically the Taliban, in Afghanistan to decrease.

Concluding hypotheses 2 and 3, the data shows the COVID-19 pandemic has had mixed effects on the violent behaviors of NSVAs and that although the virus has an exponential effect on populations, each group is different with how they react. With Mexico, some parts of Kreutz' Ripe Moment Theory hold, with the government offering amnesty and concessions for further cartel cooperation. In other areas, such as Afghanistan, even a peace deal hasn't been able to stop the fighting, despite the ongoing pandemic; and in Yemen, where the pandemic has been added to the backdrop of an already deteriorating country in the midst of a famine, fighting over territory continues between the government and non-state violent actors within the country with

no real end in sight.

The final hypothesis in which I have presented and will now be analyzing with the data and theories presented is that states below the democratic polity score threshold should experience an increase in conflict amidst a disaster, while democratic states should see a decrease in conflict amidst a disaster. As shown earlier, Mexico has a polity score of 8; Afghanistan a 1; Lebanon a 6, and Yemen a 3. None of these dip below the -6 score which is a conditional of an autocracy, however two are autocracies (transitioning), while the other two are not-full democracies. Despite this, the data can still show a pattern of behavior in correlation with disaster onset.

Mexico, considered a democracy by the Polity IV Project, has recently seen an increase in violence despite their score. With Mexico, despite them being a democracy, the most likely factor in which conflict has risen instead of fallen is due to the ongoing drug war within the country as well as the fight for resources during the pandemic. Another country that is considered a democracy (although riding the line) by the Polity IV Project is Lebanon. As we saw earlier, the Lebanese case is mixed, as there has been a decrease in certain forms of violence, while other forms have increased. Therefore, with these two countries the first part of the hypothesis, that democracies yield less conflict in the midst of disaster, does not hold.

Starting with Yemen, who has a polity score of 3, which according to the Polity IV Project is an anocracy, has experienced an increase in conflict. An anocracy is considered a government in transition, and conflict should be expected to increase during that time, therefore, this assumption is corroborated by the second part of the hypothesis. However, Afghanistan has seen a relative decrease in violence, despite its polity score being the lowest out of the four cases, at 1. This also indicates that Afghanistan is an anocracy and its government is in transition. With both Yemen and Afghanistan in mind, the second part of the hypothesis, that non-democratic states see a rise in conflict amidst disaster, does not hold.

Conclusion

At the outset of this paper, I looked to show a correlation between the onset of disasters and its relationship with the behavior of governments and non-state violent actors amidst conflict. With the case studies, analyses, and hypotheses presented, I have shown that while disaster may not be causation, there is definitely correlation with behaviors. My hypotheses showed within the case studies presented; that onset of disasters correlate with NSVAs progressing their legitimacy within their country of influence; disaster onset has had mixed outcomes with respect to conflict escalation or de-escalation; and democratic as well as non-democratic countries do not have a definitive correlation with conflict escalation or de-escalation amidst disaster.

The conclusions that I have come to given the hypotheses presented are not exclusive to the case studies presented nor should they be used unilaterally to explain behaviors in other conflicts. The information presented in an analysis and collection of observations and studies of behavior during a specified time period under exceptional circumstances, the COVID-19 Pandemic. The Ripe Moment Theory, presented by Kreutz, is one of the most prevalent theories for providing an explanation to the behaviors of NSVA behavior during a disaster. Given the information presented, it is also possible that disaster may have an opposite effect on conflict than previously thought. Disaster, may in fact, mitigate the onset of conflict and in many cases end or suspend violence between actors.

Some ideas that I was unable to include in this paper, but suggest for future study and research include the post-disaster behaviors, such as the status of the conflict and levels of violence, as well as changes in the political atmospheres of the countries. Additionally, future studies should look at countries outside of the limited regions that I have selected and look for correlation and differences between regions as well as a more in-depth analysis of regime type and conflict.

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