THE EXPANDING NATURE OF THE SYRIAN CIVIL WAR: FROM POOR POLICY TO REGIONAL CONFLICT

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ABSTRACT

This research examines the way by which domestic management issues in Syria have expanded to become a violent, regional sectarian battle that has the potential to reshape the Middle East. By focusing on three unique topics that are each central to the development of the Syrian Civil War and to the exploits of the Islamic State of Iraq and Syria (ISIS), this collection of papers shows the devolution to civil war and then to a larger conflict that may ultimately embroil the entire Arab world.

Each of the three chapters within this paper focus on a unique issue related to the Syrian Civil War that demonstrate the cascading set of consequences that have snowballed from issues that, in large part, originated in Syria starting with end of colonization and the Sykes-Picot Agreement that drew artificial borders grouping together peoples who would prefer to be independent. The resulting sectarian conflict has characterized the Middle East to this day.

The first chapter focuses on Syria's water crisis and determining which factor had a more significant impact on the start of the civil war: drought or failures in water management policy. Using a combination of qualitative and quantitative data, this chapter concludes that the impact of the Assad regime's failed policy far outweighs dry weather conditions. The second chapter looks at external effects of Syria's conflict by examining the impact of refugees upon Syria's neighbor states, concluding that the secondary and tertiary effects of housing refugees poses a greater threat to state stability than does the actual presence of refugees. Finally,

the third chapter focuses on ISIS' ability to establish an independent Islamic state. The results of this analysis suggest that ISIS will be unable to overcome sectarian issues to unite disparate Arab groups.

These three topics demonstrate the way by which Syria's domestic conflict has grown to impact not only the surrounding region, but also the larger international community. Water scarcity, refugee crisis, and sectarian conflict are all issues of significant global issues that are relevant in every part of the world. This work may guide the international community in understanding what issues must be addressed when Syria emerges from conflict, and the individual chapters may be used as case studies to inform the analysis of water, humanitarian, and sectarian crisis outside of the Levant. Syria will require a significant amount of support from external actors to overcome its humanitarian crisis, recover from ISIS' exploits, and establish sustainable water policy once the conflict comes to and end. However, the war shows no signs of slowing, and the conflict only continues to expand.

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INTRODUCTION

The Syrian Civil War is a security nightmare. National security has been completely dismantled. Almost every component of security and stability are impacted at the domestic, regional, and global level with far reaching effects. The short term results and long term effects of this conflict can only be speculated at this point while the conflict enters its fifth year, stretching to the East and into Iraq. State instability has broad implications for international security and has effects ranging far past the state itself.

The Syrian Civil War has garnered mass amounts of attention since violence first broke out in 2011. While many expected Syria to follow in the pattern of the other Middle Eastern states with Arab Spring movements, the Syrian conflict has followed a decidedly difference course. What began as a revolt against the Assad regime has expanded to an outright civil war and creating a devastating humanitarian crisis within Syria. However, the conflict also has a significant set of external consequences, including a mass refugee exodus to neighboring states, the rise of dangerous non-state actors, and brought the sectarian divide between Shi'a and Sunni Muslims to a head. The expanding nature of the Syrian conflict has the potential to result not only in regime changes domestically, but to reshape the Arab world entirely.

This paper focuses on three topics that are central to the evolution of the crisis in Syria: water mismanagement, refugee crisis, and implications stemming from the rise of the Islamic State. While it is unlikely that any single work is able to provide a comprehensive understanding of the conflict in Syria and all of its

outcomes, this paper will address three components that highlight the growth of the conflict over time and its implications for Syria itself, Syria's neighbors, and the Arab world in its entirety.

Each chapter is dedicated to one of these three factors which heavily weigh on international security. Civil war has jeopardized Syria's stability resulting in a high ranking in state fragility. As of 2014, the Institute for Peace considers Syria as the 15th most fragile nation and on high alert for state failure.[1] Fragility has skyrocketed since the start of the violence. In 2010, before the conflict started, Syria was ranked as the 49th most fragile state of the 177 nations ranked, placing outside of the top 25th percentile in terms of fragility.[2] Syria now falls in the top 8 percentile of unstable states.

There are numerous challenges to researching an ongoing event. There is little reliable data and even fewer peer-reviewed sources of scholastic work. In order to most advantageously present what data exists, this paper utilizes multiple analytical methodologies presenting one chapter utilizing quantitative regression analysis, another chapter using qualitative case studies, and one utilizing a combination of qualitative and empirical methods. While there are challenges, advantages, and disadvantages to using each method of analysis, these have been selected to show evidence in the best possible light to gain understanding of the many complicated issues related to the Syrian Civil War.

[1] Kendall Lawrence, "Most Worsened Country for 2014: Syria," The Fund For Peace, June 24, 2014, http://library.fundforpeace.org/fsi14-syria.
[2] Ibid.

The first chapter in this paper focuses on how the conflict in Syria started. This section asks if drought or water policy is more responsible for Syria's water shortage. A combination of qualitative and quantitative data is used to test the hypothesis that the impact of the Assad regime's failed policy far outweighs dry weather conditions. Exploring the Ba'ath party's rural foundations and the long term outcomes of focus on establishing Syria's agricultural sector, combined with analysis of environmental factors and weather patterns, show how political decisions can have a disastrous impact the outcome of a nation. Incompetence of bureaucrats, policy decisions to liberalize international trade, and the failure to enforce water and agricultural regulations are important variables that have led to a water shortage that has reached crisis level in Syria. These water shortages have bankrupted Syria's farmers and driven them to urban centers in the hopes of finding work.

With the population impoverished and dismal conditions in the cities, the young, unemployed citizens ultimately took to the streets to demand fair treatment from the Assad government. While there are a multitude of factors that weigh heavily as drivers that prompted this uprising, the shortage of water is one of the most important. However, the water crisis may have been avoided, or its impact minimized, had the government adequately established, implemented, and enforced agricultural and trade policies and regulations. Using a both qualitative and quantitative analysis, the first chapter argues that the weight of regime decisions weigh more heavily vis-à-vis impacts of drought as a threat multiplier contributing to the start of the Syrian Civil war.

The second chapter begins to explore some of the impact of the Syrian Civil War. The people who have most directly felt the devastating effects of the civil are the Syrian people themselves. By mid-March 2015, the violence taking place in Syria has displaced millions who have fled Syria, and almost eight million more that have been displaced from their homes but remain inside the country. The United Nations has called Syria's refugee crisis the biggest humanitarian emergency of our era and notes that it is the worst refugee crisis the world has ever seen. Estimates indicated that nearly half of all Syrians have been forced to leave their homes and nearly four million refugees have been registered by the United Nations.[3]

The violence inflicted upon civilians by the Assad regime, rebel fighters, and Islamic radical groups will be remembered as the worst human welfare crisis of this generation with more than twelve million people in need of humanitarian assistance.[4] However, the violence does not only impact the Syrian citizens. There is also a tremendous impact upon the countries that take in Syria's refugees. Lebanon, Turkey, and Jordan are collectively hosting roughly 3.5 million refugees, which is a tremendous strain on resources. This chapter asks in what ways refugees affect the stability of their host state, and hypothesizes that stability is jeopardized by the direct impact of draining the state's resources. This section uses empirical evidence to show the existence of a relationship between playing host to significant quantities of refugees and state stability in order to predict what impact the

[3] "Syria Regional Refugee Response." United Nations High Commission for Refugees. March 25, 2015. Accessed April 01, 2015. http://data.unhcr.org/syrianrefugees/regional.php.
[4] "Syria," Office for the Coordination For Humanitarian Affairs, Key Figures, accessed March 17, 2015, http%3A%2F%2Fwww.unocha.org%2Fsyria.

presence of Syrian refugees will be upon neighboring states, focusing particularly upon Lebanon.

Using the Institute of Peace's Fragile State Index to provide annual measures of overall state stability and scores for refugees and internally displaced persons before the start of the conflict through 2014, regression analysis conclusively shows that there is a positive correlation between the mass presence of refugees and a host nation's overall stability. However, the strength of this positive correlation is unexpectedly weak. The second chapter analyses these results and offers some possible explanations for the strength of the correlation.

The final chapter focuses on the most transformative development: the rise of the Islamic State extremist group (the Islamic State of Iraq and Syria, henceforth "ISIS"). This chapter uses case studies to question the likelihood that ISIS will, as they claim, overturn the borders established by the Sykes-Picot Agreement at the end of the colonial rule in the Middle East. Hypothesizing that ISIS will be unsuccessful in redrawing state borders, this section examines the sectarian disputes between Shia, Sunni and Kurds and argues that ISIS will not successfully redefine Syria's borders or establish an Islamic state. Violent extremists such as ISIS will be unsuccessful in uniting all of the diverse peoples that make up the Arab World. The tactics used by ISIS, in fact, will be more likely to encourage divisions between Shia and Sunni Muslims, and to push Kurds further towards the establishment of an independent state.

Cumulatively, this paper will stress to readers the complexity of the many interwoven factors and threat multipliers that have contributed to start and expand the Syrian Civil War. Taking all factors into consideration may begin to shed some light on the core issues that must be addressed in order to end the violence and restore stability to both Syria and the Arab world. It is clear that Syria's problems are now only a small part of the larger conflict, and the process of restoring peace involves alleviating domestic problems, and also resolving longstanding sectarian divisions. The subsequent chapters will show that solution is not likely to arrive in the near term, and the conflict is likely to continue to intensify before any stability will be restored within the region.

CHAPTER I

WATER SHORTAGE IN SYRIA:

CRISIS CAUSED BY MISMANAGEMENT OR ENVIRONMENTAL FACTORS?

COMPARING EFFECTS OF DROUGHT AND WATER POLICY

When considering the origin of the Syrian Civil War, many precipitating factors are involved in the discussion. Political oppression, the failure of the Arab Socialism ideology, economic failure, minority rule, corruption, and state violence are the factors commonly attributed to the start of the war. Water does not often factor into the discussion, but it is, in fact, a major problem in Syria and certainly a contributing factor in the devolution to civil war.

While water conflicts are not a new phenomenon, the world has seen an increasing number of water-related violent incidents at the subnational level in recent years due to the significance of the role that water plays in economic and developmental activities.[5] The World Economic Forum considers water crisis to be the number one global risk based on its devastating impact to society. While Syria is not among the direst countries in terms of natural water resources, Syrians have access to only 300 cubic meters per capita for consumption while 90% of Syria's water is used for agriculture.[6] The global average water consumption during 2012 was 1,385 cubic meters.[7] This implies that the Syrian Government has designed water policy that prioritizes agricultural and commercial endeavors over providing sufficient water to its people.

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[5] Peter H. Gleick, "Water, Drought, Climate Change, and Conflict in Syria," *Weather, Climate, and Society* 6, no. 3 (July 2014): 331, doi:http://dx.doi.org/10.1175/WCAS-D-13-00059.1.
[6] Francesca De Châtel, "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution," *Middle Eastern Studies*, 2014, 5, doi:10.1080/00263206.2013.850076.
[7] A. Y. Hoekstra and M. M. Mekonnen, "The Water Footprint of Humanity," *Proceedings of the National Academy of Sciences* 109, no. 9 (2012), doi:10.1073/pnas.1109936109.

Some scholars believe that water-related factors, such as crop failure, water shortages, and water mismanagement have played a critical role in the breakdown of the social structure in Syria.[8] This structural decay resulted in mass migration to Syria's urban centers, contributed to unemployment, economic decline, and social unrest.[9]

Water and environmental conditions are of importance in determining factors that contributed to the start of the civil war in Syria as they play a part in determining Syria's economic condition.[10] Many scholars argue there is a significant connection between economic crisis and civil conflict, including violence between political leaders and civilians.[11] In fact, some analysts believe that economic decline is a more significant driver of civil war than other political grievances. In this light, Syrian water policy had a direct and critical impact upon the beginning of the war.[12] This chapter seeks to discuss the ways water scarcity contributed to the start of the Syrian Civil War, and to estimate the significance of water scarcity in relation to other precipitating factors to determine whether drought or water mismanagement weighed more heavily among the factors that led to, or served as a threat multiplier for, the Syrian Civil War.

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[8] Ibid, 332-333; and Francesco Femia and Caitlin Werrell, "Climate Change Before and After the Arab Awakening: The Cases of Syria and Libya," *The Arab Spring and Climate Change: A Climate and Security Correlations Series*, February 2013, 32, https://cdn.americanprogress.org/wp-content/uploads/2013/02/ClimateChangeArabSpring.pdf.
[9] Ibid, 334.
[10] Peter H. Gleick, "Water, Drought, Climate Change, and Conflict in Syria," *Weather, Climate, and Society* 6, no. 3 (July 2014): 331, doi:http://dx.doi.org/10.1175/WCAS-D-13-00059.1.
[11] David Keen, *The Economic Functions of Violence in Civil Wars* (Oxford: Oxford University Press for the International Institute for Strategic Studies, 1998); Edward Miguel, Shanker Satyanath, and Ernest Sergenti, "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy* 112, no. 4 (2004), doi:10.1086/421174.

First, this paper will review the scholarly research related to agrarian societies. The linkages between economic crises and civil conflict will establish an academic foundation for review of the case in Syria. The next section will review expected outcomes, research, and analysis methodology, which employs both qualitative and quantitative analysis in order to examine multiple types of data that may provide insight into the water crisis in Syria. Third, the discussion section will relate the findings from the analysis of Syria to previous scholastic work, resulting in the conclusion that Assad regime policy decisions and failure to enforce water regulations resulted in gross mismanagement of water. Finally, this work concludes that the mismanagement of water by the Syrian government had a far greater weight as a contributing factor to the outbreak of civil war than did drought.

STUDY OF FACTORS IMPORTANT TO HYDRAULIC SOCIETIES IN THE ARAB WORLD

As events in Syria continue to unfold at a rapid pace, there are few comprehensive academic studies of the events surrounding the outbreak of the civil war at this point in time. However, academic study of regime legitimacy in Islamic societies, linkages between environmental factors and economic shock and conflict, and geopolitical effects of water scarcity provide insight to the development of the Syrian Civil War.

In his book *Oriental Despotism*, Karl Wittfogel, a noted scholar of the Asiatic world, was the first to apply a kind of Marxist theory to non-Western society. The resulting concept, Oriental Despotism, provides significant insight into the

[12] Ibid, 572.

governance and power structures within Arab states. Wittfogel studies the archetypal system of authoritarian rule in the Middle East, including the dependence on agriculture, the linkage of governance and religion, and state ownership of land and means of production.[13] In result, he argues that agrarian countries that require large-scale irrigation, which he terms "hydraulic societies," produce a system of despotism as result of the need to manage the irrigation system. While some scholars now consider Wittfogel's ideas to be outdated, hydraulic theory remains an important lens with which to view Syria's social structure.

Drawing on concepts from John Locke's thesis in "Of Civil Government," Wittfogel believes that in hydraulic societies the despot holds absolute power and is absolutely corrupt, writing that "a governmental…order leading to the emergence of absolute power encourages and enables the holders of this power to satisfy their own interest absolutely."[14] The regime wields total administrative, managerial, judiciary, military, and financial control, and may make law wherever seen fit.[15] Wittfogel expounds upon Marx's work in explaining Soviet Russia, likening Middle Eastern authoritarian hydraulic societies to Lenin's Russia. However, he further explores how the use of propaganda and coercion can be used to gain social control of a state's agricultural sector, economy, military, and government bureaucracy.[16] Oriental Despotism thus resulted in control of every aspect of the state and its people.

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[13] Karl August Wittfogel, *Oriental Despotism: A Comparative Study of Total Power* (New Haven: Yale University Press, 1957).
[14] Wittfogel, *Oriental Despotism*, 133.
[15] Ibid, 101.
[16] Ibid, 440.

Noah Feldman's book *The Fall and Rise of the Islamic State* also explores the means of social control within the Arab World. Islam and Shai'a law is often important in establishing the legitimacy of a ruler or regime in the Islamic world. In the case of Syria, all aspects of government and religious power have been concentrated in the Assad regime since the 1950's. Essentially, Feldman argues that by controlling the religious sector, a ruler, such as Assad, establishes his own validity as an authoritarian ruler.

Dynastic ruler and their dominant regimes, which consisted of religious leaders, nobles, and political elites, traditionally held a power monopoly in Middle Eastern countries.[17] Understanding the mentality of the despotic regime is useful in interpreting the events of the Arab Spring and New Arabism theory as the movement to overthrow authoritarian regimes in favor of more legitimate, representative governments has spread through the Middle East, ultimately reaching Syria. Authoritarian regimes hold unchecked power over state functions and administration, religion, the military, legislature and judiciary systems, the land, and the people.[18] Despotic rulers used power to confiscate property, land, and resources, eliminating competition and opposition by linking together all aspects of life and consolidating them under their rule. This power is rationalized by those dominated based on the benevolence of the regime that provides public utilities such as large-scale agricultural irrigation.[19]

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[17] Noah Feldman, *The Fall and Rise of the Islamic State* (Princeton: Princeton University Press, 2008), 2.
[18] Ibid, 8.
[19] Ibid.

The environmental problems evaluated in this chapter have been ongoing long before the start of the war. There is a long history of conflict in Syria and the surrounding region based on water scarcity.[20] Two journal articles provide foundational background research and theory on this subject: "Water, Drought, Climate Change, and Conflict in Syria" by Peter H. Gleick published by the American Meteorological Society, and "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution" by Francesca De Châtel published in the *Middle Eastern Studies* journal. While the two articles originate from differing fields of study, the conclusions they draw are nearly identical. Providing a strong foundation for further study, both authors conclude that water shortages play significant roles in worsening environmental conditions, one of many factors contributing to the onset of the current conflict.

While little academic study has been established surrounding the beginning of the Syrian civil conflict, there is a significant body of work related to economic downfalls and their correlation to civil conflict. Some, such as "Economic Shocks and Civil Conflict" by Miguel, Satyanath, and Sergenti deal specifically with the effects of rainfall variation. From the study of sub-Saharan Africa, they conclude that economic growth is strongly negatively correlated to civil conflict.[21] Specifically, they note that a negative growth shock has such a strong negative relation that a five

[20] Peter H. Gleick, "Water, Drought, Climate Change, and Conflict in Syria," *Weather, Climate, and Society* 6, no. 3 (July 2014): pg. 1, doi:http://dx.doi.org/10.1175/WCAS-D-13-00059.1.
[21] Edward Miguel, Shanker Satyanath, and Ernest Sergenti, "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy* 112, no. 4 (2004): pg. 725, doi:10.1086/421174.

percent drop in economic growth resulted in the increase of likelihood of civil conflict over the following year by more than one half.[22]

These conclusions are in line with the results of other studies, such as in Collier and Hoeffler, who found that young men are more likely to become armed fighters when the opportunities in the agriculture industry and formal labor market decrease relative to expected income as a soldier or militant.[23] Importantly, Collier and Hoeffler find that natural resource dependence, when linked to commodity exports, have a significant positive association with the onset of civil conflict.[24] They also find that civil wars are not driven by political grievances, but by economic variables.[25] Fearon and Laitin also support this conclusion in "Ethnicity, Insurgency, and Civil War."[26] The authors further suggest that while these studies were conducted on Africa, the conflicts elsewhere have the same determinants.[27]

In the paper "Managing the Waters of Ba'th Country," Jessica Barnes suggests that the study of water in the Middle East examine the politics surrounding water distribution and use. She explores Syria's focus on agriculture at the state level in the context of the populist origin of the Ba'th party and the desire to establish food self-sufficiency, which she believes to be the primary reason for Syria's desire to

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[22] Ibid, 727.
[23] Paul Collier and Anke Hoeffler, "On Economic Causes of Civil War," *Oxford Economic Papers* 50, no. 4 (1998): 571, doi:10.1093/oep/50.4.563.
[24] Collier and Hoffler, "On Economic Causes of Civil War", 571.
[25] Ibid, 572.
[26] James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review* 97, no. 01 (2003), doi:10.1017/S0003055403000534.
[27] Edward Miguel, Shanker Satyanath, and Ernest Sergenti, "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy* 112, no. 4 (2004): pg. 729, doi:10.1086/421174.

increase agricultural production via investment in irrigation infrastructure.[28] She argues that political choices, not climate change or drought, have resulted in water scarcity.[29] She writes that "water scarcity is not a problem inherent to the limited natural resources of a country, but rather a situation produced by the Syrian government's promotion of irrigated agriculture."[30]

Collectively, these resources provide a strong foundation that is useful in understanding the situation in Syria in terms of agricultural issues. This chapter will use the ideas and concepts described and conclusions reached thus far as a framework to contextualize the water crisis in Syria. An analysis of the Assad regime's policy decisions would also be of great use contributing to this assessment; however, their decisions have been closeted and often are not publically available. This chapter will help to fill this gap by determining the significance of regime decisions vis-à-vis environmental factors that have contributed to Syria's water crisis.

PROJECTING POLICY VICE ENVIRONMENTAL FACTORS

The expected results of this analysis is to conclude that political management of water weighs more heavily on the outbreak of the civil war than drought or other environmental factors. This projection is largely based on Wittfogel's work on hydraulic societies, which illuminates the corruption within and total power held by authoritarian regimes such as that of the two generations of Assad rule in Syria.

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[28] Jessica Barnes, "Managing the Waters of Ba'th Country: The Politics of Water Scarcity in Syria," *Geopolitics* 14 (2009): pg. 511, doi:10.1080/14650040802694117.
[29] Ibid, 511-512.
[30] Ibid, 520.

Collier and Hoeffler's finding regarding the likelihood of men to take up arms when jobs are not available, and the work of Miguel, Satyanath, and Sergenti showing the correlation between economic downturn and civil conflict also drive the expectation that poor policy decisions played an important role in the start of conflict.

APPLYING MIXED METHODS

To test this hypothesis, this chapter will analyze the situation in Syria prior to the outbreak of conflict by using both qualitative and quantitative measures. It will conduct qualitative analysis of government policy in agriculture, water management, and trade, while focusing on numerical data to analyze drought severity, water availability per capita, economic wellbeing, population growth, and availability of jobs. These areas of focus were selected based on their significance to the existing body of research surrounding civil conflict as previously described.

The combination of qualitative and quantitative analysis allows for examination of different types of relevant information. Quantitative figures alone cannot adequately describe the situation that caused Syria's water crisis, though they can support and help to validate assumptions derived from qualitative analysis. Using a combination of numerical data, policy analysis, and an assessment of regime decision-making will allow for the most insightful analysis of a rather opaque subject.

This paper will employ the definition of civil conflict used by Miguel, Satyanath, and Sergenti, which was developed by the International Peace Research

Institute of Oslo, Norway, and the University of Uppsala, Sweden. They define armed civil conflict as "a contested incompatibility which concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths."[31] Operationalizing this definition for intrastate conflict, the government is considered to be the party controlling the state capitol, or the Assad regime, and the opposition organization to be "any nongovernmental group of people having announced a name for their group and using armed force," being multiple groups of Syrian protesters and opposition forces.[32] Using these definitions, the start of the civil conflict is in March 2011, though the exact death toll during this month is unknown.

QUALITATIVE AND QUANTITATIVE INFORMATION AVAILABLE FROM SYRIA

Ba'ath Party and Assad Regime Policy

Since gaining independence from France in 1946, Syria experienced more than two decades of turbulent power transitions. Following a coup d'état that ousted the military government in 1963, the Ba'ath Party has held power. The Ba'ath party was founded as a post-colonial "nationalist, populist, socialist, and revolutionary" party promoting Arab Nationalism and the unity of Arab states.[33] The party was led by intellectuals and radical young officers primarily of minority background and from rural areas. They intended to draft support from the countryside to promote agricultural development via irrigation projects that would

[31] Edward Miguel, Shanker Satyanath, and Ernest Sergenti, "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy* 112, no. 4 (2004): pg. 748, doi:10.1086/421174.
[32] Ibid, 748.
[33] Kostiner, Joseph (2007). *Conflict and Cooperation in the Gulf Region p. 36*

support the rural farmers, who made up the majority of Syria's population. Some analysts believe that Ba'aths were inspired by the Soviet agricultural schema and presented "agrarian modernist imagery" to garner support for large scale water and energy projects, including the Euphrates Dam project.[34] The party believed that these infrastructure investments would develop a profitable agricultural sector.[35]

Hafez al-Assad seized power in 1970 following several years of struggle within the Ba'athist party. From rural Syria himself, Hafez cemented the established ties between the state and agriculture, and was often publically depicted as the archetypical peasant.[36] Scholars argue that Hafez also utilized agricultural planning as a means of expanding state power.[37] He reopened the Syrian parliament and established a permanent constitution, consolidating presidential power over all Syria institutions including the military and regional governments. These actions broke with the Ba'ath Party's founding ideals and transitioned Syria into an authoritarian state. Jessica Barnes writes that the Syrian bureaucracy does not see the countryside as a source of resources, but as political capital that could be lost to rivals.[38] This suggests that control of rural Syria and its inhabitants was a political strategy adopted by the Hafez al-Assad regime to maintain power.

After Hafez al-Assad's death in 2000, his son, Bashar al-Assad, ascended to the presidency. Bashar was generally looked upon favorably; many expected that he

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[34] Jessica Barnes, "Managing the Waters of Ba'th Country: The Politics of Water Scarcity in Syria," *Geopolitics* 14 (2009): pg. 521, doi:10.1080/14650040802694117.
[35] Ibid, 521.
[36] Barnes, "Managing the Waters of the Ba'th Party", 521.
[37] Ibid, 522.
[38] Ibid.

would introduce economic reforms, but by this time, the political leaders had become completely separated from the Ba'athist's peasant roots.[39] However, key policy objectives continued to link the Assad regime with agriculture. The government's desire to achieve self-sufficiency in Syria's primary food staples led to further decisions to promote agriculture through the expansion of irrigation.[40]

This desire for self-sufficiency dates back to the 1973 oil price shock, when Middle Eastern states believed that the West could choose to drastically increase the price of food staples as a bargaining tactic to counter the price of oil.[41] The Syrian government then established food security as a priority, and was thus able to justify the government's involvement in the agricultural sector. Legislation passed in 1975 allowed the state to dictate which crops should be planted, where and when they should be cultivated, and set pricing for the sale of the crops.[42] By setting pricing above international market rates, the government incentivized farmers to cultivate strategic crops, which include wheat, barley, cotton, beets, tobacco, lentils, and chickpeas. These crops, many of which are severely water intensive, are grown on 75% of Syria's cultivated land.[43]

Enacting policy decisions to facilitate the growth of these water intensive crops, the regime invested in irrigation infrastructure. The area of irrigated land was doubled after 1985, using surface irrigation to water more than 1.4 million

[39] Ibid, 522.
[40] Ibid, 523.
[41] Ibid.
[42] Ibid.
[43] Ibid, 524.

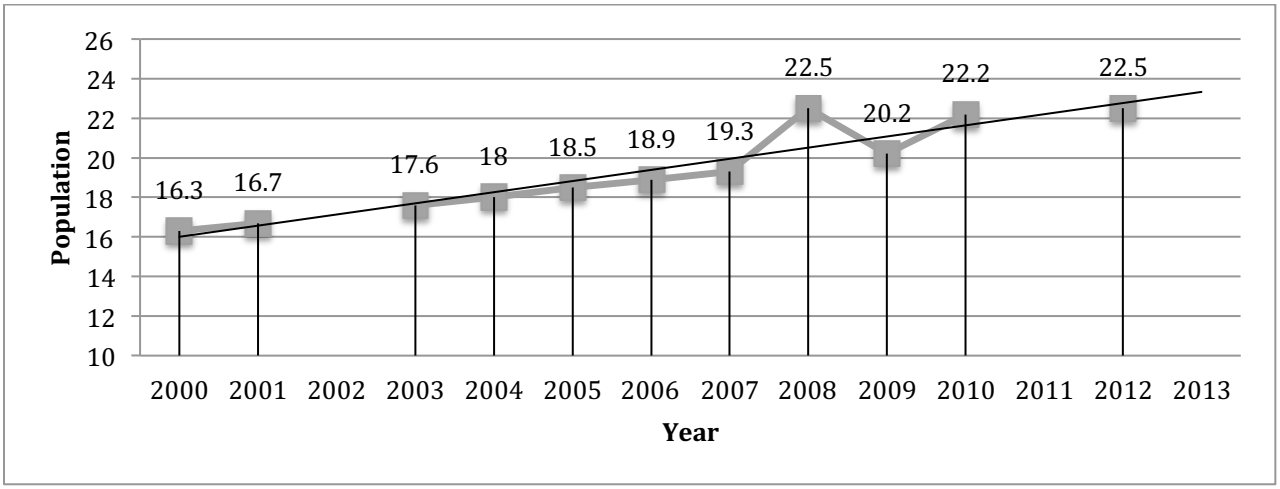
hectares[44], or roughly one third of Syria's total arable land.[45] When Bashir al Assad gained control of the country in 2000, he took steps to open up the agricultural sector, which had previously been heavily regulated. Industrial farming boomed as corporations bought up recently nationalized land and began drilling an unlimited amount of water. The government also made provisions for tax free, low interest loans for digging wells and subsidized the price of diesel used to pump water and transport crops to markets. These policy decisions increased access to water as the number of wells skyrocketed, drastically increasing groundwater extraction and depleting the already low water table to dangerously low levels.

Population Growth

During the 1950's, Syria launched a strong pronatalist policy and ultimately banned the sale and use of contraception during the 1970's.[46] This, in conjunction with improvements to the national health care system, led to explosive population growth. Syria's population grew exponentially, increasing from 3.3 million people in the 1950's to 21.4 million in 2014, and is expected to rise to 37 million by 2050.[47] Chart 1 represents the population growth since 2000.

[44] One hectare is equivalent to 10,000 square meters. One square mile is 259 hectares.
[45] Ibid, 524.
[46] Ibid, 530.
[47] Ibid.

Figure 1: Syrian Population (in millions, 2000-2013)[48]



Such significant growth over a relatively short period of time placed incredible strain on an already strained resource, creating a water deficit of 3.6 billion cubic meters per annum by 2007.[49] To compensate for the deficit, water was drawn from dam reservoirs and groundwater reserves, significantly depleting Syria's aquifers. Today, 100-200 liters of water consumed per capita each day, Syria is officially considered a water-scarce country by several international organizations.[50]

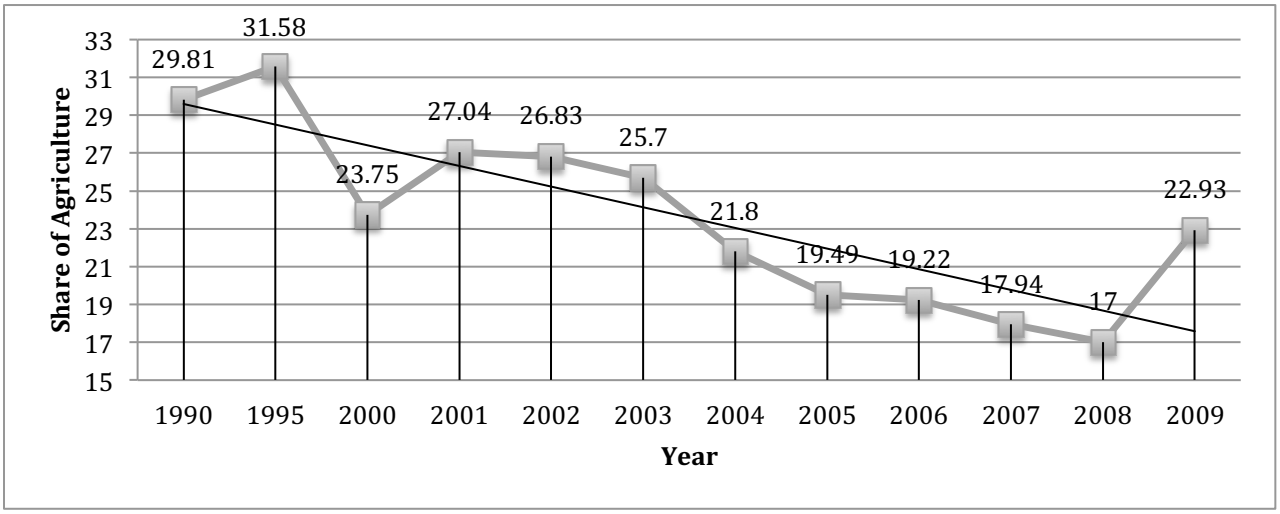
Agriculture

Syrian policy to promote agriculture helped to stress its importance as a part of Syria's economy. At the turn of the century, the use of inefficient means of irrigation and the government promotion of water intensive crops, coupled with periods of short terms drought, led to diminished value of the agricultural sector.

[48] "Data: Syrian Arab Republic," The World Bank Group, Population, accessed January 18, 2015, http://data.worldbank.org/country/syrian-arab-republic.
[49] Ibid.
[50] Khaldoon A. Mourad and Ronny Berndtsson, "Syrian Water Resources between the Present and the Future," *Air, Soil and Water Reserach* 4 (2011): 97, doi:http://dx.doi.org/10.4137/ASWR.S8076.

While the value of the agricultural sector does appear to rebound in 2009, there is no data available to examine the trend from that point forward. However, it is unlikely that growth rates were maintained after 2011, when approximately half of Syria's population was displaced from their homes upon the start violence. Chart 2 below demonstrates the sharp decline of the overall value of Syria's agricultural sector as a percentage of Gross Domestic Product (GDP) after 2002.

Figure 2: Value of the Agricultural Sector as Percentage of GDP (1990-2009)[51]



Further of note, according to the World Bank, 32.9 percent of Syria's workforce was employed in the agricultural sector in 2000. By 2010, this number drastically declined and employed only 14.3 percent.

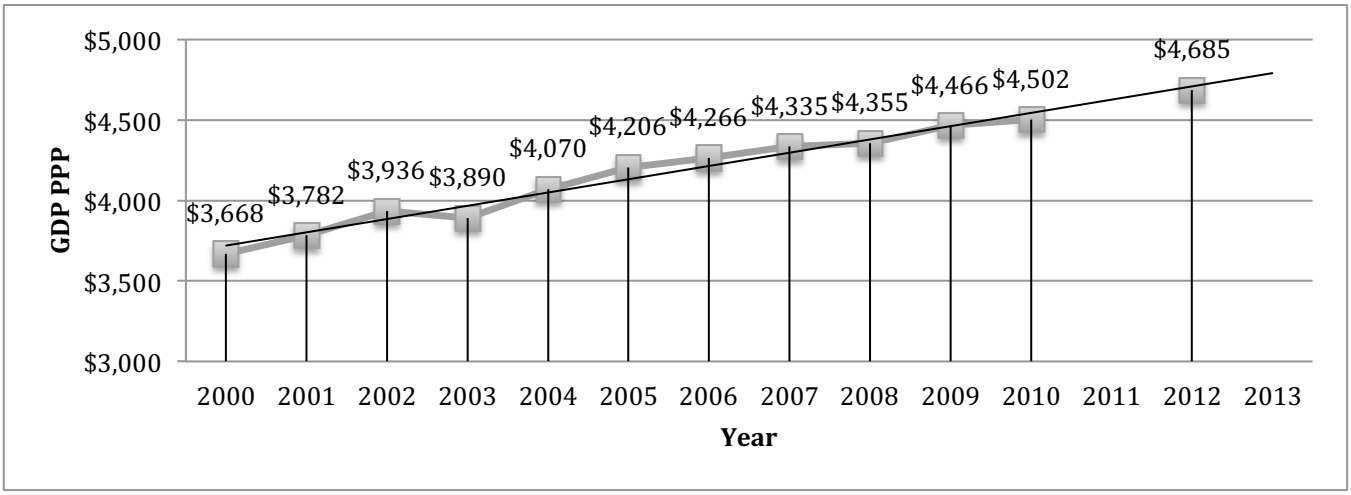
Gross Domestic Product Per Capita

To show Syria's GDP, this chapter uses purchasing parity per capita (PPP) to represent the average income per person in the terms of United State Dollars (USD) in 2005 to eliminate the effect of inflation. Here, Syria's GDP, surprisingly, shows

[51] "Data: Syrian Arab Republic," The World Bank Group, Value of Agriculture, accessed January 18, 2015, http://data.worldbank.org/country/syrian-arab-republic.

relatively constant growth. However, in comparison to developed countries, GDP per capita is very low; in the United States, GDP per capita in PPP amounted to $50,865.93. Considered nominally, Syria's overall GDP is in the bottom 34 percentile worldwide. Chart 3 below demonstrates the average income per person in Syria.

Figure *3: Syrian Gross Domestic Product in Purchasing Power Parity in USD (2000-2012)*[52]



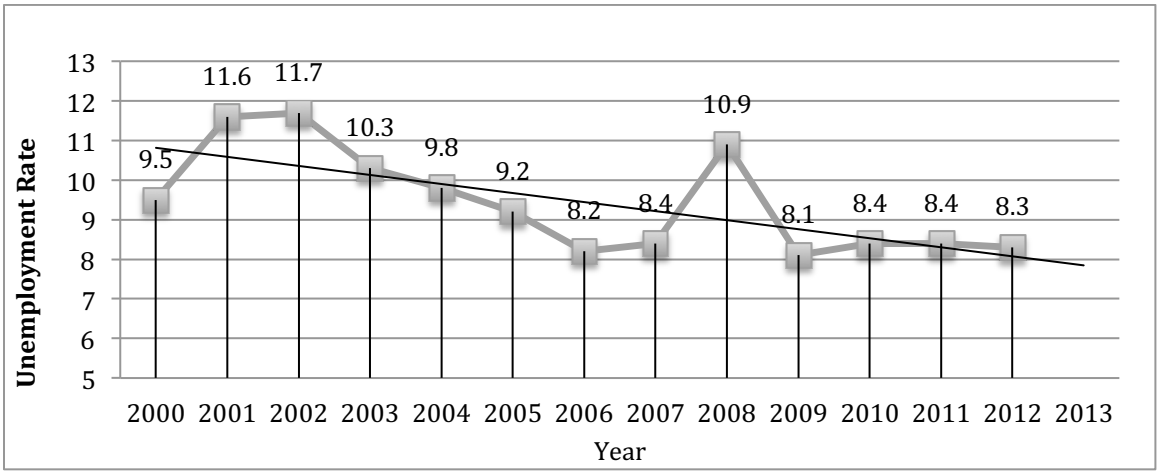
Unemployment

The unemployment rate is defined as the percentage of the labor force, those employed or those unemployed but seeking a job, who are unemployed. While unemployment rates seldom dip below 4-5% even in times of economic surplus, numbers approaching double digits often signify recession. Syria's unemployment rate is of significant concern, showing relatively steady decline over the past 15 years despite moderate GDP growth. This may suggest that the Syrian Government

[52] "Data: Syrian Arab Republic," The World Bank Group, Gross Domestic Product, accessed January 18, 2015, http://data.worldbank.org/country/syrian-arab-republic.

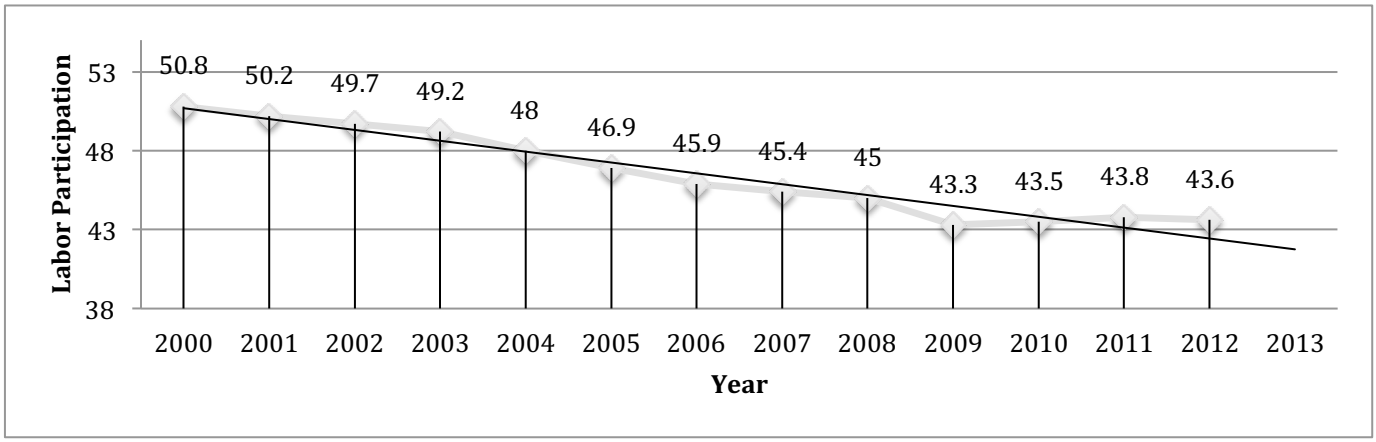
has made decisions to maximize GDP despite native impact to the job market. Chart 4 demonstrates this trend.

Figure 4: Syrian Unemployment Rates (2000-2012)[53]



These figures, however, do not account for the portion of the population who exit the labor force because they cannot find work. The following numbers in Chart 5 demonstrate the change in labor force participation:

Figure *5: Labor Force Participation (2000-2012)*[54]



[53] "Data: Syrian Arab Republic," The World Bank Group, Unemployment, accessed January 18, 2015, http://data.worldbank.org/country/syrian-arab-republic.
[54] "Data: Syrian Arab Republic," The World Bank Group, Labor Rorce Participation, accessed January 18, 2015, http://data.worldbank.org/country/syrian-arab-republic.

These figures show that only about 44 percent of the total population above the age of 15 is economically active, a decrease of more than 6 percent since 2000. Further, more than 8 percent of this economically active population is unemployed, leaving Syria with only one third of its people gainfully employed at the outbreak of the civil conflict.

Drought Severity

Syria's climate is naturally semi-arid to arid and times of drought are not surprising environmental phenomena.[55] The country is comprised of 55 percent desert and steppe terrain, which will allow for the growth of grass but is too dry to foster the development of forests. Annual precipitation is less than 350 millimeters in more than 90 percent of the country.[56] Over the last fifty years, 40 percent of that time has been spent in drought, which, on average, each lasted four and a half years.[57] Drought forecasting models have suggested that climate change will result in more frequent, more severe droughts based on increasing temperatures and less rain.[58]

The Gravity Recovery and Climate Experiment, a jointly run project by the United States' and Germany's aerospace administrations, recorded satellite data suggesting that the Tigris-Euphrates Basin, made up of Turkey, Syria, Iraq, and western Iran, is losing water faster than almost anywhere else in the world.[59] Only

[55] Francesca De Châtel, "The Role of Drought and Climate Change" 522.
[56] Ibid, 523.
[57] Ibid.
[58] Ibid.
[59] Ibid.

northern India's water supply is drying up at a faster rate. From 2003-2009, 117 million acre-feet of stored freshwater was drained from the region's reserves.[60]

Based on a study conducted in 2011, the National Oceanic and Atmospheric Administration suggested that Syria is experiencing the worst drying throughout the Mediterranean and the Middle East. Syria experienced a devastating drought starting in 2006 that is estimated to have killed up to 85 percent of the country's livestock in the most severely affected regions. Crop failure has emptied 160 villages as bankrupt farmers migrated to urban centers in order to search for jobs and food supplies. The drought is estimated to have impacted 1.3 million people and to have decreased their income by ninety percent.[61]

ASSESSING WATER POLICY

Gross mismanagement of resources, corruption, and nepotism drove Syria and its neighbors to the brink of collapse. The people no longer believe the ruling power to be legitimate under the principles of Islam and Shari'a law. The lack of legitimacy, combined with desperate conditions of the population, and rampant unemployment opened the door for revolution and incited the start of the Syrian Civil War.

As water is a scarce resource in Syria, government efforts to allocate quantities of water and manage reserves is of extreme importance. However, there is no evidence to suggest that the Ba'th party's management of this critical resource has

[60] Ibid.
[61] Michael Shank and Emily Warzba, "Why Water Is Key to Syria Conflict," CNN World, September 17, 2013, http://globalpublicsquare.blogs.cnn.com/2013/09/17/why-water-is-key-to-syria-conflict/.

been at all effective. In fact, the regime has repeatedly placed blame for water shortages on global warming and climate change, claiming that Syria was a victim to unfortunate weather patterns. To the contrary, many analysts suggest that mismanagement of water since the 1950's is the root of the current crisis.[62] This highlights the government's inability to effectively control this strategic resource by designing, implementing, and reforming water policy.

Ecological Practices

Data collected in Syria, however, has shown that only one of Syria's five agricultural zones have become drier over the last 20 years.[63] One possible explanation that would result in a perceived increasing drought severity is that changing socioeconomic circumstances of the Syrian farmers and Bedouins. Due to higher population density, the impact of a drought of the same severity has increasingly significant socioeconomic consequences.[64]

The past periods of drought have affected the entire region, not only Syria. Iraq, Israel, Jordan, Lebanon, and Palestine, however, avoided the humanitarian crisis experienced in Syria that led to malnutrition and mass migration. In Syria, the drought magnified the effects of poverty and mismanaged resources. For instance, farmers in the northeastern most part of Syria have claimed that desertification of

[62] Ibid, 532.
[63] Ibid.
[64] Clemens Breisinger et al., *Global and Local Economic Impacts of Climate Change in Syria and Options for Adaptation*, working paper, IFPRI Discussion Paper 01091 (International Food Policy Research Institute, Consultative Group on International Agricultural Research, 2011), pg. 24.

the steppe land is due to decreased rainfall and temperature increases.[65] However, this phenomenon is better explained by the overgrazing of the steppe lands after they were nationalized in 1958.[66]

Ecologists studying Syria have found that the vegetation in the region naturally adapts to changes in climate and can survive prolonged periods of drought.[67] Experiments conducted in Syria's Al Talila nature reserve have shown that mismanagement and over exploitation of resources are primarily responsible for desertification, not drought.[68] When researchers created enclosures that were protected from overgrazing, the vegetation fully recovered, resulting in green pastures while the land outside the enclosures continued to become increasingly desertified. If steps were taken to maintain the balance of the ecosystems, Syria's steppe land would remain fruitful.

Failures in Irrigation

Irrigation is the process of transporting water to crops in order to increase crop yields and is used in order to make agriculture possible in areas that were previously unsuited for crop production.[69] This technology is used in order to meet the water needs of crops, insure against drought, improve crop quality, increase yield of low moisture-holding soils, or to provide a means of liquid fertilization. Four types of irrigation exist for agriculture that require varying amounts of

[65] Francesca De Châtel, "The Role of Drought and Climate Change" 523.
[66] Francesca De Châtel, "The Role of Drought and Climate Change" 523.
[67] Ibid.
[68] Ibid.
[69] "Irrigation," U.S. Environmental Protection Agency, June 27, 2013,

infrastructure investment and manpower. Surface irrigation, the least efficient of these methods, is used in ninety-five percent of Syrian irrigated land and entails water flowing directly over the soil either via flooding or through furrows between crop rows.

Sixty percent of this area is irrigated with groundwater, requiring significant over-extraction.[70] Syria primarily uses a flooding-based irrigation system with very low efficiency. Approximately ninety percent of the country's irrigated land is watered via antiquated irrigation technology such as flooding methods.[71] The open concrete irrigation canals constructed by the government are highly inefficient; losses in water range from ten to sixty percent.[72] The use of irrigation by flooding results in further inefficiency; it uses thirty to forty percent more water than the more effective drip method of irrigation.[73]

The efficiency of irrigation, in general, is extremely low, estimated to be at forty percent efficiency in the older projects, and sixty percent in the more recent irrigation systems built within the last fifteen years.[74] Syria's utilization of the flooding method compounds these inefficiencies with additional water loss. While sixty percent of the world's drawn water is used for agricultural irrigation, only half of this amount is returned to the ground for reuse, making irrigation a relatively

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[70] Francesca De Châtel, "The Role of Drought and Climate Change" 529-30.
[71] Consuelo Varela-Ortega and Juan A. Sagardoy, "Irrigation Water Politics in Syria: Current Developments and Future Options," in Syrian Agriculture at the Crossroads, FAO Agricultural Policy and Economic Development Series No. 8 (Rome: Food and Agriculture Organization of the United Nations, 2003), http://www.fao.org/docrep/006/y4890e/y4890e0u.htm#TopOfPage.
[72] Francesca De Châtel, "The Role of Drought and Climate Change" 530.
[73] Ibid.
[74] Ibid.

inefficient use of freshwater. This loss is generated by evaporation, transpiration from plants, or loss in transportation via leaks in inefficient transit systems.[75] While Syria claims to have undertaken studies to explore the most effective techniques for water saving for crops such as wheat, corn, sugar cane, cotton, olives, eggplant, and grapes, very few irrigation modernization projects have been undertaken.[76]

There are some successful examples of irrigation in the Jazeera region to which Syria could look to as a guide. Israel, for instance, has served as a pioneer in the agricultural industry by inventing drip irrigation, which is now utilized in 150 countries across the world.[77] With less than two hundred millimeters of annual rainfall and more than fifty percent of the country made up by desert land, Israel has prioritized the management of their limited water resource and maximized the efficiency of what water it has. The country currently reuses more than sixty-five percent of its wastewater and plans to reclaim ninety percent of wastewater, which can be reused for irrigation after treatment.[78]

Humanitarian Crisis

According to the United Nations, when the drought broke out, the livelihoods of 800,000 farmers and herders dried up.[79] Starting in 2003, the Syrian Government

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[75] "Irrigation Water Use," The U.S. Geological Survey Water Science School, March 17, 2014, section goes here, http://water.usgs.gov/edu/wuir.html.
[76] Consuelo Varela-Ortega and Juan A. Sagardoy, "Irrigation Water Politics in Syria: Current Developments and Future Options," in Syrian Agriculture at the Crossroads, FAO Agricultural Policy and Economic Development Series No. 8 (Rome: Food and Agriculture Organization of the United Nations, 2003), http://www.fao.org/docrep/006/y4890e/y4890e0u.htm#TopOfPage.
[77] Neena Rai, "Drip, Drip, Drip: Daniel Hillel Talks about How He Helped Revolutionize the Way Farmers Water Their Crops," The Wall Street Journal, October 15, 2012, section goes here, http://online.wsj.com/articles/SB10000872396390443855804577602930583558076.
[78] E. Friedler, "Water Reuse - An Integral Part of Water Resources Management: Israel as a Case Study," *Water Policy* 3, no. 1 (May 22, 2001): pg. #, doi:10.1016/S1366-7017(01)00003-4.

took steps to reduce its unsustainable fuel subsidies. While oil production dropped significantly, the price of oil skyrocketed, increasing by more than $50 a barrel between 2003 and 2007. These drastic price increases limited the amount of water farmers could pump, thus they could not irrigate their lands or transport their crops to markets.

With a rapidly growing population, the demand for food is increasing, directly contributing to the demand for irrigated lands. The expansion of irrigation projects has significantly contributed to Syria's water deficit, which amounted to 3.6 billion cubic meters annually by 2007.[80] The government's stated position is that irrigation is necessary to develop the agricultural sector to provide food for the growing population. To this end, the Assad government has subsidized the production of wheat.[81] However, wheat is a water intensive crop unsuited to the Syrian terrain. Wheat is the largest crop grown in the irrigated land and is stated to be produced at a rate exceeding internal demand, though recent food assessments maintain that three million Syrians are in urgent need of food.[82] It is estimated by the United Nations' Food & Agricultural Organization that the country's production of wheat has dropped to eighteen percent of its annual average, creating a severe food shortage.[83]

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[79] Francesca De Châtel, "The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution," *Middle Eastern Studies*, 2014, pg. 525, doi:10.1080/00263206.2013.850076.
[80]Francesca De Châtel, "The Role of Drought and Climate Change" 530.
[81] Peter H. Gleick, "Water, Drought, Climate Change, and Conflict in Syria," *Weather, Climate, and Society* 6, no. 3 (July 2014): pg. 334, doi:http://dx.doi.org/10.1175/WCAS-D-13-00059.1.
[82] Ibid.
[83] Nouar Smamout, "Syria Faces an Imminent Food and Water Crisis," Chatham House, 24 June 2014, http://www.chathamhouse.org/expert/comment/14959.

The regime has also elected to make dangerous fiscal decisions that jeopardize the food security of the country in an attempt to recoup losses from unsustainable fuel subsidies. The U.S. Department of Agriculture reports that Syria, lured by the high price of wheat in the international market, sold its reserves of 1.5 million metric tons of wheat in 2006.[84] The drought drastically reduced production in the following years, and Syria was forced to import wheat by 2008.[85]

Compounding this problem, the Syrian population is experiencing a boom due to improvements made to Syria's healthcare system in the 1980's and 1990's.[86] The Syrian government failed to keep up with the increased growth rate and did not provide adequate education for the younger generations. The government also failed to foster the economic growth necessary to employ the booming younger generations, many of who were ready to enter the job market in the years leading to the outbreak of the civil war.[87] As Suzanne Saleeby writes in the Arab Studies Institute's magazine, "the regime's failure to put in place economic measures to alleviate the effects of drought was a critical driver in propelling such massive mobilizations of dissent."[88]

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[84] Julio Maldonado, *Syria Grain and Feed Annual Report*, report (U.S. Department of Agriculture Foreign Agricultural Service, 2011.
[85] Ibid.
[86] Francesca De Châtel, "The Role of Drought and Climate Change" 530.
[87] Ethan Kapstein and Amanda Mayoral, "The Economics of the Syrian Crisis," U.S. Institute of Peace International Network for Economics and Conflict, February 26, 2014, http://inec.usip.org/blog/2014/feb/26/economics-syrian-crisis.
[88] Suzanne Saleeby, "Sowing the Seeds of Dissent: Economic Grievances and the Syrian Social Contract's Unraveling," *Jadaliyya, Arab Studies Institute*, February 16, 2012, http://www.jadaliyya.com/pages/index/4383/sowing-the-seeds-of-dissent_economic-grievances-an.

Syrian economist Samir Aita writes that half of the population between the Tigris and Euphrates Rivers left the land for urban areas during the last decade, creating a refugee crisis within Syria's urban areas.[89] When the Assad government did nothing to help the drought refugees, the migrants became politicized. Aita points out that the reason states and governments were first formed in ancient Mesopotamia for the very purpose of managing the use of water for irrigation and crop growth.[90] This created a concentration of angry, unemployed young men in Syria's cities, which is believed to have played a significant role in triggering a revolt.[91] The increased populations in urban centers is a direct result of the inability to earn a sufficient income by farming or raising livestock, making drought and unemployment important factors driving the Syrian population towards rebellion.

DISCUSSING REGIME MISMANAGEMENT

The Syrian Government has not adequately handled either the unemployment situation or water shortage. Mismanagement of available resources and unsustainable regulations have resulted in the exploitation of the country's natural resources. More than twenty-two different government bureaus and agencies are involved with the water conservation effort, which are primarily staffed by undereducated personnel. As few as forty percent of employees working in the water sector have completed secondary school. Workers are paid low wages and are susceptible to corruption. Ambitious policies are drafted but never

[89] Thomas L. Friedman, "Without Water, Revolution," The New York Times, May 18, 2013, http://www.nytimes.com/2013/05/19/opinion/sunday/friedman-without-water-revolution.html?pagewanted=all&_r=0.
[90] Ibid.
[91] Joshua Hammer, "Is a Lack of Water to Blame for the Conflict in Syria?"

implemented. For example, a national drought policy was adopted in 2006, but, in attempt to downplay the growing humanitarian crisis, the plan was not put into action by the end of the most recent drought in 2010.[92]

There has been little attempt on the part of the Syrian government to resolve the water crisis. The government has been more committed to hiding the crisis and resulting humanitarian crisis rather than providing aid or implementing more sustainable resource policies. While on the surface the government goes through the motions of managing water, in the long run, the attempts at conservation are worsening conditions. Since water is considered a strategic national resource, statistics related to its management and government conservation plans are veiled in secrecy. In truth, the water sector lacks resources, accountability, and governance needed to rectify the current dysfunctional water programs.

REGIME DECISIONS OUTWEIGH ENVIRONMENTAL FACTORS

It is clear that Syria is not managing water, a resource key to national security, in an adequate manner. While the effects of drought have certainly contributed to the start of Syria' civil conflict, it is clear that regime policy decisions have exacerbated the effects of water shortage and significantly contributed to the deterioration of Syria's conditions. In its attempt to establish food self-sufficiency and join the world market, the Assad regime has proven incapable of establishing and enforcing effective policies. The government has invested in infrastructure that exacerbated

[92] Olivier De Schutter, *Report of the Special Rapporteur on the Right to Food on His Mission to Syria*, report (United Nations General Assembly Human Rights Council, 2011), pg. 8.

water shortages, established subsidies and other financial practices that have drained the State coffers, and impoverished its people.

In order to limit future damage caused by water shortages, Syria must establish and adhere to a realistic national water policy that acknowledges the dire situation. Experts recommend improved transparency, which will allow for more accurate data, and the establishment of a clear regulatory framework to enact and enforce water-related guidelines.[93] Policy pertaining to crop subsidies, drilling, and irrigation must be improved and modernized to promote the farming of less water intensive crops, to diminish the water deficit, and improve the efficiency of irrigation systems. The government should also consolidate the numerous bodies that currently play a role in the administration of the country's water resources, recruit employees with the requisite skills needed to rectify problems, and provide oversight to reduce corruption and nepotism.

When examining environmental factors and the role of water scarcity as a cause of the Syrian Civil War, two factors become clear. First, climate change is not a significant factor in the development of the conflict. Second, it is the Syrian government's mismanagement of the country's resources and ecosystems that has resulted in a humanitarian crisis, not an abnormally severe drought.[94] While drought conditions have existed, the failure of the government to enforce environmental law and provide for the growing population has become a much greater threat to Syria than dry weather patterns. These areas for improvement

[93] Francesca De Châtel, "The Role of Drought and Climate Change" 531.
[94] Francesca De Châtel, "The Role of Drought and Climate Change" 532.

seem an impossible task for a corrupt regime in the midst of a civil war, but improving the current state of Syria's water sector is critical for its future wellbeing.

As Clausewitz immortalized, war is the continuation of politics by other means. In Syria, we see the civil war creating an alternative system of power and profit as the incumbent regime has been unequal to the task of providing a governance framework able to satisfy its people.

CHAPTER II

MIGRATION AND STATE STABILITY:

HOW THE SYRIAN REFUGEE CRISIS EFFECTS NEIGHBOR-STATE STABILITY

The states surrounding Syria are in positions of precarious stability. Political discord, security struggles, and sectarian conflicts have characterized the Middle East for the last several decades. More recently, stability has been significantly jeopardized by the Arab Spring uprisings. For these reasons, Syria's protracted civil conflict poses a particular danger to the region. Networks of fighters have flocked to Syria from other uprisings in the region, bringing their foreign influences and trans-national ideals with them, resulting in more than 170,000 deaths since March 2011.[95] Nearly a third of these deaths have been civilian casualties.[96]

To escape the threat of violence, almost four million people, or one fifth of the population, have left their homes to flee Syria. In the process, this has created one of the most significant humanitarian crises of this generation. But not only must the international community be concerned with the wellbeing of the refugees themselves, this refugee crisis is a serious safety and security threat to Syria's neighbors who have found themselves the new home for millions of Syrians.

Media reports suggest that refugees will destabilize Lebanon by a parasitic draining its resources, including food, water, and public services. However, this research shows that refugees have other more significant effects on a host country. This chapter seeks to explore how refugees are factoring into Lebanon's security and stability. First it will provide an overview of the current refugee crisis resulting from the civil war in Syria. A review of academic study related to state stability and forced migration will follow. Next, this chapter will provide an overview of the

[95] Zeina Karam, "Syria Suffers Record Death Toll," *Huffington Post*, July 28, 2014, http://www.huffingtonpost.com/2014/07/28/syria-death-toll_n_5626482.html.
[96] Ibid.

statistical methods of analysis employed to qualitatively determine if, and then how, refugees are altering the stability of Lebanon. In order to assess the effect of refugees on Lebanon's stability, the next section will examine the indicators of state fragility to determine if refugees play a significant role in weakening the state before the outbreak of interstate armed conflict. The following section will discuss the results of this statistical analysis in the context of the body of academic research previously discussed. This chapter argues that the refugee situation involving Syrian and Lebanon supports previous conclusive agreement of experts that refugees have a statistically significant negative effect on the likelihood of a host nation becoming drawn into the sending nation's conflict.

In 1999, the theory of "new war" was introduced, conceptualizing a new analytical process to be applied to contemporary political conflict. New wars are thought to be the wars of the global era.[97] They are fought by networks of states and non-state actors, are for identity rather than geo-political gain, and involve different methods, means of finance, and "tend to spread and to persist or recur as each side gains in political or economic ways from violence itself rather than 'winning.'"[98] These ends, ways, and means suggest that modern conflicts are meant to be "movements which mobilize around ethnic, racial or religious identity for the purpose of claiming state power."[99] This concept of war may lend a great deal of understanding to the Syrian Civil War, particularly in the hostile actions taken

[97] Mary Kaldor, "In Defence of New Wars," *Stability: International Journal of Security and Development* 2, no. 1 (March 7, 2013): pg. 1, doi:10.5334/sta.at.
[98] Ibid..
[99] Mary Kaldor, *New and Old Wars: Organized Violence in a Global Era, Third Edition* (Stanford University Press, 2012), pg. 76.

against the Syrian population itself and how the region at large may be affected based on social, economic, political, and human factors.[100]

Artur Malantowicz writes that legitimate governments may take actions that create an unfavorable environment for inhabitants beyond their ability of control, effectively minimizing unwanted peoples via genocide, attacks on civilian targets, economic destruction, or other violence meant to eliminate or drive entire population sets from the state.[101] In 'new war' theory, population displacement is a key technique in conducting war, and the Syrian Civil War is a prime example of its application.[102] A mass exodus of refugees, however, is one factor that has the potential to transform a "new war" civil conflict into a violent, regional dispute.

As of August 2014, roughly one quarter of the population living in Lebanon is constituted by refugees, creating what the United Nations describes as a "national calamity."[103] With increasing tensions in Iraq, growing hostilities in Gaza and no end in sight to the Syrian Civil War, the influx of migrants is expected to continue. With such tremendous impact to the human condition, it is interesting to examine such refugee movements under the analytical lens of "new war" theory.

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[100] Artur Melantowicz, "Civil War in Syria and the 'New Wars' Debate," *Amsterdam Law Forum* 5, no. 3 (2013): pg. 60, http://amsterdamlawforum.org/article/view/320/496.
[101] Artur Melantowicz, "Civil War in Syria and the 'New Wars' Debate | Malantowicz | Amsterdam Law Forum," *Amsterdam Law Forum* 5, no. 3 (2013): pg. 53-4, http://amsterdamlawforum.org/article/view/320/496.
[102] Artur Melantowicz, "Civil War in Syria and the 'New Wars' Debate | Malantowicz | Amsterdam Law Forum," *Amsterdam Law Forum* 5, no. 3 (2013): pg. 58, http://amsterdamlawforum.org/article/view/320/496.
[103] "Lebanon Faces "National Calamity" as Refugee Crisis Deepens, UN Officials Warn," *UN News Centre*, July 14, 2014, http://www.un.org/apps/news/story.asp?NewsID=48264.

The academic community is in decided agreement that the spillover of domestic conflicts across state borders significantly increases the likelihood of embroiling neighbors and potentially developing into a regional conflict.[104] An estimated 2,933,109 refugees have fled Syria, constituting the largest element of civil conflict spillover.[105]

According to the United Nations Convention Relating to the Status of Refugees, a refugee is a person

> "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is willing to avail himself of the protection of that country or return there because there is a fear of persecution."[106]

Current data indicates that over 600,000 Syrians have fled to Jordan, 800,000 to Turkey, and an overwhelming 1,138,000 migrants have flocked to Lebanon, a country smaller than the State of Connecticut and with a gross domestic product less than that of Rhode Island.[107]

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[104] Idean Salehyan, "The Externalities of Civil Strife: Refugees as a Source of International Conflict," *American Journal of Political Science* 52, no. 4 (2008): 788, doi:10.1111/j.1540-5907.2008.00343.x.
[105] "UNHCR Syria Regional Refugee Response," The UN High Commission for Refugees, Total Persons of Concern, accessed July 24, 2014, http://data.unhcr.org/syrianrefugees/regional.php.
[106] UN General Assembly, *Convention Relating to the Status of Refugees*, 28 July 1951, United Nations, Treaty Series, vol. 189.

[107] "UNHCR Syria Regional Refugee Response," The UN High Commission for Refugees, Total Persons of Concern, accessed July 24, 2014, http://data.unhcr.org/syrianrefugees/regional.php.

SITUATION IN LEBANON

Even before the beginning of the current refugee crisis, Lebanon was not the most stable of countries. State fragility is a measure of state weakness including factors such as loss of physical control of its territory, the inability of a legitimate authority to make decisions, inability to provide public services, and inability to interact with other countries.[108] Having gone through its own civil war only 25 years ago and the July War less than a decade earlier, Lebanon was still attempting to recover civil infrastructure and its own displaced population at the onset of the Syrian Civil War. Such an influx of people brings significant strain to Lebanon's resources. Syrian migrants are taking refuge in poor communities and the competition for resources may result in friction between the refugees and the native Lebanese population. Nearly 12,000 new Syrians are entering the country each week, with their total number expected to reach 1.5 million by the end of 2014.[109]

PREVIOUS STUDY OF REFUGEES, FORCED MIGRATION, AND STATE STABILITY

Existing research on refugees and interstate conflict can shed light on the relevant factors that should be examined to determine what information must be analyzed in order to test a hypothesis regarding the impact of refugees to a state's stability. Work central to international relations theory will help to define what constitutes stability and the factors that contribute to a state's weakening. Previous

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[108] [108] "UNHCR Syria Regional Refugee Response," The UN High Commission for Refugees, Total Persons of Concern, accessed July 24, 2014, http://data.unhcr.org/syrianrefugees/regional.php.
[109] "Lebanon Faces "National Calamity" as Refugee Crisis Deepens, UN Officials Warn," *UN News Centre*, July 14, 2014, http://www.un.org/apps/news/story.asp?NewsID=48264.

study of forced migration concludes that there is a causal relationship between refugees and interstate conflict. Historical study of the spillover effect of civil conflict will provide a framework to measure the impact of the Syrian Civil War on Lebanon.

There is consensus among the academic community that international migration poses unprecedented political, social, and economic pressures.[110] This phenomenon is not specific to the Middle East as a region, but applies uniformly worldwide as populations from lesser developed countries tend to flock to more developed, democratic locations, or flee from hostile environments. Jonas Widgren points out that mass migration, if uncontrolled, may "threaten social cohesion, international solidarity, and peace."[111] When migration is forced, creating a mass refugee movement, the effect seems to be intensified.

New theories of war, their desired outcomes, and their means of achieving them may also lend insight to the refugee crisis in the Middle East. Mary Kaldor, in her 1999 book, New and Old Wars: Organized Violence in a Global Era, provides a new, post-Clausewitzian theory of war that she applies to political violence since the end of the Cold War. "New War" theory, Kaldor explains, puts political violence in context with globalization, taking into account transnational and non-state actors, foreign financing, and both public and private actors. Kaldor's work emphasizes the importance of political economy, stating that financial security is a key driver in ensuring a state's authority. Without financial control, legitimate governments are

[110] Jonas Widgren, "International Migration and Regional Stability," *International Affairs (Royal Institute of International Affairs 1944-)* 66, no. 4 (1990): pg. 749, doi:10.2307/2620358.
[111] Ibid.

likely to use illegal means of ensuring their power, which destroys social support systems and creates high levels of unemployment, driving the population to revolutionary causes.[112]

Kaldor's work is important in understanding both the conflict in Syria and the effect of a refugee population on a receiving state. I expect that the effects of high unemployment and lack of economic resources will be similar upon states in conflict and those receiving refugee populations. One of the only new theories of war in the last two centuries, Kaldor's theory has received significant attention from the academic community. Artur Malantowics, for example, has examined the Civil War in Syria based upon "new war" theory. His analysis proves many elements of the theory correct in assumptions about actors, methods, war economics, and spread of violence.[113] While many elements of "new war" theory are still up for debate within the academic community, it may enrich understanding of the composition of security based on social, economic, political, and human factors.[114]

Refugees and International Relations, edited by Gilbert Loescher and Laila Monahan, was inspired by the increase in refugees seeking haven from conflict and war during the 1980s. This work sets out to link together refugees and foreign policy by examining the economic impact insecurity problems relating to the regional complex that result in forced migration. The central theme of this book is that refugee issues are inherently political. Loescher and Monahan point out that

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[112] Mary Kaldor, "In Defence of New Wars," *Stability: International Journal of Security and Development* 2, no. 1 (March 7, 2013): pg. 2, doi:10.5334/sta.at.
[113] Artur Melantowicz, "Civil War in Syria and the 'New Wars' Debate," *Amsterdam Law Forum* 5, no. 3 (2013): pg. 60, http://amsterdamlawforum.org/article/view/320/496.
[114] Ibid.

refugee crises touch upon a wide variety of international relations issues and can, therefore, make important theoretical contributions to the study of international relations.[115] This work will be relevant to my research by facilitating the application of refugee issues to state stability theory.

Refugee movements are created by inequality in sociopolitical economies, state failure, and violent conflict. The consequences of such migration result in the spread of conflict, terrorism, and the displacement of one country's citizens to a host country or countries.[116] This work points out that these consequences represent a challenge to the regional or even world order and therefore necessitates international cooperation to resolve forced migration issues that are explicitly tied to world politics.[117] Attempting to bridge the study of forced migrations from a historical or empirical perspective with international relations theory, the authors note that "[t]he relationship between force migration and IR can be conceptualized on three different levels: the causes of forced migrations, the consequences of forced migration, and responses to forced migration."[118] These conceptual levels of analysis will provide a framework for examining the relationship between Syria and Lebanon.

Loescher and Monahan also assert that refugees play an important role in transnationalism, which requires a new understanding of relationships between

[115] Gil Loescher and Laila Monahan, *Refugees and International Relations* (Oxford: Oxford University Press, 1989), 3.
[116] Ibid, 1.
[117] Ibid, 3.
[118] Ibid, 12.

states and makes a large contribution to state fragility or failure.[119] Since the conflict in Syria has become secular and the region has a long history of armed conflict exacerbated by the power struggle between Shi'ites and Sunnis, this work will further serve to explain the relationship between international relations and refugee influence on transnationalism.

Security, Stability, and International Migration, by Myron Weiner, provides theoretical context that links migration and its effect on the sending and receiving states to concepts of international relations. Wiener points out that most of literature on the subject of international migration focuses on economic conditions as the primary driver of international migration.[120] He argues that while economic factors have significant influence on migration they fail to consider important political elements.[121] Migration is often impelled or prohibited for reasons that have nothing to do with economic conditions.[122]

Weiner also focuses on the role of a state in creating international migration and its response to an influx of refugees.[123] This effectively links migration with political decision-making based on the perception of the migrants as potentially threatening by either the receiving or sending country. Ultimately, his work shows

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[119] Gil Loescher and Laila Monahan, *Refugees and International Relations* (Oxford: Oxford University Press, 1989), 10.
[120] Myron Weiner, *Security, Stability, and International Migration* (Cambridge, MA: Defense and Arms Control Studies Program, Center for International Studies, Massachusetts Institute of Technology, 1990), 98.
121 Ibid, 98.
122 Ibid, 100.
123 Ibid, 100.

that refugee presence does have a direct correlation to foreign policy decision making.

Weiner describes security as a "social construct" that invokes different connotations based on the preferences and values of a society[124]. Refugees are viewed as a threat when they are believed to create problems between the sending and receiving countries, when they are perceived as a political or security threat to the regime of the host country, a social and economic problem for the host country, or when a host country uses refugees as a threat against their country of origin.[125] The act of granting asylum alone can cause strife between the sending and receiving country.[126] Even if a state has only humanitarian desires, refugees can threaten a host country's stability. Refugees have been known to conduct terror attacks, traffic drugs, smuggle weapons, and contrive to overthrow incumbent regimes.[127]

The following references show a sampling of research that conclusively indicates that violent civil conflicts are highly likely to incite interstate conflict. Migration issues are only one facet of this picture, but they too are shown to greatly increase the chance of the spread of a domestic conflict to a regional conflict. There is little discord among scholars who have studied this "spillover effect." Their work provides useful historical study of refugee conflicts and their relation to wider regional conflicts that may be applied to the specific example of Syria and Lebanon.

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[124] Ibid, 102.
[125] Ibid, 105-106.
[126] Ibid, 107.

[127] Ibid, 108.

"Regional Implications of the War in Syria" by Matthew Levitt highlights the consequences of the Syrian Civil War for its neighbors. This article discusses the secondary and tertiary effects of the influx of freedom fighters, the dangers of the outbreak of a regional sectarian conflict between the Shi'ite and Sunni, and the macro effects of the refugee movement. Levitt continues to discuss how the Syrian conflict may serve to disrupt the equilibrium of Shi'ite and Sunni communities. The war in Syria has evolved to take on two dimensions, both between the Assad regime and the Syrian opposition, but also a sectarian struggle between Muslim sects.[128] Levitt provides insight to the sectarian nature of the conflict surrounding Lebanon and Syria that will be useful in understanding the potential growth of conflict within the region.

This article also discusses the implications of a refugee crisis and the particular dangers for Lebanon, which cannot long support the added burden of Syrian migrants. Refugee communities provide motivated recruits for militant groups with access to weapons and an environment fostering radicalization. Reduced state stability also presents an opportunity for terror organizations to infiltrate weakened states. Levitt cites the presence of Hezbollah in Lebanon in the 1980s. His work will provide the regional context and highlight key indicators of growing interstate tensions based on the historical example of Lebanese-Syrian conflict.

[128] Matthew Levitt, "Regional Implications of the War in Syria," editorial, *The Washington Institute*, June 2014, Loc. 86, http://www.washingtoninstitute.org/policy-analysis/view/regional-implications-of-the-war-in-syria

Several other works are useful in understanding the factors indicative of weak or weakening states that may ultimately result in interstate conflict. Robert Rotberg's book, State Failure and State Weakness in a Time of Terror, serves to discuss how terrorism impacts state security. Rotberg writes about the factors that pose a danger to weak states and their neighbors. In The Tragedy of Failure, Tiffany Howard examines the relationship between forced migration, terrorism, and state failure. Most importantly, she establishes indicators that may be observed up to two years in advance of state failure. These factors will be useful in determining the extent of the weakening of Lebanon.

"The Syrian Spillover" discusses the secondary and tertiary effects from civil war that create regional chaos. Authors Byman and Pollack discuss the five archetypal patterns of spillover: refugees, terrorism, secessionism, radicalization, and the intervention of neighbors.[129] This article supports Levitt's projection of increased sectarian conflict between Sunnis and Shi'ites, and the likely spread of the conflict throughout the region. Both articles draw the same conclusion that the stability of both Lebanon and Iraq have been put at particular risk due to the Syrian Civil War. Byman and Pollack recount Syria's intervention in Lebanon during 1975 to exemplify how the sectarian issue of Sunni radicalization turned into a full invasion and regional crisis lasting nearly two decades and spawning Hezbollah.[130]

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[129] Daniel L. Byman and Kenneth M. Pollack, "The Syrian Spillover," *Foreign Policy*, August 10, 2012, 2-6, http://www.foreignpolicy.com/articles/2012/08/10/the_syrian_spillover.
[130] Daniel L. Byman and Kenneth M. Pollack, "The Syrian Spillover," *Foreign Policy*, August 10, 2012, 7, http://www.foreignpolicy.com/articles/2012/08/10/the_syrian_spillover.

In "The Externalities of Civil Strife: Refugees as a Source of International Conflict," Idean Salehyan argues that civil violence is unlikely to be contained by state countries, creating externalities such as refugee migration that significantly increases the probability of militarized interstate disputes.[131] Salehyan points out that much study has been devoted to the causes of interstate disputes, though refugee flows as a cause of hostilities have been absent from most of this research.[132] Like Levitt, Pollack, and Byman, Salehyan describes the negative spillover effects of refugees that jeopardize interstate relations.

Setting his work apart, Salehyan tests these claims through empirical analysis and provides useful insight for conducing quantitative studies of refugees as predictors of conflict by studying the linkages between refugees and militarized interstate disputes between the years of 1955 and 2000. To illustrate the impact of refugees on interstate conflict, this article describes the Indian invasion of East Pakistan and Rwanda's invasion of Zaire to underscore the causal relationship. Most importantly, the section on quantitative analysis provides many relative analytical practices, recommendations for refugee and conflict data sources, and suggestions for isolation of variables that maximize the impact the results of empirical analysis. This information will provide valuable advice for quantitative analysis of a similar subject, but with a different scope. Ultimately, Salehyan was

[131] Idean Salehyan, "The Externalities of Civil Strife: Refugees as a Source of International Conflict," *American Journal of Political Science* 52, no. 4 (2008): 787, doi:10.1111/j.1540-5907.2008.00343.x.
[132] Ibid, 788.

able to show that both refugee sending and receiving states are more likely to initiate militarized disputes.[133]

The previous research done on migration and interstate conflicts establishes that refugee flows must be viewed as something more than the unintended consequences of internal crisis. The academic community is in agreement that refugees greatly influence the spread of conflict between states. As the most recent of conflict prompted mass migrations, the exodus of Syrians to Lebanon has not yet undergone empirical testing to establish consistency with past examples of refugee conflicts that have resulted in regional conflict. Refugee data, in general, is also limited. The United Nations and its subsidiaries are the primary body that has collected refugee statistics, which are mostly used for the purposes of humanitarian air efforts.

Very little work has been done with such information from a security studies or international relations point of view. While many papers, case studies, and journals have been devoted to the spillover effect, there has been little study of how the refugees themselves, not the broader issue of sectarian conflict, affect their host state. This research will examine the current conflict to determine the effect that refuges have had thus far on the security and stability of Lebanon. The results may indicate what role, if any, refugees play in destabilizing their host state.

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[133] Idean Salehyan, "The Externalities of Civil Strife: Refugees as a Source of International Conflict," *American Journal of Political Science* 52, no. 4 (2008): 798, doi:10.1111/j.1540-5907.2008.00343.x.

A Drain of Resources

Based on the consensus among refugee scholars on the significance of the spillover effect in drawing a state into regional conflict, I suspect that refugees, the physical element spilling over state borders, will have a negative effect on state stability of the host nation by draining the host state's resources. Refugees will overwhelm the state's ability to provide social services and create an economic drain on state resources. By crippling public infrastructure, the change in the amount of refugees in a state will have a positive correlation to the state's stability.

Using Quantitative Analysis

To test this hypothesis, I will focus on Lebanon, but with limited data over a very limited period of time available for testing, I will also collect data from other refugee crisis areas. In order to normalize independent variables from state to state, I will utilize the data from the Fragile State Index compiled by the Fund For Peace, a non-profit organization devoted to research and education to prevent violent conflict and promote sustainable security.[134]

CAST Analytical Tool and Indicators of Fragility

The Fragile State Index is a ranking of 177 countries published annually by Foreign Policy magazine. Their Conflict Assessment System Tool (CAST) is an analytic tool used to measure conflict risk across 12 varying indicators that

[134] "Fragile State Index 2014," The Fund for Peace, accessed June 22, 2014, http://ffp.statesindex.org/.

cumulatively express the overall stability of a country.[135] Developed at Georgetown University's Institute for the Study of Diplomacy by Dr. Pauline Baker and in conjunction with the U.S. Army Peacekeeping Institute, CAST was peer reviewed by the journal *Parameters* in 1996.

These indicators, summarized in Chart 1, are based on essential political, social, and economic conditions and summarize the effects of hundreds of sub-indicators. The Fund For Peace states that the CAST program systematically incorporates and, using various algorithms, analyzes data from a wide variety of primary sources in order to produce scores for each of the 12 indicators. These scores are constituted of both quantitative analysis and qualitative input that account for major events that have occurred in a country and human review to ensure the correct interpretation of raw data.[136]

Of particular importance to this paper is the Refugees and Internally Displaced Persons Indicator (Refugee Indicator). This indicator is a measure of the pressures on a state associated with population displacement and strain on public services caused by rapid influx of refugees that have the potential to threaten state security.[137] Primary source data on refugee and internal displacement camps,

[135] "Fragile State Index 2014," The Fund for Peace, Methodology, accessed June 22, 2014, http://ffp.statesindex.org/.
[136] Ibid.
[137] "Fragile State Index 2014," The Fund for Peace, The Indicators, accessed June 22, 2014, http://ffp.statesindex.org/.

displacement related disease, refugees per capita, and absorption capacity of the host state is analyzed to determine the Refugee Indicator score.[138]

Correlation Testing

Ultimately, the scores produced for the Fragile State Index allow for the comparative study of different countries, taking in their varied circumstances and environments. To test my hypothesis, I will calculate the Pearson product-moment correlation coefficient (Pearson's r) to find a correlation between change in refugee data with an overall change in a country's Fragile State Index score. Since only ten years of fragile state data exists, I will run the same test on other locations that have undergone refugee crises in order to more widely understand the correlation, if any is present, between refugee influx and increased state fragility.

Pearson's r is defined as the covariance of two variables divided by the product of their standard deviations:

$$\rho_{X,Y} = \frac{\operatorname{cov}(X,Y)}{\sigma_X \sigma_Y} = \frac{E[(X-\mu_X)(Y-\mu_Y)]}{\sigma_X \sigma_Y}$$

where cov is the covariance, σ_X is the standard deviation of X, μ_X is the mean of X, and E is the expectation.[139] Pearson's r is widely used in the sciences as a measure of the degree of linear dependence between two variables. The equation gives a value between +1 and -1 where 1 is a total positive correlation, 0 is no

[138] Ibid.
[139] Brittani Sponaugle, "Pearson Product-Moment Correlation: A Relationship Measurement Tool," Udemy Blog, February 5, 2014 , https://www.udemy.com/blog/pearson-product-moment-correlation/.

correlation, and -1 is total negative correlation.[140] If the correlation is positive, it will indicate that refugees do in fact impact state fragility. If the value of the correlation is 0 or negative, it will suggest that, based on available data, there is no correlation between refugees and state fragility.

ANALYZING FRAGILITY DATA

Pearson's r is first used to determine the correlation between the number of refugees in Lebanon and the Refugee Indicator score. The refugee data originates from the United Nations Refugee Agency's annual Statistical Yearbooks from 2005-2012. The Statistical Yearbooks for 2013 and 2014 have not yet been published. The result of this test was a positive correlation, though a weak one. Next, correlation tests were conducted to determine the relationship between the Refugee Indicator and sum of all of the Fragile State Index score indicators except for the Refugee Indicator. The Refugee Indicator score has been subtracted to remove the potential data endogeneity-skewed results. For Lebanon, the correlation proves to be strong. The original data and Pearson's r results are summarized in Chart 2.

Figure 6: Lebanon's Fragile State Index and Refugee Indicator

Year	Fragile State Index (FSI)	Refugee Indicator (RI)	FSI-RI	Number of Refugees
2014	86.9	8.6	78.3	1,509,790
2013	86.3	8.5	77.8	1,008,970
2012	85.8	8.2	77.6	133,538
2011	87.7	8.5	79.2	8,845

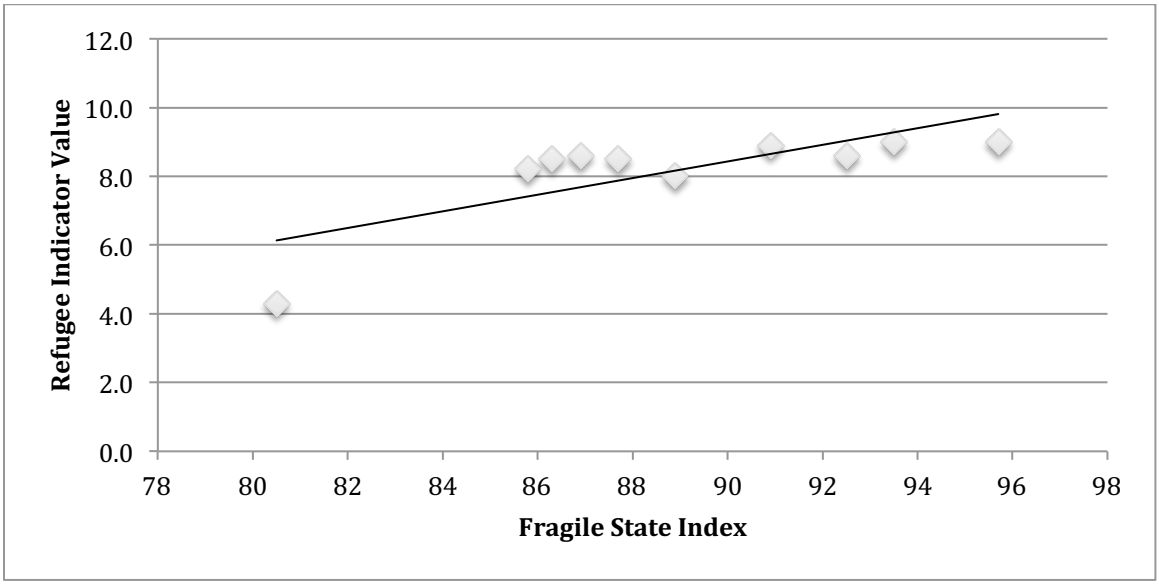
[140] Ibid.

2010	90.9	8.9	82.0	7,949
2009	93.5	9.0	84.5	50,300
2008	95.7	9.0	86.7	50,319
2007	92.5	8.6	83.9	50,266
2006	80.5	4.3	76.2	12,252
2005	88.9	8.0	80.9	2,547

Pearson's r for Number of Refugees and Refugee Indicator = 0.162792625

Pearson's r for (Fragile State Index – Refugee Indicator Value) and Refugee Indicator Value = 0.579216152

Figure 7: Lebanon Fragile State Index and Refugee Indicator Value Scatterplot with Trendline



With a correlation coefficient of 0.58 between the Lebanon's Fragile State Index score and Refugee Indicator score, a strong correlation is suggested. When plotted visually, it is easy to see the proximity of the data points to a trendline.

These factors provide evidence supporting my hypothesis, but with only ten data points, I will examine other countries to test for consistency among the results.

Figure 8: Syria's Fragile State Index and Refugee Indicator

Year	FSI-RI	RI
2014	101.6	10
2013	97.4	9.5
2012	94.5	9.0
2011	85.9	8.5
2010	87.9	8.9
2009	89.8	9.2
2008	90.1	9.0
2007	88.6	8.9
2006	88.6	7.1
2005	91.5	8.0
r = 0.504477933		

Figure 9: Fragile State Index, Refugee Indicator Scores, and Pearson's r Coefficients for Turkey, Iraq, and Jordan

Year	Turkey		Iraq		Jordan	
	FSI-RI	RI	FSI-RI	RI	FSI-RI	RI
2014	67	7.10	93.7	8.50	68.4	8.30
2013	68.5	7.40	95.1	8.80	67.9	7.80
2012	70.1	6.50	95.8	8.50	67.5	7.30
2011	68.9	6.00	95.8	9.00	66.9	7.60
2010	70.8	6.30	98.6	8.70	69.1	7.90
2009	71.6	6.60	99.7	8.90	70	7.90

2008	69.2	6.20	101.6	9.00	69.5	7.80
2007	69.1	5.80	102.2	9.20	69.8	6.80
2006	68.3	6.10	100.7	8.30	70.2	6.80
	r = -0.244087		r = 0.373160		r = -0.28653	

DATA SIGNIFICANCE

Cumulatively, this data shows five states that all illustrate a positive correlation between refugee indicator scores and country fragility. However, there is a significant degree of variation between the strength of the correlation. While Lebanon shows a 0.58 Pearson's coefficient, indicating a strong correlation, Turkey and Jordan show negative correlations with coefficients of -0.24 and -0.29 respectively. This indicates that a weak negative correlation; as state fragility increases, the Refugee Indicator has decreases, or vice versa. Both Turkey and Jordan show both positive and negative fluctuation in fragility during this time period, which may in part explain the result of a negative correlation for this time period.

Based on the relatively lower Fragile State Index scores of Turkey and Jordan, I initially suspected that the more fragile the state, the stronger the correlation would be between the Refugee Indicator and Fragile State Index scores. Lebanon and Syria's higher levels of fragility seem to correspond with their stronger correlation to refugee data. However, the scores in the Iraq test prove to be an outlier. Iraq shows the highest levels of state fragility, but the Pearson's coefficient is less strong that that of Lebanon and Syria, though still a strong correlation at 0.45.

Possible Methodological Improvements

I do believe that the results of these tests show that there is a correlation between the number of refugees in a country and that state's fragility. As the number of refugees increase, the fragility increases, or as refugees diminish, the state's stability begins to normalize. There is, however, more work to be done to fully explain these results. At present, there is not sufficient data to conclusively prove such a correlation between refugees and increased state fragility. It is not yet possible to determine how refugees will affect Lebanon in the long run, and the impact of refugees may change as a crisis grows longer. I would suggest that studies be conducted using different data sources to confirm the legitimacy of my tests using the Fragile State Index and Refugee Indicators. As only ten years of data exists, there is likely too little data to conclusively prove my hypothesis. Further insight to the composition of the Fragile State Index indicator scores would also improve the integrity of this study.

Areas for Future Study

I also recommend further study of the correlation between the number of refugees and the Refugee Indicator score. Since the CAST analytical program is proprietary, it is not possible to determine the method used to produce the Refugee Indicator score. I was very surprised by the weakness of the Pearson's correlation between raw refugee data and the Refugee Indicator score. I believe this factor

strongly suggests utilizing a different method of testing in order to prove my hypothesis with a higher level of confidence.

I expect that a lack of data will continue to plague attempts to analyze the effects of refugees on their host nation. The United Nations' agencies are among the only organizations that collect and publish statistical data related to refugee issues. Having more varied sources of information detailing refugee crises over a longer period of time would better allow for the statistical normalization of the data used for analysis of refugee issues and would ultimately result in the ability to draw conclusions with a higher degree of fidelity.

Observations

While working with this data, it was surprising to observe the relatively little change in the Fragile State Index score of Lebanon despite the current refugee crisis. Though the situation is being called a national calamity, the Fragile State Index score has only increased by 1.1 between 2012 and 2014, with Lebanon actually falling one position from 45th to the 46th most endangered state on the Fragile State Index. It seems that a refugee crisis may have much more impact on the likelihood of being drawn into a violent conflict which then increases state fragility, rather than the refugee crisis directly increasing state fragility by draining state resources. This suggestion is consistent with the concepts of New War Theory, which note that mass population displacement is a key technique used to conduct war. New War Theory also stresses the importance of a state economy in its stability. Perhaps a more protracted presence of refugees would have more serious financial and economic

consequences, but refugees do not appear to be causing extensive economic strain at this point.

MINOR DIRECT IMPACT ON FRAGILITY

Given the dangers that come with failed or fragile states, it is important for scholars and policymakers to understand how factors such as refugees contribute to state fragility. However, the physical presence of refugees seems to have a surprisingly small direct impact on state fragility. It seems that the political ramifications and the secondary or tertiary effects of a refugee crisis are much more dangerous than the direct impact of refugees residing in a host country. Diminished food supplies, natural resources, unemployment, and refugee violence do not appear to significantly change a host state's stability. While further research must be conducted to determine the validity of this idea, it will be useful for policymakers to understand exactly how refugees affect the domestic wellbeing of the host nation.

Understanding the small impact that refugees have on state fragility also explains the little amount of academic research devoted to this subject. While tremendous refugee presence does impact a state, perhaps domestic policy to address refugees is not as critical as first expected. Ultimately, this research shows that refugees have a much greater direct impact to a host state domestically than they do to that state's international relations. While refugees do have some impact upon foreign policy, other factors must be taken into account to fully explain that effect.

CHAPTER III

THE RISE OF THE ISLAMIC STATE:

SECTARIAN CHALLENGES TO SYRIA'S NATIONAL BORDERS

On the first night of Ramadan in June 2014, a spokesman for the Islamic State of Iraq and al-Sham (ISIS, also known as IS or ISIL), proclaimed "[t]he sun of jihad has risen" and called upon all Muslims to pledge their allegiance to the ISIS caliphate led by Abu Bakr al-Baghdadi, ISIS' leader who claims to be a direct descendant of the prophet Muhammad.[141] This call to arms brings a direct challenge to Syria and its neighbors as the caliphate attempts to establish an Islamic governance structure that disregards state lines. Given the chaos created by the civil war in Syria, failing conditions in Iraq, and a fledgling independent Kurdistan coupled with ISIS' perchance for violence and their universal appeal in a region fraught with conflict, many have claimed that ISIS will "end Sykes-Picot" and establish a new Islamic state. However, past border disputes in the Middle East suggest that it will be more difficult to establish a new state than the self-proclaimed caliphate may think.

This research will explore the likelihood that ISIS will successfully redraw state borders in the Levant. This chapter will begin with an overview of Sykes-Picot agreement that shaped Syria's current boundaries and grouped together many diverse groups of people with divergent interests. Next, a review of academic study will provide a foundation of modern Arab ideology, the clash between groups, and historic examples of politically crafted borders. It will discuss the case study methodology employed to learn from historic instances of violence instigated by the creation of artificial borders that group together people with divergent interests. The following section discusses projected outcomes for the situation in Syria based

[141] Aaron Y. Zelin, "ISIS is Dead, Long Live the Islamic State," *Foreign Policy*, June 30, 2014, http://foreignpolicy.com/2014/06/30/ISIS-is-dead-long-live-the-Islamic-state/.

on the case studies. This chapter will conclude by arguing that there is little likelihood that ISIS will achieve their goal of creating an independent Islamic state by reshaping Syria's borders.

In 1916, France and the United Kingdom struck a deal defining areas of control of the Ottoman Empire should it fall to the Triple Entente during World War I. Known as the Sykes-Picot Agreement, the resulting treaty terms divided the Middle East between Arab, French, and British control. Each power was left to define the state boundaries within their areas of control, and some scholars suggest that the only reason the premise of the Sykes-Picot Agreement was successful was that it provided some stability to a volatile region.[142] However, little heed was paid to the inhabitants of the region and the long-term effect of the creation of political boundaries that segregated ethnic sects.

The Middle East is populated by a complex web of ethnic and religious groups. Differentiations between the various Muslim sects often characterize group politics, and clashes between various groups are ongoing.[143] Nearly 60% of Syria's population is composed of Sunni Muslims with two larger minority groups including a 9% Kurd population and 12% Alawite population.[144] Though Alawites account for only a small fraction of the country, they have held power via the Ba'ath party since the mid-1960s. Kurds, who of late have been increasingly pressing for more

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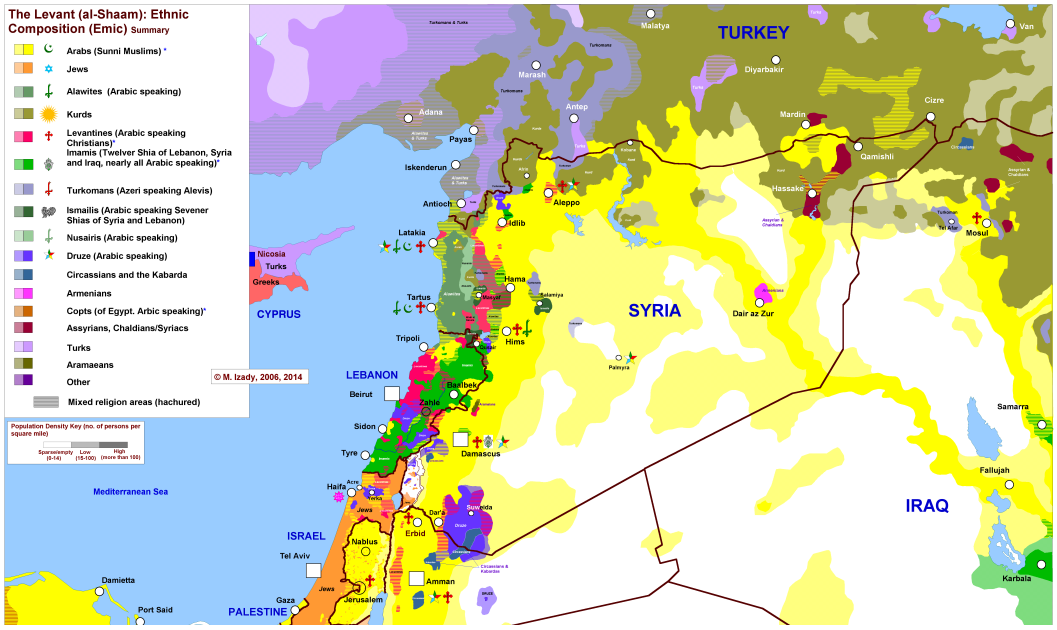
[142] John Bew, "A Tragic Cycle," *New Statesmen* 143, no. 5223 (August 14, 2014): 25.
[143] Vali Nasr, *The Shia Revival: How Conflicts within Islam Will Shape the Future* (New York: Norton, 2006), Kindle edition, Location112.
[144] *The Gulf/2000 Project: Change, Community, and Cooperation in the Persian Gulf*, School of International and Public Affairs, Columbia University, 2013, Maps and Statistics Collection, http://gulf2000.columbia.edu/index.shtml.

autonomy, primarily inhabit the northeastern region of Syria adjacent to Kurdish regions of Iraq, Iran, and Turkey. The differentiation between sects can play a significant role in the regional power politics. Sectarian conflicts are sometimes perpetuated at the nation-level when rulers choose religious politics to pursue their goals.

Figure 10: Ethnic Composition of Syria



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For the United States, there is no definitive answer whether its interests would be better served by Shiite or Sunni pre-eminence, but reignited secular battles certainly present new security challenges within the Middle East. Two Middle Eastern states compete for Islamic leadership: Iran, a predominately Shia state, and Saudi Arabia, which is primarily populated with Sunni Muslims. The struggle for dominance currently playing out between transnational militant groups

145 *The Gulf/2000 Project: Change, Community, and Cooperation in the Persian Gulf*, School of International and Public Affairs, Columbia University, 2013, Maps and Statistics, http://gulf2000.columbia.edu/index.shtml.

will likely have significant impact on the stability of Syria, Iraq, and other Middle Eastern states.[146] The desire to "cleanse" Islam, establish a state governed by Shari'a law, and continually escalating militant violence is a growing threat not only to international security, but to the very existence of Syria, Iraq, and other Middle Eastern states.

After the 2001 war with Iraq, the Coalition forces established policy to remove the influence of Saddam Hussein's Ba'ath party influence from Iraq's new political system.[147] This de-Ba'athification policy resulted in the exclusion of Sunnis in the new regime based on previous close affiliations with the Ba'th regime.[148] The newly formed government primarily consisted of Shi'as, which resulted in the disenfranchisement of Iraq's Sunni population.[149] This disenfranchisement has played a significant role in the creation of ISIS, a primarily Sunni extremist jihadi group.[150]

ISIS expanded its operations from Iraq into Syria with the goal of establishing an Islamic state in the Sunni-majority regions of Iraq and Syria.[151] Having joined with Syrian rebel fighters, ISIS currently controls a significant portion of Syria.

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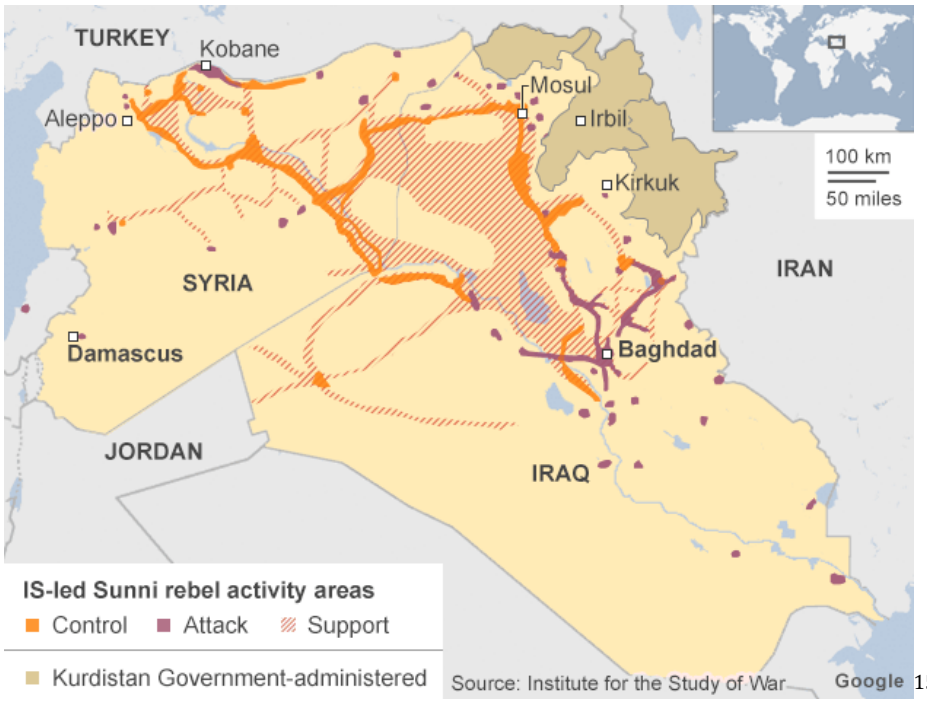
[146] Vali Nasr, *The Shia Revival: How Conflicts within Islam Will Shape the Future* (New York: Norton, 2006), Kindle edition, Location114.
[147] Zachary Laub and Jonathan Masters, *Islamic State in Iraq and Greater Syria,* Council on Foreign Relations, report, June 12, 2014, Origins, http://mercury.ethz.ch/serviceengine/Files/ISN/181537/ipublicationdocument_singledocument/b90746e3-61de-4b5e-929a-c5cdf7a3d70b/en/Islamic+State+in+Iraq+and+Greater+Syria+(Al-Qaeda+in+Iraq)+-+Council+on+Foreign+Relations.pdf.
[148] Ibid.
[149] Ibid, 1.
[150] Ibid.
[151] Robin Simcox, "ISIS' Western Ambitions: Why Europe and the United States Could Be the Militant Group's Next Target," *Foreign Affairs*, June 30, 2014, http://www.foreignaffairs.com/articles/141611/robin-simcox/isis-western-ambitions.

Syrian Kurds, on the other hand, are joining forces with the neighboring Iraqi Kurds to gain autonomy or potentially establish an independent state.[152] With so many actors involved who claim ties to ethnic groups that transcend borders rather than a particular nation-state, it is inevitable that the boundaries of Syria will be challenged as ISIS fights to control more territory. A British jihadist summarized that ISIS "understands no borders."[153]

Figure 11: ISIS Held Territory as of December 26, 2014



[154]

[152] Marina Ottaway and David Ottaway, "How the Kurds Got Their Way: Economic Cooperation and the Middle East's New Borders," *Foreign Affairs*, May/June 2014, http://www.foreignaffairs.com/articles/141216/marina-ottaway-and-david-ottaway/how-the-kurds-got-their-way.

[153] Robin Simcox, "ISIS' Western Ambitions: Why Europe and the United States Could Be the Militant Group's Next Target," *Foreign Affairs*, June 30, 2014, http://www.foreignaffairs.com/articles/141611/robin-simcox/isis-western-ambitions.

[154] "Battle for Iraq and Syria in Maps," Institute for the Study of War via BBC, December 26, 2014, The Rise of IS, http://www.bbc.com/news/world-middle-east-27838034.

ACADEMIC STUDY OF ARAB SECTARIAN CONFLICT

The literature existing on the Middle East is essential in understanding the ethnic divisions within the Middle East and the ideology that is foundational to the Islamic people. For this reason, I consider the *Identity and Foreign Policy in the Middle East* by Shibley Telhami and A.I. Dawisha's book, *Arab Nationalism in the Twentieth Century* to be critical in understanding the evolution of the Arab Nationalism ideology and the historical antecedents of its development leading to the ebb and flow of its prominence in the Islamic world. Noah Feldman's work is also important to understanding Islamic states, their composition, and legitimacy. Karl Wittfogel's work in Oriental Despotism is essential in understanding the linkages between governance and religion in the Arab world. Vali Nasr's book *The Shia Revival* is also helpful to understand the contemporary conflict between Shia and Sunni sects, and how world politics influence sectarian conflict in the Middle East. Collectively, these foundational theories and histories provide sufficient context to understand the current sectarian crisis and make abstractions as their future results.

To understand the intentions and goal of ISIS, understanding Arab Nationalism is essential. At the time of the Sykes-Picot Agreement's establishment, Arab Nationalism was rising in prominence to become a key post-colonial concept for scholars and politicians in the Middle East. This supra-national ideology explains one of the primary way of thinking in the Levant at the time. Arab nationalists consider the Arab world to be one nation stretching from Northern Africa to the Gulf States and the Levant, "a single nation bound by the common ties

of language, religion, and history" desiring political unity.[155] Despite the existence of many individual states, they believed the region should be a singular Pan-Arab nation. Individual state borders were an illusion, and heads of state were seen as "deviant" temporary caretakers standing in the way of the Arab Nation.[156]

Arab Nationalists attribute the failure to unify the Arab Nation to Western interference, such as the Sykes-Picot Agreement, which divided the region and its spoils among former colonial powers or to the individual regimes, who were thought to be selfishly acting in their own best interest while neglecting their Arab brethren.[157] Some scholars even attributed the lack of unity of the Arab states to the loss of the Six Day War based on the resulting loss of legitimacy of Gamal Abdel Nasser, the leader of the Arab Nationalism movement.[158] Nevertheless, this failure laid to rest the Arab Nationalist agenda as a system of independent states became more firmly established. Independent states desire individual political sovereignty rather than ethnic unity.[159]

Arab Nationalism largely gave way as in influential ideology after 1967. Arab states joined forces with the United States against their Iraqi brothers to liberate Kuwait during the 1991 Gulf War, and partnerships with the West increased as the international oil market expanded exports from the Middle East. When Tunisia

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[155] Hisham Bashir Sharabi, *Nationalism and Revolution in the Arab World: The Middle East and North Africa* (Princeton: Van Nostrand, 1966), 2; George Antonius, *The Arab Awakening: The Story of the Arab National Movement* (Philadelphia: Lippincott, 1939); A. I. Dawisha, *Arab Nationalism in the Twentieth Century: From Triumph to Despair* (Princeton, NJ: Princeton University Press, 2003), 2.
[156] Walid Khalidi, "Thinking the Unthinkable: A Sovereign Palestinian State," *Foreign Affairs*, July 1978, 2-3.
[157] Ibid, 3.
[158] A. I. Dawisha, *Arab Nationalism in the Twentieth Century: From Triumph to Despair* (Princeton, NJ: Princeton University Press, 2003), 3.
[159] Ibid, 12.

ousted President Ben Ali and Egypt toppled the Mubarak regime, a resurgence of Arab identity facilitated the spread of revolt to Bahrain, Yemen, Libya, Syria, Morocco, and Jordan. Some experts suggest competition between Arab states as the reason for these revolts, thought others believe that the "sense of commonality and identification" shared by protesters promoted the spread of the Arab Spring movement.[160]

This resurgence of some Arab Nationalist principles has been designated "New Arabism" to distinguish the resulting evolution of concepts at the end of the twentieth century. Political scientist Shibley Telhami writes that New Arabism is "an independent transnational movement in the Arab world" which was inspired by intellectual elites attempting to establish a new political direction independent from that of the incumbent government structure.[161] Regional media outlets popularized these concepts by portraying unifying themes.[162] The Arab Spring movement, however, has not challenged the sovereignty of individual states, and nor does New Arabism call into question the legitimacy of individual Arab countries.[163]

In addition to nationalist movements, it is important to consider sectarian factors when forecasting the results of the ISIS conquests. In his book *The Shia Revival,* Vali Nasr asserts that an unintended effect of the Iraq War was the re-

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[160] Christopher Phillips, *Everyday Arab Identity: The Daily Reproduction of the Arab World* (Hoboken: Taylor and Francis, 2012), 20, http://JHU.eblib.com/patron/FullRecord.aspx?p=1075384.
[161] Shibley Telhami, "Power, Legitimacy, and Peace-Making in Arab Coalitions: The New Arabism," in *Ethnic Conflict and International Politics in the Middle East*, ed. Leonard Binder (Gainesville: University Press of Florida, 1999), 56-57.
[162] Ibid, 57.
[163] Shibley Telhami and Michael N. Barnett, *Identity and Foreign Policy in the Middle East* (Ithaca: Cornell University Press, 2002), 207.

ignition of sectarian conflict between Shia and Sunni Muslims.[164] Nasr examines the consequences of overthrowing Saddam Hussein's Sunni regime and handing power to the Shia resulting in political changes of course, such as the fostering of a relationship between Iran and Iraq and a resurgence of Shia politics in the Arab world.[165] He expects that the ascension to prominences of the Shia will incite Sunni extremism, as can already be seen with ISIS.[166] Nasr projects that Sunni and Shia will only find peace when a transformation has taken place allowing for equitable distribution of wealth, a governance structures that allows proportional representation and eliminating oppression, and a peaceful dispute resolution process.[167] According to Nasr, the region must undergo a process of democratization for such results to occur.[168]

Other counter-Western ideas also help to shape the nature of the conflict in Syria. Karl Wittfogel, a noted scholar of the Asiatic world, was the first to apply a kind of Marxist theory to non-Western society. The resulting concept, Oriental Despotism, provides significant insight to the governance and power structures within Arab states, though some consider his work to be outdated. Wittfogel studies the archetypal system of authoritarian rule in the Middle East, including the dependence on agriculture, the linkage of governance and religion, and state

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[164] Vali Nasr, *The Shia Revival: How Conflicts within Islam Will Shape the Future* (New York: Norton, 2006), Kindle edition., Location 3283.
[165] Ibid, Location 3283.
[166] Ibid, Location 3284.
[167] Ibid, Location 214.
[168] Ibid, Location 3300.

ownership of land and means of production.[169] A dynastic ruler and their dominant regime, which consisted of religious leaders, nobles, and political elites, traditionally held a power monopoly in Middle Eastern countries.[170] Understanding the mentality of the despotic regime is useful in interpreting the events of the Arab Spring and New Arabism theory as the movement to overthrow authoritarian regimes in favor of more legitimate, representative governments has reached Syria.

Authoritarian regimes hold unchecked power over state functions and administration, religion, the military, legislature and judiciary systems, the land, and the people.[171] Despotic rulers used power to confiscate property, land, and resources, eliminating competition and opposition by linking together all aspects of life and consolidating them under their rule. This power is rationalized by those dominated based on the benevolence of the regime that provides public utilities such as large-scale agricultural irrigation.[172] Recently, however, gross mismanagement of resources, corruption, and nepotism drove Syria and its neighbors to the brink of collapse. The people no longer believe the ruling powers to be legitimate, which opens the door for revolution and resurgence in the popularity of religious law.

Since the Sykes-Picot Agreement, leaders have had difficulty in justifying their legitimacy to their people as many citizens believe they have been deprived of

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[169] Karl August Wittfogel, *Oriental Despotism: A Comparative Study of Total Power* (New Haven: Yale University Press, 1957).
[170] Ibid.
[171] Ibid, 8.
[172] Ibid.

opportunities that were made available to others.[173] The resulting inequitable distribution of resources among a country's citizens based on sectarian preferences has given rise to wider sectarian conflict that is spreading through the region.[174] Resurgences of Arab Nationalism and desire for Shari'a law highlight the lack of legitimacy of despotic rulers. Longstanding differences in society and governance structures are important to consider when examining the power structures of Arab states since their societal foundations are fundamentally different than those of the Western world.

The traditional Arab Nationalist view requires that a regional, rather than single state, perspective is applied to Arab issues. More recent scholars, however, consider the regional approach to be waning in the Arab world. Scholars like Rashid Khalidi, Noah Feldman, and Adeed Dawisha point out that the regional approach simply has not worked. Arab nationalist parties, like the Ba'aths ruling Syria, have not put into practice their Pan-Arab rhetoric when given the opportunity.[175]

Historical analysis of the control of Syria and the surrounding region also helps to place the aims of transnational militant groups into historical context. Despite the recent cries of ISIS that they will bring about the end of Sykes-Picot, distinct ethnic groups have often inhabited present-day Iraq and Syria, each ruled by separate powers.[176] While the Arab tribes were briefly united under Mohammad

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[173] Ibid, 8.
[174] Ibid.
[175] Rashid Khalidi, *The Origins of Arab Nationalism* (New York: Columbia University Press, 1991).
[176] Jennifer T. Gordon, "ISIS' Desire to Erase Sykes-Picot is Rooted in Fiction, Not History," *The National Interest*, September 17, 2014, http://nationalinterest.org/feature/ISIS%E2%80%99-desire-erase-sykes-picot-rooted-fiction-not-history-11293.

in the seventh century, old divisions reappeared after his death as Islam expanded out of the Arabian Peninsula.[177] While the Ottoman Empire reestablished some level of unity within the Arab world, the territories still retained independent administration. Uniting Iraq and Syria as a single caliphate, which ISIS claims as one of its goals, seeks to prey on the weakness of Iraq's security forces and capitalize on the lawlessness of Syria during its civil war.[178] Ironically, just like the Sykes-Picot Agreement, this plan ignores nearly a century of development of two separate nations. Such an outcome may not be any more legitimate than the status quo.

There is a common perception in the academic community that states with politically designed borders are more likely to come into conflict than states that develop organically. Artificial borders or those in which political borders do not coincide with a division of nationalities desired by the people on the ground may create ethnically fragmented countries or divide one group of people into two bordering countries.[179] Countries that share artificial borders, including Syria and its neighbors, are believed to be more likely to come into conflict as they separate previously united groups and lead to irredentist demands.[180] Around the world, it is common to find failed states, civil and international conflict, and desperate economic conditions near colonial borders that paid no heed to sectarian divisions

[177] Ibid
[178] Ibid.
[179] Alberto Alesina, William Easterly, and Janina Matuszeski, "Artificial States," *Journal of the European Economic Association* 9, no. 2 (2011): 1, doi:10.3386/w12328.
[180] P. Englebert, S. Tarango, and M. Carter, "Dismemberment and Suffocation: A Contribution to the Debate on African Boundaries," *Comparative Political Studies* 35, no. 10 (December 2002): 1097, doi:10.1177/001041402237944.

and boundaries that develop naturally over time via conflict or based on divisional terrain features.

Borders that cut through societies and interrupt trade routes have been studied extensively. In *Political Frontiers and Boundary Making*, Holditch concludes that racial units should coincide as much as possible with the geographic unit, particularly if the racial unit has demonstrated an unwillingness to assimilate with others.[181] Further, he writes that political leaders should be determined by their ability to bring cohesion to a territory's people.[182] Holditch explains that wars are now based on religious differences rather than desires of expansion and that borders are the inevitable product of advancing civilization and increasing populations.[183] Each of these ideas represents one element of the conflict currently unfolding in Syria. The Sunni peoples are divided, the country is led by a minority Alawite-Shia leader, and the population growth is outpacing job creation for the 250,000 young workers entering the job market each year.[184] Holdich's conclusions on border issues provide an overarching framework that allows for the identification of border issues that play important roles in the devolution of conflict.

Research surrounding divergent groups lacking social cohesion helps to explain conflicts between differing peoples who are grouped together. Alesina, Easterly, and Matuszeski's article "Artificial States" helps, in particular, to explain

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[181] Thomas Hungerford Holditch, *Political Frontiers and Boundary Making* (London: Macmillan and, 1916), 31, https://archive-org.proxy1.library.jhu.edu/details/politicalfrontie00holdiala.

[182] Ibid.

[183] Ibid, 66.

[184] *The Gulf/2000 Project: Change, Community, and Cooperation in the Persian Gulf*, School of International and Public Affairs, Columbia University, 2013, Maps and Statistics, http://gulf2000.columbia.edu/index.shtml.

the animosity between religious and ethnic sects in the Middle East. First, "Artificial States" outlines problems created by outsiders as they give lands to groups without considerations of prior claims on the territory. Secondly, political borders divide ethnic, religious, and linguistic groups. This separation frustrates group ambitions and creates unrest in the new territory. Political borders can also consolidate groups seeking independence into a singular new nation. Finally, new states are created that have no national identity which unites citizens to a common purpose and facilitates cohesion. Collections of disparate groups with different priorities and identities have little incentive to develop cohesion or work together to establish public goods.[185] These problems create a number of issues that impact factors including economic well-being of artificially created states.

Alesina, Easterly, and Matuszeski write that naturally forming states have the advantage of time to develop a national identity, where artificial states are suddenly group together diverse peoples who have little motivation to promote national interests.[186] Focus remains on reuniting their own peoples, seeking independence, or seeking refuge from majority groups holding the power in a new, politically created state. These concerns make it difficult for populations to come together in order to reach consensus on public goods, create national institutions, or facilitate economic development. Ultimately, the lack of cohesion prohibits, or at least severely limits, socio-cultural, political, and economic development. This research is

[185] Alberto Alesina, William Easterly, and Janina Matuszeski, "Artificial States," *Journal of the European Economic Association* 9, no. 2 (2011): 24, doi:10.3386/w12328.
[186] Ibid.

helpful to understand the views of different sects in the Middle East in the context of Arab Nationalism.

Research suggests that not only do artificial borders impact the likelihood of states to engage in conflict with neighbors, they are also more likely to have domestic problems. Alesina, Baquir, and Easterly determined that when individuals have different preferences, they prefer to devote fewer resources to public projects.[187] Their research demonstrates that certain public goods such as roads, sewage infrastructure, and education are negatively related to ethnic divisions within a city.[188] Locations that have polarized ethnic groups are less willing to contribute to public goods, and thus, they have fewer of them. This, they believe, occurs for two reasons: 1) divergent priorities as to which public resources should be funded, and 2) diminished incentive to invest in public goods that will benefit adversaries.[189] This research shows how the grouping of incongruent peoples in one state may lead to infrastructure and public works shortages that create cyclical effects leading to intrastate conflicts.

Ultimately, the body of research related to artificial borders points to several differing reasons why these boundaries may lead to conflict. However, most researchers have honed in on different aspects of political borders that create conflict in their own ways. By examining each of these aspects in one region, much can be learned about the desires of the groups in and around Syria and the

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[187] A. Alesina, R. Baqir, and W. Easterly, "Public Goods and Ethnic Divisions," *The Quarterly Journal of Economics* 114, no. 4 (1999): 1243, doi:10.1162/003355399556269.
[188] Ibid.
[189] Ibid, 1244.

likelihood of achieving their geopolitical goals. However, there is a long-standing history of an independent Syria, and no external party has shown a willingness to intervene in a regional conflict in order to allow for any permanent change to state boundaries.[190] While the literature shows that a state with politically drawn borders containing fragmented groups with different religious ideologies are more likely to be embroiled in conflict, there is little precedent for complete overhaul of artificial borders without an external power to maintain them.

Some scholars, however, argue that while borders are not changing, they are becoming more porous and giving rise to new economic zones engaged in the gas and oil trade.[191] These transnational zones, such as the portion of Turkey, Syria and Iraq inhabited by the Kurds, are allowing for shifting control of resources without violence. Economic cooperation is becoming a peaceful alternative to political violence in other locations, as well, including Cyprus, Greece, and Turkey, and Sudan and South Sudan.[192] In the wake of the Arab Spring, evidence has shown that Arab Nationalism is being challenged as nations have come together to overthrow authoritarian despots. ISIS may challenge this new trend by reigniting secular issues in locations with unstable political systems.

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[190] John Bew, "A Tragic Cycle," *New Statesmen* 143, no. 5223 (August 14, 2014): 10.
[191] Marina Ottaway and David Ottaway, "How the Kurds Got Their Way: Economic Cooperation and the Middle East's New Borders," *Foreign Affairs*, May/June 2014, http://www.foreignaffairs.com/articles/141216/marina-ottaway-and-david-ottaway/how-the-kurds-got-their-way.
[192] Ibid.

PROJECTING ISIS WILL FAIL

Based on the body of research that has already been conducted in the areas of sectarian conflict and border disputes in the Middle East, I do not expect that ISIS' exploits will result in changes to the region's international borders despite the expanding nature of the conflict. The creation of an Islamic state will require a major overhaul of the Middle East, with more conflict, violence, and Islamic extremism. ISIS's conquest in the region is already taking on an increasingly large opposition group and is provoking retaliation from the West. Aggression into U.S. protected Kurdistan and hostile intentions towards the West will provoke a response from the United States, who will not allow ISIS free rein in the region.

Economic interest in the region's energy market will encourage outside actors to maintain regional stability in order to secure access to energy resources. Due to the general instability of the region, I do not believe that international borders will be jeopardized unless an external power intercedes to maintain new state divisions. In the current climate, I do not believe outside actors will be willing to intervene, save to maintain the status quo. External powers will attempt to maintain what little stability exists in Middle East, which will delay any impending secular restructuring.

SELECTING RELEVANT CASE STUDIES

To test this hypothesis, I will conduct case studies to investigate the qualitative conditions of situations similar to the current environment in Syria, focusing on the Arab world and the surrounding region. For each situation, I will

examine history of the establishment of states and their boundaries, the fragmentation or displacement of people, clashes between groups unwillingly united, effects of Arab Nationalism, and, if possible, the ultimate resolution to the problem. I will also consider Islamic and tribal divisions in order to assess the similarity of the environment in each example to the current environment in Syria and Iraq.

Excepting ISIS, this work will not include the effects of external actors and transnational groups such as Hezbollah, Al-Qaeda, or the Muslim Brotherhood as there is not sufficient space to conduct a thorough study of their alignment to existing states and ethnic divisions.

LEARNING FROM THE PAST

Palestine

The "Palestine Problem" is one of the most well-known, long lasting, and most bitter conflicts in the Middle East. Surprisingly, the issue is not based upon differences in religion, but is a territorial dispute stemming from the United Nations decision to divide Palestine into two segments, one Jewish, and one Arab. Until that 1947 decision, Palestine was a part of the Ottoman Empire and comprised of hundreds of rural villages populated primarily by Muslim and Christian Arabs who had inhabited that land for centuries. While the Zionist movement began to consolidate the diaspora of European Jews in Palestine in 1882, the Jewish presence previously consisted of a small minority numbering only 25,000 people, many of

whom were recent immigrants.[193] The Arab world rejected any Jewish claim to the land and was unwilling to subjugate Palestinians to the "imposition of an alien regime."[194] The situation escalated after the Six Day War and Israel's ongoing occupation of the Palestinian segment of land and the Golan Heights region of Syria.

Considering the importance placed on the existence of Arab Nationalist ideology, the seizure of Arab land quickly becomes a problem for the entire Arab world, provoking immediate military action from Jordan, Egypt, Syria, and Iraq to rescue their Arab brethren and restore their land. To the Arab world, the seizure of Palestine and its turn over to outsiders is seen as a loss of sovereign territory and its holy land, a major violation of the Arab Nation's dignity.[195] The way of life of the Palestinian people was destroyed, leaving the population destitute, displaced, and subject to brutal Israeli administration. With the rest of the Arab World having just established independence after the withdrawal of Western colonizers, Israel was seen as a last pillar of Western imperialism in the Near East.

However, with the Western backing of Israel, Arab military forces have been unable to counter Israel forces. Arab lands remain in Israel occupation to this day, and though many rounds of negotiations have been held to reach a peace deal, no armistice has satisfied both parties. A leading example of problematic political borders and the grouping together of diverse populations, there is no end in sight

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[193] "Primer on Palestine, Israel and the Arab-Israeli Conflict | Middle East Research and Information Project," The Middle East Research and Information Project, accessed December 06, 2014, http://www.merip.org/primer-palestine-israel-arab-israeli-conflict-new.
[194] Ibid.
[195] Walid Khalidi, "Thinking the Unthinkable: A Sovereign Palestinian State," *Foreign Affairs*, July 1978, 3.

for the Palestine Problem. As long as the United States continues to provide support to Israel, they will remain sufficiently armed to oppose Arab forces.

Kurds

One result of the onset of the Syrian Civil War in 2011 is the Kurdish declaration of autonomy in the northeastern part of the country. This territory comprises the portion of the country feeling the most disastrous effects of the 2006-2010 drought and the Assad regime's failure to adequately manage the country's water supplies, which drove farmers out of business and into poverty. However, this area also contains Syria's most fruitful oil and gas producing land.

In Iraq, the Kurds have enjoyed semi-autonomy since the first Gulf War when the U.S. forces imposed a no-fly zone over the northern portion of the country in 1991. This protection could have allowed for the declaration of an independent Kurdistan, bolstered by Western protection.[196] However, the Kurds chose instead to pursue economic interests independent to the rest of Iraq while remaining part of the country.

Instead of fighting for a free state, the Kurds have chosen a less extreme path by striving for financial freedom, which is more beneficial for both the Kurds and Baghdad. When the new Iraqi constitution was established in 2005, Kurdistan's special status was solidified as the Kurdistan Regional Government, granting the Kurds a large degree of autonomy in the oil producing provinces of Dohuk, Ebril,

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[196] Marina Ottaway and David Ottaway, "How the Kurds Got Their Way: Economic Cooperation and the Middle East's New Borders," *Foreign Affairs*, May/June 2014, http://www.foreignaffairs.com/articles/141216/marina-ottaway-and-david-ottaway/how-the-kurds-got-their-way.

and Sulayaniyah. Though Turkey fears the establishment of an independent Kurdish state that may encourage the cessation of their own Kurdish region, they negotiated a deal allows oil to be pumped into Turkey directly from the Kurdish region and for revenues to be deposited in a Kurdish bank account. The Kurds agreed to pass 83 percent of revenues to Iraq based on a revenue-sharing budget plan, but first plan to deduct $50 billion in arrears allegedly owed by the central government, and has threatened to deduct $380 billion in damages inflected on the Kurds prior to 1991.[197]

This deal is beneficial for both sides: greater Iraq shares in profits of energy production, and the Kurds do not have to take on the administration of a new state and gain recognition from the international community. Iraq desperately needs Kurdistan and its oil, which may check any effort to hinder Kurdistan's partnership with Turkey. For Kurdistan's part, they are not yet ready to take on the challenge of statehood that could result in short-term revenue loss and damage their relationship with Turkey. However, the central government will soon have little influence over Kurdistan, who will soon be earning in excess of the $12 billion it receives in oil payments from Baghdad.[198] The government's failure to successfully rebuild Iraq has pushed Kurdistan towards independence, and the incentive to remain a part of Iraq may diminish as profits rise.

[197] Ibid.
[198] Ibid.

If the status quo is maintained, this economic cooperation between Turkey, Kurdistan, and Iraq could provide a new, nonviolent model to create a fluid order contrary to the political boundaries designed by Sykes-Picot.

CONSIDERING THE EFFECT OF EXTERNAL ACTORS

While the Syrian Civil War's causes had little to do with broader regional issues, it has opened a Pandora's box of partitioning questions in the region. The division of Assad's regime against the rebel forces has highlighted sectarian issues by drawing in support from Syria's neighbors based on religion. Shi'ite Lebanese Hezbollah, Iran, and the Iraq government lends support to the Assad regime while Sunni opposition forces include Iraqi jihadists. The opposition itself is also fragmented; it is comprised of various military and jihadist groups with differing viewpoints who are as likely to fight each other as they are to cooperate.

If Syria were to fall, it would likely split into three entities as the Kurds in the northeast would likely follow in the footsteps of their Iraqi brethren and establish their own independent territory.[199] This could create further problems embroiling Turkey, which contains a minority population of Kurds who may wish to follow in suit in seeking autonomy and jeopardizing the oil partnership between Turkey and Iraqi Kurdistan.[200]

Further complicating the situation, ISIS is a transnational organization and pays little heed to state lines, having invaded parts of Iraq as well as Syria.

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[199] Itamar Rabinovich, *Saban Center at the Brookings Institute,* Report no. 32, February 2014, 4, http://www.brookings.edu/research/papers/2014/02/sykes-picot-rabinovich.
[200] Rabinovich, Report No. 32, 4.

Comprised of radical Sunni jihadists from the entire region, ISIS desires the creation of a Sunni Islamic state that would create an area friendly to the Iraqi Sunnis in the territory adjacent to its border with Syria.[201] Combined with potential for Kurdish autonomy, the creation of an Islamic state straddling both Iraq and Syria could lead to the crumbling of Iraq into three segments: Shi'ite, Sunni, and Kurdish.

With Lebanon and Jordan under increasing strain from Syrian and Palestinian refugees, the introduction of any further instability from the breakdown of Iraq or Syria could be their breaking point. Ultimately, the crumbling of any one state in the Levant has the potential to result in a domino effect of toppling states across the majority of the region. The possibility of such widespread regional discord has aligned the interests of unlikely partners Iran, Israel, and the United States in order to maintain the status quo.[202] The United States favors stability in the region, Iran wants to maintain the power of allies in Iraq, Lebanon, and an Assad-led Syria, and Israel simply wants to limit any Hezbollah ascension to power.[203]

The United States has changed in attitude towards Middle Eastern policy after the unexpected longevity of a U.S. military presence in Afghanistan and the turmoil resulting from the Arab Spring. Threats to American security and strategic interests lurk throughout the region including radical Islamic non-state actors, state failure, humanitarian crises, and civil war. Policymakers have shifted their objective from complete regional transformation to more meager goals of increasing the

[201] Ibid, 5.
[202] Ibid, 8.
[203] Ibid, 9.

stability of weakened countries and containing radical Islamic ideologies.[204] ISIS is quickly gaining power and is now overtaking al-Qaeda as the militant providing the most significant threat to the Western world. The United States will seek a solution that is a happy medium: a balance of power between Shia and Sunni Muslims is likely the optimal situation for the United States, with one side checking the other and focusing aggression internally rather than towards the Western world.

The case studies provide interesting insight on the stabilizing influence that external actors can have on the Levant. We have seen that the support of the United States has allowed Israel to overcome the opposition of the collective effort of the Arab world and maintain its territorial hold despite the uniting power of Arab Nationalism. We have also seen that partnerships with Turkey and international oil investors has incentivized the Iraqi Kurds to maintain peace with Baghdad and present a possible way forward based on economic cooperation. The United States, while limiting their involvement thus far, is already using force against ISIS and will continue to do so when necessary to maintain peace within the region. Widespread instability in the Middle East presents too much risk to Western security and strategic interests to be ignored.

VIOLENCE WILL NOT UNITE THE ARAB WORLD

While scholarship of the sectarian issues in the Middle East points toward the need for a relatively immediate resolution to conflict between Shia and Sunni Muslims, history shows that borders are not likely to change without the influence of an external power. The states in the Middle East are generally too weak to

[204] John Bew, "A Tragic Cycle," *New Statesmen* 143, no. 5223 (August 14, 2014): 24.

maintain new borders as they recover from Arab Spring revolts, refugee and humanitarian crises, and state failure. Nasr presents a potential solution for the region that would establish a system of equivalent treatment for each ethnic group by establishing representative governments. However, the region would need to undergo a major transformation to overthrow authoritarian regimes and establish a sustainable form of a hybrid approach that couples democracy with Arab ideology. This process would likely only increase the violence and instability of the region during the transformation process, which may be found unacceptable to the Western world.

For this reason, this research concludes that ISIS will be unsuccessful in establishing a new Islamic state. Their fight is largely the result of Shiite reestablishment in Iraq after the U.S. toppling of Saddam Hussein's pro-Sunni regime and lacks the strategic vision for enabling long-term, sustainable change in the region. Violence will not work as a tactic in uniting the Arab world; violence against or oppression of any one ethnic group will jeopardize the legitimacy of any governance structure. Any transformation must occur peacefully, over time, with the buy in of the people, and incorporate a hybrid approach to democracy that is adapted to fit within the context and culture of the Arab world.

No Conclusion in Sight

The clearest conclusion from the preceding chapters is that there is, in fact, no conclusion in sight for any of these three issues. The Syrian government is in no position to drive change to effectively establish and implement sustainable policies for water management. Syrians are still being driven from their homes and displaced as refugees. ISIS continues to gain momentum and inflict violence upon civilians in Syria and Iraq, further igniting sectarian issues. Resolutions to these problems will not be arriving any time soon.

The effects for this conflict will be wide-ranging. For Syria, the outcome looks bleak regardless if the Assad regime retains power or is overthrown by the rebel forces. When stability is restored and a legitimate government is established, the country will have been ravaged by war, divided by sectarian conflict, broke, and dealing with serious environmental issues and water shortages.

Although each of the three issues discussed in this paper are unresolved, each section may provide insight to the issues of water management, refugee crises, and sectarian conflict. Individually, each chapter can serve as a case study for other states experiencing similar problems. Collectively, this paper suggests areas of focus for rebuilding Syria once it emerges from civil war.

Mass humanitarian relief efforts will be needed from the international community to place Syria back on a path towards stability. The government will need counseling on how to manage the country's resources, invest in infrastructure including irrigation, and to incrementally increase market liberalization in order to join the global economy in a sustainable way. The Syrian people will need

assurances that their basic needs will be address. Syrians will need their safety guaranteed, their homes protected, and the agricultural market stable enough that farmers may return from overcrowded cities, reestablish themselves and their crop and livestock, and provide for their families.

However, there is little hope of resolving Syria's domestic problems while ISIS continues to maraud within the region. Efforts to stem ISIS' advances have had had some positive effect, but new affiliates continue to spring up across the Middle East as freedom fighters join the battle. Terror attacks against western targets become more of a threat as support for ISIS spreads geographically outward from the Middle East. Experts States also fear that ISIS will launch a major offensive against Baghdad in attempt to overthrow the U.S.-supported Shi'a government. Overall, the problem of ISIS seems to be expanding rather than deteriorating.

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