

**Border Network Analysis for International Relations:
Lessons Learned at the US-Mexico Border**

Jessica Becker
Graduate School of Public and International Affairs
University of Ottawa
Jstam098@uottawa.ca

July 2018

Supervisor: Alexandra Gheciu

Table of Contents

Abstract	
Introduction	3
Methodology	
Background	6
Networks	
Network Analysis	
Network Analysis Concepts	
Network Analysis for International Relations: Four Phases	
Border Network Analysis: Borderlands are Social Spaces	
Border Network Analysis for International Relations Theory: A Complement to Social Constructivism	
Part I – Building Strategies of Connection: Border Consulates as Brokers	12
Introduction	
Centrality	
Brokers	
Conclusion	
Part II – Network Formation and Resilience: “Operat[ing] on the Verge of Chaos”	15
Introduction	
Network Formation	
Trust and Network Resilience	
Network Innovation and Boundary Spanners	
Conclusion	
Part III – Exercising Network Power: Good Web Actors and Bad Web Actors	18
Introduction	
Network Power and Social Constructivism in International Relations	
Good Web Actors	
Exercising Network Power to Address Border Problems	
Coercive Bargaining	
Bad Web Actors	
Conclusion	
Border Network Analysis and Changing World Order	26
Conclusion	28
Figures	29
FIGURE 1. Protect Yourself: Fellow citizens, travelling in an automobile trunk.	
FIGURE 2. Protect Yourself: Fellow citizens, scaling the wall.	
Bibliography	31

Abstract

States that will rise to the top in a changing world order will be those that possess *network intelligence*. In this paper, I use concepts and ideas from network analysis for international relations (IR) and apply them to border studies to explore the potential for border network analysis (BNA) to inform what Anne-Marie Slaughter (2017) refers to as “web strategies” for IR – strategies based on a world view that appreciates the complexity and potential of connections. This project analyzes the connections between three different stakeholders within the US-Mexico borderlands: security personnel, human rights advocates and border consulate officials. Observations made about this network within the US-Mexico borderlands at El Paso (Texas), Ciudad Juárez (Chihuahua), Douglas (Arizona), Agua Prieta (Sonora), and Nogales (Arizona) have led to three conclusions about border networks in rural and urban settings along this stretch of the US-Mexico border: border consulate officials in positions of centrality can act as brokers; border network resilience depends on the level of trust between entities; and central entities within border networks can be good or bad “web actors” depending on how they chose to exert network power – to either maximize or undermine a network’s potential. Lessons learned from networks that operate in US-Mexico borderlands to collectively solve border problems can shed light on and inform strategies of connection, cooperation and network power for a changing world order increasingly in disarray.

Introduction

Networks have been around for centuries, but their potential value in developing strategies for, and in an understanding of global order and international relations has been neglected by IR scholars. Network analysis is a useful discipline as it allows scholars to map network properties and help make predictions about shifts in an entity’s centrality within the network due to a better understanding of the patterns of behaviour that drive this shift. Only recently have scholars like Anne-Marie Slaughter (2017) called for a “Grand Strategy” in foreign policy that makes more extensive use of network analysis: “we need the ability and the tools to operate effectively in a very different world” (10).¹ Slaughter argues that today we can no longer make use of outmoded games and strategies in how we think about international relations as these are ineffective in a networked world. Nevertheless, developing networked strategies for today’s global environment will be challenging since the very “foundations of sovereignty itself are shifting” (224). For instance, the desire to construct border fortifications around the world is symptomatic of states wishing to reassert their sovereignty – a reaction to the hyperconnected world they find themselves implicated in and poorly equipped to deal with.

Ian Bremmer (2012) in his book *Every Nation for Itself: Winners and Losers in a G-Zero World* examines which states are more likely to rise to the top in a changing world order. In a nobody-in-charge world, he argues, “winners” will have options and influence because they are more adaptable, resilient and stable entities in a world that is becoming increasingly unstable, whereas “losers” will be sidelined due to their inflexibility and their failure to adjust to global changes. This paper argues that nation states that will emerge as winners in a new world order will be those with *network intelligence*. Networks, Joshua Cooper Ramo (2016) writes, “are packed with tremendous potential” (46). Failure to realize this potential, Daniel Flesmes (2013) argues, “will not only lead to the missing of the train back to Westphalia, but also, more crucially, the missing of the opportunities offered by the networked world order” (1031). Entities

¹ Grand strategy “refers to how a state harnesses all its instruments of power – military, political, economic, cultural, technological, even moral” (Slaughter 2018, 17).

with network intelligence know the advantages – efficiency, adaptability, and innovative capacity – that a network has to offer in solving multifaceted problems; they are “good web actors” who know how to cultivate trusting relationships and who have the network skills needed to leverage these advantages to deal with complex problems.

Border network analysis (BNA) can provide a means through which interactions between and behaviours among entities can be examined at a local level to determine who holds network intelligence within borderlands and makes effective use of this intelligence to solve border problems. Conclusions made at the local and on an individual level holds valuable information about the role that networks play in solving problems that implicate multiple nation states and where opposing interests can collide. Lessons learned through BNA at the US-Mexico border could inform strategies on a state level in international relations. Borderlands are unique, highly complex spaces where state relationships are played out. Problems abound at borders and social interactions between various entities speak volumes about the health of state relationships. Information gathered about interactions within US-Mexico borderlands is useful fodder in learning how to maximize network potential in managing state relationships and in dealing with transborder problems.

Lessons learned on a field research trip to the US-Mexico borderlands in El Paso (Texas), Ciudad Juárez (Chihuahua), Douglas (Arizona), Agua Prieta (Sonora), and Nogales (Arizona) in February 2018 have resulted in three broad conclusions about border networks: first, border consulate officials can play a special role in developing strategies of connection that promote exemplary patterns of behaviour. Observations at the US-Mexico border reveal that consulates that exhibit centrality have the capacity to act as brokers. Second, although borderlands are often perceived to be chaotic spaces, collaboration does take place as networks emerge and work towards solving border problems. Connection-formation and network emergence is facilitated by a common goal and can occur through top-down or bottom-up processes. Their resilience depends on the level of trust and patterns of cooperative behaviour maintained between entities in the long run. Lastly, entities in positions of centrality can exert power through brokering, gatekeeping, bargaining, and norm change. How and why they chose to do so will determine their status as either good web actors (who aim to maximize network potential by leveraging its advantages and by supporting the network as a whole) or bad web actors (who undermine network potential and seek to exploit network advantages for their own personal gains).²

The paper unfolds as follows: after a brief outline of the methodology used, I provide background on networks, network analysis and concepts, as well as the development of network analysis for IR. I introduce BNA and make a case for its value and relevance for strategies and theories in IR. The paper analyzes in greater depth three components of networks 1) entities and their ties; 2) network formation/resilience; and 3) network power. For each, I make connections between network analysis concepts and my observations at the US-Mexico border to come to three conclusions about how border networks operate within borderlands. Lastly, I acknowledge the limitations of my study before suggesting that the scope of BNA could be broadened to include other borders around the world and how activities within these borderlands reflect changing dynamics of an international order. I end by emphasizing that transborder issues driving the shift in our global environment calls for greater cooperation rather than isolationism.

Methodology

² Good and bad web actors are terms introduced by Anne-Marie Slaughter (2017) in *The Chessboard and the Web*.

The research design for this project used qualitative analysis from consultations held at the US-Mexico border to arrive at three conclusions about border networks and to determine which border network entity held the most network intelligence. Border networks provide a rich source of data on human interactions useful for identifying patterns of behaviour that can help inform strategies of connection, network formation/resilience and network power. The units of analysis used were three separate entities that all have a stake in border management and use networks to solve border problems: USBP who have a strong security interest, NGOs with a strong human rights interest, and border consulates that have regular contact with both security officials and civil society members. Entities within this network were chosen because they are mutually independent, meaning that although they have the capacity to work and at times depend on each other to carry out their work, they make autonomous decisions representing their own internal interests and operations.

Between February 24 and March 4, 2018, I held consultations with experts connected to USBP, US and Mexican consulates and NGOs in El Paso, Ciudad Juárez, Douglas, Agua Prieta, and Nogales. I also attended one bilateral meeting in Douglas in which I observed interactions between different government and non-government group members. Throughout my consultations and observations, I was interested in learning the following:

- What are the specific border-related problems that entities encounter in their daily work?
- To whom do entities reach out when trying to solve these problems? How often do they engage with them and how helpful and reliable are these partners?
- Who do border entities consider to be their most valuable partner; what makes them important?
- How have partnerships between entities formed and how long have they existed?
- How are partnerships maintained and managed?
- Are there contacts that entities wish they had access to within the network?
- Do entities seek new connections on a regular basis? What barriers exist in doing so?

The purposes of these consultations were:

- to determine with whom entities interact within a border network;
- to evaluate the strength of the relationships between these entities;
- to learn how border networks form and how resilient they are; and
- to identify where power is centralized within the network.

Information gathered from consultations with experts affiliated with each entity was used as a primary source of data to determine how border networks are formed and maintained, which entity within the network had the most centrality based on the quality and frequency of interactions with each other. Information gathered from consultations and observations was also used to form initial impressions on how entities with centrality exert power, how this power was used and for what purpose - in sum, which entity holds the most network intelligence within borderlands.

In order to make the leap from lessons learned about human interactions at a local level to applications of these lessons to state interactions within a global network of state relationships, I use a new term, BNA, that combines concepts from network analysis for IR – a discipline that has yet to be systematically applied to IR – and concepts from social constructivism in IR (a much more entrenched theory in IR) to determine where ideas overlap and how they complement each other. Nevertheless, the predominant theoretical framework used in this project is network analysis and a review of literature – in particular books published within the last three years – was used to interpret lessons learned at the US-Mexico border from consultations with experts. A review of literature that includes both scholarly articles as well

as online news media sources on changing world order (also published within the last three years) was used to substantiate arguments that relate to the role networks and their components play in a shifting global environment.

Background

Networks

Niall Ferguson (2018) argues that “most of us have only a very limited understanding of how networks function, and almost no knowledge of where they came from” (14). He believes that we tend to “overlook how widespread they are in the natural world, what key role they have played in our evolution as a species, and how integral a part of the human past they have been.” Networks have been around for centuries. The importance of networks throughout history, Ferguson argues, has been underestimated and too many “assume erroneously that history can have nothing to teach us on this subject.” IR scholars interested in applying network analysis to international relations using examples from history have their work cut out for them if the evidence, as Ferguson suggests, does indeed point out the many instances in which networks had an influence in international relations.

One – if not the most – important characteristic of networks observed by analysts is how they evolve. They can “shift with an easy plasticity, in response to internal pressures or external changes” (Ramo 2016, 136). Within the context of international relations, scholars are interested in how networks evolve into hierarchies and vice versa and ask what drives this shift in structure? Ferguson makes an interesting point when stating that hierarchies become more like networks when they “cannot reform themselves,” and then also tend to get reinstated when “it becomes clear that the network alone cannot avert a descent into anarchy” (48). Ferguson uses historical examples such as networks of political revolution in the late 18th century or the earlier religious and cultural revolutions of the Reformation and Counter-Reformation to show how hierarchical structures were reformed and then reinstated over time (122–23). An understanding of not only who or what groups hold centrality within a network, but how centrality in networks can shift becomes crucial when drawing conclusions and making predictions about changing world order in general because these shifts as Ferguson’s examples illustrate are almost always accompanied by an attempt to reassert control over what is perceived as disorder and chaos within global politics.

Networks have been typically categorized in opposition to hierarchies; however, scholars caution defining networks as such. Ferguson (2018) explains that indeed, “far from being the opposite of a network, a hierarchy is just a special kind of network” (39). In the absence of a higher, legitimate authority that governs relations between states, international relations has been and continues to be understood through hierarchical structures.³ Slaughter (2017) tries to make the case for interpreting international relations through both hierarchies and networks; she emphasizes the need to see “in stereo” and understand international relations in terms of both hierarchical and network properties.⁴ “Different theories of international relations” she writes, “posit different ontologies. Scholars, experts, and policy makers look out at the ‘world’ or the ‘international system’ and see different things. The ontological shift from seeing the world of states to seeing a world of networks is the shift from separation to connection” (68). Like Slaughter, Daniel Flesher (2013) also highlights the need to consider both structures in IR: “Even though

³ See David A. Lake (2009) *Hierarchy in International Relations*.

⁴ Slaughter (2017) encourages foreign policy practitioners to “see the international system as a web...a world not of states but of networks” (7) and to “see power *and* interdependence, states *and* people, structures *and* agency, stasis *and* dynamism, all at the same time” (72).

hierarchy continues to be a helpful category for the understanding of foreign networks, their stratification can ultimately be better understood as consequential patterns of centre and periphery” (1028). By seeing world order through the lens of both networks and hierarchy, scholars may begin adapting IR concepts and theory to accommodate a new “web” perspective.

Network Analysis

Network Analysis is quite simply the study of relationships between entities. Hafner-Burton et al. (2009) define networks as “sets of relations that form structures, which in turn may constrain and enable agents” (560). Network analysis, they say, “provides a set of theories and tools to generate puzzles and test propositions about these structures”.⁵ The very first example of such a puzzle was coincidentally rooted in a study on boundaries. Ferguson and others have identified how the formal study of networks originated in the mid-18th century, in the East Prussian city of Königsberg where, in 1735, Leonhard Euler created a theory on networks to illustrate why it was impossible “to take a walk that crossed all seven bridges [that connected two islands in Königsberg] just once, without re-crossing them” (24). Euler’s theory was then later used to measure interactions between humans.⁶ Network analysis enables scholars to measure and map network properties such as centrality, make predictions about shifting centrality, as well as understand the patterns of behaviour exhibited by entities that drives this shift.

Network Analysis for IR derives from Social Network Analysis (SNA) and uses similar concepts, ideas and methods. Indeed, SNA is a much more specialized, theoretical practice that uses graph theory to quantify and measure relationships and thereby “formalize their properties mathematically” (Slaughter 2018, 54). For instance, Zeev Maoz (2010) in his book *Networks of Nations* uses SNA to analyze how states, left to fend for themselves in a “self-help” world, make alliance choices. The purposes of my paper are not to quantify or measure properties of border networks through SNA, but as a preliminary stage, to identify border networks as a valuable source for studying and applying network analysis in general. The study does not use of SNA tools, because not enough data was collected in order to base conclusions on calculated measurements. However, the initial observation made about border networks in this paper highlight the potential for further and more rigorous applications of BNA to IR.

Network Analysis Concepts

Entities: Network Analysis is the study of relationships between what has been referred to as “nodes,” “entities,” “units,” “players,” or “agents.” In this paper, I use the term entities. Entities in BNA are groups made up of like-minded individuals who share the same goals in solving border problems. When using network analysis it is critical to define what the entities are so as not to confuse levels of analysis; analyzing the links between individuals vs. links between states for instance may require different applications of network analysis and the results of or conclusions derived from one study may not be easily transferable to another study. Hafner-Burton et al. (2009) caution that descriptions of networks need to be precise, otherwise studies may lead to “trivial conclusions, unproven assertions, and measures

⁵ Hafner-Burton et al. (2009) explain that network analysis is rooted in three commonly held principles: “nodes and their behaviors are mutually dependent, not autonomous; ties between nodes can be channels for transmission of both material (for example, weapons, money, or disease) and non-material products (for example, information, beliefs, and norms); and persistent patterns of association among nodes creates structures that can define, enable, or restrict the behaviour of nodes” (562).

⁶ The study of links between humans or *social networks* can be traced to a study published in 1933 by Johannes Deltisch, a schoolteacher and “amateur social scientist” who tried to map “the friendships of the fifty-three boys he had taught in his 1880-81 class” (Ferguson 2018, 25).

without meaning” (559).⁷ Network analysts are interested in measuring the *strength* of ties between entities. This strength is made evident through the quality and frequency of interactions. Ties can be symmetrical or asymmetrical; they can also be positive (cooperative) or negative (non-cooperative) (563).

Centrality: A concept already familiar to many scholars who use network analysis is centrality. Centrality refers to the level of importance a particular entity has within the network. Importance can refer to access or influence. Entities in central positions have access to a greater variety and volume of “material or ideational resources due to the sheer number of exchanges in which they participate” and the “diversity of sources that they can access” (MacDonald 2017, 143). The three most commonly used measurements of centrality are: *degree*, *closeness*, and *betweenness*. Degree centrality is determined by the number of links a node has. Closeness centrality is identified by the distance between the nodes and all other nodes within a network. Entities with high betweenness centrality are those with the important connections.

Power: The greatest impact that network analysis has had on IR is in the reconceptualization of power.⁸ Hafner-Burton et al. (2009) explain that power in IR, from a network perspective, “is no longer derived solely or even primarily from individual attributes, such as material capabilities” (570). Ways in which network analysis informs traditionally held views on power in IR continues to develop as new studies apply network tools to test long-standing ideas in IR. How power is defined within networks is a tricky business. Questions are raised about who holds power, why and for what purpose. Most network analysts however agree that power is derived from an agent’s position within the network – its centrality – and the ties that it is able to establish and maintain.

Those in positions of centrality can exercise power in three ways: by brokering, gatekeeping, and bargaining. Entities within the network in central position can act as brokers or gatekeepers; they can either stifle a network’s development by demanding “high tolls to pass through his booth on the network, leading to monopoly profits in the extreme case” (Valdis Krebs 1996) (sometimes the only way into a network is through a central actor), or conversely, they can promote network expansion by “connect[ing] parts of the network that were not previously connected” thereby ensuring that a network maintains productive links. Entities may also exert power through bargaining. The ability of an entity to bargain depends on available alternatives for those deciding whether to join or exit a network. Entities in central positions may take advantage when few alternatives exist by blocking access while a surplus of choices allows entities on the periphery to bargain by threatening exit.⁹ Bargaining, in these extreme cases, can veer towards coercion.

A link can be made between social constructivist theory in IR and network analysis to identify one other way in which network power can be exercised, namely, through a central agent’s ability to inspire norm change. Norm change is dependent on and facilitated by networks. Entities in positions of centrality can

⁷ They also admit that “Network concepts and theories do not always translate well to the domain of international relations, forcing modifications of their use in other fields” (577). For instance, scholars have had to create new network terms in order to adapt network analysis to the field of international relations. Zeev Maoz for example created two additional measures within networks in his study of conflict in IR: network polarization and interdependence (Hafner-Burton et al. 2009, 578).

⁸ See Deborah Avant and Oliver Westerwinter’s (2016) *The New Power Politics: Networks and Transnational Security Governance*.

⁹ Hafner-Burton et al. (2009) explain how exit options, when used at an extreme, becomes imperialistic and refer to this as the “hub-and-spoke network” whereby “the [imperial] metropole creates bargaining power vis-à-vis its colonial possessions” (572).

use their status as “norm entrepreneurs” to frame and diffuse messages across the network and make them more visible.

Network Formation/Resilience: There has been great interest in network power among scholars, but close consideration of network formation should not be discounted as unimportant when drawing conclusions about networks at borders or in developing network strategies for “networked” transborder problems. By using various mechanisms for measuring ties, analysts try to predict how likely ties are to be created between entities and if/when a network will form or expand.¹⁰ While plenty has been written on the relationship between nodes within a network, another element that has not yet been given much attention is how that relationship is managed and maintained. A network’s resilience is based on how ties are formed, the level of trust between entities and their willingness to innovate.

Network Analysis for International Relations: Four Phases

Zeev Maoz (2012) writes that “the history of network analysis in international relations reflects a curious evolutionary path marked by substantial discontinuities” (249). Hafner-Burton et al. (2009) have attempted to break down the use of network analysis in IR by identifying trends since the 1970s; however, they also reiterate that, “its incorporation into international relations has been slow and uneven” (574).¹¹ Miles Kahler (2009) writes, “In contemporary international relations, *network* has too often remained a familiar metaphor rather than an instrument of analysis” (2). The term “network” was originally used in IR to describe how groups and members within that group were organized. IR scholars recognized the importance of how these groups and members exerted influence, established relationships and cooperated with each other at an intergovernmental level; however, a “network approach” was not used to analyze international relations specifically. Pioneers of network analysis in IR in the 1960s and 1970s, “generally stopped short of using network analysis to test theories or predict network effects on international politics” (Hafner-Burton et al. 2009, 562) since the “toolkit of network analysis” had at that time “not [yet] received wide acceptance” (574).¹² The period between the 1970s and early 1990s is referred to as the “second wave” in the history of network analysis in IR (562).

The third wave came after the late 1990s when tools of network analysis began to be fully applied to problems in international relations. At the time of writing their paper in 2009 Hafner-Burton et al. argued that “Analysts of transnational activist networks [(TANs)] and nongovernmental organizations (NGOs) have only begun to apply network analysis to power relationships, issue adoption, and effectiveness in these organizations” (576). They lament that network analysis had not yet made “significant contributions to the study of TANs and NGOs.” However, since then, scholars have become increasingly interested in how civil society organizations have mobilized to deal with specific problems and precipitate change. Although Margarita H. Petrova’s (2010) article “Banning Obsolete Weapons or Reshaping Perceptions of Military Utility: Discursive Dynamics in Weapons Prohibitions” does not use network analysis in IR, and instead, draws on social constructivism as a theoretical framework for her argument, the article remains an important contribution that demonstrates how NGOs mobilized to reach the threshold necessary to establish consensus on the banning of land mines within a network made up of entities with both human

¹⁰ These mechanisms Hafner-Burton et al. (2009) explain will depend on where entities are placed within the network (relational) and on the characteristics of particular nodes (individual). Ties, they say, are also formed due to pre-existing conditions (preferential attachment). Their model illustrates how ties can be formed in multiple and often complex ways.

¹¹ For additional material on history of network analysis in IR see Ward, M.D. et al. (2011)

¹² John Scott’s *Network Analysis: A Handbook* published in 1992 and Stanley Wasserman and Katherine Fausts’s *Social Network Analysis: Methods and Applications* published in 1994 provided important and comprehensive go-to resources for social science network researchers in the 1990s.

rights and security interests. Adam Bower later in his article “Networking for the Ban: Network Structure, Social Power, and the Movement to Ban Antipersonnel Mines” published in 2016 builds on previous scholarship like Petrova’s that analyze norm entrepreneurship and examines the “structural preconditions that empower” norm diffusion. Hafner-Burton et al. (2009) predicted that “Network analysis will be most useful in international relations when it is carefully married to existing theoretical and conceptual approaches and then helps to expand their scope” (582).

Today, the potential for networks to influence international relations and outcomes has become even more pertinent and network analysis in IR could be seen as entering into its fourth phase. This fourth phase is characterized by a growing interest in understanding the role that networks play in a globalized world and how concepts in network analysis can be employed in foreign policy and in strategies to shape a new world order. Max B. Gallop (2016) points to this emerging literature: “We are seeing the beginning of work that combines the network insights about interconnectivity with game theoretic work that focuses on strategic interaction” (311).¹³ Recent studies have contributed to a body of work that uses network analysis tools to test hypotheses made in international relations theories. For instance, Dorussen et al. (2016) make the case that “properly accounting for networked interdependencies” can have “profound implications for our understanding of the processes thought to be responsible for the conflict behavior of state and non-state actors” (283). Detailed studies on nuclear proliferation networks, ballistic missile networks or the arms trading networks are also making important contributions that are shaping foreign policy. The Alpha non-proliferation programme for instance is an autonomous programme within the Centre for Science and Security Studies at King’s College in London currently conducting research that maps proliferation networks of North Korea, Iran, Pakistan, Syria and other countries.¹⁴

In order to move towards a “Grand Strategy” that maximizes network potential, studies need to demonstrate the value of applying network analysis to transnational issues in IR. Hafner-Burton et al. (2009) ask: is network analysis a “useful import or another fad?” (580). Although there may be obstacles in importing network analysis into specific fields of study, this practice need not be simply another fad. Importing network analysis tools into other disciplines has great value as it can help identify links, test out and elucidate concepts and ideas all of which could eventually lead to a theory on international networks. Hafner-Burton et al. (2009) argue that the first phases of network analysis in IR have failed to establish network analysis as a legitimate and permanent fixture in IR as a discipline. They believe that there were “too many measurements of structure accompanied by too few tests of either network or international relations theories” (580). In their article they propose an agenda for future applications of network analysis to international relations and suggest that a network tool kit is imported to inform, deepen, and test theories in the domain of international relations. Borderlands serve as an ideal space through which network analysis can be applied. Doing so, in turn, will shed light on, test hypotheses and add new dimensions to ideas in IR. Maoz (2012) writes that “network approaches have a tremendous potential to elevate the study of international relations to new levels” (253). This study hopes to further

¹³ Gallop’s own study aims to test IR theories in cases where network interdependencies exist and thereby account for the strategic ways in which networks form.

¹⁴ Some of the most well-known applications of network tools has been conducted on terrorist networks. This Hafner-Burton et al. (2009) explain has provided “new policy prescriptions for dissolving those networks and demonstrates that early blanket assumptions about their form (cellular, nonhierarchical) and functioning (centralized decision making, decentralized execution) were too simple” (575). Valdis Krebs, a leading researcher, author and consultant in the field of social and organizational network analysis used open source data to trace direct and indirect interactions between the 9/11 hijackers and others to draw a map of terrorist networks.

demonstrate this potential by analyzing the unique dynamics of border networks – the interactions between entities, the formation and resilience of ties and where power is centralized within the network.

Border Network Analysis: Borderlands are Social Spaces

Borderlands around the world are becoming increasingly fraught with tensions due to the proliferation of transborder issues and the inability of governments to coordinate and deal with them. Borderlands are areas where these tensions materialize often violently. Disorder at the US-Mexico border is evident in “the pursuit of vigilante justice by the Minutemen, the waiving of environmental and aboriginal laws by the federal government, the existence of sanctuary cities and a sanctuary movement, cross border criminal activity such as drug and human smuggling and trafficking, hostility between USBP and humanitarian groups, and systemic corruption” (Becker 2018) as well as more recently, forced separation of children from their parents crossing the border between ports of entry. Borderlands seem to represent “a kind of no man’s land: an area in which there is an absence of the constitution – an a-constitutional space.” Michael Dear (2013) in his book *Why Walls Won’t Work* identifies this space as a third nation: “a community carved out of the territories between two existing nation states...an ‘in between’ space, transcending the geopolitical boundary that divides the constitutive nation states and creates from them a new identity distinct from the nationalisms of the host country” (71). States try to navigate this space and establish order by implementing measures to gain control and reassert national sovereignty; however, doing so can quickly escalate into an increasingly militarized border.¹⁵

Although these areas can be highly mutable and contentious, there are also important lessons that a closer analysis of border networks can provide. Borderlands are social spaces where interactions between entities within border networks speaks volumes about international relations. They are complex spaces in part due to the level of interactions between individuals with opposing perspectives that have the potential to become violent but that can also result in a high level of cooperation. Border problems feature prominently within the lives of those who live on either side of borders. Lara-Valencia (2011) writes, “This space is the territory where citizens and organizations act on local issues by transcending the border, and even integrating it into their daily activities” (251). Border problems are central concerns for those living and working at the border. The stakes for effective cooperation and positive interactions is high as it directly impacts their lives and their work.

Slaughter (2017) writes, “Complex interdependence describes the web world, but it does not give us web strategies” (31). This study tries to determine if border networks as they exist within spaces where the interactions between entities are key in solving problems can inform “web strategies” for international relations. As has already been pointed out, making the jump from one level of analysis – that of interactions between individuals – to another level of analysis – that of interactions between states – can be difficult to navigate. Nevertheless, the unique spaces within which border networks exist may make the jump in level of analysis less perilous since it is within these spaces where nation states and their policies come into direct contact with each other and where the health of the relationship between nation states is often on full display.

Border Network Analysis for IR Theory: A Complement to Social Constructivism

Another way in which analysis of border networks can inform international relations is through the use of concepts and ideas borrowed from social constructivism in IR, a theoretical framework used to analyze changing dynamics in international relations. Hafner-Burton et al. (2009) make brief mention of the potential for network analysis to inform theories like social constructivism in IR. Social Constructivists,

¹⁵ See Jessica Becker’s (2018) discussion on “militarization of border walls and borderlands.”

they say, “hypothesize that socialization processes are an important determinant of state behaviour in international politics” (569) and that “Network analysis offers a method for measuring the sources of socialization and the diffusion of norms based on the strength of ties between states.” Social constructivism emphasizes the need for “human agreement” in order for norms to change. Network analysis can help establish how agreement is achieved since it tries to measure and evaluate human interactions.

Maoz (2012) writes, “There is no theory of networks – certainly not a theory of international networks,” but only “theories of international relations that rely on the underlying premises of networks” (252). He explains that “What network analysis enables us to do is to shed new light on ideas drawn from such theories, taking into account the fundamental dependencies and high-order relations that are not easily visible by other approaches.” A study on border networks can and should take social dimension inherent in borders and border security practices into account. BNA becomes a useful complement to social constructivism in IR theory. While a constructivist approach can provide alternative means through which borders can be re-imagined and re-conceptualized, network analysis concepts and ideas can provide the tools to further investigate how various groups, who often have opposing interests, within borderlands – social spaces that are highly dynamic – interact, establish and maintain a network centered on border issues and how power is exerted to achieve the threshold necessary for norm change.

PART I - Building Strategies of Connection: Border Consulates as Brokers

Introduction

Slaughter (2017) writes, “Problems and threats arise because we are too connected, not connected enough, or connected in the wrong ways to the wrong people or things” (12). In order to build strategies of connection to solve problems, it is crucial to recognize their networked dimensions; “threats arising from people and patterns of behaviour need responses that directly engage people and patterns of behaviour.” Developing an effective response to networked problems begins “below the level of state action.” Problems at borders are continuing to present great domestic challenges for states and also in terms of coordinating responses between states. Analyzing in greater detail the kinds of connections that exist within border networks and getting a better understanding of the patterns of behaviours among entities within these networks may provide a good place to start in developing “strategies of connection” (13) for a changing world order.

Centrality

Formal and informal interactions between all three entities at the US-Mexico border in Ciudad Juárez, El Paso, Douglas, Agua Prieta, and Nogales take place in the form of daily, weekly and monthly face-to-face meetings between counterparts; however, the frequency and quality of interactions at these meetings vary significantly over time and along different areas of the US-Mexico border. If centrality is defined as the amount of importance an entity has due to its level of access or influence, it appears at first glance as though security officials hold positions of centrality within border networks. Yet, my observations in three different locations reveal that border consulates are able to exhibit high degree, closeness, and betweenness centrality making them valuable partners within border networks.

At the Consulate General of the United States of America in Ciudad Juárez, I learned about the high levels of interaction between the consulate and USBP to solve border problems. These interactions are highly valued because of the consulate’s proximity to the border allowing for direct contact between

officials. The strength of their ties exhibits closeness centrality. The US consulate in Juárez processes one of the highest numbers of immigrant and non-immigrant visas around the world. The most common type of border problem this consulate faces is requests for visas from individuals wishing to enter the United States whom they discover to have a criminal background. USBP, Customs and Border Protection (CBP) and consulate officials interact with each other on a frequent basis to exchange information to solve this type of problem. Border and consulate officials need to present a unified front by communicating the same message to those seeking to enter into the United States. The consulate determines who can enter and the USBP have the final word. Often applicants will obtain visas from the consulate and within 30 minutes – the approximate time it takes to drive from the consulate to the nearest port of entry – end up at the US-Mexico border where they are screened by USBP. Consulates within borderlands due to their close geographical proximity to the border can interact with border security officials on a frequent basis.

Border networks that are thriving exhibit high density – a great number of links between all three entities. Most of these links are facilitated by the consulate. A network's density is a "property describing the connectedness and cohesiveness of a network" (Slaughter 2018, 47). Border consulates are "sociable" since they are both well-connected within the community and have easy access to border security officials. Consulate officials at the Consulate General of Mexico in Nogales, Arizona for example visit nearby detention centres and processing units at ports of entry on a daily basis to interview Mexican detainees about whether their needs are being met or to enquire that their rights have not been violated. Four times per week, these same officials also visit a Mexican diner called El Comedor, part of the Kino Border Initiative, a non-profit, binational organization established in 2009 that seeks to help migrants including repatriated Mexicans. A network's overall level of cohesion is determined not only by how well-connected an entity is to others – how wide-ranging its connections are and the number of connections it has – but also by the kinds of connections it has. Border consulates are perceived within the network as having influence and access due to the number and nature of their connections. Slaughter (2018) explains, "Influence requires connection; the denser the web of relationships, the greater the influence" (2). NGOs often reach out to consulates because consulates know the "right" people when it comes to solving border problems. Consulates hereby exhibit their betweenness centrality within border networks and it is in their ability to act as a connector in touch with both sides of the security-human rights divide that reveals their potential as brokers.

Brokers

The cohesiveness of the border network and its ability to tackle border problems is linked to the border consulate's ability to leverage its brokering capacity. Brokers have the ability to control the extent to which information or resources are passed through a particular node: "Just as commuters, by individually seeking the shortest route to their destination, concentrate traffic in a few congested intersections, so too people in a network often rely on key individuals to connect them to otherwise distant individuals or groups" (Ferguson 2018, 28). Brokers can either use their position as connectors to help develop patterns of behaviour that benefit the network, or they can create deliberate bottlenecks and choke-off links within the network in which case they are acting as gatekeepers. Those in positions of centrality operate on a slippery slope whereby the same powers of link-formation can be used to withhold access and block links from taking place.

In all three locations, I noted that NGOs, unless they have a well-established network of their own and are well-represented within their communities – in other words have exit options, – often rely on consulates as an important resource in order to help them solve border problems. Consulates can offer their government's seal of approval which provides legitimacy and support for civil society initiatives.

At the Consulate General of Mexico in the small town of Douglas, Arizona I observed how consulate officials who occupy a central position within the border network due to the strength of their connections act as brokers. Two kinds of meetings take place every month and are facilitated by the consulate. Meetings between US and Mexican security officials and meetings between Mexican government and civil society members. The purposes of these meetings are three-fold: 1) to provide a networking function where for instance Mexican patrol officers can introduce themselves and coordinate actions with US liaison officers; 2) to enable problem solving; and 3) to improve capacity building efforts whereby gaps and needs within the network are identified. For instance, US and Mexican security officials had recently met to discuss the problem of marijuana being shot through air cannons over the border near Douglas. Both parties agreed to coordinate actions by changing their patrol schedules on either side of the border in order to intercept the drug smugglers. A special task force was created to deal with this issue and the number of incidents decreased significantly. Although these meetings are facilitated by the consulate, it was the desire to avoid bad press by Mexican and US governments that brought both sides into discussions.

Another example of an initiative that grew out of a consulate-facilitated meeting is a pilot program for 5th graders in Mexican schools in the region aimed at raising awareness about the use of children as smugglers. Tucson News reported on November 15, 2017 that USBP arrested 89 juveniles for smuggling drugs through Arizona's ports of entry. Children who cross the border through ports of entry to get an American education become targets for drug smugglers. In response, "Officials on both sides of the border say they are working to educate children and teens" (Prendergast 2016). Using children as smugglers is on the rise because there is a belief among traffickers that children are less likely to be apprehended; however, legislation in Arizona calls for children who get apprehended to be imprisoned. For instance, Elizabeth S. Eaton and Daniel Gonzáles (2016) report that Cochise County located in the southeastern corner of Arizona where Douglas is located has prosecuted juveniles between 14 and 17 years old on drug smuggling charges, the majority of whom are sentenced one to one-and-a-half years in adult prison upon accepting a plea agreement. The educational pilot program pitched by Mexican youth advocates aims to teach children and parents in Mexico about the techniques used by smugglers. Other attendees at the meeting in Agua Prieta from local shelters as well as a local Mexican human rights inspector offered to help and provide their services for this initiative. In addition, consulate officials agreed to help by putting the youth advocates in touch with the local radio station in Douglas in order to broadcast the initiative and promote their message on both sides of the border.

Conclusion

Building strategies of connection to help tackle transnational issues can be informed by observations made about the patterns of behaviour among entities within border networks. Border consulates can play a special role due to the number and kinds of connections they have as well as due to their proximity to key entities. They are well-positioned to identify links that benefit the network and those that hamper its productivity. Observations made from the interactions between government officials and civil society members in Agua Prieta reveal how border consulates have the ability to bring together and establish stronger connections between different entities; they have the ability to harness the "energies of group members" (Slaughter 2017, 220) in order to work towards achieving a common goal.

PART II – Network formation and resilience in the US-Mexico borderlands: “operat[ing] on the verge of chaos”

Introduction

Slaughter (2017) writes, “Over the longer term, the more we know about how and when networks emerge and what their impact is both on the people or institutions within them and the world outside them, the more we will know about how to create and orchestrate them for specific purposes” (230). Much can be learned from the human interactions within borderlands since border problems are a daily occurrence for those who live and work there. Michael Dear (2013) in his book *Why Walls Won't Work* explains what makes border mentalities different. “The daily rigors of coexistence along the borderline,” he writes, “make a mockery of national grandstanding” (96). Human interactions at borders are unique to borderland spaces especially when two states make unequal neighbours: disparities run deep and are highly visible, yet geographical proximity has forced co-existence and resulted in a hybrid “third nation.” Gloria Anzaldúa goes further in depicting this hybrid nation as being born out of violence and inequality: ““The U.S.-Mexican border *es una herida abierta* [is an open wound] where the Third World grates against the first and bleeds. And before a scab forms it hemorrhages again, the lifeblood of the two worlds merging to form a third country – a border culture”” (quoted in Dear 2013, 99-100). Networks that operate within this unique space embody the tensions and disparities of this third nation but also reveal great potential for working towards networked solutions. Valdis Krebs’ early work *Visualizing Human Networks* published in 1996 aims to explain networks as they relate to firms. Although the purpose of Krebs’ article is to provide advice for executives, it contains valuable insight into how networks form and can resist disruptions. Using network concepts and the advice Krebs provides in his article to analyze border networks reveals that a network’s overall resilience depends in part on what has brought entities together – how ties were established – the level of trust between entities, and their willingness to innovate and explore new ties.

Network formation

“Good work groups, like good jazz groups,” Krebs (1996) writes, “operate on the verge of chaos.” In the absence of a conductor, jazz musicians must improvise. Although each plays independently of one another, they can create harmony based on the quality of trust within their relationships and the degree to which they can identify the gaps and needs within the group. In order to make a network more resilient, entities in central positions similarly need to be in tune with the changing dynamics of their environment. They need to build and maintain trust as well as identify new links that can benefit the network as a whole. Although the US-Mexico borderlands are perceived as disorderly and dysfunctional where tensions run high, networks have long existed whereby entities coalesce on specific border problems. Slaughter (2018) writes, “To develop a set of tools that foreign policy makers... will actually use, it is critical to start with a set of problems that they currently find difficult to solve” (77). Problems abound within borderlands in part due to the very fact that they require transborder coordination and cooperation. Lara-Valencia (2011) writes, “border organizations become engaged in cooperative actions incentivized by practical needs arising from problems or matters that cannot be effectively managed locally or unilaterally” (253). What facilitates formation of productive relationships is shared values and vision, and above all a common goal.

Before analyzing mechanisms of connection-formation, it is important to recognize that links can be formed via top-down and bottom-up initiatives. Francisco Lara-Valencia (2011) in his article, “The ‘Thickening’ of the US-Mexico border: prospects for cross-border networking and cooperation” explores how US national border policies impact networking and cooperation among local organizations at the US-

Mexico border and makes use of an analytical model to highlight factors that influence the formation of cross-border cooperative networks (251). North American Free Trade Agreement (NAFTA), for instance, created conditions conducive to cooperation and facilitated network formation from the top-down: “NAFTA stimulated significant institutional change in the [US-Mexico border] region, including the creation of the Border Environment Cooperation Commission (BECC), the North American Development Bank (NADBank), [or] the Commission for Environmental Cooperation (CEC).” As a result of government-led initiatives, cooperation between entities becomes institutionalized and necessitates information sharing and coordination of actions across the US-Mexico border. NAFTA enabled and facilitated connection-formation that was reproduced at the grass-roots level.

Top-down government initiatives can encourage – even provide an example for – informal cooperative patterns of behaviour below state level. Multinational agreements like NAFTA have sparked enthusiasm for joint-policy making and institution-building on a local level. Evidence from Lara-Valencia’s study shows that there was a “surge in cross-border activity during the period when NAFTA was being debated in the region and immediately after its passage in 1994” (261). “By institutionalizing cooperation” Lara-Valencia explains, “the new framework reduced the cost of developing new partnerships and increased the likelihood of future cross-border cooperation.” It is important to note that the US administration at the time, by providing its seal of approval on the agreement gave local Canadian and Mexican partner organizations – both public and private, – the confidence to form new links and engage in cooperative activities: “By creating iterations and the belief that cross-border cooperation networks will expand continuously for the foreseeable future, participation in such networks grew in importance and reputation, which allowed for the development of increasingly complex and innovative partnerships.” Paul Ganster and Kimberly Collins similarly point out the potential that formal coalitions have in propagating cooperative patterns of behaviour. City twinning, they say, can only occur if nation states offer “explicit support,” which would aid in the institutionalization of cooperation.¹⁶

This seal of approval however can just as easily be reneged. The US administration is considering withdrawal from the NAFTA agreement which at this time of writing is being renegotiated. US president Donald Trump’s rhetoric in threatening to “rip up” the deal threatens to dismantle deeply entrenched networks at the local level and reverses patterns of cooperative behaviour. Furthermore, As G7 negotiations came to a close on June 9, 2018, Donald Trump chose to “unsign” the joint communiqué, a document that outlines state partners’ shared goals and commitments. By removing its seal of approval, the US administration signals a change in behaviour that is having an impact within a global network of state relationships.

Trust and Network Resilience

Trust is essential for a network’s resilience and endurance whether it emerges at the grassroots level or through government initiatives. Greater connectivity also means greater risk. Ramo (2016) writes that “a connected world has no front line” (209). A higher degree of trust lowers the transaction costs in collaborating with each other, makes problem solving more efficient and helps create resilience from outside attacks on the network. Trust at the US-Mexico border, I learned, is a key component in the relationship between US and Mexican border officers and is essential in establishing continuity within a security framework. The security entity at the US-Mexico border in Nogales, Arizona has a strong network of its own due to relationships that have been cultivated over a long period of time. On February 18, 2010, then-secretary of state Janet Napolitano and Mexican secretary of public safety Genaro García

¹⁶ City twinning is referred to by Ganster and Collins as cross-border integration through for example joint city planning, shared infrastructure or through economic integration (498).

Luna signed a Declaration of Principles on cooperative efforts to secure the US-Mexico border and combat transnational threats. This agreement called for closer collaboration between US and Mexican security officials which resulted in a pattern of productive and cooperative behaviour between counterparts working to resolve border problems. “Mirror patrol” for example meet on either side of the border and run the boundary line together to chase away drug smugglers scouting with binoculars. “Boomerang operations” require teams on both sides of the border to work as a unit. Selected officials from the US and Mexico are vetted, trained, and given visas in order to be brought across the border to work on specific operations often under the same commander. US and Mexican border patrol also sweep underground tunnels together on a regular basis. Maintenance of this security network, I was told, is based almost entirely on trust. For instance, USBP must be unarmed when entering into Mexico (and vice versa). When crossing the border into Mexico, they are thus under the protection of Mexican authorities who provide escort for US officials often in armoured vehicles in volatile regions. The relationship between federal security officials on both sides of the border relies on good communication of intelligence. Communicating messages becomes easier and faster when there is a high level of trust. Mexican municipal police, I learned, are considered unreliable partners since they have broken trust in the past by disrupting border operations and by causing harm to officials. The frequency and reciprocity of interactions between US and Mexican security officials have over time cultivated a culture of trust.

“Cooperative behaviour cascades in human social networks” (Fowler and Christakis 2009) just as a lack of trust between entities will perpetuate patterns of uncooperative behaviour. While bilateral agreements such as local repatriation agreements require collaboration, the level, frequency, and quality of interactions and the effectiveness in how these formal agreements are carried out on an individual level within border networks still relies on trust. USBP and border consulates adhere to local repatriation agreements when transporting irregular border crossers back to their country. There are 15 Mexican consulates in the US and each has its own repatriation agreement with local government officials. Repatriation is supposed to be carried out in the most humane way possible. The role of border consulates is to oversee that repatriation is done according to the shared agreement. In the past, repatriation in Nogales, I learned, was disorganized; it could take place at any time and under any circumstances. Today, local governments have agreed on a set schedule and have made exceptions for unaccompanied minors, elderly, pregnant women, the injured or disabled. Tension can arise when there is a break in trust and lack of communication between USBP and consulate officials. The convention of Vienna is an important legal resource for consulate officials in the US because it allows for consular notification. When Mexican migrants are apprehended by security officials and detained, they are allowed to contact their consulate. USBP however are not mandated to notify detainees of this right, nor are they required to contact the Mexican consulate to notify them of new detainees.¹⁷ This, I discovered, happens on a voluntary basis and depends on the kind of relationship USBP has with local consulate officials. Although formal agreements require that entities cooperate and interact with each other, the ability for border networks to resolve issues relies a great deal on the level of trust between entities. In order for a network to survive, thrive and be more efficient, it must be based on trusting relationships.

Network Innovation and Boundary Spanners

Alternatively, Valdis Krebs (1996) warns about the dangers of relying too heavily on strong – often long-standing, and trustworthy – ties. By doing so, the network becomes homogenous as information is

¹⁷ See Avena case (Case Concerning Avena and Other Mexican Nationals – Mexico v. United States of America) in which the United States was judged by the International Criminal Court to have violated the rights of Mexican nationals given the death penalty to seek legal representation from their consulates (a breach of obligations under the Vienna Convention on Consular Relations).

recycled and “becomes stale.” In order for a network to continuously thrive, new information needs to be brought in from the outside. Krebs explains that this can be done through what he refers to as “boundary spanners” who seek new connections to improve the overall productivity of the network. Mexican liaison officers who work for USBP act in a similar capacity to boundary spanners as they put US security officials in touch with key individuals on the Mexican side. Indeed, the USBP station in Nogales is a liaison unit and prides itself on the relationship it has cultivated with the help of liaison officers over the last decade. Links however within this network are limited only to those with a security dimension; connections to consulate officials or civil society members are not heavily sought after which could result in “missed opportunities and less innovation.” The creation of new, diverse ties and expanding the network in a productive way ensures its survival and resilience in a fast-changing world. Boundary spanners contribute to a network’s resilience and are needed to help the network as a whole adapt to changing conditions: “A richly connected network can survive much damage” Krebs explains.

Conclusion

Border networks appear to operate on the verge of chaos not only because of the nature of the environment within which they must establish productive ties but also due to the opposing interests of factions within the network. Networks are often formed in response to a common problem and emerge either from the top-down or bottom-up. Their resilience depends on the level of trust between entities and on their ability to remain innovative. “A change in the array of national policies governing the border can lead to a rapid deterioration in the cooperation and the nullification of the progress made in recent years to create this important form of social capital” (253) writes Lara-Valencia (2011) about NAFTA. Indeed, the US administration’s actions and behaviour towards its international partners is eroding trust within the global network and is forcing a shift in its centrality. The administration’s position on NAFTA for instance threatens to dissolve local networks. While networks can be vulnerable to changes in the political environment and although their resilience may be tested, the norms that grow out of these networks have a long shelf life.

PART III – Exercising Network Power: Good Web Actors and Bad Web Actors

Introduction

IR scholars have distinguished between hard power, soft power, and more recently smart power. Ramo (2016) writes, “A whole new landscape of power is emerging now” (84). Network analysts challenge conventional views of power in IR by pointing out additional forms of power that rely on a different set of criteria “no longer derived solely from individual [state] attributes, such as material capabilities” (Flemes 2013, 1030). Power in networks “flows from connectedness: the number, type, and location of connections a node has” (Slaughter 2016, 168) – in other words, its centrality. Network power can be exercised in three different ways: through brokerage, gatekeeping, and bargaining. Brokers and gatekeepers control flows of information or resources; they either cultivate or impede connection-formation. Power can also be exercised through bargaining as some entities are in positions within the network to threaten exit; however, their ability to do so relies on the existence of outside options. Slaughter (2009) writes that “Networks of bad web actors threaten global security and well-being on a daily basis; we must respond by creating and supporting integrated networks of good web actors –

corporate, civic, and public” (220). Power in networks can be used strategically whereby actors aim to “increase their power by enhancing and exploiting their network positions” and by taking advantage of the “fungibility of network power” (Hafner-Burton et al. 2009, 559). If power in networks is held by those who exhibit the most centrality – those who are well-connected, connected to the right people and in the right way – then it can be argued that border consulates can act as powerful entities. As already discussed, border consulates have high degree, closeness and betweenness centrality. Because they are well-connected, they also have access and influence. Entities who are in positions of centrality can act as good or bad web actors based on how they choose to make use of their connections – to encourage or inhibit connection-formation, to maximize or neglect network potential, to support the network as a whole or undermine its value.

Network Power and Social Constructivism in IR

One additional way in which network power can be exercised is through norm change. Social constructivists in IR put emphasis on how ideas shape international politics – ideas that are based on norms that emerge, are diffused and eventually institutionalized. A norm’s life cycle relies on, and in fact, requires a network – a mutable system of moving parts directed by social interactions that helps create momentum for norm diffusion. A norm’s life cycle is intrinsically linked to an entity’s life cycle within the network. David Singh Grewal’s (2008) explanation of network power places network analysis into the realm of social constructivism. In his book *Network Power: The Social Dynamics of Globalization* he describes network power in terms of a threshold that is reached whereby enough entities agree on a standard or norm to render it a “social fact.”¹⁸ To reach this threshold, there needs to be enough momentum to ratchet up a norm’s level of visibility within the network. The universalization process of standards described by Grewal mirrors the life cycle of norms described by Finnemore and Sikkink.¹⁹ For instance, Grewal (2008) refers to a tipping point as “the point past which a network has become so dominant that we can expect virtually all non-users to adopt its standards” (40). Power within a network is gained through “the rule of ‘preferential attachment,’ a tendency for new nodes to link to already well-connected nodes” (Lake and Wong 2009, 129) exhibiting a “rich-get-richer” pattern that establishes a momentum and has a direct impact on the rate at which norms are diffused across the network. In order to exert this kind of power, entities need significant pull. Grewal (2008) argues that networks are originally formed because enough entities have chosen to converge on “a set of global standards.”²⁰ David A. Lake and Wendy H. Wong (2009) explain, “If the mass of newly connected nodes is too small, the potential cluster dissolves back into the larger ‘liquid’ of society. If the cluster is large enough, it coheres and begins to work together to create value in a network...By creating value, the nascent network creates incentives for its members to stay in contact and work together” (135). Power then can be identified by the degree to which others adopt norms upheld by entities. Socialization as described by Ikenberry and Kupchan (1990) is facilitated by networks. Entities with centrality can use network power to “socialize” adherents who “buy into and internalize norms that are articulated by the hegemon” (283). To do so, norms need to be effectively promoted and communicated by entities seeking adherents. Observations made at the US-Mexico border reveals how this form of network power is used to create visibility around border issues and to build momentum for norm change.

¹⁸ Grewal (2008) refers to networks as “an interconnected group of people linked to one another in a way that makes them capable of beneficial cooperation, which can take various forms, including the exchange of goods and ideas” (20).

¹⁹ See their 1998 article “International Norm Dynamics and Political Change.”

²⁰ What Grewal (2008) means by standard is “the shared norm or practice that enables network members to gain access to one another, facilitating their cooperation” (21).

Good Web Actors

Using Grewal's concept of threshold in network power, and having identified border consulates as entities within the network who have some pull over others, how can border consulates leverage their connections and attract a critical mass of key individuals who otherwise may not interact with each other to converge on a set of standards or norms regarding border problems? Good web actors first of all recognize the value and advantages that network connections have in solving problems. Good web actors exhibit the leadership skills needed to leverage these advantages, and, by doing so, help keep a network in tact. Finally, good web actors also acknowledge how important trust is in network maintenance.

To take advantage of a network's efficiency, adaptability and innovative potential, entities in positions of centrality need to possess a set of network skills. Valdis Krebs (1996) writes, "the real power in networks is the 'multiplier' effect of indirect ties, which enable network members to increase their reach substantially, gaining access to new information and resources in distant parts of the network." It requires skill however to spot these valuable links and then bring them into the fold. Slaughter (2017) identifies these skills in her book and argues that these attributes "form the core of network leadership" (185). Among these skills is an ability to communicate and advocate the value that members have and potential members gain in joining the network and adhering to specific norms. Slaughter argues that network leaders need to be good communicators; they must know how to clarify goals. Doing so will not only make the network more efficient, but will also help establish trust, and attract new, valuable members. Mexican border consulate officials raise awareness in the borderlands about what services their consulate can offer to migrants and Mexicans. The Mexican consulates in El Paso, Douglas and Nogales educate community members about their roles through meetings with NGOs, workers at migrant shelters, at schools and public events. In addition, the consulates communicate what services they offer through information pamphlets. One such leaflet is entitled, "Do you know what your consulate can do for you?" and lists 9 services provided by the Mexican consulate.²¹

The effectiveness with which a border consulate's centrality is leveraged and how power is exerted to diffuse messages across the network can vary. The Mexican consulate in Douglas for example reiterates its value to members of the community and other stakeholders through regular meetings where it shares the outcomes of joint initiatives. These meetings are not institutionalized and in many areas along the US-Mexico border they are no longer routine. Meetings between consulate officials and security officials or human rights advocates in the community are increasingly organized on a voluntary basis. The minutes from meetings held on January 31 and February 28, 2018 between border stakeholders and consulate officials in Douglas reveals how regular meetings provide an opportunity for individuals to share information, establish new connections and brainstorm ideas. Mexican consulate officials come prepared and are ready to answer questions. At these meetings documents are distributed such as graphs on the number of monthly repatriations, unaccompanied juveniles and juveniles arrested for drug and human trafficking, hospitalizations of migrants, inmate visits by consular officials, and causes of migratory deaths. These documents are discussed to identify areas that need attention and to monitor progress made on specific border issues. By holding regular meetings consulate officials not only communicate their own role as brokers between competing interests within the community but also help build trusting

²¹ Other information pamphlets include: A Mexican-government issued leaflet outlining the contact information and locations of the various Mexican-state delegations (as well as Mexican consulates in the US) and contact information for Mexican nationals facing detention; A Mexican consular notification card specifying what to do in case of arrest and detention; A Mexican citizens' guide for all possible interactions within the US and at the border, including depictions of the uniforms of various levels of law enforcement officers Mexicans could encounter at and beyond the US-Mexico border.

relationships and demonstrate the value that collaboration has in solving problems at the border. A border consulate's ability to posit itself as a valuable partner and thereby attract and keep entities at the table also depends on the relationship they have with other entities in the network. For instance, consultations with experts in Nogales revealed a lack of trust between entities. I learned that the Mexican consulate used to be the first point of contact for NGOs; however, NGOs like the Kino Border Initiative now rely more on other partnerships such as the Florence Project, a free legal and social service provider for detained immigrants in Arizona, with whom they have a memorandum of understanding.²² In order to maintain productive relationships, good web actors need to continuously emphasize their value-added in the network. Lack of communication among entities in Nogales has resulted in confusion about what services the Mexican consulate can offer and the limitations they have when dealing with border problems like irregular border crossing.²³ Experts linked to the Mexican consulate in Nogales highlighted the importance of good communication as a skill to educate members of the community on what authority they have and what services they offer for Mexicans.

Another skill that good web actors have is the ability to identify entities from distant parts of the network that can make valuable contributions. Slaughter refers to these as “synergy spotters.” Experts connected to the US consulate in Juárez noted the importance of curating relationships especially through the consulate's locally engaged staff who are more familiar with the local environment, history and culture. Good web actors will make use of boundary spanners who have what Ramo (2016) describes as a seventh sense: “the ability to look at any object and see the way in which it is changed by connection” (36).

Networks are adaptable, but they can easily dissolve if entities are poorly equipped to deal with changing conditions. Networks based on human interactions rely on trust for their adaptability: “In a world of uncertainty and rapid change, trust is the key ingredient” writes Slaughter (2016, 165). Good web actors need to be able to build momentum when needed in order to respond quickly to changes that implicate the network's goals. Trump tweets for instance have forced Mexican border consulates to change tactics and establish ad hoc task forces on numerous occasions. This, I learned, has caused issues in the past as some government officials interpret presidential tweets in a certain way leading to confusion and disruptions at the border. The creation of migrant defense centres that provide free legal aid for Mexican nationals or a nation-wide call centre called CIAM (Centro de Información y Asistencia a Mexicanos) – both federal efforts to raise awareness about Mexicans' rights – are examples of actions taken by the Mexican government in response to Trump tweets. Changes within the network such as staff rotation may also cause disruptions. NGOs for instance may find they are no longer dealing with the same consulate or USBP officials at meetings or detention centre visits. Well-established, resilient and thriving border networks stand a better chance at weathering these disruptions, especially when good web actors establish trust through effective communication.

Exercising Network Power to Address Border Problems

Good web actors can unlock the creative potential of networks. Ramo (2016) explains, “Networks change the locational utility of anything they touch. When connection makes an object instantly, clearly visible, it revolutionizes its potential” (210). The Mexican border consulate in Douglas has leveraged the creative potential of its network by using network power to create visibility around specific issues associated with

²² The Florence Project fills an essential gap in the center's capacity and knowledge (the center lacks the in-depth legal knowledge to deal with more complex legal cases).

²³ Consulates as government institutions, for instance, are limited when helping asylum seekers since these individuals are seeking asylum from their own governments. Mexican consulates are also limited to helping Mexican citizens only.

border crossing. During my visit to the US-Mexico borderlands, I was invited to a bilateral meeting held between government officials and civil society members in Agua Prieta, Sonora just across the border from Douglas. These meetings are held on a monthly basis and are attended by government officials from the Mexican consulate in Douglas and the Mexican department of immigration, individuals offering legal services, members from youth and human rights advocacy groups, NGOs, church and charity groups, educators from local schools as well as members from local workers' or women's shelters. The drive from El Paso to Douglas through the desert in the early hours of the morning was well worth it as I was able to see first hand how consulates can use their role as brokers to facilitate link-formation and help create visibility on specific issues for the purposes of solving border problems. I learned about two border problems in particular: the increase in injuries among migrants from climbing the border wall and from travelling in trunks of cars (known to be a frequent occurrence in Nogales but was now on the rise in Douglas).²⁴ Special task forces and campaigns were created with the help of both security and civil rights entities. The consulate endorsed the initiatives and provided its stamp of approval (See Figure 1 and 2). The campaigns were aimed at raising awareness about and creating visibility around the dangers and repercussions of migrants' actions. The consulate plays a role in mediating discussions between various groups within the community to identify initiatives that are in the interest of both civil society members and border security officials.²⁵

The Mexican consulate in Douglas uses its position of centrality to not only create visibility on border issues through campaigns but also exerts network power in one other way: by trying to change perceptions of the border wall that separates Douglas from Agua Prieta. The consulate supports initiatives aimed at reconceptualizing the border wall – initiatives that aim to build momentum and reach the threshold needed for norm change. With the help of both security and civil society members they helped organize events such as theatrical performances, bi-national concerts or mural painting as ways in which communities on both sides of the border can participate in and contribute to efforts in establishing a new narrative that counters the border wall-as-weapon narrative circulating in the media. Dreams Across Borders for instance launched by the consulate in 2015 is an initiative that brings community members together in support of the reconceptualization of the US-Mexico border wall through art. Network entities acting as good web actors make use of the access and influence they have to take advantage of a network's innovative potential and create visibility on issues that implicate the network as a whole. Is there a US consulate in Agua Prieta? If not, this is interesting because in Nogales, Sonora and Ciudad Juarez there are US consulates

Coercive Bargaining

Not all entities within a network act as good web actors. Entities can choose to use their positions of centrality to exert power through coercive force and exploit network advantages for their own interest. All

²⁴ Migrants are often brought across the border in the trunks of cars by smugglers – many of whom I learned are US citizens, – but because the migrants are deported back to their country, they are unable to provide testimony in court where their smugglers are being accused of criminal activity. The smugglers are often released without being charged.

²⁵ Border security officials, I learned, are not typically present at meetings with civil society groups because this could present a conflict in interest. Members from civil society have direct contact with migrants and often know where they come from, where they want to go, what motivates them to cross the border between ports of entry and how they do so. Communicating this with security officials may be counterproductive for those wishing to protect the privacy and rights of migrants. Consulate officials nevertheless still act as mediators in meetings with civil rights groups and security officers.

networks and entities are comprised of individuals...and one person can change the whole dynamic of the network. Ties in a network are formed as a result of decisions that seem both free and coerced (Grewal 2008, 26).²⁶ In his explanation of network power, Grewal puts emphasis on choices: “It is our choices that lie behind network power.” David A. Lake and Wendy H. Wong (2009) explain that the voluntary nature of social networks puts limitations on central entities’ ability to abuse their power: “Central nodes can manipulate the network to their advantage, but only up to the point where the members become indifferent between continuing to participate in the network and exiting in favor of their next best alternative” (131). Collective, voluntary choices then contribute to shifts in centrality, but only as long as other options exist. Choices are made based on available alternatives, and as these diminish, a coalition of the willing becomes more like coalition out of necessity. Like an offer that cannot be refused, the apparent freedom to adopt the dominant standard “becomes an increasingly coerced one” (Grewal 2008, 12) – in other words, join or face isolation.

An entity’s centrality within a network exhibits a kind of life cycle as it grows in popularity through its pull effect. Incentives play an initial role in how the network is formed: “nodes must reap a return from the network that is greater than or equal to what they can achieve in their next best alternative” (Lake and Wong 2009, 130). In order to maintain and expand the network, central nodes can play up the value that joining has for members as well as potential members of the network. Communicating value and offering incentives to attract members, however, are soon no longer needed as expansion gains momentum and an entity achieves centrality. Once an entity recognizes that it holds network power and that others cannot so easily exit, it can choose to use this power to try and extend its life cycle through coercive measures. Doing so, however, has reputational costs (another author made this point; find reference). An entity’s decision to exploit bargaining power and risk its reputation may even be evidence of shifting centrality within the network and an entity’s imminent demise as it moves through to the end of its life cycle.

Bad Web Actors

Bad web actors take advantage of their positions of centrality within the network to achieve their goals through coercive bargaining and by diffusing norms for their own gains. These behaviours are being practiced on a state level and are manifesting themselves on an individual level within borderlands. Donald Trump implemented a “zero tolerance policy” at the US-Mexico border in April, 2018, that requires anyone caught crossing the border between ports of entry to be criminally prosecuted. This policy resulted in more than 2,300 children being taken from their parents at the border between May 5 and June 9, 2018 based on statistics released by the Department of Homeland Security. The separation of families at the border has sparked a global outcry. To contain the growing humanitarian and political crisis, the US administration used its platform to justify the policy. At a White House event for the National Space Council, Donald Trump argued: “The United States will not be a migrant camp, and it will not be a refugee holding facility...They [migrants] could be murderers and thieves, and so much else.” The US in its position of centrality relative to countries like Mexico in a global network of states is acting as a bad web actor since rather than using its position to leverage network efficiency, adaptability and its innovative potential to solve the crisis at the border, it uses the access and influence already within its possession as a central player to bargain for a better deal that suits its own interests, not that of the network as a whole. Kahler (2009) writes, “As agents within networks comprehend the power that inheres

²⁶ This form of network power is less obvious; entities sense that a power is being exercised over them but are unable to locate or articulate it. In keeping with Grewal’s argument, it is this kind of power that has generated resentment against globalization as individuals feel a loss of control over their ability to make autonomous decisions. Anti-globalists, for instance, have directed their anger against “elites” whom they believe to be the agents of these forces that have taken away their autonomy and ability to “exit” the network.

in network structure, they will attempt to influence that structure over time” (14). This can be done through practices of gatekeeping and bargaining.

Trump’s zero tolerance policy has been identified as a bargaining tactic that is cruel and coercive. *The Washington Post* on June 18, 2018, asked “When did caging kids become the art of the deal” and CBC News’ Keith Boag on June 19, 2018, pointed out “Children’s distress may help Trump bargain for his border wall.” The Trump administration’s bargaining tactics used not only at the US-Mexico border but also with international trading partners could cause a shift in a network of long held partnerships centered on norms that reflect a liberal order. Robert Kagan (2018) writes, “Trump is not merely neglecting the liberal world order; he is milking it for narrow gain, rapidly destroying the trust and sense of common purpose that have held it together and prevented international chaos for seven decades. The successes he is scoring — if they are successes — derive from his willingness to do what past presidents have refused to do: exploit the great disparities of power built into the postwar order, at the expense of the United States’ allies and partners.” Exploitation can precipitate a shift in where centrality is located within a network as states respond to changes in behaviour. “Our [American] ideals, and the fact that other countries knew we held those ideals” Krugman (2018) laments, “made us a different kind of great power, one that inspired trust...The Pax Americana was a sort of empire; certainly America was for a long time very much first among equals. But it was by historical standards a remarkably benign empire, held together by soft power and respect rather than force.” The US administration’s bargaining practices is wearing down the trust that is a key element in network maintenance and its explicit use of bargaining as a coercive force is precipitating a shift in a global network.

The US administration is using network power to diffuse norms that are causing disruption and confusion at the US-Mexico border. It has used its position of centrality to frame migrants as criminals, a message that threatens the cohesion of networks at a local level within borderlands. Network power is used to manufacture a narrative and then this narrative is legitimized by making it more visible within the network. The administration has made persistent use of platforms that provide a great amount of access to individuals whether through Trump’s Twitter feed, Fox News interviews, or Melania Trump’s apparel.²⁷ “Parents who entered illegally are, by definition, criminals,” Kirstjen Nielsen told reporters during a White House news briefing – a message that puts emphasis on the person as criminal rather than the criminal act itself. This message reinforces Donald Trump’s migrants-are-criminals frame used throughout his election campaign and made evident through his policies on immigration as president. On June 20, 2018, as pressure to reverse the zero-tolerance policy reached its peak, Trump reluctantly signed an executive order to stop family separation at the US-Mexico border. Nevertheless, to avoid appearing politically “weak,” to his supporters he continues to use strong language on migrants to sustain momentum for his narrative.

The US is already losing centrality within “global networks of exchange” Paul K. MacDonald (2017) points out: “China’s creation of the Shanghai Cooperation Organisation and the Asian Infrastructure and Investment Bank, suggest that authority in world politics may not be embedded exclusively in American-led institutions in the coming years” (150). He predicts that there may be “deeper shifts in networks of global exchange” on the horizon. Donald Trump’s use of network power in an effort to extend the life cycle of his centrality – vis-à-vis the state’s – within the network confirms his status as a bad web actor.²⁸

²⁷ Ahead of her visit to a migrant shelter in Texas on June 21, 2018, First lady Melania Trump sparked outrage when spotted wearing a jacket that had written on it “I REALLY DON’T CARE, DO U?”

²⁸ To avoid confusing levels of analysis, it is important to note how Trump views himself *as* the state possessing absolute authority. Roland Paris (2018) for example explains how Trump’s language repeatedly evokes a version of

Nevertheless, as others have noted, Trump's messages have been known to be directed at a narrow cross section of society.²⁹ Christian S. Crandall et al. (2018) in their article "Changing Norms Following the 2016 U.S. Presidential Election: The Trump Effect on Prejudice" argue that "The 2016 election seems to have ushered in a normative climate that favored expressions of several prejudices" (186). What determines whether a dominant standard will become universalized, as Grewal has noted, will be the extent to which there is social agreement on this standard. Network power of this kind is proportionate to the pull and the perceived value the entity has in the network.

If individual choices are what lie behind network power, then the Trump Administration's coercive bargaining tactics and exploitation of its network centrality to diffuse norms that serve Donald Trump's own personal interests will result in entities seeking alternatives and who may then converge on a set of new standards. Stacie E. Goddard (2009) refers to this as "switching" – "processes [that] alter network structures, leaving actors with fundamentally different set of network ties, and changing the issues, institutions, and even actors involved in a political system" (250). Irregular migration is an Americas problem – one that stretches well beyond the US' southern border. Mexico has been acting as an "effective buffer against the newest migration flows from Central America" writes Andrew Selee (2018). Programa Frontera Sur (South Border Program), funded in part by the US, enlisted Mexico's help in keeping migrants from making it to its northern border (Carasik 2015) to "take pressure off the border with the United States" (Selee 2018). However, Selee predicts that the election of Mexico's new president Andrés Manuel López Obrador could "change the status quo." Mexico may explore other alternatives and develop immigration policies – likely with a "more nationalist bent" – that do not rely on US cooperation or resources and that would perpetuate a pattern of uncooperative behaviour. The US administration, Selee argues, "needs to work with Mexico to form a more cooperative and comprehensive migration strategy. Otherwise, the United States could find itself facing a much larger flow of undocumented immigrants at the southern border than it does today."

Entities better at advocating their value-added within a global network, could gain significant pull that would contribute to a shift in centrality and a change in the overall dynamics of a global network in international relations.³⁰ David Hamilton (2010) argues that "The evolving international order is less likely to be shaped by Great Power condominiums than driven by in-between peoples and spaces in a nobody-in-charge world" (5). Daniel Flesmes (2013) believes that "rising powers" such as China, India or Brazil have been more successful in adapting to a changing global environment. These states, he points out, know how to take advantage of network potential by for instance using strategies of "soft balancing"; they "have no interest in disrupting – only modifying – the current order, so as to improve their own systemic position" (1020). Indeed, entities that are on the periphery or that occupy an "in-between" space in the network may have ambitions to achieve positions of centrality in the long run but are not yet well-placed within the network to cause a significant shift. Nevertheless, monitoring their interactions with other entities using concepts of network analysis in IR would reveal how they are achieving "incremental reform of the international order" (1022) and contributing to changes in world order.

Conclusion

sovereignty that expresses "an idea of American primacy in which the exercise of raw power can be justified by nothing more than the will of Donald Trump, himself."

²⁹ Brian Williams questioned whether Trump's repeated use of the term "sovereignty" in his UN speech on September 19, 2018 acted as a kind of dog whistle for his base (Chasmar 2017).

³⁰ Paul K. MacDonald (2017) even points out that "shifting patterns of network ties" (147) can result in the creation of new actors.

BNA reveals ways in which power can be exerted by central entities through brokering, gatekeeping, bargaining and norm change. How entities choose to use network power will define them as either good or bad web actors. Good web actors maximize network potential by cultivating the skills needed to make the network more efficient, adaptable and innovative. Good web actors also recognize the importance of trust in network partnerships and act within the interests of the whole network. Bad web actors in comparison use their positions to withhold information or resources, block access within the network and diffuse norms that harm network cohesion. When exit options or alternatives are scarce, entities in central positions can bargain. Border consulates that hold positions of centrality can act as good web actors as the Mexican border consulate in Douglas has demonstrated. If entities in positions of centrality on a state level were to similarly leverage network advantages, exhibit network leadership skills and maximize network potential, more innovative solutions could be based on a different standard – on collaborative norms – to deal with the migrant crisis at the US-Mexico border.

Border Network Analysis and Changing World Order

An analysis of three distinct entities at the US-Mexico border in El Paso, Ciudad Juárez, Douglas, Agua Prieta, and in Nogales reveal three broad conclusions: border consulates due to their positions of centrality can play a special role as brokers, networks centered on a common goal and built on trust are more resilient, and the way in which network power is exercised by central entities can have a direct impact on the network as a whole. Finding better solutions to border problems depends on all three. Before broadening the scope from an analysis of networks based on human interactions within borderlands to an analysis of networks that are built on state relationships, several factors need to be considered which may complicate a direct link between lessons learned at the border and how these inform issues in international relations.

Border consulates and USBP operate within hierarchically structured, bureaucratic institutions and are bound by mandates. This may put limitations on the networking that consulate or security officials can do within the scope of their work. Experts linked with the US border consulate in Juárez for instance noted that their work must adhere to strict objectives and needs to be in line with government priorities: to keep criminals out while keeping the flow of goods moving freely. Another factor that may put limitations on consulates' ability to act as good web actors – expanding their networks, leveraging boundary spanners and building trust among other entities – is staff rotations as officials are replaced by others who may not possess the same set of network skills that may contribute to the entity's centrality. Locally engaged or other staff who are employed at the consulate on a more permanent basis could provide some continuity and stability; however, whether or not the network can overcome these disruptions will depend on how the network is maintained, on the strength of ties and level of trust between entities. Bureaucratic institutions also result in the formalization of partnerships through agreements and policies which may result in stale relationships over time. Boundary spanners can help identify new links that can offer diverse and more innovative contributions to the network. One last limitation that government institutions have on entities' ability to leverage network advantages is budget. Interactions between consulate officials and members of civil society often depends on programs funded by the federal government. Consulate officials in Juárez for instance face both financial and security barriers that prohibit them from obtaining productive connections beyond the walls of their institution. Some outreach is done to for example local prisons or shelters for women; however, I learned that the consulate depends greatly on locally engaged staff who have a network that they can draw from. Despite these factors, however, international relations

studies could still benefit from BNA and lessons learned at the border with regards to how networks are formed and maintained, how they overcome disruptions, and how network power is used.

The National Intelligence Council's 2016 Global Trends Report "Paradox of Progress" predicts a growing "crisis in cooperation." States that exhibit degree, betweenness, and closeness centrality within a global network, and that hold "veto power," the report states, "will threaten to block collaboration at every turn, while information 'echo chambers' will reinforce countless competing realities, undermining shared understanding of world events." To overcome these challenges states will need to develop "the ability to foster relationships and leverage information" as well as "cultivate trust and credibility." The ability for states with network power to do so "will become as important as military and economic might in shaping future events." Brandon J. Kinne (2013) presents useful research in his article "Network Dynamics and the Evolution of International Cooperation" to illustrate how and why "efforts at cooperation depend, in part, on existing structures of cooperation in the international system" (766). IR scholars have long pointed out that in an international system states possess imperfect information about other states' preferences, motives, intentions, available resources, capacity etc.³¹ Kinne argues that "network ties alleviate the collaboration and coordination problems that imperil cooperation" since an entity's existing connections act as a kind of guarantor for and communicates a degree of trustworthiness and reliability in this system. Keck and Sikkink (1999) have also argued that "Networks are communicating structures" (90). States can signal to others that they are more open to collaboration as well as the kind of collaboration they are interested in by cultivating numerous and diverse ties that benefit the network as a whole. States in possession of network intelligence then can play a key role in shaping a world order based on collaborative norms. Today, the international system is under pressure due to various transborder issues. Scholars are calling for "networked-based solutions." A deeper understanding of how networks operate at borders, their properties and how they exert power could become extremely valuable in finding strategies of connection, resilience, and cooperative patterns of behaviour for networked solutions at a state level.

George Friedman (2017) has said that borders are at the heart of global conflict since border issues seem to arise "again and again." Europe's borders, he writes, "have been the foundation of both its political morality and its historical catastrophes" and points out that nearly all countries in Europe today have border issues. Border studies as a discipline and in international relations is relatively new but is becoming highly relevant in today's changing global environment. Ramo (2016) writes "We are now in the earliest stages of a shift that promises to be still more consequential than the one that enlightened and industrialized our world over several centuries after the Dark Ages" (32). Scholarly debate is increasingly focused on a shifting world order – an order that had converged on Western, liberal standards and today seems to be moving away from this alignment. Gideon Rose (2017) writes, "Today this liberal international order is a bit dilapidated. The structure still stands, but paint is peeling, walls are cracking, and jerry-build additions just out from odd angles."³² Transboundary issues like migration, climate change, pandemics, cybersecurity and terrorism are "weakening the ability of all governments to respond" (Nye 2017). Across the globe anxieties are being raised about how these issues are affecting national sovereignty. Governments in an attempt to preserve state sovereignty are doubling down on border security which is changing border security practices as borders, not just in the United States but around

³¹ See for example Keohane (1984) *After Hegemony: Cooperation and Discord in the World Political Economy*.

³² Richard Haass (2017) reflects on a world "in disarray" in his most recent book. Robin Niblett (2017) and Edward Luce (2017) both discuss how liberalism is "in retreat" and Jeff D. Colgan and Robert O. Keohane (2017) explain why they believe the "Liberal Order Is Rigged."

the world are becoming increasingly militarized.³³ Donald Trump has repeated on several occasions, “a country without borders, is not a country at all.” Everything, Trump argues, “comes down to borders.” Joseph Nye (2017) asks whether the liberal order “can survive” the new challenges it faces while other scholars question whether it should.

Inherent within the changing dynamic of world order and the underlying threats driving this global shift are networks. Slaughter (2017) writes that “Networked threats require networked responses” (12); moreover, ones that are inclusive and leverage the advantages that networks have to offer. The response thus far in dealing with border problems has and continues to be border militarization. Installing border structures as one form of border militarization however is a futile attempt to wall out threats and protect national sovereignty. Walls are neither functional nor feasible, but instead, perform sovereignty at the border.³⁴ BNA tries to understand how networks form, operate and how they exert power within borderlands. Lessons learned through BNA in how network power can be used productively, how attacks on the network are overcome and what skills are needed to do so could provide the basis for network strategies that deal with transborder problems at a state level. As opposed to developing short-term, isolationist, and reactionary, militaristic solutions to border problems, examples of how networks are used productively and strategically – even if on the verge of chaos – in borderlands act as a reminder in what has and what can be achieved through cooperative behaviour, norms and strategies in international relations.

Conclusion

John Donne once wrote that “No man is an island entire of itself; every man / is a piece of the continent, a part of the main.” Problems that by nature are multifaceted and that implicate various entities cannot and should not be tackled alone. Networks hold tremendous potential; they are essential not only as a “transmission mechanisms for new ideas, but as the sources of the new ideas themselves” (Ferguson 2018, 42). Ferguson explains, “Not all networks are likely to foster change; on the contrary, some dense and clustered networks have the tendency to resist it. But the point of contact between diverse networks may be the place to look for novelty.” Borderlands are highly dynamic spaces where diverse groups come into contact with each other. This paper has sought to analyze three different entities operating within borderlands to address border problems. Observing their interactions using concepts of network analysis resulted in three conclusions about how border networks work and operate: first, brokers can play an important role mediating interactions between individuals with opposing interests. Second, a network’s resilience depends a great deal on trust. Third, entities in positions of centrality can be good or bad web actors, much depends on how power is used and for what purpose. These lessons can be used to examine and inform international relations to determine if and how states exhibit the same patterns of behaviour. BNA can also contribute to IR theory by adding new dimensions to ideas brought forward in social constructivism. The recent tensions and volatility within the US-Mexico borderlands and indeed seen within borderlands in other parts of the world is reflective of a world increasingly in disarray. This disorder, in part, stems from states’ inability to coordinate and collectively manage complex problems.

³³ See Randall H. McGuire’s article “Steel Walls and Picket Fences: Rematerializing the US-Mexican Border in Ambos Nogales” for a detailed discussion of how a boundary between two countries has been visibly redefined over time.

³⁴ For a dramaturgical analysis of borders see Mark Salter’s 2011 article “Places Everyone! Studying the Performativity of the Border.” Wendy Brown (2010) similarly identifies how “political walls” function to “spectacularized power” (39).

Viewing world order through the lens of networks can offer new perspectives, insights and may even present new tools for managing complex problems in a shifting international system. Leaders, Ramo (2016) argues, who are ill-equipped to deal with what he refers to as a new “Network Age” will suffer from failing legitimacy (82) and he believes that it is because of this that “our grand strategy is incoherent, [and] the reason our age really is revolutionary” (82). Slaughter argued in 2009 that the “United States has a clear and sustainable edge” in a world where “the state with the most connections will be the central player, able to set the global agenda and unlock innovation and sustainable growth” (95); however, this potential as others have pointed out is being squandered. The US as a major power is in a position whereby it can either act as a good or bad web actor. In 2014, then-US President Barack Obama was allegedly reported to have summarized his foreign policy as the following: “don’t do stupid shit” (Rothkopf 2014). By choosing to see the world not as a web but detached from the main, states risk making foreign policy decisions that can have a direct and potentially negative impact on shifting centrality within a global network. Networks evolve and states that are not in tune with the dynamics, behaviours, and characteristics of networks, who exploit network power for their own gains, and who fail to take network properties into account when making decisions or developing strategies – in short, who do not possess network intelligence – will find themselves no longer at the helm, but on the periphery – on an island.

Figures

FIGURE 1. Protect Yourself: Fellow citizens, travelling in an automobile trunk



(Protect Yourself: Fellow citizen, travelling in an automobile trunk puts at risk your life and the lives of those around you. Travelling in a trunk is illegal and can result in your death. Don’t put yourself at risk!)

FIGURE 2. Protect Yourself: Fellow citizen, scaling the wall

SRE
SECRETARÍA DE
RELACIONES EXTERIORES

CONSULADO DE CARRERA
DE MÉXICO EN DOUGLAS

CUIDA TU VIDA

Paisano, al saltar el muro **arriesgas tu vida** y la de los tuyos

En 2017, el **63%** de los accidentes de migrantes
fue resultado de caídas en el muro fronterizo

¡No te expongas!

SRE
SECRETARÍA DE
RELACIONES EXTERIORES

Descarga la app
MICONSUMEX

CIAM
Centro de Información y
Asesoría Migratoria

Para más información llama sin costo al
1 855 4636 395

24

(Protect Yourself: Fellow citizen, scaling the wall puts at risk your life and the lives of those around you. In 2017, 63% of accidents among migrants were the result of falls off the border wall. Don't put yourself at risk!)

Bibliography

Avant, D. and Westerwinter, O. 2016. *The New Power Politics: Networks and Transnational Security Governance*. New York: Oxford University Press.

Becker, J. 2018. Speaking to The Wall: Reconceptualizing the US-Mexico Border “Wall” from the Perspective of a Realist and Constructivist Theoretical Framework. *Journal of Borderlands Studies* (June).

Boag, K. 2018. Children's distress may help Trump bargain for his border wall. *CBC News* (June) <https://www.cbc.ca/news/world/border-wall-separating-families-1.4711582>

Bower, A. 2016. Networking for the Ban: Network Structure, Social Power, and the Movement to Ban Antipersonnel Mines. In *The New Power Politics: Networks and Transnational Security Governance*, eds. Avant, D. and Westerwinter, O. 169-96, New York: Oxford University Press.

Bremmer, I. 2012. *Every Nation for Itself: Winners and Losers in a G-Zero World*. London, UK: Penguin Group.

Brown, W. 2010. *Walled States, Waning Sovereignty*. New York, NY: Zone Books.

Carasik, L. 2015. Brutal Borders: Mexico’s Immigration Crackdown – And How the United States Funds It. *Foreign Affairs* (November). <https://www.foreignaffairs.com/articles/mexico/2015-11-04/brutal-borders>

Chasmar, J. 2017. Brian Williams: Was Trump’s repeated use of ‘sovereignty’ during U.N. speech a dog whistle? *Washington Times* (September). <https://www.washingtontimes.com/news/2017/sep/20/brian-williams-trumps-repeated-use-sovereignty-dog/>

Fowler, J.H. and Christakis, N.A. 2009. Cooperative behaviour cascades in human social networks. *Proc Natl Acad Sci USA* 107: 5334-8.

Colgan, J.D. and Keohane, R.O. 2017. The Liberal Order is Rigged: Fix It Now or Watch It Wither. *Foreign Affairs* 96 no. 3: 36–44.

Crandall, C.S., Miller J.M., and White II, M.H. 2018. Changing Norms Following the 2016 U.S. Presidential Election: The Trump Effect on Prejudice. *Social Psychological and Personality Science* 9 no. 2: 186-92.

Dear, M. 2013. *Why Walls Won’t Work: Repairing the US-Mexico Divide*. New York: Oxford University Press.

Dorussen, H. E., Gartzke, A. and Westerwinter, O. 2016. Complex interdependence and the diffusion of conflict and peace. *Journal of Peace Research* 53 no. 3: 283–91.

- Eaton S. E. and Gonzáles, D. 2016. Tough love at Arizona border: Prosecuting teen drug smugglers as adults. *AzCentral* (August).
<https://www.azcentral.com/story/news/politics/border-issues/2016/08/14/arizona-border-teen-drug-smuggling/87671222/>
- Ferguson, N. 2018. *The Square and the Tower: Networks and Power, from the Freemasons to Facebook*. New York: Penguin Books.
- Finnemore, M. and Sikkink, K. 1998. International Norm Dynamics and Political Change. *International Organization* 52 no. 4: 887-917.
- Flemes, D. 2013. Network Powers: Strategies of Change in the Multipolar System. *Third World Quarterly* 34 no. 6: 1016–36.
- Friedman, G. 2017. Almost All Countries In Europe Have Border Issues. *NewsmaxFinance* (October).
<https://www.newsmax.com/finance/georgefriedman/countries-europe-border-issues/2017/10/30/id/822948/>
- Ganster, P. and Collins, K. 2017. Binational Cooperation and Twinning: A View from the US-Mexican Border, San Diego, California, and Tijuana, Baja California. *Journal of Borderlands Studies* 32 no. 4: 497-511.
- Gallop, M. B. 2016. Endogenous networks and international cooperation. *Journal of Peace Research* 53 no. 3: 310–24.
- Goddard, S.E. 2009. Brokering change: networks and entrepreneurs in international politics. *International Theory* 1 no. 2: 249-81.
- Grewal, D. S. 2008. *Network Power: The Social Dynamics of Globalization*. New Haven: Yale University Press.
- Haass, R. 2017. *A World in Disarray: American Foreign Policy and the Crisis of the Old Order*. New York: Penguin Books.
- Hafner-Burton, E. M., Kahler, M. and Montgomery, A. H. 2009. Network Analysis for International Relations. *International Organization* 63 no. 3: 459–90.
- Hafner-Burton, E.M. 2009. Globalization and the Social Power Politics of International Economic Networks. In *Networked Politics: Agency, Power and Governance*, ed. M. Kahler, 23-43. Ithaca, NY: Cornell University Press.
- Hamilton, D. 2010. Forging Networked Security in a Nobody-in-charge World. *The International Spectator* 45 no. 4: 5-11.
- Ikenberry, G.J. and Kupchan, C.A. 1990. Socialization and hegemonic power. *International Organization* 44 no. 3: 283-315.

Kahler, M. 2009. Network Politics: Agency, Power, and Governance. In *Networked Politics: Agency, Power and Governance*, ed. M. Kahler, 1-20. Ithaca, NY: Cornell University Press.

Kagan, R. 2018. Trump's America Does Not Care. *The Washington Post* (June).
https://wapo.st/2t9JhPd?tid=ss_mail&utm_term=.8f66eaf97613

Keck, M.E. and Sikkink, K. 1999. Transnational advocacy networks in international and regional politics. *International Social Science Journal* 51 no. 159: 89-101.

Keohane, R.O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.

Kinne, B.J. 2013. Network Dynamics and the Evolution of International Cooperation. *American Political Science Review* 107 no. 4: 766-85.

Krebs V. 1996. Visualizing Human Networks. Esther Dyson's Monthly Report. New York, NY: *EDventure Holdings Inc.*
<http://www.orgnet.com/Release1.0-0296.pdf>

Krugman, P. 2018. Fall of the American Empire. *The New York Times* (June).
<https://nyti.ms/2MBpTUn>

Lake, D. A. 2009. *Hierarchy in International Relations*. Ithaca, NY: Cornell University Press.

Lake, D. A., and Wong, W. H. 2009. The Politics of Networks: Interests, Power, and Human Rights Norms. In *Networked Politics: Agency, Power, and Governance*, ed. M. Kahler, 127-51. Ithaca, NY: Cornell University Press.

Lara-Valencia, F. 2011. The "thickening" of the U.S.-Mexico Border: Prospects for cross-border networking and cooperation. *Journals of Borderlands Studies* 26 no. 3: 251-64.

Luce, E. 2017. *The Retreat of Western Liberalism*. New York: Atlantic Monthly Press, 2017.

MacDonald, P.K. 2017. Embedded authority: a relational network approach to hierarchy in world politics. *Review of International Studies* 44: 128-150.

Maoz, Z. 2010. *Networks of Nations: The Evolution, Structure, and Impact of International Networks, 1816-2001*. Cambridge: Cambridge University Press.

Maoz, Z. 2012. How Network Analysis Can Inform the Study of International Relations. *Conflict Management and Peace Science* 29 no. 3: 247-56.

McGuire, R.H. 2013. Steel Walls and Picket Fences: Rematerializing the U.S.-Mexican Border in Ambos Nogales. *American Anthropologist* 115 no. 3: 466-80.

- National Intelligence Council. 2016. *Global Trends: Paradox of Progress*.
<https://www.dni.gov/index.php/global-trends/the-future-summarized>
- Niblett, R. 2017. Liberalism in Retreat: The Demise of a Dream. *Foreign Affairs* 96 no. 1: 17–24.
- Nye, Jr., J. S. 2017. Will the Liberal Order Survive? The History of an Idea. *Foreign Affairs* 96 no. 10: 10–16.
- Paris, R. 2018. The Right to Dominate: How Old Ideas about Sovereignty Pose New Challenges for World Order. Working Paper (June).
- Petrova, M. H. 2010. Banning Obsolete Weapons or Reshaping Perceptions of Military Utility: Discursive Dynamics in Weapons Prohibitions. *Institut Barcelona d'Estudis Internacionals* 31: 4-30.
- Prendergast, C. 2016. Cartels Recruiting Drug, People Smugglers in Bars, High Schools. *Arizona Daily Star* (October).
https://tucson.com/news/local/border/cartels-recruiting-drug-people-smugglers-in-bars-high-schools/article_ab15e460-c798-54ec-a4ab-0a3f052f75ef.html?
- Ramo, J. C. 2016. *The Seventh Sense: Power, Fortune, and Survival in the Age of Networks*. New York: Little, Brown and Company.
- Rose, G. 2017. What Was the Liberal Order? *Council on Foreign Relations*.
<https://www.foreignaffairs.com/anthologies/2017-02-23/what-was-liberal-order>
- Rothkopf, D. 2014. Obama's "Don't Do Stupid Shit" Foreign Policy. *Foreign Policy* (June)
<https://foreignpolicy.com/2014/06/04/obamas-dont-do-stupid-shit-foreign-policy/>
- Salter, M.B. 2011. Places Everyone: Performativity and Border Studies. *Political Geography* 30: 61–69.
- Scott, J. 1992. *Network Analysis: A Handbook*. Thousand Oaks, CA: SAGE Publishing.
- Selee, A. 2018. What if Mexico Stops Cooperating on Migration? Why the U.S. Needs to Engage Constructively. *Foreign Affairs* (July).
<https://www.foreignaffairs.com/articles/mexico/2018-07-03/what-if-mexico-stops-cooperating-migration>
- Slaughter, A.-M. 2009. America's Edge: Power in the Networked Century. *Foreign Affairs* 88 no. 1: 94-113.
- Slaughter, A.-M. 2017. *The Chessboard and the Web: Strategies of Connection in a Networked World*. New Haven: Yale University Press.
- Ward, M.D., Stovel, K. and Sacks, A. 2011. Network analysis and political science. *Annual Review of Political Science* 14: 245–26.

Wasserman, S. and Faust, K. 1994. *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.