DAMMING SUSTAINABILITY: HOW SOCIAL AND ENVIRONMENTAL NETWORKS INFLUENCE THE CONSTRUCTION AND MANAGEMENT OF LARGE DAMS IN THE AMAZON BASIN

A Dissertation Presented

by

V. MIRANDA CHASE

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ABSTRACT

DAMMING SUSTAINABILITY: HOW SOCIAL AND ENVIRONMENTAL NETWORKS INFLUENCE THE CONSTRUCTION AND MANAGEMENT OF LARGE DAMS IN THE AMAZON BASIN

May 2022

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Directed by Professor J. Samuel Barkin

Dams are powerful structures that engender a flood of controversies. These projects face great criticism from numerous groups, many of whom succeed in influencing such enterprises. This research is an in-depth study on dam-related social and environmental movements in the Amazon: how they are created and internally organized; how members share information and resources, how they identify alternatives; and how they design strategies and implement agendas. Social movements include, but are not limited to, domestic and international nongovernmental organizations (NGOs), academic researchers, journalists, religious organizations, grassroots associations, and large private foundations. They create formal or informal coalitions and design joint strategies aimed at protecting local

communities and ecosystems from the negative impacts of dams. To systematically understand these social interactions, it is important to realize that these groups operate as social networks. I ask "How do networks of social and environmental groups influence decision-makers regarding the construction and management of large dams in the Brazilian Amazon?"

To answer my research question, I study how various groups form networks, trace the process through which their strategies were formulated and implemented, and assess the influence these strategies have had on policymakers. I use process tracing and social network analysis (SNA) to investigate two social movements that successfully managed to influence high-level policymakers around the Belo Monte and the Sao Luiz do Tapajos dams in the Brazilian Amazon. I investigate the kinds of relations activists have with one another and the networks they form. I evaluate the characteristics that render each of these networks successful at influencing policymakers. In both cases, the SNA method revealed important insights into these social movements. One of the main findings of this research is that social movements are more effective at influencing policymakers when they manage to build networks that are dense, diverse, and diffuse. Finally, I also offer theoretical contributions into the relations between agency and structure as co-constitutive forces in social movements. Activists shape and are shaped by the networks they build, and this coconstitutive nature of social movements is crucial in analyzing why some movements can successfully influence policymakers.

DEDICATION

Dedicated to:

The Amazon, my Golden CB, and Pacotinho

ACKNOWLEDGEMENTS

I have read so many acknowledgements in books, dissertations, theses, and other publications, and they all start with some version of "this project was a collective enterprise that could not have been done without the help and support of so many people." Now, more than ever, I deeply understand that feeling. Here, I would like to express my sincere appreciation for and gratitude to those who have supported me, trusted the viability of this research, and invested their time and effort in guiding, consoling, and encouraging me whenever I needed it.

Professor J. Samuel Barkin, my advisor and mentor, found the balance between giving me the latitude and freedom I needed while keeping me on track and reminding me of the guard rails to help me get to the finish line. Sammy, it is crystal clear to me that I could not have had a better advisor. Thank you! Alongside Sammy, my committee was a coalition of powerhouses. Professor Margaret P. Karns was the exemplar of the steady and reliable supporter that any doctoral student could hope for. Peggy, thank you for all your precious advice and your careful comments on multiple drafts, and many thanks for being available to meet, chat, call, and have lunch over all these years. Professor Rosalyn Negron—the sole reason why I felt inspired and encouraged to ventured into social network analysis, which became the soul of this dissertation—thank you for showing me the way. Professor Philip M. Fearnside, the gravitas and legitimacy you bring is invaluable. For anyone familiar with social and environmental issues in the Amazon, you are a reliable reference and a lighthouse. Having you all on my committee was an honor and an incredibly enriching experience. I am humbled by your generosity and your efforts supporting me.

The beloved GGHS crew—what a wonderful group of inspiring and motivated people you are! The list is long, thanks to our community continuing to grow stronger and wider. I feel particularly fortunate for the opportunity to have built close friendship, camaraderie, and mutual support with Adriana Rincon Villegas, Linda Holcombe, Polly Cegielski, Krystal-Gayle O'Neill, Leena Maqsood, Safiya St. Clair, and Carlos A. Pérez-Espitia. The Mom's Group and our writing sessions in the evenings after the kids were in bed provided the inspiration, encouragement, and steady routine I needed to get the writing done. Many thanks to Chantal Krcmar, Beth Fascitelli, Nyingilanyeofori Hannah Brown, Shelley Brown, and Meg Hassey. Mammas, you rock! The GGHS professors who, although not in the committee, acted as mentors, supporters, and invaluable sources: Professors Jeff Pough, Stacy D. VanDeveer, Maria Ivanova, Eben Weitzman, Paul Kowert, Karen Ross, Anna Agathangelou, and Cynthia H. Enloe, thank you all!

My intellectual community of peers and scholars working on social and environmental issues in the Brazilian Amazon, you have reminded me of the issues that matter most, the reasons why they matter, and why they are worth our time and dedication. Your work has inspired me, guided my own research, and helped reveal many of my blind spots. Thank you for writing, for our precious conversations, and for being an insightful soundboard. I am indebted to Cristina Yumie Aoki Inoue, João Elbio Sequeira, Michele Betsill, Mauricio Torres, Luísa Pontes Molina, Roberto Goulart Menezes, Augusto Postigo, Raquel Rodrigues dos Santos, among many others.

There is one group of people whom I did not expect to be so influential during my doctoral program, but how wrong I was! As unexpected as it was, I found myself longing for the kinds of conversations I had with peers during the multiple Smith colloquia I have

attended over the years. Because of those readings and those conversations, I came to several of the insights and understandings that informed this dissertation. At the Mercatus Center, I found what I have always thought academia should be: a place of respectful contestation. Many thanks to Professors Peter J. Boettke, Bobbi Herzberg, Jayme Lemke, Paul Dragos Aligica, Rosolino A. Candela, Christopher Coyne, Richard Wagner, and Lawrence H. White, along with all the Smith fellows I had the pleasure to meet over the years, during the events carefully prepared through the exquisite professionalism and high standards of Peter Lipsey and Courtney Dunn. Our conversations have made me challenge many of my assumptions, understand the problems I was grappling with from a different perspective, and gave me a new set of intellectual tools that today help me conduct more rigorous and thorough research.

There is one group of people who did not sign up for the strenuous journey that is required of those supporting someone pursuing a doctoral dissertation but who have nonetheless provided the love, support, consolation, encouragement, and sense of purpose that we all need. My family has been the safe harbor and the inexhaustible source of patience and understanding during all the moments when I needed them most. For all the times when I wish I could have spent more time with you but had to go back to the field or sit for longer hours in front of my computer, for all the times when my mind and heart were roaring with concerns about this research and I could not be fully with you, for all the times when I was about to fall to pieces and you held me together, for those and many other moments, I thank you. My husband Tom, our Baby Dan, my parents Elaine and Benedito, my sister Jessica, my in-laws Bill and Lorraine, the entire Chase clan, the entire Cesario hub, and those of you who are family just as much, Biba, Brady, and many others who live in my heart—you make life purposeful and beautiful. Thank you.

There is one author who probably has never been featured in the acknowledgements section of an academic publication but who nonetheless deserves my sincere gratitude. Watty Piper, author of *The Little Engine That Could*, your book, written in 1957, became the mantra I sang to myself when the road was though:

"I am not very big. I have never been over the mountain. But I think I can. I think I can. I think I can." And the Little Blue Engine hitched herself to the train. She tugged and pulled and pulled and tugged and slowly, slowly, slowly they started off.

Puff, puff, chug, chug, went the Little Blue Engine. "I think I can—I think I can—I think I can."

Up, up, up. Faster and faster the little engine climbed, until at last they reached the top of the mountain. "Hurray, hurray," cried the little clown and all the dolls and toys. "The good little boys and girls in the city will be happy because you helped us!"

And the Little Blue Engine smiled and seemed to say as she puffed steadily down the mountain, "I thought I could. I thought I could. I thought I could."

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LIST OF ACRONYMS

Acronym	Portuguese	English
AGU	Advocacia-Geral da União	Office of the General Counsel for the Federal Government
ANA	Agência Nacional de Águas	The Brazilian Regulatory Water Agency
APIB	Articulação dos Povos Indígenas do Brasil	Brazilian Association of Indigenous Peoples
COIAB	Coordenação das Organizações Indígenas da Amazônia Brasileira	Coordination of Indigenous Organizations of the Brazilian Amazon
DPE	Defensoria Pública do Estado	Public Defender's Office at the state level
DPU	Defensoria Pública da União	Federal Public Defender's Office
FPIC		Free, Prior and Informed Consultation
FUNAI	Fundação Nacional do Índio	National Indian Foundation
IACHR		Inter-American Commission on Human Rights
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis	Brazilian Institute of the Environment and Renewable Natural Resources
MAB	Movimento dos Atingidos por Barragens	Movement of People Affected by Dams
MPE	Ministério Público do Estado	Public Prosecutor's Office at the State level
MPF	Ministério Público Federal	Public Prosecutor's Office
NGOs		Nongovernmental Organizations
OAS		Organization of American States
SLT	Usina São Luiz do Tapajós	São Luiz do Tapajós Dam
SMOs		Social Movement Organizations
STF	Supremo Tribunal Federal	Brazilian Supreme Court

FOREWARD

I wonder if anyone will ever carefully lay their eyes on this dissertation after I submit it. Probably not, but if someone ever decides to read it, here are a few things I would ask you to consider. First, what you have in front of you is the version of the dissertation that was possible to complete under several conditions; it is not the version that speaks to the full potential of this research project. I feel strongly that the insights and contributions presented here can, and will, be developed much further. I believe the 12-question theoretical framework and the use of social network analysis methods to study social movements offer a solid foundation for an ongoing research project that is serious about understanding how the process of people coming together in certain ways empowers them to influence policymakers. I am committed to continuing this research and presenting future versions that build on and refine these findings. Stay tuned!

For the unlikely reader who comes to this dissertation without much knowledge of how this project came to be, I would like to offer a brief overview of the context. I started the doctoral program in the fall of 2015 and was fortunate enough to conduct preliminary field research in the summer of 2016. During that trip, it became clear to me that most groups working on social and environmental issues in the Amazon were connected with one another. In the summer of 2017, I was back in the field and formally started collecting data about how they operated as a network. The fieldwork portion of the research took about a year, and in the fall of 2018, I was back in the United States. I had made a commitment to all my interviewees in the field that I would neither publish nor disclose any of the pieces of information they told me before going back to the field and presenting it to them firsthand.

My hope was to do that in the spring of 2020, but unfortunately the global pandemic prevented me from doing so. Thus, this dissertation contains no data disclosed during interviews and is based solely on secondary data. Despite not being able to return to the field before graduation as I had hoped, I am keeping my promise of not disclosing anything from the interviews before talking with those who have generously shared their experiences with me. I hope that future publications of this research project will contain the precious information that only primary data can offer—the lived experiences of those who are on the frontlines of fighting for social and environmental rights in the Brazilian Amazon.

As I come to the end of the formal part of this doctoral program, I am reminded of the reasons that impelled me to start this journey. I recognize that the environment sustains us all, and those who are guardians of precious natural resources deserve our respect. The force that pulls me to this work is the urgency and necessity of caring for all of what is precious in life. I am guided by the compass that shows us what is right. This journey draws me closer and closer to that goal, regardless of the recognition that "getting it perfect" will remain unattainable. Onwards, we continue forever hopeful and forever humble.

CHAPTER 1

INTRODUCTION

Dams are powerful structures that engender a flood of controversies. In the Amazon basin, more than four hundred dams are being planned, under construction, or in operation (International Rivers, Fundación Proteger, and ECOA n.d.). These projects face great criticism from numerous groups, many of whom have succeeded in halting or altering such enterprises (Hill 2014; Davies 2017). The lengthy process between local community disapproval and policymakers' decision to give up or modify dam proposals is not fully understood. This research is an in-depth study on dam-related social and environmental movements in the Amazon: how they are created and internally organized; how members share information and resources, how they negotiate conflicts, how they identify alternatives; and finally, how they design strategies and implement agendas. This thorough analysis is crucial to support local communities and ecosystems vulnerable to dams in the Amazon region.

Social and environmental movements may include (but are not limited to) domestic and international nongovernmental organizations, academic researchers, journalists, religious organizations, grassroots associations, and large private foundations. They are a mosaic of enterprises: some work to secure human rights for local communities, others provide basic health care; some raise funds to protect endangered species, and others create mechanisms to

mitigate climate change. When all these efforts are taken into consideration, it is possible to see the interplay between these groups, particularly when a large dam is being built. They create formal or informal coalitions and design joint strategies aimed at protecting local communities and ecosystems from the negative impacts of dams. To systematically understand these social interactions, it is important to realize that these groups operate as social networks. Networks are "forms of organization characterized by voluntary, reciprocal, and horizontal patterns of communication and exchange" (Keck and Sikkink 1998, 8).

My research question is: How do networks of social and environmental groups influence decision-makers regarding the construction and management of large dams in the Brazilian Amazon? To answer my research question, I study how various groups form networks, trace the process through which their strategies are formulated and implemented, and assess the influence these strategies have on policymakers. There are two core components of this question: the social movements themselves, and their influence on policymakers.

The first component is about the ways in which social and environmental groups operate to build alliances and coalitions. They might be able to block the entire dam project, or they can postpone, delay and interrupt it several times. They might also influence other decisions related to dams, such as their location, size, whether the dam will operate year-round or will the gates remain open during the wet season, how much and which kind of compensation will be offered to impacted communities, as well as who is impacted. There are numerous strategies these social movements can employ: protests, political pressure, legal action, naming and shaming, broad campaigns to draw public support, etc. These strategies might be employed sequentially or simultaneously, they might be coordinated

across various groups, or might rise spontaneously in different places. I study the ways in which these groups are connected and how their networks hinder or facilitate the implementation of multiple strategies.

The second component of this question is about how influential these groups can be during decision-making processes. Policymakers have many variables to consider when making decisions about a dam: How to fund it? How sensitive are the funding sources to social pressure? What kinds of support and/or challenges will the project face? What are the political consequences of taking risks? These factors are inherently political and must be negotiated at high policymaking levels. Decision-makers are constrained by certain institutions (laws, court orders, parliamentary due-process, etc.), and yet are also able to navigate a convoluted bureaucratic system in pursuit of their political agendas. This research analyzes whether and how the pressure created by social and environmental movements changes the ways in which decision-makers navigate the political system.

It is important to point out that social and environmental movements carry a normative component: if dams have harmful impacts on local communities and ecosystems, what should be done instead to promote development, produce electricity, and manage water resources? Thus, these groups take responsibility to propose alternatives. When they first start to mobilize and create coalitions, there is momentum to establish collaboration in pursuit of a common goal (protecting communities and ecosystems from the negative impacts of dams). They become platforms where ideas are discussed and negotiated. When there is sufficient level of agreement or buy-in among members, networks operate as a diffusion mechanism. However, these processes are tense, conflicted, turbulent, and can engender strong disagreements among actors on the same side of the movement. As the process goes

on, conflicts and disagreements start to form within these coalitions. Once tensions erupt, networks become fractured and competing agendas emerge among new coalitions.

Civil society movements have often been seen as actors who operate in a political system where states, markets and international organizations are the most powerful institutions and have the upper hand in determining the rules of the game. However, when these less-powerful groups manage to form networks, they produce and share information, and their ideas can change the way the political system works (Keck and Sikkink 1998). Having such consequential influences over a political system does not happen in all situations. Thus, it is important to compare different cases of social mobilization to understand when and how they form networks that successfully manage to influence the political system. I argue that successful social movements build networks that are dense, diverse, and diffuse. The ways in which such networks are organized, how the media portrays them, how they collaborate and establish partnerships, and how they resolve internal conflicts play an important role in the level of influence they manage to exercise on policymakers.

In summary, my focal research question can be broken up in two parts: how social and environmental groups create movements to protect local communities and ecosystems from the negative impacts of dams, and how such the networks of these movements influence policymakers. It is important to point out that networks can be structured in multiple ways: they can be centralized around key leaders or diffuse across multiple partners; they can have a small or large number of members supporting a shared goal; members can be densely or loosely connected; and members can be homogenous or diverse - all operating in the same sectors or coming from multiple backgrounds. My argument is that groups that are part of

dense, diffuse, and diverse (heterogeneous) networks are more successful in influencing policymakers. Those who build stronger ties with local communities, researchers in academia, religious groups, political parties, and with the mainstream media can leverage a greater impact and have more influence on policymakers' decisions.

Background about the Belo Monte Dam

Social and Historical Aspects

The controversies regarding dams in the Amazon basin are not new. Many large dams have been constructed in previous decades, such as the Balbina and Tucurui Dams (both built in the 1980's). These dams caused many negative impacts on traditional populations and local natural resources (Benchimol and Peres 2015; Chen et al. 2015). As Fearnside (1999, 483) concludes: "examination of Tucurui reveals a systematic overestimation of benefits and underestimation of impacts as presented by authorities". Unfortunately, the Belo Monte Dam, in the Xingu River, is no exception to this pattern. Technical feasibility studies around the Belo Monte Dam were begun in 1975 by the Eletronorte state energy company, and were concluded in 1980 (Barbosa 2015). The final report proposed flooding an area of 1200 km² for the reservoir (ISA n.d.). This would directly impact numerous indigenous tribes living in the area, so protests and resistance led to the first "Encontro dos Povos Indigenas do Xingu" (Meeting of the Indigenous Peoples of the Xingu), held in 1989 (Barbosa 2015). The pictures in Figure 1 below clearly show the results of the negotiations.





Figure 1. Indigenous woman named Tuíra, a leader of the Kayapó Nation, threatened a government's representative during the Meeting of the Indigenous Peoples of the Xingu (1989). Source: ISA (n.d.)

This is Tuíra, an indigenous leader of the Kayapó Nation. During that meeting, she used her machete to threaten the representative of Eletronorte, the public energy utility company (Barbosa 2015). These pictures travelled the world, and the resistance against the Belo Monte Dam voiced by indigenous peoples and environmentalists was clearly heard. The project went dormant for almost a decade. But the government came back in 2002 with a new feasibility plan, which presented a much smaller reservoir that would flood "only" 516 km². In order to better understand the technical components of this new plan, it is important to consider the geographical aspects of the Xingu River and of the Amazon basin in general lines.

Technical Aspects and Their Implications for Local Livelihoods

The lower part of the Xingu River follows a "curve" that is known as "Volta Grande do Xingu" (Big Bend of the Xingu) (see Figure 2). This curve is subject to the same natural water level variations as the rest of the basin. The regime of the waters in the Amazon is characterized by two main seasons: one is the dry period when the waters flow within the

river channels; and the second period is characterized by floods, when the water overflows through large extensions of the margins creating vast floodplains (Ribeiro 2007). The lives of all traditional peoples of the Amazon Forest are guided by these natural fluctuations, which have created distinctive features in the Amazonian cultures. Fishing, farming, religious festivals, and numerous cultural celebrations are organized in synchrony with the distinct phases of this environmental calendar. The Xingu River was one of the last major undammed tributaries of the Amazon River, and the indigenous tribes who have lived along its margins for many generations have incorporated this multi-faceted water circle into their culture. The Belo Monte Dam dramatically changed this water pattern.

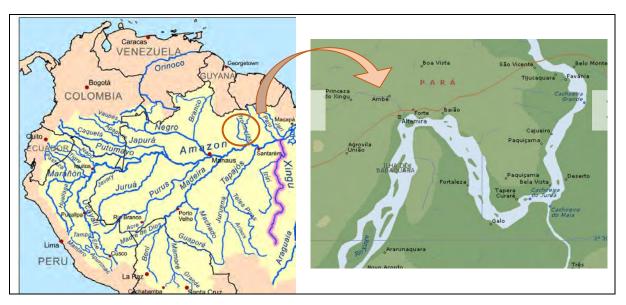


Figure 2. Amazon Basin (left), and Xingu River (right). Sources: Wikipedia (2015); (PlanetCatfish 2010)

Originally, the first plans for the Belo Monte project were to build the dam wall at the end of the Big Bend, which would cause the waters upstream to flood permanently and turn the Big Bend into one large reservoir. The revised plan proposed by the government in 2002

was to have the dam wall upstream of the Big Bend and to divert the water through an artificial channel, creating a reservoir in the inner part of the Bend (see Figure 3). This has caused the Bend to have a low water level year-round, eliminating the natural flooding seasons. Furthermore, the area upstream of the wall is permanently flooded. By diverting the water and creating an artificial reservoir, the new plan avoided flooding indigenous land. Unfortunately, this means that several indigenous and traditional populations and their livelihoods have been impacted by the changes.

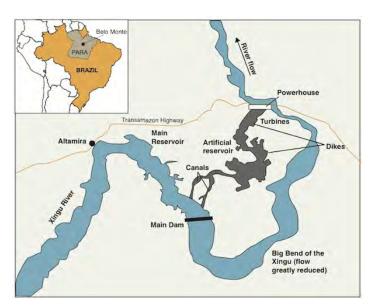


Figure 3. Design Plan for the Belo Monte Dam. Source: Snider (2013).

Social and Political Aspects

After a nation-wide energy shortage in the early 2000's, the government started to build alliances and approve all necessary legislation to implement the new dam. Indigenous communities and environmental activists worked hard to oppose the construction and delay the process as much as possible. Unfortunately, all the numerous legal battles and pressures

from the media were not able to deter the government. In 2008 the "Encontro Xingu Vivo para Sempre" (Forever Living Xingu Meeting) was organized by local NGOs who invited indigenous communities and government officials to discuss the dam. A representative of the energy company attended the meeting and started to talk about the many benefits the project would bring to local communities. He was interrupted by Tuíra, the same indigenous leader of the Kayapó Nation, who used her machete this time to inflict a cut on his arm, while hundreds of indigenous peoples were crying war chants (Barbosa 2015).

During 2009 and 2010 the social and environmental impact assessments were revised once again, and many court hearings were carried out (ISA n.d.). In 2011 the final approval was released, and the construction began shortly after. Protests have blocked the work site numerous times, but the project marched forward. The resistance movement used the Inter-American Commission on Human Rights of the Organization of American States (OAS) to file a case against the Brazilian government, but the government's response was dismissive and simply stated that strict guidelines were being following (Barbosa 2015). In 2012 marches and rallies took place in major cities of Brazil, and protestors blocked and invaded the dam site crying "Pare Belo Monte" (Stop Belo Monte), as shown on the picture below (see Figure 4).



Figure 4: Protestors invading the dam site in 2012. The formation reads "STOP BELO MONTE". Source: Snider (2013).

Unfortunately, the efforts by traditional peoples and environmental groups in the Amazon were not enough to bring the dam project to a halt. Once construction began, crews were working 24 hours per day, with 25,000 workers rotating day and night shifts (Folha de Sao Paulo 2013). Construction of the main dam was completed in 2016, and the dam is currently fully operational. Indigenous territories have not been flooded, but thousands of families were forcefully relocated, most of them without proper compensation.

Overview of This Dissertation

In this dissertation, I use two cases of social movements that have successfully influenced high-level policymakers to answer my research question. Before introducing the cases, I provide in Chapter 2 a review of the literature on social movements broadly speaking. The chapter offers an overview of the field of social movements, first discussing several definitions of social movements and their importance as a political phenomenon. I

mostly rely on the work by Sydney Tarrow (2011), who argues that social movements are confrontations sustained over time, peacefully or violently, between ordinary people and those in power. His theory of social movement contains four main components: social networks, collective action frames, repertoires of contention, and political opportunity structures. Chapter 2 presents each of them and compares Tarrow's ideas with other social movement theories, culminating with the theoretical framework that guides this research project. I consider the process of how social movements might influence high-level policymakers and develop an analytical framework to systematically compare movements. The analytical framework relies on the works of Tarrow (2011), Tilly (2004), Keck and Sikkink (1998), and Betsill and Corell (2008). It offers a 12-questions approach that considers how activists form networks, define their agendas, build coalitions, establish connections with others in power, all the way to negotiating final agreements with policymakers and putting pressure for them to adopt new behaviors.

Chapter 3 then uses this framework to analyze the first case in this dissertation, the Lagoa social movement. Here I use the method of process tracing and content analysis to understand how actors built coalitions to oppose the dam. The Belo Monte Dam has impacted numerous groups in different ways, and all of them have tried to push back, fight for compensation, negotiate changes and modifications in project to protect their own interests. As is always the case, some were more successful than others. What is surprising about the Lagoa movement is that this was deemed a fully lost cause by many and, nonetheless, managed to fully achieve its goals of influencing policymakers. The movement centers around some one thousand families who were living in inhumane and abject conditions due to the poorly implemented relocation program carried out by the dam

company. The government and the company spent years denying that there was a problem at all. The movement eventually convinced the government to shift positions, which happened in 2018 and since then the dam company was mandated to address the situation. Chapter 3 uses process tracing to closely evaluate how the impacted community and local activists built a social movement that successfully influenced high-level decision makers. The chapter uses the 12-questions analytical framework to evaluate this social movement.

Chapter 4 offers the second case of a social movement that started with the Belo Monte Dam and has effectively been influencing policymakers regarding other dams and "development projects" in Brazil. The case is still ongoing, although with very promising results thus far. Brazil is a signatory of the ILO Convention No. 169, which promotes the principle of Free, Prior, and Informed Consent (FPIC) to protect local communities impacted by large development projects. Unfortunately, the government has largely ignored its commitment to the treaty despite reiterated false statements that communities had been consulted. To bridge the discourse-practice gap in the government's behavior, local communities, activists, and many other organizations formed a social movement to promote consultation protocols. The movement has two main purposes: the first is to support local communities securing their rights to free, prior, and informed consultation processes by assisting the development of consultation protocols. The second purpose is to educate the larger public and particularly policymakers on what protocols are, why they matter, and how to follow them when consultation is needed. This chapter uses the methods of process tracing and content analysis to investigate how this movement came to be and what impacts it has had thus far. The chapter concludes with the 12-questions analytical framework to assess the successes of this movement thus far.

Chapter 5 provides a brief introduction to the method of social network analysis (SNA) and explains how it can usefully complement the toolbox of social movement scholars. SNA is a set of theories and methods to systematically study social interactions, and it is useful in investigating social movements and providing insights into their internal workings which can then explain under which conditions do movements successfully influence policymakers. The advantage of using a network approach is that it is possible to assess the degree to which organizations are connected. Another advantage is that network analysis reveals which nodes are most central, which nodes form the pathway that connects one hub to another, and which nodes are peripheral. At the network level, we ask questions like "do well-connected networks tend to diffuse ideas faster?" (Borgatti, Everett, and Johnson 2013). One of the questions I ask is: What are the characteristics of networks that have the power to influence policymakers? Are they centralized or decentralized? Are they dense or sparse? Are they large or small?

Chapter 6 uses the method of SNA to analyze the Lagoa and Protocol social movements discussed in chapters 3 and 4 respectively. The analysis of both movements is based on secondary data. For the Lagoa case, I have created a database with newspaper articles that talk about the Belo Monte dam, ranging from local news anchors reporting on community meetings and protests, all the way to international news outlets covering topics related to the dam. The database with news articles contains 868 articles from the period of January 2010 (when dam construction was confirmed) until May 2020 (when data collection ceased). They cover a wide range of issues related to the dam, and I use a sub-set of them that covered urban problems to analyze the Lagoa social movement.

For the Consultation Protocols case, I built another database that contains the protocols currently published in Brazil. The database has 49 consultation protocols and a total of 815 datapoints, where each datapoint is the name of an organization mentioned in a protocol. In chapter 6, I use the databases from each of these cases to shed new light into these movements. I evaluate the characteristics that render each of these networks successful at influencing policymakers. In both cases, SNA revealed important insights into these social movements that the analysis using process-tracing in chapters 3 and 4 had missed.

Chapter 7 concludes with the main findings of this research. Social movements are more effective at influencing policymakers when they manage to build networks that dense, diffuse, and diverse. I argue that having diverse partners makes social movements more effective because they have more actors with different skillsets that can come into play during the process of targeting and negotiating with policymakers. I argue that having high levels of density makes a social movement more effective because density is positively associated with higher levels of social monitoring, personal commitment, and mutual support. Lastly, I argue that social movements with a diffuse structure, meaning low degrees of centralization, are more effective because information and resources flow more easily in these settings when compared to networks that are centralized or have too many hubs. I also offer in the conclusion some theoretical insights into the relations between agency and structure as co-constitutive forces in social movements.

CHAPTER 2

THE SIGNIFICANCE OF SOCIAL MOVEMENTS

What Are Social Movements?

Social movements are part of the broader field of collective behavior studied by economists, political scientists, sociologists, and scholars from various fields. "Collective behavior is voluntary, often spontaneous activity that is engaged in by a large number of people and typically violates dominant-group norms and values" (Kendall 2016, 509). It is important to distinguish collective behavior from other situations in which people coordinate their actions. For example, organizational behavior is when people work together at a company or a union where they create an official division of labor, establish hierarchies, and follow the directions of the organization's leaders. Another example is institutional behavior, such as when people gather as part of a school, political party, or religious organization. In these situations, behavior is governed by the rules and procedures that determine how the institution is run. Collective behavior is different from organizational or institutional behavior because it is marked by voluntary and spontaneous activities, and it may take a variety of forms, including "crowds, mobs, riots, panics, fads, fashions, and public opinion" (Kendall 2016, 509).

Social movements are a particular kind of collective behavior, longer than short episodes such as panics and fads and more organized than mobs or crowds. One of the

central characteristics of a social movement is the fact that those joining it share a goal or a vision. "A social movement is an organized group that acts consciously to promote or resist change through collective action. Because social movements initially are not institutionalized and are outside the political mainstream, they offer 'outsiders' an opportunity to have their voices heard" (Kendall 2016, 519). Occasionally social movements become established and later institutionalized (e.g., turning into political parties), whereas others turn more violent and extremist (e.g., revolutions, civil wars, guerrillas). Social movements are not defined by methods or results (successes or failures), but by the spontaneous and voluntary coming together of people who share goals and visions.

Although not all social movements follow the same pattern, certain features are often observed in many of them. Kendall (2016) discusses three common stages of social movements. They are the preliminary, coalescence, and institutionalization stages:

In the preliminary (or incipiency) stage, widespread unrest is present as people begin to become aware of a problem. At this stage, leaders emerge to agitate others into taking action. In the coalescence stage, people begin to organize and to publicize the problem. At this stage, some movements become formally organized at local and regional levels. In the institutionalization (or bureaucratization) stage, an organizational structure develops, and a paid staff (rather than volunteers) begins to lead the group. When the movement reaches this stage, the initial zeal and idealism of members may diminish as administrators take over management of the organization (Kendall 2016, 521).

Western mainstream scholars agree that social movements emerged in Europe and North America in the late 18th century. However, this historical perspective is challenged by

scholars from other traditions such as Asian history, indigenous studies, and Global South perspectives. But even those who challenge the historical grounds of Western-centric approaches contend that Western mainstream scholars made important contributions to the study of social movements. Broadly speaking, authors such as Tarrow (2005), Tilly (1977), McAdam (1982, 1986), McCarthy and Zald (1977), and Snow (2004) among others have, in one way or another, established the field of social movement studies.

Charles Tilly (2004) argues in his book *Social Movements*, *1768-2004* that the historical roots of social movements are intrinsically connected with larger processes of democratization in Europe and the United States. He argues that social movements became a new political phenomenon beginning in the late eighteenth century and continuing over the last two centuries. They were a response to growing urbanization, people of diverse backgrounds coming together, and advances in the process of democratization (the concepts of citizens having rights, people being free to gather and express their opinions, and governments becoming bounded by the rule of law). According to Tilly, the relative freedom of expression, increased diversity of opinions, and greater protection offered by democratization created higher levels of political contention. Social movements are a form of contentious politics because the claims made by those engaging in social movements confront the status quo that is currently benefiting others. Social movements are also political because governments are a principal component of the claims being made (either as the object or target of claimants or their opponents) (Tilly 2004).

In his book *Power in Movement: Social Movements and Contentious Politics*, Sydney Tarrow (2011) builds on Tilly's definition of social movements as a form of contentious politics. He argues that social movements are confrontations (peaceful or violent) between

ordinary people and those in power. Elites controlling the government act to maintain their grip over the state apparatus, so it is incredibly difficult for ordinary people to confront authority. Contentious politics emerge when there are changes in the structure of political opportunities which create incentives for regular people to take action. Tarrow defines social movements as "sequences of contentious politics based on underlying social networks, on resonant collective action frames, and on the capacity to maintain sustained challenges against powerful opponents" (Tarrow 2011, 7). According to Tarrow, one central characteristic defining social movements is their endurance over time. Social movements should only be called such if they are sustained (i.e., short bursts of contention are not social movements).

Tilly argues that social movements have three main elements: The first are campaigns defined as "sustained, organized public effort[s] making collective claims on target authorities" (Tilly 2004, 3). The second is social movement repertoires, defined as "combinations from among the following forms of political action: creation of special-purpose associations and coalitions, public meetings, solemn processions, vigils, rallies, demonstrations, petition drives, statements to and in public media, and pamphleteering" (Tilly 2004, 3). The third element is "participants' concerted public representations of WUNC: worthiness, unity, numbers, and commitment on the part of themselves and/or their constituencies" (Tilly 2004, 4).

Even though the term WUNC comes across as oddly specific, Tilly argues that they are easy to identify because they are quite common. A movement displays its worthiness by encouraging participants to conduct themselves according to certain standards, such as dressing well, speaking correctly, sobriety, attending church or other important gatherings.

The basic idea is to refute labels that social movement members are bad actors. Worthiness can be displayed when movements showcase the support of famous people, dignitaries, or celebrities. A movement displays unity when members wear a common badge (t-shirts, headbands, wrist bands, etc.) and when they come together in a performance such as a street protest or march, chanting and singing together. The display of numbers can be as simple as a headcount in a demonstration, but it can come from the number of people who signed a petition, joined a boycott, or sent letters to government representatives. Lastly, members of a movement display commitment by enduring severe weather, standing up in the face of oppression, and even by performing public sacrifices such as hunger strikes.

Theories of Social Movements

Even though social movements are not a recent phenomenon, the academic field focused on social movements dates from the 1960's. This field is interdisciplinary, as scholars from sociology, psychology, political science, history, and other areas study social movements. Although they each look at this phenomenon from their own perspective and disciplinary lens, there are some commonalities in their scholarships. For one, they all focus on individuals and social organizations joining a cause because of a shared belief, cultural motivation, or political position. As noted by Della Porta and Diani (2014) all scholars in this field consider social movement actors as a distinct kind of actor. The second unique marker about this field is the activities that social movements make. Large protests are one of the most iconic activities. As scholars began to study protests and the participating actors, it became clear there are other forms of contention, resistance, and opposition the same actors also engage in (e.g., boycotts, institutionalized campaigns, and other more conventional forms of political engagement).

The third commonality among scholars in the field is the attention to recent technologies and how they change communication, engagement with one another, and deciding whether to join a movement. Social media technologies, combined with online campaigns, petitions and instant forms of communication have significantly altered the dynamics of social movements. The fourth thing scholars in the field noticed is that "collective action does not always imply the formulation of political demands (through confrontational as well as conventional repertoires). It may also take the form of the direct production of collective goods, through a broad range of actions that stretch from the communitarian enactment of alternative lifestyles to various forms of mutual help and service delivery" (Della Porta and Diani 2014, 66).

As the field began to develop, the academic community created different venues to channel these debates. One of the oldest and still ongoing publications is the annuals *Research in Social Movements, Conflicts and Change* (established in 1977). Other important journals include *Mobilization* (established in 1996), *Social Movement Studies* (established in 2002), and *Interface* (established in 2009). These for represent "the bulk of social movement research in both North America and Europe developed since the 1960s, [and focus largely on] four main sets of questions, concerning (a) the relationship between structural change and transformations in patterns of social conflict; (b) the role of cultural representations in enabling collective action; (c) the mechanisms that render it rational to mobilize on collective goals; and (d) the effects of the political and institutional context on social movements' development and evolution." (Della Porta and Diani 2014, 67).

Although social movements have political goals, their impacts can be much broader and reach aspects of a community's social and cultural life. In fact, Kendall (2016, 520)

contends that social movements are so difficult to classify that sociologists generally distinguish them "on the basis of the amount of change they seek to produce", as opposed to classifying them based on their strategies, stated goals, or forms of membership. This distinction based on the amount of change a movement produces, however imperfect, leads to a general classification of social movements in five types: 1) reform movement, 2) revolutionary movements, 3) religious movements, 4) alternative movements, and 5) resistance movements (Kendall 2016).

Reform movements have modest goals and target improving society while maintaining the basic social structure. Revolutionary movements, on the opposite side, try to overhaul the current system and seek to produce larger changes. Resistance movements are somewhat in between the previous two. They seek to either resist the latest changes and undo previous ones (and in this sense they seek greater changes than reformist movements), but they are still working within the larger socio-political system in place (so in this sense they are less radical than revolutionary movements). Religious movements and alternative movements are less focused on societal goals but seek to cause changes within individuals (religious and spiritual movements being radical, and alternative movements moderate focusing on things like getting people to stop drug use, reduce meat consumption, and live a healthy life).

When scholars devote themselves to understanding these various social movements, there are some questions many explore: why do social movements emerge? Why do some people choose to join a movement and others do not? Why do some movements succeed, and others fail? When we look at the different answers that scholars have offered to these questions, it becomes possible to classify their work under six groups of social movement

theories. This classification comes mostly from Kendall (2016), and it is largely accepted in the field of social movements. The six theoretical schools are: 1) relative deprivation theory, 2) value-added theory, 3) social constructionist theory – frame analysis, 4) new social movement theory, 5) resource mobilization theory, and 6) political opportunity theory.

Authors in the first theoretical approach argue "people who are satisfied with their present condition are less likely to seek social change. Social movements arise as a response to people's perception that they have been deprived of what they consider to be their fair share" (Kendall 2016, 521). Marxist scholars Polanyi (1975) and Runciman (1966) are part of this school of thought and argue movements fail or succeed depending on how much inequality there is and how much people are aware of it. Dianna Kendall argues "even though discontent and feelings of deprivation may be necessary to produce certain types of social movements, they are not sufficient to bring movements into existence" (Kendall 2016, 522). The second approach, value-added theory, is based on the work of structuralist scholar Smelser (1963). According to this theory there are six conditions necessary and sufficient for the emergence of social movements. They are as follows: 1) structural conduciveness, 2) structural strain, 3) spread of a generalized belief, 4) precipitating factors, 5) mobilization for action, and 6) social control factors (Kendall 2016).

The third approach (social-constructionist theory) assumes that "a social movement is an interactive, symbolically defined, and negotiated process that involves participants, opponents, and bystanders. [...] In other words, various 'realities' may be simultaneously occurring among participants engaged in the same set of activities" (Kendall 2016, 523). This school of thought is based on the work by symbolic and culturalist scholars Goffman (1974), Snow (2004), and Scott (1985), among others. They argue that movements use symbolic

production as a strategy, and posit that various participants interpret these symbols and social realities differently according to their cultural frameworks. McAdam, McCarthy, and Zald (1996) point out that theories of frame analysis have neglected issues related to how movements strategize their campaigns, the overall political context, and material concerns such as funding.

The fourth approach, new social movement theory, "looks at a diverse array of collective actions and the way those actions are based on politics, ideology, and culture. It also incorporates factors of identity, including race, class, gender, and sexuality, as sources of collective action and social movements" (Kendall 2016, 526). These theories draw from the works by Castells (1997), Smith (2001, 2008), and other scholars from world systems theory such as Wallerstein (1979), Arrighi and Drangel (1986) and Arrighi, Hopkins, and Wallerstein (2012). These new social movement theories suggest that

movements like feminism or environmentalism reflect the shifting focus of contemporary societies from the production of material goods to the production of knowledge, broadly conceived. [Furthermore, they posit that] new movements try to oppose the intrusion of the state and the market into social life, reclaiming individuals' right to determine their own life projects and identities, against the omnipresent and manipulative systemic apparatuses (Della Porta and Diani 2014, 67).

The fifth approach, resource mobilization theory, is one of the largest in the field of social movements. These theories focus on

the ability of members of a social movement to acquire resources and mobilize people in order to advance their cause. Resources include money, people's time and skills,

access to the media, and material goods, such as property and equipment. Assistance from outsiders is essential for social movements. For example, reform movements are more likely to succeed when they gain the support of political and economic elites. Resource mobilization theory is based on the assumption that participants in social movements are rational people. From this perspective, social movements are formed and dissolved, mobilized, and deactivated, based on rational decisions about the goals of the group, available resources, and the cost of mobilization and collective action" (Kendall 2016, 522).

Scholars within this rationalist approach can be roughly divided in two subgroups, one more grounded in sociology and economics including McCarthy and Zald (1977), and the other in sociology and political science including McAdam, Tarrow, and Tilly (2001). They are all responding in one way or another to the work by Mancur Olson (1971), who argued that collective action was irrational.

The sixth theoretical approach, political opportunity theory, argues that the origins of social protests cannot be explained solely by the fact that people possess a variety of grievances or that they have resources available for mobilization. Instead, social protests are related to the political opportunities that potential protesters and movement organizers believe exist within the political system at any given point in time. Political opportunity theory posits that social protests that take place outside of mainstream political institutions are deeply intertwined with more conventional political activities that take place inside these institutions (Kendall 2016, 525).

These ideas share important commonalities with resource mobilization theory but there are significant differences. Scholars in both approaches pay attention to the systemic political and institutional environments in which social movements operate. The difference between the two approaches is that resource mobilization theory focuses more on material flows, actors' agency and rational decision making, whereas political opportunity theory inquires more about access to information, resources, and institutions. Scholars from the rationalist approach critique the work of those in political opportunity theory arguing the structuralist approach presents an overly rigid framework that does not explain changes and one that focuses too much on institutions and not enough on actors.

Theories of political opportunity structure have been articulated by scholars such as Eisinger (1973), Meyer (2004), Meyer and Minkoff (2004). However, the most famous and widely read authors are Doug McAdam, Charles Tilly, and Sydney Tarrow. It is important to note that these divisions of authors into different schools of thought or theoretical approaches are simplistic, reductive, and limited. Most of the authors produced complex work that spanned multiple traditions. This division is an aid to (roughly) organize the vast field of social movement studies.

The Social Networks of Social Movements

In a discussion about the definition of social movements, it is pertinent to comment on what social movements are not. Tilly draws an important distinction between social movements (i.e., campaigns, repertoires, and WUNC displays) and the people and organizations that constitute them.

Analysts often confuse a movement's collective action with the organizations and networks that support the action, or even consider the organizations and networks to

constitute the movement, for example by identifying the environmental movement with the people, interpersonal networks, and advocacy organizations that favor environmental protection rather than the campaigns in which they engage (Tilly 2004, 6).

This is a crucial distinction. The study of social movements is not simply an analysis of who are its participants. Social movements are the result that emerges from their interactions. A movement is more than the sum of its parts. A movement is not simply the coming together of actors and their connections. A movement becomes a movement when these actors, through their networks and interactions, create campaigns, employ repertoires, and display their worthiness, unity, numbers, and commitment.

Social movements should not be reduced to the social networks of the actors that are part of the movement. The networks are the connections among actors. When these actors decide to activate these connections, they work together and generate outcomes that are larger and more consequential than what individual actors could have done on their own. In other words, actors create networks, and networks propel the emergence of social movements. A social movement is a political force created by the networks of multiple members who wage contention on target actors. Social movements are dynamic and rely on intense interactions among participants. To understand a social movement, we need to look at its members and their networks as well as investigate the political outcomes that result from those actors working together in sustained campaigns of contention. Thus, it is important to understand how different networks are structured to help us better understand how social movements operate.

Networks are autonomous and independent units that coordinate their actions, share resources and information, and work in overlapping collaborative enterprises. They are "characterized by voluntary, reciprocal, and horizontal patterns of communication and exchange" (Keck and Sikkink 1998, 8). Social movement actors create networks through formal and informal coalitions. They design joint strategies aligned to shared goals. For instance, some organizations work to secure human rights for local communities, others provide basic health care; some raise funds to protect endangered species, and others create mechanisms to mitigate climate change. When a large dam is built, the actors perceive a threat to their agendas. They join forces and create a mosaic of enterprises. To systematically understand these social interactions, it is important to realize that these groups operate as social networks.

Of all the authors reviewed in this literature, Sydney Tarrow (2011) is the one who offers the most thought-out theory of how social movements operate as networks. His theory has four main components. The first three are directly related to networks and will be discussed in this section. The last one is more related to how social movements influence policymakers and will be discussed in the following section.

The first component of Tarrow's theory is precisely that social movements are conducted through networks. He argues that people do not engage in social movements simply because they are part of a social group or class (e.g., peasants, workers, farmers) For one, most people are members of various groups, and no one can engage in social causes for each of their memberships. Most importantly, joining collective action is very costly from a personal perspective. Most people prefer to free ride and enjoy the benefits reaped by the work of others who carried out a movement. Tarrow (2011) argues that what pushes people

to join a movement are the social relations in which they are embedded. In other words, their identity as a member of that group, how they see themselves in the group, and how they engage with others in and outside of the group are all factors that propel people to act. To put it simply, it is the personal network of each actor that builds larger social movements.

The second key component of social movements are collective action frames. Tarrow (2001) defines them as social constructs shared among people in a society. Movements do not just emerge out of nowhere. Their message needs to be socially constructed and politically negotiated. People do not suddenly realize they are oppressed, or their rights are being violated, and then they join collective forces to oppose their oppressors. All these ideas need to be framed, constructed, and presented in a way that pushes people towards certain actions. The framing of a message is crucial - a bad framing can destroy the possibilities of a very legitimate movement to ever become successful, whereas a good framing can turn even a not-so-important social cause into a large and effective movement. "Framing relates to the generalization of a grievance and defines the 'us' and 'them' in a movement's structure of conflict and alliances [and it relies upon] collective identities" (Tarrow 2011, 31). It is important to note that collective action frames also depend on networks to spread. Communication networks are thus central. In their simplest form communication networks are the old fashion person to person word-of-mouth. But newspaper, radio, television, and social media are all networks that collect information from actors, (re)frame it, and distribute it to others.

The third vital component are repertoires of contention. Tarrow (2011) argues that social movements take place in a modular fashion, which means that they follow certain preestablished patterns known to be effective and which can be customized by whoever is

employing it. For example, boycotts are a modular form of contention - they are known and have been effective multiple times in the past, and when a group wants to employ this tool, they customize it to their situation. Repertoires of contention are strategies that people use in social movements because they believe these modules are effective in achieving their goal of pressuring their opponents. Common repertoires of contention include boycotts, protests, petitions, sit-ins, barricades, road closures, among an incredibly extensive list of others.

Networks are also especially important to understand repertoires because these strategies are passed on through social learning. There are cases in history that show how members of a revolutionary group travelled to other countries to bring in strategies that were successful, to continue the revolution elsewhere. Thus, we can look at social networks to understand why repertoires of contention are used in some movements but not in others.

It is important to note here that mass mobilization, which is often associated with social movements, is only one modular fashion of these repertoires of contention. Social movements are not defined and should not be reduced to mass mobilization. It bears repeating that, according to Tarrow, social movements are confrontations (peaceful or violent) between ordinary people and those in power. They are "sequences of contentious politics based on underlying social networks, on resonant collective action frames, and on the capacity to maintain sustained challenges against powerful opponents" (Tarrow 2011, 7). In this definition, one central characteristic defining social movements is their endurance over time. Social movements should only be called such if they are sustained (i.e., short bursts of contention are not social movements). Considering that mass mobilization is just one aspect of their repertoires of contention and considering that it is incredibly hard to sustain mass

mobilization for long periods of time, it is imperative to stress that social movements should not be equated with or reduced to mass mobilization.

This distinction matters, because Keck and Sikkink differentiate their object of analysis (networks) from Tarrow's object of analysis (social movements). I believe that distinction is much fuzzier than the authors suggest. Keck and Sikkink differentiate transnational advocacy networks (TANs) from social movements defined as sustained mass mobilization. Defined that way, waging social movements at the international level becomes in fact harder. According to them, TANs tackle issues which are unlikely to generate enough sustained mobilization to ever become a social movement *strictu sensu*. These issues are unlikely to generate sustained mass mobilization mostly because they are very diffuse. Once governments have agreed to protect the environment or respect human rights, the work of activists becomes constant monitoring and steady pressure on government agencies. This kind of work does not easily lend itself to sustained mass mobilizations, but rather it is much more feasible to carried out by advocacy organizations such as NGOs. According to Keck and Sikkink the kinds of campaigns organized by TANs are different in nature than social movement campaigns. They are campaigns that social movements (defined as sustained mass mobilizations) could not easily carry out.

There is very little analytical utility in this distinction between activist networks and social movements as mass mobilizations. Particularly nowadays, well into the second decade of the twenty first century, these concepts have a great degree of overlap. It is possible to conduct virtual mass mobilization internationally, and it is possible to create activist networks around virtually any issue (as long as the framing skills are there). Thus, for the purpose of this research, I will use the broad definition of social movements presented by

Tarrow, which is that they are confrontations between ordinary people and those in power. In this definition, there is no conditionality on the number of ordinary people required to wage a social movement (large mass mobilizations and small activist networks can both be analyzed as social movements as long as they are formed by ordinary people who carry sustained campaigns against those in power).

As explained the in beginning of this section, social movement and social networks are separate concepts. I look at the social networks of actors waging confrontations against those in power to better understand the social movements creates by such actors. The field of social movement has recently started to overlap with the field of Social Network Analysis (SNA). There are interesting and insightful studies that came out from the merging of these two areas. However, theoretical frameworks that connect these fields coherently are still scarce and fragmented. This research fills this gap and offers a suggestion about how we can use SNA to better understand social movements. Chapter 3 presents this framework. It is important to note, however, that using the method of SNA to understand how social movements operate does not explain how they exercise influence over policymakers. Process tracing is a more suitable method to understand how social movements influence policymakers. The next section elaborates more on this.

How Do Social Movements Influence Policymakers?

The literature reviewed above presents multiple ways to analyze social movements.

One important question that still needs to be considered is how social movements influence their main target- policymakers. There are important distinctions between a movement achieving its goals, a movement being successful, and a movement influencing policymakers. Even though there are overlaps in these categories (and a great deal of confusion in the

literature about it), it is important to distinguish them for a more thorough analysis. In this section I present a brief definition clarifying the distinctions between the three concepts. I then offer a discussion on how other authors conceptualize and assess a movement's success and influence over policymakers.

The most straightforward overlap is when a movement's goal is to convince policymakers to adopt a certain position and they succeed in doing it. In this case goal attainment, success and political influence are the same. However, there are numerous instances when this is not the case. For example, a movement might not achieve its goal of securing compensation for impacted communities, but they may be able to influence how policymakers respond to future events (e.g., policymakers might agree to compensate other communities in future projects.) In this case, there is political influence but no success in goal attainment. This was the case, for instance, with the consultation protocols discussed in chapter 5. The consultation protocols have never been used (until this point) as a guideline for an actual consultation process. But the sheer existence of consultation protocols, along with all the public, political, and legal repercussion they have caused, has called enough attention among policymakers that they are now being more careful in their conduct of projects and permits around communities that have developed protocols.

Goal attainment is also distinct from success. A movement may start by completely opposing a dam and once the project is approved and confirmed, the movement may shift into opposing certain features of the dam or demanding greater social and environmental protections. Asking whether the movement achieved its original goals does equate to a certain extent with how successful they were at influencing policymakers (i.e., they were not successful because the goal of blocking the dam was not achieved). However, looking simply

at the goals is clearly not enough. Activists may argue that even though they did not achieve their goals of blocking the dam, their movement was still successful in the sense that it exposed how little transparency and how much corruption there was in the government. In this case, there is success in creating a movement and calling attention to a problem although there is no political influence and no goal attainment.

Lastly, we need to consider cases when policymakers make small concessions (and movements achieve some goals) without changing how they conduct policymaking and public governance at large. These are, in truth, cases when social movements find themselves in a very weak position. On one hand they cannot afford the reputational cost of simply dissolving, so they remain united and persist on the long-term fight for their cause. But on the other hand, that fight never becomes strong enough to gain traction to bring about significant changes. In these cases, movement leaders learn that they can only achieve modest goals and their best chances of doing so are by "partnering" with others (i.e., which sometimes mean becoming coopted by them). They can achieve small goals by partnering with policymakers and give a veneer of legitimacy to the government in power. Alternatively, they can partner with other social movements by adding their weight to a larger process and later share on the achievements of this other cause.

These distinctions are important for us to analyze social movements and their outcomes because as discussed here influence over policymakers is quite distinct from success or goal attainment. Authors argue that one of the biggest long-term outcomes of social movements broadly speaking is the fact that they expand and strengthen a country's democracy regardless of whether they achieve their concrete goals or not. Kendall argues, for example, that "social movements make democracy more available to excluded groups [and

they] provide people who otherwise would not have the resources to enter the game of politics a chance to do so" (Kendall 2016, 519). Charles Tilly agrees and asserts that "the rise and fall of social movements mark the expansion and contraction of democratic opportunities" (Tilly 2004, 3). He posits that "social movements assert popular sovereignty. Although particular movements differ fiercely over who counts as "the people," the whole apparatus of campaign, repertoire, and WUNC displays embodies the more general claim that public affairs depend, and should depend, on the consent of the governed" (Tilly 2004, 13).

According to Charles Tilly (2004), social movements have influence when they manage to align appropriate strategies (repertoires) with their particular internal dynamics (worthiness, unity, numbers, and commitment) and organize around a central message that puts pressure on policymakers (campaign). According to Sidney Tarrow (2011), social movements have influence when actors form connections with other actors (social networks) that become meaningful enough to impel them to take action around a certain message (collective action frame), and once willing to act, actors look for strategies that were successful in other cases (repertoires). However, social networks, collective action frames, and repertoires are not the most important variables in Tarrow's theory of social movement. As mentioned in the section above, his theory has four main components, and the fourth is the one in which he places significant explanatory weight to explain a movement's ability to influence those in power.

The fourth important component of Tarrow's social movement theory is the structure of political opportunities and threats. Political opportunities are events that signal to ordinary people possible vulnerabilities or internal conflicts among elites, which create a context in which contenders are more likely to be successful. In these situations, people feel encouraged

to engage. On one end of the spectrum, political opportunities "lower the costs of collective action, reveal potential allies, show where elites and authorities are most vulnerable, and trigger social networks and collective identities into action around common themes" (Tarrow 2011, 33). On the opposite end, political threats increase the cost of collective action by raising fear of (or actual) repression, spreading false or conflicting information, co-opting leaders, offering political favors, fostering internal conflicts, and driving wedges to break partnerships. Political opportunity structure is an analytical device that encourages us to ask four main questions: How opened (or closed) is the current political system to the influence of outsiders? How stable is this system? How much access do social movement actors have to allies, particularly among the elites? How much conflict is there among elites? By analyzing these dynamic situations, we can understand how social movements emerge and why they fail or succeed. Tarrow argues that political opportunity structures that are more open to activist influence render social movements more successful.

In order to answer the question of how movements influence policymakers, it is helpful to turn to authors who have studied the question of "how to influence policymakers" even though many of them have not focused specifically on social movements. Keck and Sikkink (1998), for example, developed a typology of four main tactics commonly used by advocacy networks to influence policymakers. Their definition of advocacy networks bears strong resemblance to the definition of social movements by Tilly and Tarrow. The tactics are as follows: information politics, symbolic politics, leverage politics, and accountability politics.

According to Keck and Sikkink (1998), information politics is when activists gather data and produce reports that shed light into an issue calling governments and civil society to

act. Symbolic politics is commonly witnessed when notable events are used as platforms to launch a new campaign and expand the members of a network. Leverage politics can be subdivided into two categories: material and moral. Material leverage is the strategy of associating the issue at hand with monetary or financial outcomes (e.g., mitigating climate change is necessary because the costs of extreme weather events will be more expensive than mitigation measures). Moral leverage is based on commonly shared norms and beliefs that urge people and institutions to act accordingly (e.g., mitigating climate change is important because protecting the earth is the right thing to do). Finally, accountability politics is the strategy of getting policymakers to commit to something and later holding them to their statement to impel them to follow through.

The process through which activists influence the political system can be divided in five main stages: agenda setting, discursive position, institutional procedural, campaigns at target actors, and behavioral change (Keck and Sikkink 1998). Initially it is important to create awareness towards an emerging issue and put it on the agenda. Then activists try to persuade policymakers to formally adopt a position and publicly declare its new goals. The third stage is the process of adopting institutional procedures that promote new practices. The fourth is a campaign on a target actor. Finally, the fifth stage is identifying actors who have previously committed to a new policy but have not implemented it yet. "At that point the effort is not to make governments change their position but to hold them to their word" (Keck and Sikkink 1998, 26).

Another foundational study that analyzed how activists influence policymakers is the work by Betsill and Corell (2008). The authors looked at how environmental NGOs influence government representatives and diplomats particularly during the creation and negotiation of

international treaties. Their conceptualization of nongovernmental organizations encompasses "a broad spectrum of actors from advocacy groups rooted in civil society to privately held multinational corporations and trade associations to research-oriented bodies" (Betsill and Corell 2008, 4). The authors see these actors as distinct from social movements because they argue that the latter "mobilize their constituents through protest or disruptive action and are interested in opening up opportunities for mass participation" (Betsill and Corell 2008, 17). However, this definition of social movements is very restrictive and limiting. The focus of Betsill and Corell's work certainly does not equate to social movements, but it is possible to conceive that some if not most of the environmental NGOs involved in international negotiations are also part of larger social movements. This matters because the framework created by Betsill and Corell to understand how these NGOs influence government representatives is useful to understand how social movements broadly speaking influence policymakers.

Betsill and Corell present not only a well thought out framework to analyze NGO influence in international environmental treaties, but they also display a humble attitude towards the reach of their work. "We urge readers to exercise caution in generalizing our findings beyond these case studies" (Betsill and Corell 2008, 10). This is refreshing and greatly appreciated, because a common attitude in academia is for authors to introduce their work as universal and all-encompassing theories. I take this cautionary note from Betsill and Corell seriously. In this research I am indeed taking their findings beyond their original case studies and am applying their framework to understand a different phenomenon. I use their framework as a heuristic tool to conceptualize social movements influence on policymakers. Their framework is extremely useful for this exercise because it has two dimensions: one

focuses on non-governmental organizations and the other on the governmental actors they influence. I indicate in later chapters how I am using their framework, emphasizing the areas in which I have tried to be cautious about not overextending their framework beyond its analytical reach, as they suggest.

The first dimension of the Betsill and Corell framework focuses on the activities nongovernmental actors do, how much access they have, and how many resources they can gather and use. The second dimension focuses on the governmental actors and decisions that are the target of influence. This includes the extent to which activists managed to change the process of how governments operate, and the outcomes of final governmental decisions. The framework suggests five indicators for the second dimension which show the extent to which non-governmental actors manage to influence the policymaking process. The first indicator is issue framing, and it can be analyzed by tracing how activists presented a problem and by looking at weather policymakers shifted their original conceptualization and started using the frame presented by activists. The second indicator is agenda setting, which shows whether NGOs managed to get policymakers to formally discuss a certain issue. The third indicator investigates whether activists were able to influence the position of key actors. These first three indicators speak to the ability of NGOs to influence the process of a negotiation. The fourth indicator (procedural issues) and the fifth (substantive issues on final agreements) are indicators that measure the extent to which activists influence a negotiation's final outcome.

I apply the theorical contributions from Keck and Sikkink (1998), Betsill and Corell (2008), and Tarrow (2011) discussed here to create an analytical framework and assess how social movements influence policymakers in chapters 3 and 4. As other scholars have noted, frameworks are useful to guide our thinking and analysis – more so than leading us to certain

conclusions. Thus, the framework I suggest is a list of questions, and the answers to which can be assessed using a list of indicators.

Analytical Framework

- 1) Can social movement activists and organizations form coalitions? If the answer is no, then their chances of influencing policymakers virtually disappear. If the answer is yes, then we need to consider the internal dynamics of such coalitions. As discussed earlier, the ability to form networks is central in Tilly's and Tarrow's theories of social movements. To evaluate the networks of social movement coalitions, I use Tilly's WUNC displays (how the coalition shows its worthiness, unity, numbers, and commitment) and basic SNA metrics such as network size.
- 2) Can social movements design an effective collective action frame? If the answer is no, then their chances of influencing policymakers virtually disappear. As Tarrow (2011) pointed out, a very worthy cause able to mobilize great societal changes can be shredded apart by a poorly designed collective action frame. It is only by crafting a collection action frame that clearly defines the "us versus them" and impels people to act that social movements have a chance at influencing policymakers.
- 3) Once activists and social movement organizations have built momentum and started to mobilize, the next question is: *How much and which kinds of resources do social movements have?* This is an incredibly important consideration, and the question is part of the framework developed by Betsill and Corell (2008) and is also considered at length by Tilly (2004) and Tarrow (2011). Resources are not

- just monetary or financial, but also include things like having people who can offer professional skills and being able to use office space and equipment from a partner organization, among others.
- 4) The next question that follows is: What activities do social movements do? This is an important question analyzed by all authors which I am drawing upon to create this framework. Tilly (2004) and Tarrow (2011) use the language of repertoires and campaigns to describe these activities. These are actions carried out in the past by other movements and which have proved successful to cause disruption, gain the attention of those in the government, invite more people to join and grow the movement, etc. To evaluate different forms of campaigns carried out by movements, Keck and Sikkink (1998) identify four tactics information politics, symbolic politics, leverage politics, and accountability politics. When movements conduct a large number of activities, using a combination of tactics, efficiently pooling and sharing resources, relying on a well-crafted action frame, and presenting their WUNC displays, they begin to have increasingly higher chances of influencing policymakers.
- 5) Whether they do in fact start to influence policymakers becomes a factor of *how much access do social movements have to policymakers?* This is a question from the framework developed by Betsill and Corell (2008) which overlaps with Tarrow's concept of political opportunity structures. Tarrow (2011) offers four guiding questions to evaluate this point. How open is the current political system? How stable is the system? How much access do social movements have to allies and elites? How much conflict is there among elites? In this framework I am

developing, I use questions like these to probe the political structure targeted by social movements. If the political structure is closed off, repressive, united, and well-funded, it becomes immensely harder for social movements to successfully influence those in power regardless of their WUNC displays, the sharpness of their collective action frames, how much and which kinds of resources they have, or how they organize campaigns around effective tactics and strategies. I am not arguing that it would be impossible for social movements to have an influence when the political structure offers no opportunities and mostly threats. There is a vast and inspiring literature on non-violence civil resistance showing that overthrowing a system that once seemed impossible can be achieved through peaceful means. For a few examples, see Sharp (2010), Chenoweth and Stephan (2012), Nepstad (2015), Chabot and Vinthagen (2015), Bartkowski (2013), King (2010), Stephan and Chenoweth (2008), Schock (2004). However, even though it might be possible, it is that much harder to influence an oppressive and closed-off regime than it is to influence one that is more democratic and transparent. Thus, access is a fundamental variable to consider.

These first five questions of the proposed framework are concerned with identifying and analyzing internal processes and dynamics of social movements themselves. Even the question regarding how much access a movement has is in many cases a feature of the movement. In a political system that is minimally democratic and transparent, how much access social movement organizations have to policymakers is often the result of how much and how skillfully they try to engage with these actors, which is very much an internal characteristic of each

- movement. The following seven questions of the framework speak to changes in the policymaking process and outcomes.
- 6) Have policymakers changed their original framing around the issue? This is both a result of social movements having been successful at creating an effective collective action frame that pushes people to join the movement and pushes policymakers to respond, as well as a result of effective campaigns using tactics such as information politics and symbolic politics. In their framework, Betsill and Corell (2008) argue, and I agree, that using process-tracing is a very good method to answer this question. We need to gather information regarding how target actors used to talk about the issue and how much they even did, and then compare that to changes indicating whether they are paying more attention to the cause in question and/or are signaling a possible openness.
- discussed by Keck and Sikkink (1998) and Betsill and Corell (2008), agenda setting is simply vital in the process of political influence. It is only after social movement organizations win a seat at the table that they begin to promote meaningful changes. In the beginning, they may not be able to actually participate in discussions, and policymakers may have closed-door meetings to discuss internally and decide how they will respond to increasing pressure. That is already a sign that movements are closer to their goal. When activists and social movement organizations manage to include their priorities in the agenda and be present in meetings that discuss their causes, their chances of causing political influence increase significantly.

- 8) Have key actors changed their position, or at least announced an intention to do so? This question is also an important indicator in Keck and Sikkink (1998) and Betsill and Corell (2008) frameworks. This step is not only important because it indicates that another actor or organization is joining the movement, but mostly because policymakers who are early adopters of a new cause generally have a greater ability to influence peers, and because they put their reputation at stake. Thus, these policymakers that are early adopters have an added incentive to advise movement leaders regarding the best strategies, how to fine tune ongoing campaigns, and which other policymakers to target next.
- 9) Have policy institutions announced procedural changes that align with overall goals of social movements? As with the previous question, this one also comes from the works of Keck and Sikkink (1998) and Betsill and Corell (2008).

 Procedural changes indicate a high degree of influence by social movements on the policymaking process. They sometimes come as somewhat disappointing, because actors who have vested interests and are tightly connected with key policymakers may find ways to achieve the same outcomes even under new institutional procedurals. Nonetheless, changing institutional procedures is certainly a very important milestone and can certainly lead to meaningful victories for social movements.
- 10) Have social movements organized campaigns on target actors? The question of campaigns is analyzed by virtually all scholars working on social movements. But Keck and Sikkink (1998) specifically look at campaigns on target actors, which happen later in the process, after movements have already established their cause

in the agenda and are then putting pressure on recalcitrant actors to commit their support to a particular change. These campaigns are harder to design than earlier campaigns trying to call attention to an emerging movement and attract supporters. These later campaigns need to be designed to avoid having target actors becoming more entrenched in their positions.

- 11) Have social movements and policymakers achieved final agreement on substantive issues? This is clearly one of the very last steps in the process of influencing policymakers. In the analytical framework proposed by Betsill and Corell (2008) this is the last step in goal attainment. Exercising enough influence over policymakers to convince them to officially announce and sign final agreements is often the most celebrated highpoint of a social movement's story.
- 12) Have policymakers changed their behavior? Once policymakers reach a major agreement with social movement activists it might still take time and close monitoring to get them to adopt new behaviors. This very last step was proposed by Keck and Sikkink (1998). There is no more influence that social movements can exercise after policymakers have changed their behavior and adopted new practices aligned with social movement goals.

These twelve questions comprise the main analytical framework I use to investigate the influence of social movements over policymakers. It is imperative to note that this process is by no means linear. There are many forward leaps and setbacks in contentions interactions. These questions indicate a general outline of the process and are used to guide the analytical inquiry. They should not be seen as a check list or a score sheet. To answer these questions, I use a combination of methods, including social network analysis and

process tracing. Chapters 3 and 4 present two instances when social movements have successfully influenced policymakers. Both chapters use diverse sources of secondary data and employ process tracing to show how policymakers reached agreements and changed their behaviors due to skillful activism of social movements. Chapter 5 explains the method of social network analysis in more detail and how this analytical framework benefits from a network analysis. Chapter 6 then uses a network analysis to evaluate the social movements discussed in chapters 3 and 4, and it shows how that method enhances this analytical framework.

CHAPTER 3

THE LAGOA SOCIAL MOVEMENT OF THE BELO MONTE DAM

Introduction

This chapter uses the theoretical framework discussed in Chapter 2 to analyze social movements' influence on policymakers to evaluate one of the movements that emerged in response to the Belo Monte dam and managed to successfully convince policymakers at the federal level to change their position. It begins with a detailed description of the movement, its agenda, and strategies. In the second half of the chapter, I use the analytical framework to evaluate the movement. The data analyzed in this chapter rely solely on secondary sources. I have built a database with newspaper articles about the Belo Monte dam, and I use these articles to analyze the Lagoa social movement.

As discussed in Chapter 2, one key feature of social movements is their endurance over time. For this reason, newspaper articles became a reliable source of information to follow that process. Articles allow us to see the overall conditions under which a movement started to emerge, who were the actors originally involved with crafting the message and gearing support, how the movement developed over time, the backlashes it faced, and the final outcomes it has achieved. Although newspaper articles are never complete, unbiased, or fully objective, some journalists and news outlets do provide a reliable account and description of current events.

The database I have created combines news articles from multiple journalists and news sources. They are all available on the website *Amazônia Noticias e Informação* (https://amazonia.org.br/) This site is published and maintained by *Amigos da Terra-Amazônia Brasileira*, which is a highly regarded nonprofit organization working on social and environmental issues in the Amazon region. Their work supports the acknowledgement of local communities in the region, and it recognizes their fundamental role in the protection of the forest. *Amigos da Terra-Amazônia Brasileira* works in partnership with a wide host of collaborators who support public policies geared towards the protection of natural habitats, combating deforestation, and sustainable development in the region (Amigos da Terra nd).

The website *Amazônia Notícias e Informação* is an independent open access news source that publishes their own news articles and reprints articles published by other newspapers in Brazil and abroad (Amazônia Notícias e Informação nd). The website works as a central hub for all important news related to social and environmental issues in the Amazon. The original articles are authored by respected journalists, academics, scientists, and important public figures in environmental polítics. Their reprinted articles come from major newspapers in Brazil such as *Folha de Sao Paulo*, *Correio Brasiliense*, *Estadao*, *O Globo* and others, along with international news sources such as *UN News*, *BBC World News*, and *The New York Times*.

The database I have built comes solely from the *Amazônia Noticias e Informação* website, which collects this wide variety of news sources. The database includes all news article published about the Belo Monte dam, ranging from local news anchors reporting on community meetings and protests, to international news outlets covering topics related to the dam and federal politics in Brazil. The database contains 868 articles from the period of

January 2010 (when dam construction was confirmed) until May 2020 (when data collection ceased). The articles cover a wide range of issues related to the dam, such as impact on indigenous communities, impact on other traditional but non-indigenous communities, deforestation, fisheries, corruption, urban problems in Altamira, and the Lagoa neighborhood. For this chapter, I use a sub-section of the database which includes all news articles that covered urban problems and the Lagoa case in Altamira. I use this data to reconstruct the narrative about how the movement emerged, its major milestones, and final achievements. After each event discussed in the following sections, I cite the source of the news article where the information came from.

The Belo Monte Dam: The Ugly, the Stinky, and the Victory of Those Who Persisted

The Belo Monte dam is one of the largest hydroelectric powerplant in the world, and it was built in the heart of the Amazon region on the Xingu River. The project impacted nine indigenous nations, hundreds of traditional communities, and thousands of people in the urban area of Altamira and surrounding towns. The dam faced enormous resistance and pushbacks from local, national, and international groups, but nonetheless it was built. When the project was approved, the Brazilian government and the dam company promised that people impacted would be compensated. The dam company sent out technicians to conduct social surveys, accessing what kinds of property people had and what they should be compensated for. The company claims to have conducted the social survey with every family in the areas where they expected to relocate people- in other words, they claim to have surveyed everyone who was going to be impacted. This was later challenged multiple times because the survey was conducted carelessly. There were people living in these areas who

were not included in the survey and, consequently, had to fight for years before receiving any kind of compensation.

Those who owned houses in areas that would be flooded had the option to receive either a new house or an indemnity (a financial payment in the value of the property). There were several accusations that these properties were incorrectly assessed and those who chose the monetary compensation lost part of the value they used to own. However, these were the least complicated situations. In cases when people rented houses, owners were given the option to take a payment for the value of the house and renters were given a cash payment worth one year of rent. This created a problem because there were people with cash in hand looking for homes, many homes in risky areas that would be flooded, and not enough new houses built in safer areas.

To add to this problem, one needs to consider the massive number of people moving to the town. The population in Altamira went from just over 90,000 people before the construction of the dam to a whopping 150,000 in a matter of three years (Vieira 2013). People flocked to Altamira in search for jobs, mostly construction workers (unskilled laborers). In addition, there were a few hundred professionals (e.g., engineers, administrators, accountants, logistics managers, lawyers, etc.) also moving in, often with a contract with the dam company that included an allotted amount for housing expenses on top of their base salary. Those directly contracted by the dam company numbered more than 21,000 workers, and the other newcomers came in the hopes of benefiting indirectly from the local economic boom that was taking place (Vieira 2013). What happened next is explained by the simple market function of supply and demand: housing costs, and rent in particular, skyrocketed.

There are accounts of prices increasing more than three hundred percent (300%) in less than

12 months (Peduzzi 2012), and other reports of rents increasing by more than four hundred percent (400%) over two years (Vieira 2013).

During that brief period between 2010 and 2013 the situation in Altamira disintegrated quickly. Housing, food, and other living costs went up, traffic accidents increased along with the rates of robbery and other violent crimes, feminicide, drug trafficking, and all the known consequences of poorly planned large "development" projects. Between 2011 and 2014 homicide rates increased 80%, growing from 48 to 86 cases per 100,000 inhabitants. In 2015 it lowered to 57, which was still five times higher than what the World Health Organization considers "epidemic violence" (Brum 2015). In the same period, car accidents went from 456 per year to 1169, an increase of almost 150 percent. In one year alone, between 2013 and 2014, the number of patients who were victims of car accidents more than doubled (Brum 2015).

Both those who were there before and low-skill workers who came to town searching for jobs were unable to find or pay for housing, which increased the likelihood of becoming involved with this vicious cycle of urban problems. The supply shortage was a problem in all markets, not only food and housing. Unfortunately, there are numerous accounts indicating an increase in human trafficking and forced prostitution (Fachin 2017). Once brothels became established, even prostitutes felt the need to organize a street march petitioning the dam company not to pay its employees all on the same day because it was too hard to keep up with that demand (Castilho 2014).

Anecdotes aside, the situation in Altamira started to deteriorate and it only got worse over the next few years. Those who were there before and many of the low-skill workers who came to town searching for jobs were not able to find or pay for housing. One family after

another started building informal dwellings around a shallow pond in the southwestern region of Altamira. Soon after there were so many houses around the pond, that people started building new houses on stilts inside the pond. It became one of the largest informal settlements (slums) around the dam. This was the Lagoa neighborhood.

The sanitation conditions were precarious at best. Most houses managed to tap into illegal unregulated pipes of "clean" water- not treated water, but relatively clean. None of the houses had sewage connections and all human waste went directly into the pond. People were living on top of their own raw sewage and other kinds of trash disposed in the pond. Despite public pressure, the dam company put out multiple statements claiming they had properly compensated those who were directly impacted by the project, and that the situation in Lagoa had nothing to do with the dam.

Up until late 2015 the situation was bearable, but things got worse when the construction was almost over, and the company shut the dam's floodgates. The reservoir filled up, and with that the water table began to rise. The pond, which was fed by ground water, started to rise as well. Living on top of raw sewage is bad enough, but having that sludge all over the floor, under the bed, and in the kitchen defies the description of inhumane.

This chapter analyzes the social movement that emerged to fight for the rights of those living in the Lagoa neighborhood. For years both the government and the dam company denied the existence of a problem, refusing to talk or negotiate with residents, and releasing statements that the situation there was completely unrelated to the dam and the reservoir. The dam company did not recognize those living in the Lagoa as "impacted." They claimed those living there were either full outsiders (construction workers from other regions of the country) not entitled to receiving compensation because they were not directly

impacted by the dam, or people from Altamira who used to live in impacted areas and had already received some form of compensation.

The Lagoa case was deemed a lost cause. Nonetheless, those living in and around the pond started to mobilize. They created their own community association, partnered with grassroots organizations, convinced several media outlets to give them visibility, recruited geologists and soil scientists to function as expert witnesses for their cause, and secured support from two incredibly important governmental agencies, the Public Prosecutor's Office (MPF) and the Federal Public Defender's Office (PDU). Building a network of allied forces is no easy task, but local leaders were committed. It was clear that directly convincing the dam company to act was a waste of time and a fool's errand. The strategy of the network was to get the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), the regulatory agency with authority to issue the permits for the dam project, to force the company to relocate all the families and give them new homes.

For years IBAMA ignored the Lagoa case. But in 2018 the agency changed its position. Somehow the coalition managed to convince policymakers at IBAMA to recognize those families as impacted and further demand compensation. How did this happen? This chapter analyzes the process of families in Lagoa creating a social movement and building a network of supporters that managed to influence high-level policymakers to change their position. This paper argues that their success in influencing policymakers was a result of their ability to build a network effectively. In chapter 6, I provide a formal SNA analysis of this movement and indicate the characteristics of the network that were particularly important at successfully convincing policymakers to change their position.

There were other communities in Altamira severely impacted by the dam, but none of them managed to convince policymakers that IBAMA should require the dam company to pay them any further compensation. But somehow families in Lagoa succeeded in this feat. In this dissertation I do not analyze the cases of communities that failed at influencing IBAMA. Unfortunately, trying and failing to influence policymakers is a common phenomenon. What becomes an interesting process to study is precisely why some movements manage to succeed. The Lagoa is one of these cases. Here I explain how the social movement in Lagoa created a network of allied organizations and provide a detailed timeline explaining the violations that were taking place, how those who were impacted started to mobilize, and how much pushback they faced.

The Social Chaos between 2011 and 2014

In 2010 the federal government held an auction to select a company that would build the Belo Monte dam. The winner was a consortium of private and public companies (construction companies and investors). In 2011 IBAMA, the environmental agency responsible for overseeing the project, issued a permit allowing the company to begin the project. There were several conditions listed on the permit that had to be met for Norte Energia to secure the next permit. As time would tell, Norte Energia managed to secure the next permit in 2015 without complying with the conditions listed.

During the years of 2012 and 2013 Altamira went into social convulsion. Several articles in the database indicate this, including one by MPF (2013b). Particularly on the issue of housing and compensation, the complaints from residents were plentiful. Those impacted questioned everything from the methods used to calculate the amount of their compensation to the kind of construction and material in the new houses that were being built. There are

countless cases of people reporting feeling vulnerable and subject to arbitrary decisions by those working for the dam company. One of the significant issues was that Norte Energia promised that the new homes would be built out of bricks and mortar, but later residents found out that houses were built with cement walls.

This is a problem because those houses are hotter, and the cement walls cannot support hooks for hanging hammocks. Most people in the Amazon sleep in hammocks and were forced to change their customs, which is a violation of their cultural rights. If the reader does not consider this to be a significant issue, it is worth imagining how it would feel if the reader were no longer allowed to sleep on a bed. The problem would be slightly more tolerable if the houses were built according to safety codes. But people began reporting the walls and electrical systems were not meeting basic guidelines. Instead of addressing the issue, the town hall in Altamira proposed, and the local city council approved, changing the safety guidelines so that the new homes would then be in compliance (MPF 2013b).

In 2014 when the new homes were ready, Norte Energy began the process of evicting families from their original homes and moving them into the new neighborhoods. The housing problem escalated quickly. One of the most common issues was that in original homes there was a nuclear family and several other relatives, friends, and acquaintances living together. The houses were small and subdivided in micro rooms, but there was a tenuous balance that kept relations under control. When it became time to move into the new homes, tensions emerged. In most cases, only the nuclear family was registered and accounted for in Norte Energia's system. The homes built with cement walls did not allow for easy subdivisions of rooms and other spaces in the house, so many nuclear families moved into the new house living their previous housemates behind. Unfortunately, those left

behind were not allowed to remain in the old homes because Norte Energia adopted the practice of demolishing the houses after evicting families. Many of those housemates started moving into Lagoa.

Demolishing the houses after evicting families was not only a problem for those left behind. In the areas that were going to be flooded (where these original homes were located) the houses were built out of wood, and it was common to use a shared pillar to support neighboring houses. Once Norte Energia demolished several houses, families who were still waiting to be transferred to new neighborhoods began reporting that their houses were shaky and unstable (MXVPS 2014). Some families were still waiting to hear from Norte Energia regarding when they were going to be relocated, but the status of their cases was uncertain. The dam company was trying to stall and delayed the process of analyzing applications of hundreds of families. The truth later came out that Norte Energia did not build enough houses in new neighborhoods, and the company started forcing people to sign documents agreeing to accept monetary compensation for their old homes (Madeiro 2014).

The situation was chaotic and uncertain. Families did not know how long they could stay in their old homes, when the area was going to be flooded, if they were going to receive a new home in one of the new resettlement neighborhoods, or if they were going to be pressured by the company to sign an indemnity contract and take a payment. Amidst all of this, in June of 2014 the state government in Pará decided to close the Public Defender's Office at the State level in Altamira, known as Defensoria Pública do Estado (DPE) (MPF-PA 2014). It is bewildering and unjustifiable that government authorities would cease offering services in such a situation. The mandate of DPU and DPE is precisely that of providing free legal assistance to those in need as a way of fulfilling the democratic regime

and protecting the constitutional rights of individuals and collectives (DPU 2020). Closing the local office exacerbated the problems even further. This was, unfortunately, only one of many strategies deployed by those in power to disrupt social mobilizations.

The Emergence of a Movement and Repression against Mobilizations

Protests and demonstrations were happening in Altamira before the dam was announced, but the scale and frequency reached the first peak between mid-2013 and mid-2014. The database shows this clearly, both in the number of news articles published around this time and in the content of the articles describing street marches, blockades, protestors invading the dam site and government office buildings. The dam company and the government used multiple strategies to suppress opponents. Local and state governments criminalized social movements, finding minuscule infractions that allowed them to shut down nonprofits and/or bring lawsuits against leaders (MXVPS 2013). The Brazilian Intelligence Agency (ABIN) sent spies to attend rallies and meetings and to collect as much information as possible (MXVPS 2013). The intelligence agency declared that these activities were justified under the "National Program to Protect Knowledge," which is meant to obtain information that is considered sensitive to the Brazilian State (MXVPS 2013).

Other strategies deployed by the government included co-opting leaders by offering them well-paid positions in government agencies (Castilho 2014). Politicians also "drove wedges" (exploited issues to divide members of the movement) and tried to ignite internal conflicts amongst different social movement groups. This strategy was most visible along party lines. At the time President Dilma was in power her party (the Workers Party or PT) sent a message to those affiliated with the party in Altamira. Some groups received funds for projects that were unrelated to the dam and had been dormant for years. They had to make

the hard choice between accepting funds for legitimate projects and agreeing to stop resistance against the dam, or go without funding and face further challenges in their opposition efforts (Castilho 2014). Some groups understood they would not be able to completely stop the dam and decided to start negotiating and compromising. Others continued mobilizing in full opposition to the project (Castilho 2014), continuing and widening the divide among the movement.

Activists fighting against the dam did not only face governmental repression. Norte Energia, the dam company, had multiple strategies to defend itself against protesters. The dam's construction site was frequently invaded, sometimes by groups that wanted to ask for their rights and were willing to negotiate, and at other times by activists who intended to stop or delay construction activities. Norte Energia used the legal system and convinced a state judge to issue a prohibitory interdiction to suppress mobilizations. This is a preemptive legal instrument used to protect property before it gets invaded. After the interdiction was issued, leaders from certain grassroots groups could be fined up to 50,000 BRL a day if they came close to the dam's construction site (Castilho 2014). When Norte Energia felt cornered by multiple social groups at once, they usually agreed to negotiate with leaders but did so individually. This allowed the company to offer bribes and reach compromises on a case-by-case basis, all in an effort to allow the dam project to move forward (Castilho 2014).

A Turning Point: The Public Hearing of November 2014

After the DPE office shut down in early 2014, Norte Energia was emboldened to coerce local residents into accepting whatever amount and kind of compensation the company was willing to offer. Grassroots groups that had been mobilizing and trying to pressure the dam company were experiencing fewer successes and began to lose leverage.

There was not much else they could do aside from promoting more street protests or organizing more plans to invade the construction site. News articles from that period indicate smaller mobilizations (fewer people in any given protest) and sparser events over time.

Nonetheless, it is important to note that these strategies are very costly on multiple fronts - financially, emotionally, politically, and socially. It was then when local leaders managed to negotiate an important alliance with MPF.

Dr. Thais Santi was the chief public prosecutor in Altamira at the time. In an interview with Elaine Brum from El Pais (Brum 2014), Dr. Santi recounted a day in 2014 when an elderly lady came to her office. The woman was poorly articulated and could barely explain exactly what her problem was, but she was begging for support. Dr. Santi decided to go with the woman to the place where she was having challenges. It was the office of Diagonal, a subcontractor hired by Norte Energia to deal with relocating families. The social workers at Diagonal explained to the elderly woman that she could not have a house and instead was being offered an indemnity payment. The woman wanted a house and refused to accept the financial compensation. The social worker then asks Diagonal's lawyer to enter the room and he then proceeded to explain to the woman using technical jargon why she was not entitled to receive a home. The elderly lady could not understand the technicalities of the explanation and was unable to speak articulately in her own defense, but she was adamant about receiving a home and refused to sign anything. The lawyer then forwarded her case to Norte Energia. The dam company had twenty-six lawyers in Altamira alone, all of them working as if they were an official appeals court that decides contentious cases from Diagonal, their own subcontractor. The lawyers at Norte Energia "explained" again to the elderly lady that this was their final decision and that she had a given number of days to

either accept the indemnity payment or present a claim that would then be evaluated by a judge. The lawyers forewarned her that, when in court, they would request to be vested in possession of her house (Brum 2014).

Dr. Thais Santi recounted this story several times as being the moment when she realized that the problems were not Diagonal's or Norte Energia's draconian strategies - the problem was the elderly woman not having any legal support or representation. This was the moment when her office, MPF, began to work closely together with several grassroots groups fighting for the rights of those being forcefully relocated. They planned and organized a public hearing for November 2014. Local groups started to mobilize and compile as many cases as possible, showing the tragedies and injustices that were being perpetrated against poor and indefensible civilians. Dr. Thais Santi managed to bring to Altamira federal representatives of all public agencies involved with Belo Monte, particularly DPU. Dr. Santi later called this public hearing "the hearing of horror shows." Here are some of the stories presented at this hearing, all of them from the database of news articles.

In another case, Maria Marlete de Freitas, 27 years old, mother of two, spoke at the public hearing and explained that she had provided all the documents the dam company had requested, filled out her application indicating she wanted a new home, and was told she would get one. Later the company offered her 27,000 BRL in indemnity payment and said that, if she did not sign, she would lose everything. She started shopping for houses and found nothing. She believed she would need more than double that amount to afford a new home similar to her previous one (Madeiro 2014). Elissandra de Oliveira, a young woman, was promised a new home and agreed to record a TV commercial for Norte Energia. In the short video, she talks about how her old home was in bad condition and how happy she was

that the Belo Monte dam was being installed in Altamira and she would benefit from it by receiving a new home. In the end of the video, she appeared opening the door of the new home with no furniture yet, spinning around with open arms showing how elated she was. Elissandra never received that new house. A few months later after recording the commercial, she was coerced into signing an indemnity contract (MAB 2014).

The public hearing presented cases like these, one after another. The most emblematic one was Maria dos Santos, 80 years old, who was coerced into signing a blank contract. She signed it by printing her thumb with ink on a piece of paper because she is illiterate (Madeiro 2014). With one testimony after another, those authorities who were there to listen become convinced that the problem was systemic and widespread. Immediately after the hearing they announced the creation of an inter-institutional reconciliation chamber to mediate cases when the dam company and residents did not agree on the value or kind of compensation. The chamber would have representatives from the dam company, DPU, and several grassroots organizations (MPF-PA 2014). This was certainly an important victory. However, the most significant win after the public hearing was a public commitment by DPU to install an office in Altamira. This was a turning point, which later changed the pace and the dynamics of social movements.

The Roller Coaster between 2015 and 2018

During the first few months of 2015 there were six public defenders and four staff members in the DPU's office working in Altamira on an itinerant basis (they usually arrived on Monday evening or Tuesday morning and left on Fridays). They were the only recourse for the thousands of families who needed legal assistance and could not afford to pay for an attorney (Leite 2015). In the beginning of 2011, after Belo Monte had just been announced,

the local DPE office in Altamira used to have thirteen defenders working full time to support local communities. At the time the town was smaller, the volume of cases was lower, and staff members were already operating at full capacity (Leite 2015). The conditions faced by the six defenders and four staff members of DPU in early 2015 were strenuous. The original plan was to stay in Altamira between January and April of 2015, and they expected that by then most cases would have been addressed. But by late March only 120 cases had been resolved, many were pending in court, and hundreds were still waiting to be analyzed (Craide 2015). It was clear that they had to stay for longer, but their presence there was uncertain.

The inter-institutional reconciliation chamber created by MPF in the public hearing of November 2014 began to operate in early 2015 supported by those working at DPU. The new institution was successful at promoting a dialogue among multiple stakeholders such as Norte Energia, IBAMA (the environmental agency responsible for regulating and overseeing the dam project), grassroots groups, civil society organizations and local communities impacted by the project. The offices of MPF and DPU were both ready to litigate and bring as many cases as needed to the judicial system. But the chamber managed to obtain a formal pledge by Norte Energia and IBAMA, agreeing that all negotiations that reached agreement would be final. This allowed for this newly created institution to operate as a conciliatory court, decreasing the number of cases that was actually ruled on by a judge (MPF 2015).

Meanwhile, the year 2015 saw increasing tensions in Altamira on many fronts. The dam construction was moving ahead, but the town grew increasingly anxious about the next major milestone that loomed on the horizon. This was because the granting of permits by IBAMA had been a convoluted process since the start. In February 2010 IBAMA emitted a preliminary permit authorizing the company to start pre-construction operations. The permit

included a list of forty conditionalities, which must be met for the company to qualify for the next permit (IBAMA 2010). For multiple reasons or, to put it briefly, because of political pressure, the president of IBAMA signed the next permit in June of 2011, even though virtually none of the conditionalities had been fully met. This second permit, known as Installation License, allowed the company to begin construction and authorized all major steps required to implement the project (clearing the area, building the dam, diverting the river, building dikes, opening new roads, building dorms for workers, etc.) This second permit included a list of twenty-three conditionalities, many of them either identical or paraphrased versions of the list in the previous permit (IBAMA 2011). The last and third license would allow the company to fill the reservoir and the dam to start generating electricity. In mid-2015 the dam company announced they expected to receive this last permit later that year (ISA 2015).

Yet again, most conditionalities attached to the second permit were neglected by the dam company. They included, among other items: environmental management plans, mitigation and adaptation projects for indigenous and traditional communities, management systems to monitor water quality, construction and installation of education and health facilities in Altamira and surrounding towns (IBAMA 2015). Of particular importance for this research project was the design, construction, and full implementation of a sewage system to improve basic health and sanitation conditions in Altamira. In mid-2015, this conditionality was not even close to being met. The dam company did build a wastewater treatment plant and a sewage collection system, but it did not connect it to any of the houses because they argued this was the responsibility of the municipal government. Thus, human

waste from everyone in town was still disposed of in pit latrines, directly into the river, and, in a few cases, in septic systems (ISA 2015).

The other conditionality explicitly stated in the Installation License was to conclude the registration process of all impacted people (known as Cadastro Socioambiental – the "Socio-environmental Registry"), which included a list of families entitled to receiving new homes or a financial compensation for their previous properties. As mentioned earlier, this process was disorganized, incomplete, and careless as described in detail in numerous articles in the database. Many people complained about not being included on the Registry, and those who were included complained about not being allowed to choose a new home and being coerced into accepting a small financial compensation (Richard 2015). According to the Installation License, the company was required to register everyone, build new homes, and remove all families from areas that were going to be flooded before they could apply for the next permit (IBAMA 2011). As Norte Energia rushed through the process, thousands of people were excluded from the list, and families were forcibly evicted from their homes in the imminence of the reservoir being filled.

In June 2015, around 24,000 people who used to work at the construction site received a notification that their employment contract was about to end (Borges 2015). The dam was already built and filling the reservoir would not require as many workers. Aside from those directly hired by the dam company, there were more than 15,000 other indirect jobs that were also about to be closed (Borges 2015). Some of these people planned to leave Altamira, but many hoped to stay. This problem was compounded by some 1800 families that were still trying to be included in the Socio-environmental Registry, despite Norte Energia releasing frequent and strong statements that the registration process had been

completed and all families who were entitled had already been included (Borges 2015). The registry also included some 3000 families who were denied the option to receive a new home and could only accept a small financial compensation for their previous homes (Richard 2015). The risk of mass eviction was imminent because people would start losing income and missing rent payments, and because the dam company was in a hurry to remove people from areas that were to be flooded. The problem was that there was not enough housing to accommodate them. More families moved into the Lagoa area.

Pressuring IBAMA to hold off on granting the last permit seemed like the only hope to hold Norte Energia accountable for all the unfulfilled commitments and unmet conditionalities. Articles from the database indicate that social movements in that period (mid to late 2015) organized large protests, published numerous reports, granted hundreds of interviews to national and international newspapers and TV programs, wrote petitions, and did everything they could to pressure the company and IBAMA. They failed. On November 24, 2015, the president of IBAMA signed the last permit that granted Norte Energia the power to fill the reservoir and begin operating the Belo Monte dam (IBAMA 2015). For the social and environmental movements this was not only a major setback, but the final seal on a major catastrophe.

As mentioned earlier, soon after the reservoir started to fill up in early 2016, those living in Lagoa, and surroundings noticed water seeping through the ground. Numerous articles in the database recount the conundrum that followed. According to Norte Energia, the houses at Lagoa were higher than what was known as "Cota 100," which was the calculated mark that the waters would reach once the reservoir was filled. Everything below this mark was considered "impacted area," and everything above it was considered "not

impacted." The Lagoa neighborhood was at 102 meters above sea level, thus two meters above the threshold. Norte Energia insisted repeatedly that none of the issues in that neighborhood were related to the reservoir.

Pressuring those who were supposed to do things was not working, so grassroots groups started to demand independent verification to measure the impacts at Lagoa. Together with a grassroots group called Movement of People Affected by Dams (Movimento dos Atingidos por Barragens, MAB), those living in Lagoa pressured the Brazilian Regulatory Water Agency (Agência Nacional de Águas, ANA) and asked for independent monitoring. The agency confirmed previous measurements - Lagoa was above the threshold and was not considered impacted (Barros and Barcelos 2017). Residents and MAB activists understood that the area was higher than the level of the reservoir, but they were not convinced that what they were experiencing was not an "impact" due to the reservoir. They demanded ANA and Norte Energia to install staff gauges, which are large rulers used to measure water levels. These were installed all over the community, fixed to poles where everyone could easily see them. For more than one year between 2016 and 2017, technicians and community members took their independent assessments using the same gauges to assess the water levels (Barros and Barcelos 2017).

Those involved in social movements fighting for the rights of Lagoa residents did not give up pressuring IBAMA and Norte Energia. They requested frequent meetings, arguing the situation in that neighborhood violated two core promises made when Belo Monte was approved. First was that the three main permits issued by IBAMA have explicit conditionalities that the entire city of Altamira would receive sewage services, and the sheer existence of an area like Lagoa violated that. Second was the fact that Norte Energia did not

build enough houses to relocate people who lost their homes and did not account for the massive population influx. Thus, even though the Lagoa neighborhood was above the infamous "Cota 100" mark, the situation of those living there should be considered to be a problem that Norte Energia and IBAMA had the responsibility to address (Barros and Barcelos 2017).

In April 2016 Norte Energia released yet another statement saying that the company would not take any responsibility for the Lagoa neighborhood. Later that month, social movement organizations managed to secure the support of the Altamira Mayor's Office, which declared that the municipal government considered the area and its lack of sanitation to be a responsibility under the purview of Norte Energia (MAB 2016). In May 2016 the company declared that all families impacted by the dam had been transferred or received financial compensation, which only prolonged the tug-of-war situation (Craide 2016). In June 2016, the political situation in Brasilia changed as a result of impeachment of President Dilma Rousseff, and a new person was appointed to the lead the agency (Canal Energia 2016). In July 2016 residents and activists protested in front of IBAMA's office in Altamira and managed to speak over the telephone with top representatives in Brasilia, who promised to visit the town; this led to another major public hearing in October (G1 2016; Racismo Ambiental 2016). Meanwhile, MPF also filed another civil case against Norte Energia and IBAMA demanding basic sanitation conditions be offered to all residents in Altamira.

At the time when the public hearing took place, there were five hundred families living on top of their own raw sewage in Lagoa. News articles from that period indicate the continuation of this story, which was long in the making. A few residents were former construction workers who had built Belo Monte, others were long-time residents of Altamira

displaced from their homes and unable to purchase new houses. Their stories were loud and clear during the public hearing: Norte Energia, the owner of Belo Monte, must take responsibility for all the impacts caused by the dam. They were particularly frustrated about the fact that the company had caused so much damage to their lives and yet they were the ones facing the burden of proof and having to sustain the costs of social mobilization to show what, to them, was so obvious (MXVPS 2016). After the public hearing, IBAMA sided with the residents and ordered Norte Energia to conduct an assessment into the Lagoa neighborhood. The company was required to interview everyone living there and investigate when they had moved in, why they were living there, and to include all residents under the Socio-Environmental Registry.

Norte Energia initially sued and tried to use the judicial system to avoid this liability, but later agreed to conduct a formal assessment (Barros and Barcelos 2017). A few months later, in January 2017, Norte Energia published its formal assessment alleging that the Belo Monte dam had absolutely no relation with the flooding observed in Lagoa (G1 2017). Those engaged with social movements trying to put pressure on the situation were outraged at the company but were also encouraged by that fact that at least the new leadership at IBAMA was showing signs of being open to their case. At that point, the agency made clear that it was requesting for families to be included in the registry and that the case was under evaluation. For MAB and other social movement organizations these were promising signs (Barros and Barcelos 2017). Later in 2017, MAB and other groups representing the Lagoa residents managed to secure their first-ever formal meeting with Norte Energia to discuss the case.

March of 2018 was the culmination of their efforts, as their case came to fruition. The president of IBAMA, Suely Mara Vaz Guimarães de Araújo, went to Altamira herself to conduct one last inspection at the Lagoa neighborhood and to conclude the analysis of all documents presented by MAB, MPF, and other groups representing the residents. By the end of her visit, there was a large meeting where the final announcement would be made. I was fortunate enough to be able to attend that meeting. There were about six hundred people there. Dr. Thais Santi, the chief public prosecutor who wrote the brief suing IBAMA and Norte Energia for not meeting the conditionality to provide basic access to sanitation to all residents in Altamira, opened the session. Her case was simple: "The Lagoa neighborhood is a product of the Belo Monte dam. Those responsible for the dam must take responsibility for all its repercussions." A handful of people made statements supporting the case, such as representatives from the local government. When the president of IBAMA was about to speak, the entire auditorium was dead quiet:

I came here today to announce IBAMA's position regarding the Lagoa neighborhood. This agency understands that the situation of those living there is unbearable. We have determined that Norte Energia must remove all families from the area and give them either a new home in one of the new neighborhoods in Altamira or a financial compensation that is enough for them to buy a home of a similar size elsewhere (Suely Mara Vaz Guimarães de Araújo, President of IBAMA, 2018)

The thrill and enthusiasm reverberated through the walls. The relief was contagious. The entire town could hear the celebration. People broke out crying. They were exuberant and elated.

The big heroes of the day were MAB activists. For about five years, they did extensive grassroots work, making connections with those in Lagoa and building partnerships with a host of other institutions, notably MPF and DPU. They managed to call attention to this situation, and they successfully managed to influence policymakers' decisions about it. In the beginning of their activism, the process was targeting Norte Energia, but they quickly changed and included IBAMA as the main policymaking target. That day, in March 2018, IBAMA's president herself declared that her agency had changed its position regarding the situation in Lagoa thanks to the work done by MAB and its allies.

The next section analyzes this social movement using the framework developed in chapter 2.

Social Movements Influencing Policymakers

Where does the power of social movements come from? How do they harness the means to influence high-level policymakers? The analytical framework developed in chapter 2 offers twelve questions that guide our inquiry process and helps us investigate how movements cause change. In this section, I use this framework to shed light into the Lagoa movement and its influence on IBAMA.

1) Can social movement activists and organizations form coalitions? The Lagoa movement was able to build successful coalitions with a large number of supporters. The movement began mostly with residents of Altamira calling attention to the severe impacts they were experiencing. That alone can sometimes be hard to do, especially considering the sheer chaos that Altamira was witnessing at that time. Mobilizing people is hard, and activists managed to successfully take the first step towards promoting change. Residents partnered with grassroots

- organizations and later secured institutional support, first from MPF, second from DPU, and later from the Altamira Mayor's Office. Along this journey they also collaborated with several media outlets and other nonprofit organizations.
- 2) Can social movements design an effective collective action frame? As discussed in the first part of this chapter, those families who moved to Lagoa were originally classified as "not impacted" by the dam because they were outsiders who did not live in Altamira when the dam was approved. Many of them were considered "impacted and already compensated" and thus not deserving of further compensation because they had received some money for their previous homes. This is a clear example of how Norte Energia and IBAMA had an initial advantage in framing the situation and explaining why the problem was not their responsibility. It took demanding work on the part of activists to explain that the situation in Lagoa was a product of Belo Monte caused by poor management and implementation of the project. The situation in Lagoa would not exist if Belo Monte did not exist, and it was the responsibility of IBAMA and Norte Energia to address the problem.

This framing was fundamental for two reasons. First, it motivated people in Lagoa to join the movement and show their support. It is important to remember that people living in such awful conditions struggle for daily survival. It is costly on multiple levels to attend meetings, join protests, and spend days camping outside IBAMA's office in Altamira. Many of the residents who were living in Lagoa believed the dominant narrative that they were not entitled to compensation. Thus, the frame that social movements crafted had to be, primarily,

effective in mobilizing people into joining a collective action. The second challenge in crafting an action frame was figuring out how to avoid the legal nuances that would follow. Norte Energia or IBAMA could have tried to get away with compensating fewer people had the frame not been crafted well, for example, only encompassing those who had not received any compensation at all. Framing the entire situation in Lagoa as a product of Belo Monte was skillful because it avoided scrutiny over individual families living there.

- 3) How much and what kinds of resources do social movements have? The Lagoa movement was a movement conducted by and on behalf of poor families. It was not possible for activists to draw from within their membership base the technical support they needed to conduct the geological studies of the groundwater, or to closely monitor water levels after the reservoir filled up. The organizations collaborating with residents, however, managed to bring in resources such as equipment, professional skills, and technical assistance to support their main argument (i.e., the houses were flooding because of the reservoir's pressure on groundwater).
- 4) What activities do social movements do? The data analyzed here shows a wealth of diverse activities carried out by activists in Lagoa, ranging from street marches, camping outside IBAMA's office in Altamira, to promoting large public hearings. These campaigns have displayed all the important characteristics that the authors discussed in chapter 2 have outlined. It was part of the mobilization repertoire to promote street marches, and there were many of these. Community meetings were also part of the repertoire of activities that people were familiar with, and these

took place numerous times as well. A few activities the Lagoa movement carried out were things like independent monitoring of the water level, conducting regular surveys to keep a headcount of families in the neighborhood, and sleeping outside IBAMA's office to demand a meeting with top officials.

These campaigns used all four of the tactics described by Keck and Sikkink (1998). The public hearing of November 2014 was a clear display of information politics. The truth was exposed and there was no denying the problem. Symbolic politics was the most-used tactic because it was common to see images of houses in Lagoa displayed against official advertisements of Belo Monte and all the "progress and development" that supposedly was going to come with the dam. Leverage politics was tried first when social movements put as much pressure as they could on IBAMA and demanded that the agency not to release the last permit that Norte Energia needed. It was clear to everyone that holding back on the permit would be the last strong leverage civil society could have to hold Norte Energia accountable. Unfortunately, they were not able to exercise enough pressure on IBAMA. But social movements did have other moments when they managed to have leverage, for instance when the dam company insisted that filling the reservoir would have no impact on the pond, and this later proved to be false. Accountability politics was a tactic widely used to pressure IBAMA, more so than Norte Energia. Ultimately, it was IBAMA's responsibility as the regulatory agency to monitor whether Norte Energia was complying, and social movements held IBAMA accountable for that responsibility in multiple campaigns.

5) How much access do social movements have to policymakers? As explained in the first part of this chapter, groups involved with the Lagoa neighborhood were systematically and consistently ignored for years. The first step was to secure access to organizations such as MPF and PDU, which happened in 2014. Once they secured the support from these core government agencies, the movement grew stronger. But access to policymakers at IBAMA continued to be a challenge. Eventually, through a combination of legal actions from MPF and direct action organized by MAB, the movement managed to open a channel of communication with IBAMA. Access to Norte Energia did not happen until after IBAMA changed its position.

As discussed in chapter 2, Tarrow (2011) offers four guiding questions to evaluate how much access activists have to policymakers. The questions are: How open is the current political system? How stable is the system? How much access do social movements have to allies and elites? How much conflict is there among elites? The struggles that activists in Lagoa faced while looking for access to policymakers only goes to show that the political system that was driving Belo Monte was closed, although it was disguised under a democratic government. The system was also very stable, because there were numerous changes in high-level positions of leadership with no clear impacts on on-the-ground activities. It was only because social movements managed to get access to, and form strong alliances with, key high-level organizations such as MPF and DPU that the movement eventually succeeded in getting policymakers to change their positions. Social movements seized what Tarrow calls "political opportunity structure"

when they managed to quickly get access to the new president of IBAMA in 2016 and secured her support for the Lagoa case. It is hard to assess, based on the secondary data collected, how much conflict there was among elite political groups.

6) Have policymakers changed their original framing around the issue? There were a few instances when policymakers indicated that they had begun looking at this situation differently (and were changing how they were framing it). After the second major public hearing in October 2016, the new president of IBAMA requested that Norte Energia conduct a formal assessment of Lagoa and interview every resident in the neighborhood. This indicates a change in IBAMA's original framing because previous presidents of this agency refused to even acknowledge that Lagoa had anything to do with Belo Monte. When IBAMA's president requested an investigation into and assessment of the case, she was signaling a change in that original frame.

Typically, a change in frame only indicates an inclination or a first move by policymakers towards changing their positions. In this case, the movement developed quickly between IBAMA changing its original frame around October 2016 and later requiring Norte Energia to offer compensation and remove all families from Lagoa in March 2018. Once IBAMA changed the original frame and accepted that Lagoa was a product of Belo Monte and thus a case of noncompliance with the licenses requiring full sanitation for all houses in Altamira, the action that followed was a request for Norte Energia to relocate all families and give them new homes.

- discussed above, the battle towards sheer recognition of a problem in Lagoa took years. For a long time, policymakers in the Mayor's Office, IBAMA, and other public institutions bought into the frame presented by Norte Energia that those families either were not entitled to compensation or had already received their fair share. Thus, this was not a problem any one of those institutions had to worry about or include in the political agenda. The large public hearing of November 2014 was the first time that the issue was formally discussed by decision makers. The situation in Lagoa did enter the public agenda after that, but as discussed above, Norte Energia did all it could to delay and deprioritize this agenda item.
- 8) Have key actors changed their positions, or at least announced an intention to do so? There were key actors who changed their positions earlier on due to activism by local groups, which has increased the momentum and strength of this collective effort. For example, when MPF changed its position and decided to actively support the movement, they organized the public hearing of November 2014 and secured support from DPU. These two public institutions (MPF and DPU) did not change their positions in the sense that they were at first opponents and later became supporters of the movement. Rather, their position changed from not engaging at first to then actively supporting and promoting this cause. In April 2016, another key actor also changed its position and announced support for the movement the Altamira Mayor's Office. For years, the Mayor's Office was supportive of the Belo Monte dam because of the political attention the project,

and other reasons along these lines. When local town officials announced in April 2016 that the Office was changing its position and would start supporting the Lagoa cause, it was a clear sign that Norte Energia was losing key allies and that the tides were shifting towards the residents. Lastly, IBAMA changed its position when the agency accepted the frame presented by the communities, MPF and MAB (i.e., the frame that Lagoa was a product of Belo Monte and families living there were entitled to full sanitation services). The agency is the most central policymaker that decides on this matter, thus the change in their position indicated a clear political victory for social movements.

9) Have policy institutions announced procedural changes that align with overall goals of social movements? There were two important procedural changes along the course of this process. The first was when IBAMA changed the process to verify the water level. Originally, there was no plan in place to even monitor the water level in Lagoa and when issues started to arise, IBAMA's standard procedure was to accept data and information provided by Norte Energia. This changed when communities requested an independent monitoring system, and since then IBAMA's new procedure was to consider both sources of information to make decisions. The second and most significant procedural change was when IBAMA requested Norte Energia to include families in Lagoa in the socioenvironmental registry. The process of inclusion in the registry had been careless since the beginning, thus changing it was complicated because there was no guarantee that all families would be included and could then receive compensation. The procedural change that IBAMA adopted was to consider the

- list of families in Norte Energia's registry against another list prepared by the grassroots organizations themselves.
- 10) Have social movements organized campaigns on target actors? Yes, in many cases. The activities conducted by grassroots organizations supporting Lagoa were numerous and diverse. This is described extensively in the first section and does not need to be repeated here. They include things like camping outside IBAMA's office in Altamira, numerous news articles in different newspapers, petitions, protests, street marches, reports, documentaries, public hearings, etc.
- 11) Have social movements and policymakers achieved final agreement on substantive issues? Yes, eventually IBAMA changed its position and agreed to side with families in Lagoa. The final agreement reached was that IBAMA would order Norte Energia to relocate all families or offer them compensation.
- 12) Have policymakers changed their behavior? It is hard to evaluate whether this process will lead to any long-term changes in IBAMA as a public agency. The data available at this point do not allow for any kind of speculation. That having been said, it would be naïve to expect that IBAMA will change its behavior and internal procedures in future cases of similar "development" projects because of their experience with the Lagoa social movement. Unfortunately, this is yet another case of local communities being systematically excluded and deprioritized by policymakers and only managing to influence their positions after a great deal of mobilizing collective action.

Analysis of the Lagoa Case

The Lagoa social movement was one of the least probable success stories in the Belo Monte saga. There were other groups impacted by the dam that had greater media appeal and internal organizing capacity, such as the indigenous groups. The struggles and social movements organized by indigenous groups are commendable and have been analyzed by a number of scholars (Fearnside 2017b, c; Santos and de Andrade 1988; Mourão and Silva 2018; Gohn and Milhomens 2017). However, the social movement conducted by Lagoa residents is a case of sheer resilience and endurance. The Lago case was deemed a lost cause by numerous actors many times. There was little hope that these families would receive compensation and be relocated. Nonetheless, carrying on was what they did.

What does the Lagoa case say about the Belo Monte dam? From the perspective of those families, Belo Monte is anything but a project that brought sustainable development to the region. Belo Monte became synonymous with urban chaos, violence, drug and human trafficking, and a slum built on stilts with families living on top of their own sewage. Belo Monte unearths the cruelty that emerges when a weak democracy delegates to the private sector tasks that are the responsibility of public officials. It is easy to understand why Norte Energia and its subcontractors were solely interested in staying on schedule for the construction of the dam and had little incentive to spend time and money carefully and thoroughly addressing social and environmental problems caused by the impacts of building a large dam in a small town. Communities impacted by the Belo Monte dam spent years shouldering the burden of proof and having to advocate on their own behalf, to fight against a project that was promoted, funded, and (poorly) regulated by the Brazilian government. What

the Lagoa case shows about Belo Monte is that this was a public project that benefited private companies at the expense of local communities.

What does the Lagoa case say about impacted communities influencing high-level policymakers? The first and most-obvious observation is that this process is extremely hard and costly. The second is that it is possible. Following on the tracks laid by previous scholars, this case shows again that social movements continue to be an avenue for those marginalized by political circles to have a say in processes that affect them. Influencing policymakers is possible when social movement activists and organizations form coalitions, design effective collective action frames, secure resources, carry out activities in their repertoires of contention, secure access to policymakers, manage to convince policymakers to change their original framing around an issue, include their cause in the political agenda, have key actors change their position or at least announce an intention to do so, put in place procedural changes that align with their overall goals, organize campaigns on target actors, reach substantial or final agreement with policymakers, and eventually change the behavior of policymakers.

What does the Lagoa case say about the policymaking process in Brazil? Social movements continue to be a powerful tool to expand and strengthen democratic institutions. Weak and fragile democracies, such as the one in Brazil, depend on and urgently need more social movements because they call upon institutions such as MPF, DPU, the media, nonprofits, and academics to put pressure on decision makers, demand more transparency and keep them accountable to their public mandate. The Lagoa case shows that policymaking in Brazil is still a process where large private companies have secured access to the public apparatus and use it for private gains. The public institutions that are meant to serve and

protect public interests are poorly funded, short staffed, or coopted by political rent seekers. Examples of this are abundant. For instance, the office of DPE in Altamira closing in June 2014 amid the mayhem that was going on at the time indicates overt carelessness for the thousands of families that needed legal support. Another case is IBAMA, the regulatory agency responsible for monitoring Norte Energia, granting them the Operating License in November 2015 while ignoring multiple pleas by civil society that there were no conditions for issuing such a document because most of the conditionalities were not met.

What the Lagoa case shows about influencing policymakers in Brazil is that building coalitions is fundamental to having any leverage over high-level officials. Families in Lagoa managed to be recognized as impacted and receive compensation only because they managed to build strong coalitions with grassroots organizations such as MAB and partner with other organizations such as MPF, DPU, university researchers, and the media. To put it simply, the Lagoa case shows social movements can influence policymakers by skillfully building alliances. Chapter 5 of this dissertation provides a social network analysis of how these organizations built such coalitions.

CHAPTER 4

THE ILO CONVENTION NO. 169 AND THE MOVEMENT BEHIND CONSULTATION PROTOCOLS

Introduction

This chapter discusses another case where communities impacted by the Belo Monte dam managed to influence high-level policymakers. These communities were impacted by the Belo Monte dam and managed to use ILO Convention No. 169 to influence high-level policymakers in Brazil. It is interesting to note that ILO Convention No. 169 was written to promote the autonomy of traditional groups and it focuses only marginally on environmental issues. Nonetheless, given that these communities see their livelihoods intertwined with the protection of natural resources, they are using this convention as an instrument for stronger environmental measures in Brazil. This suggests that studying global environmental governance would be limited if it focused only on the analysis of environmental conventions. It also suggests that studying global governance in general would be limited if it focused only on international events at a global level.

ILO Convention No. 169 was approved in 1989 and established the norm that indigenous and tribal peoples have the right to be consulted on any legislative or administrative matters that impact them (ILO 1989a). The norm calls for free, prior and informed consultation, meaning that it should take place before a project is approved, that

communities should not be coerced into accepting the project, and that they should receive complete information, especially concerning potential negative impacts. Hereafter this is called the norm of Free, Prior and Informed Consultation (FPIC).

Since ratifying it in 2004, Brazil's compliance with ILO Convention No. 169 has been erratic. The government intends to implement numerous infrastructure projects (e.g., the São Luiz do Tapajos dam, the Ferrogrão railroad, and ports on Maica Lake for bulk carriers, among others), which have negative impacts on traditional communities (Gerlak et al. 2019; Fearnside 2019). For years the proponents of projects like these have disregarded the convention's provisions on consultation. As I will show, it was only after the FPIC norm became more diffused among traditional communities that the convention began to influence the country's political agenda. Around 2014, communities started developing their own consultation protocols - documents that outline the steps the government ought to follow when consulting them. Communities are now demanding their right to be consulted.

Despite Brazil being a party to this convention, there has been a disconnect between the discourse of the Brazilian government and the effective implementation of the FPIC norm. The government has claimed many times that consultation was conducted, although communities argue it was not. This chapter traces how a gap emerged between the government's discourse and its practice, and it analyzes how communities have tried to bridge this gap by pushing policymakers to walk the talk. I investigate how the FPIC norm has been diffusing into the official rhetoric, and how several institutions are working to bridge the discourse-practice gap. This analysis covers the period from 1988 (when the FPIC norm was discussed by the ILO) until the time of writing (October 2021) when we see clear signs of this norm diffusing and taking hold in Brazil. As in chapter 3 (on the Lagoa social

movement), for this analysis I rely solely on secondary data. I reviewed ILO archival documents and several consultation protocols. I used the method of process-tracing (George and Bennett 2005), which requires examining government statements, media articles and other documents, to identify a causal relationship between events (promoting consultation protocols) and their impacts (incorporating the FPIC norm into the government's rhetoric and, slowly, its practices).

Results show that key organizations have been working together to promote protocols and diffuse the FPIC norm. This is yet another case of communities influencing high-level policymakers by skillfully and strategically building coalitions. Actors such as community associations, NGOs, international foundations, and religious organizations form transnational networks. They strive to change the way the Brazilian government abides by international standards and the way in which natural resources are governed. Along this process traditional communities become more powerful actors. Environmental governance in Brazil cannot be understood without a close examination of how a multitude of international and nonstate organizations operate in networks to influence this governance.

This analysis illustrates a new case of norm diffusion characterized by a transnational-networked pattern. Norm diffusion is the process through which ideas spread and influence the worldviews of policymakers, local communities, international organizations, private corporations, and civil society leaders. Ideas do not flow simply in a top-down or bottom-up manner; rather, the case studied here shows how they diffuse through networks. I identify the norm proponents and entrepreneurs in the case of consultation protocols, which diffusion mechanisms they are using, and the consequences of this process for environmental governance in Brazil.

Theoretical Framework

Constructivist scholars in International Relations (IR) study norm diffusion to understand how ideas spread, focusing on processes that promote or hinder the creation and dissemination of ideas (Karns, Mingst, and Stiles 2015). One important focus in constructivist theories is on how norms influence state preferences (Jung 2019). Despite this state-centric focus, there are many authors in this field who study how actors other than states are agents of norm proposition and diffusion, for instance international organizations (IOs), activist groups, and private companies among others (Keck and Sikkink 1998; Carpenter et al. 2014; Avant, Finnemore, and Sell 2010). This chapter highlights how non-state actors are having a crucial role in diffusing the FPIC norm in the Brazilian Amazon.

There are several definitions of norms, but a useful one is that "[what] makes norms norms is that they develop 'stickiness', backed by a 'logic of appropriateness' to replace an initial 'logic of consequences'" (Acharya 2011, 116). Some ideas never become widespread despite being promoted (they don't stick), while others are accepted and used. A norm is a widespread idea that is adhered to because it is deemed adequate. The difference between a logic of appropriateness and a logic of consequence is what differentiates norms from laws (Acharya 2011).

There are multiple ways of organizing authors' contributions within this field (for a great review of the IR constructivist literature, see Jung 2019). One way is dividing them into three camps. First, there are those who see norms flowing from the international to the national level (top-down), for instance when powerful countries and IOs influence smaller states by teaching them what is adequate. Second, there are those who see norms diffusing from peripheral states to the international level (bottom-up), for instance when less-powerful

countries manage to diffuse norms internationally to promote their own interests, or when smaller countries first adapt norms coming from larger players before incorporating them into domestic practices. Interesting views on this debate include: Barnett and Finnemore (1999), Finnemore and Sikkink (1998), Negron-Gonzales and Contarino (2014), Acharya (2014), Sikkink (2014), and Park (2006), among others.

The third camp encompasses authors who see norms diffusing through transnational networks. For example, Park (2006) challenges the idea that IOs lead the process of norm creation, highlighting the importance of NGOs and activists in these processes. Khagram (2004) describes how grassroots and civil society movements have influenced the World Bank regarding the construction of dams. The present paper contributes to the literature on the third camp by analyzing a new case of norm diffusion through transnational networks.

Norm entrepreneurs are state or non-state actors who have "strong notions about appropriate or desirable behavior in their community" (Finnemore and Sikkink 1998, 896). Often, they target states as the main actor whose behavior they want to influence, trying to convince them to embrace a certain norm. When entrepreneurs operate in different countries, their networks are termed "transnational" (Keck and Sikkink 1998, 1999; Florini 2000; Carpenter et al. 2014; Rietig 2016). These cases are also known as transnational advocacy networks, defined as "actors working internationally on an issue, who are bound together by shared values, a common discourse, and dense exchanges of information and services" (Keck and Sikkink 1999, 89).

Entrepreneurs often need an organizational platform to operate, such as an NGO or an IO. Barnett and Finnemore (2004) view IOs as "conveyor belts" through which norms diffuse. In the case discussed here the ILO was this conveyor belt. Once entrepreneurs

manage to put ideas onto these platforms, norms begin to spread. Finnemore and Sikkink (1998) identify a "norm's life cycle," which begins with norm emergence and, after reaching a tipping point, norms cascade and become internalized. This approach considers that there must be a tipping point after which norms that have emerged will cascade into the international society. This can be the point when a norm becomes institutionalized, although the authors maintain that norms can cascade first and be institutionalized later. The FPIC norm first emerged among indigenous groups and civil society organizations, which then gained support from some partner countries. The norm was later institutionalized in ILO Convention No. 169, and it is now diffusing (cascading) across member countries.

Finnemore and Sikkink (1998) assert that entrepreneurs use several mechanisms to influence state behavior, such as framing, persuasion, and bandwagoning, although they see socialization as the most influential. "Socialization is thus the dominant mechanism of a norm cascade, [and it happens through] emulation (of heroes), praise (for behavior that conforms to group norms), and ridicule (for deviation)" (Finnemore and Sikkink 1998, 902). Acharya (2004) considers "localization" as a central mechanism, characterized by the process through which international ideas are modified to fit local demands. He also suggests that mechanisms of norm diffusion can be snowballing, learning, and emulation. Further, he highlights that norm entrepreneurs promote the "widening, deepening [and/or] thickening" of international norms in a process that is region-specific (Acharya 2014, 406).

The ongoing process of diffusing the FPIC norm involves socializing states about what kind of consultation is appropriate. It also includes shaming them for not doing it, and in the case of Brazil it encompasses adapting (localizing) this norm to the national context.

Localization is seen, for instance, in the consultation protocols. There were no clear

guidelines regarding how to conduct consultation after Brazil ratified the convention, so traditional groups in the Amazon created their protocols as a mechanism for adapting this international norm to the Brazilian context.

ILO Convention No. 169 and the FPIC Norm

The Indigenous and Tribal Peoples Convention n. 169 of the International Labour Organization (aka ILO Convention No. 169) is one of the most important legally-binding international laws that protects indigenous peoples across the world (Survival International n.d.). This convention is a revision of ILO Convention No. 107, which was integrationist (i.e., it fostered the idea that indigenous peoples had to be integrated into the country's main society, thereby not respecting their autonomy). In 1988 the ILO tasked the Committee on Convention No. 107 with updating international practices towards indigenous populations. It is important to note that the ILO has a tripartite structure, so representatives of governments, employers and workers all have equal voice on decisions. The committee followed this tripartite structure and members from the three sectors participated in the revision process.

When the revised convention came to a final vote, the three sectors of the Brazilian delegation abstained (see records of votes on page 32/19 of the ILC 76th Session during the 37th sitting, ILO 1989b). This would lead one to imagine that they were aligned with one another. This was, however, not the case. As discussed in a different article (Chase 2019), process tracing research shows that one side was concerned about the revised convention going too far, while the other side was concerned about it not going far enough. These groups had diverging views then, and this continues to be the case. Members of the workers' delegation and other civil society groups both in Brazil and elsewhere pushed hard for a thorough revision and a convention that would guarantee comprehensive rights to indigenous

populations. Government and employer delegations from Brazil and other countries resisted new standards that they deemed incompatible with their national legislation and sovereignty. There were several issues that brought out these tensions. The most contentious one was about how the convention should address issues related to projects that would impact indigenous peoples: should they be *consulted* or should they give *consent* before a project moved forward.

The government and employer representatives of Brazil opposed granting consent rights to indigenous peoples. The committee originally suggested that the revised document read "seek consent" and several amendments were worded and reworded to make it clear that this would not guarantee indigenous peoples the right to veto government projects (ILO 1989c). During the ILC 75th session, the representative of the Norwegian government pushed for governments to "consult fully with a view of obtaining consent," but the representative of the US government suggested the new convention promotes "full consultation in lieu of seeking the consent" (ILO 1988, page 32/10, paragraph 74). The government and employer representatives of Brazil voted in favor of the US suggestion (ILO 1988).

The representative of Brazilian workers (Central Única dos Trabalhadores, CUT) played a leading role in pushing for full consent, which was aligned with workers' delegations from other countries. "The [Brazilian] Workers' members proposed a two-part amendment to substitute 'obtain the informed consent' for 'seek the consent', and to add that it should be 'freely expressed through their own institutions'. They considered it essential that indigenous peoples have a real influence on decision-making" (ILO 1988, page 32/10, paragraph 73). Nonetheless, this position was outvoted in the final version of the revised convention. The approved version of ILO Convention No. 169 only calls for indigenous

peoples to be consulted about projects that impact them; their consent is not required for projects to be implemented. The convention only protects the right of indigenous peoples to consent to projects (i.e., veto) in cases when these populations must be relocated from their territories - see article 16 of the Convention (ILO 1989a). Thus, the document offers no strong legal framework to determine what happens when, after being consulted, indigenous people do not consent to projects that will negatively affect them but do not require their compulsory relocation.

The Coordination of Indigenous Organizations of the Brazilian Amazon (Coordenação das Organizações Indígenas da Amazônia Brasileira, COIAB) is a nonprofit indigenous organization that was part of the committee that revised ILO Convention No. 107, which shows that indigenous groups have been engaged in high-level policymaking for several decades. It is hard to know exactly why, but COIAB was not present during the ILC 76th session in 1989 when the final version of the document was passed. Statements by other indigenous organizations can shed some light. Mr. Helms, the Rapporteur of the Committee, acknowledged that "indigenous representatives were often very dissatisfied with our procedures and our decisions, and that some felt obliged to leave the room on a couple of occasions" (ILO 1989b, page 31/2). Other indigenous representatives, however, stayed until the end and recorded their statements in the conference proceedings. For example, Mr. Ontiveros Yulquila, representative of the Indian Council of South America, denounced that:

It has been absurd for us to watch, from the observers' seats, deprived as we were of the right to speak or to vote by the regulations and structures of the ILO, the Government and Employers' delegates of a large part of the world (Canada, the United States, Argentina, Brazil, Bolivia and Venezuela) behave like representatives

of the old colonial empires which despoiled the Americas, denying us the right to exist and express our identity as peoples in the cultural, social and economic fields (ILO 1989b, page 31/8).

The final version of ILO Convention No. 169 promotes the principle of free, prior and informed consultation in several of its passages (ILO 1989a). Article 6 affirms that governments ought to consult traditional groups impacted by any legislative or administrative projects that directly impact them, and it calls for good-faith consultation so that the people can *freely* participate. Article 15 states that governments shall consult those impacted by a project "before undertaking or permitting any programmes" (Article 15, paragraph 2). Article 7 requires that social and environmental impact assessments be made available and be taken into consideration "as fundamental criteria for the implementation of these activities" (Article 7, paragraph 3). In other words, decisions ought to be made in an *informed* way.

Implementation of ILO Convention No. 169 in Brazil

The government of Brazil has been a reluctant follower of the convention. It abstained during the final vote when the convention was approved in 1989, but it did ratify it in 2002 and signed a presidential decree in 2004 promulgating the convention and making it legally enforceable under domestic legislation (Presidência da República, Decree 5051/2004). Since then, there has been a slow and ongoing internalization process for the FPIC norm. There are many cases when traditional populations were deprived of consultation, frequently so in dam cases (Garzon, Yamada, and Oliveira 2016). This spurred a lively debate in Brazil about the role of ILO Convention No. 169, its poor implementation, and its potential to foster thorough processes of consultation (Garzon, Yamada, and Oliveira 2016; Wiens 2017).

If the government and the private sector have been reluctant followers, civil-society groups and local communities have been passionate leaders. For instance, they sued the government in 2006 together with MPF alleging that indigenous peoples had not been consulted for the Belo Monte Dam¹. This dam is one of the most notorious cases of lack of consultation in Brazilian recent history. The dam had been planned for a long time, but this and other legal suits delayed construction activities. The case was decided in favor of indigenous groups in lower courts, but the decision was suspended later by higher courts, so the dam project moved forward (ISA 2014). Judicial decisions have put construction activities on hold many times. Technically, construction should not have been started or should have at least been kept on hold until all local communities were consulted. However, for many years the project has moved forward despite protests denouncing such violations.

During the same period, other dams followed the same path as Belo Monte, notably Teles Pires and São Manoel (Fearnside 2015a, 2017a), both of which face numerous legal actions in the Brazilian court system². Indigenous groups and their supporters have pressured the government for thorough consultation processes, which have not happened in line with FPIC norms. All suits have been granted in favor of indigenous peoples in lower courts (Foresti 2017), but later overthrown by higher courts via a loophole in Brazilian law known as "security suspension." This is a highly controversial judicial device that allows federal judges to overturn decisions from lower houses, before the case is adjudicated in higher courts (Sequeira 2014). A federal judge may overturn a lower court's decision arguing that

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¹ Civil Public Action lawsuits n. 2006.39.03.000711-8 and n. 709-88.2006.4.01.3903.

² Civil Public Action lawsuits (selected): n. 33146-55.2010.4.01.3900, n. 3947-44.2012.4.01.3600, n. 005891-81.2012.4.01.3600, n. 009024-63.2014.4.01.3600, 13839-40.2013.4.01-3600

placing a project on hold would harm the greater national public order and economic security of Brazil. A merit-based assessment and final judgment by the Supreme Court is then postponed. Consultation processes are thus suspended and economic growth is securitized (Chase 2017).

All these instances of lack of consultation and manipulation of the judicial system to push dam projects forward have created strong reverberation among activists, who pressured the Brazilian government to implement ILO Convention No. 169. They partnered with the Inter-American Commission on Human Rights (IACHR) of the Organization of American States (OAS), and in April of 2011 the IACHR sent an official letter to the Brazilian government requesting that all licensing processes for Belo Monte be suspended until goodfaith consultation was carried out (CIDH 2011). In response to the growing shaming pressure, the government declared a few days later that the request was unjustified and that proper consultation had been conducted (MRE 2011).

Some government representatives pointed to large meetings held in gymnasiums where people were informed about the specifics of the project and what to expect. At no point was there a question as to whether dam construction would happen or not. None of these "so-called consultations" respected FPIC norms (Salgueiro 2011). Dr. Rodolfo Salm was one of thousands who have eye-witnessed these public hearings. He reports seeing police and national guard armed with rifles, machine guns and tear gas (Salm 2009). These meetings were not free, because communities felt intimidated and could not freely participate in the decision-making process. Salm (2009) also reports that several questions were dismissed or ridiculed. This does not characterize a process of informed consent, because people were not given complete information regarding the dam project. Lastly, the public

hearings were also not prior because they took place after the government decided to implement Belo Monte.

Despite this abysmal performance, Mr. Gilberto Carvalho, Minister of the General Secretariat of the Presidency of the Republic (Secretaria-Geral da Presidência da República) asserted that consultation was carried out and even mentioned ILO Convention No. 169 when declaring this (Lopes 2012). This indicates an enormous dissonance between the government's discourse and the effective implementation of this convention. After large public outcries demanding a better consultation process, the government contended in 2011 that there were no clear standards for implementing the FPIC norm. It then announced it would create specific regulations determining the criteria for consultation processes (Locatelli 2016a). Civil society groups pushed for a participatory process, which led to the establishment of a working group in January 2012 to discuss new guidelines (DOU 2012a). These efforts were happening in parallel to the construction activities of Belo Monte, Teles Pires, and other dams. Later in 2012, two decisions by the government pushed civil-society groups over the edge, forcing them to walk away from negotiations at the working group.

The first decision was in July of 2012, after the Office of the General Counsel for the Federal Government (Advocacia-Geral da União, AGU) released a document determining that the right of indigenous peoples shall be disregarded in cases of significant public interest to use natural resources in their territories (DOU 2012b, AGU Portaria 303). The second was a bit more convoluted. On August 13th a regional federal court had determined that all construction activities in Belo Monte be put on hold due to lack of consultation with indigenous groups (TRF1 2012). A few days later, on August 24th, AGU issued another document (Reclamação 14,404) asking the Supreme Court (Supremo Tribunal Federal, STF)

to overturn the decision (STF 2012a). On August 27th, the president of STF issued a decision overturning the ruling by the regional court, arguing that a previous security suspension order (Suspensão de Liminar 125, Ministra Ellen Grace) was still in place and thus the regional court had overstepped its authority (STF 2012b). This decision came so shortly after the one by the regional court, and even more closely after the request by AGU, that it raised suspicions about opaque agreements between the executive and judiciary branches of the government.

These two events of July and August 2012 cast a dark shadow over the working group and outraged civil-society groups. The government had agreed to host discussions about consultation, but its good-faith intentions were now jeopardized. Negotiations continued for another few months until key activist groups decided to walk away. One of the most serious cases was the Brazilian Association of Indigenous Peoples (Articulação dos Povos Indígenas do Brasil, APIB). In an open letter in 2013, APIB denounced the ill-intentions of the government, accusing it of manipulating the guidelines for community consultation (APIB 2013). Others adopted the same position and walked away from negotiations (Sanson 2013), rendering expectations for a legitimate consultation process almost hopeless.

Traditional communities in the Amazon were still apprehensive about infrastructure projects planned for their region. Many indigenous organizations and their partners were aware of legal safeguards and wanted to defend impacted communities. But in several cases the communities themselves were not familiar with the protections they had from national and international legislation. In 2011, the Coordination of the Indigenous Organizations of the Amazon Basin (Coordenação das Organizações Indígenas da Bacia Amazônica, COICA)

in partnership with the Spanish Agency for International Development Cooperation (AECID) organized a workshop to inform indigenous leaders about their rights recognized by international institutions such as the ILO, the UN and the IACHR. A year later they repeated this process to reach even more indigenous leaders (Fellet 2012). In 2013 MPF started to promote similar workshops among traditional communities in the Amazon, informing them about ILO Convention No. 169 (MPF 2013a).

Eventually, a large number of people from various communities came to know about their rights. They also learned that leaders and partner organizations had pressured the government to enforce these measures, only to find out that decision-makers had ignored their rights arguing that it was impossible to consult these communities due to a lack of guidelines. In 2014, during another wave of heightened tensions, communities and their partners came up with a creative solution: if the government wanted guidelines, these groups decided to give them some. They created consultation protocols.

What Are Consultation Protocols?

Consultation protocols are documents written by local communities with guidelines they expect the government to follow when consulting them. Guidelines vary from community to community, and each protocol is unique to represent the particularities of their own indigenous or traditional groups. All of them declare that consultation should be free, prior and informed, and all protocols mention Brazil's obligations under ILO Convention No. 169. In this dissertation, I analyze all protocols published in Brazil, examining their content, publication date, and the organizations involved. As an example, I use the Wajāpi protocol to discuss the general format and content found in virtually all other protocols in Brazil.

The Wajāpi indigenous people were the first in Brazil to publish their consultation protocol in 2014 (Locatelli 2016a). They open the document declaring: "We have decided to write this document because we often see the government doing things to the Wajāpi People without asking us what we need or want. Other times the government does things around the Wajāpi territory which impact us, and it does so without asking our opinion. The government has never consulted our people." The document also mentions that "It is an obligation of the government to consult us. [The right to consultation] is guaranteed by ILO Convention No. 169 and it is a law in Brazil since presidential decree 5051/2004 was signed" (translation slightly adapted by author) (Apina, Apiwata, and Awatac 2014).

The idea that communities could write their own protocols establishing how they want to be consulted spread quickly. Starting in late 2014, many began developing their protocols. Although these documents are not all the same, my textual and document analysis shows that they follow a general template similar to the Wajāpi example. There are a few common sections in all these documents:

- Who are the people protected by the protocol: this section explains about their traditional culture and how they use natural resources. This is important because it is here where they self-declare their identity as indigenous, tribal, or traditional communities, establishing thus that they are protected under ILO Convention and under the 5051/2004 presidential decree.
- How the initial contact needs to happen: this section outlines which institutions
 must be contacted to formally start a consultation process (e.g., community
 associations, labor unions, etc.) This is to prevent other organizations that do not
 legitimately represent a community from highjacking the consultation process.

- when and where meetings shall take place: this section states that meetings should be inside the community so that everyone participates. This is to avoid public hearings held in gymnasiums in nearby towns from later being presented as consultation meetings. Regarding "when," all protocols emphasize the need for consultation to take place prior to the project in question. Some documents also emphasize that during certain periods of the year, people in the communities are busy with traditional or subsistence activities (i.e., the harvest season). So, consultations should be scheduled not to overlap with these periods.
- Who is allowed to participate in the meetings: this section states that everyone in the community and outsiders trusted by the community can join the meetings.
 This is to avoid women and elderly people from being excluded and to make sure that partner organizations are not barred from negotiations. This section also emphasizes that government representatives who are sent to these meetings to speak on behalf of the project must not be mere technicians but rather must have authority to negotiate and compromise.
- What needs to be explained, and in what language: this section makes it clear that the language used during consultations ought to adopt simple terms and avoid jargon. It also requests time for translation into indigenous languages, when necessary. This is important because it speaks to the need for consultation to be informed. Full information, including risks and uncertainties must be disclosed to interested communities.
- How negotiations will unfold: This section delineates that there will be first a few explanatory meetings for everyone in the community to understand what the

project is about. Then the community will hold internal meetings, and finally there will be negotiation meetings with government and project representatives. This is important because it underscores the fact that even if some meetings are held, it does not mean that full consultation was conducted.

 How decisions are made: This section states that communities make decisions by consensus, so government representatives should refrain from buying off selected leaders or trying to create internal divisions in the community.

Effectiveness of Networks in Diffusing the FPIC Norm

Some might ask what the value is of simple, short documents written by local communities and sent to government institutions? A skeptic would classify them as mere letters or informal documents that have no legal standing. This skeptical view, however, is far removed from reality. Consultation protocols have become one of the most important documents in the implementation of ILO Convention No. 169 in Brazil. They have been used by federal judges to determine that certain projects should be put on hold until proper consultation takes place (TRF1 2016; Locatelli 2016b; PRR 2017). The success of consultation protocols was possible because communities and their allies collaborated with one another to spread the significance of these documents.

As mentioned above, the first protocol was published in 2014 by the Wajāpi
Indigenous communities, which live far away from the area where Belo Monte was built. But
the FPIC norm and the innovation around enforcing it through protocols did reach the Belo
Monte area shortly thereafter. Unfortunately, the protocols came too late to interrupt the
construction of the Belo Monte dam. Nonetheless, the pressure that Indigenous peoples and
traditional communities have put on the government because they knew their rights had been

violated was very significant. Furthermore, they launched an informal campaign to educate Indigenous and traditional communities elsewhere of the damages and impacts they were suffering because of the Belo Monte dam. This, in turn, spurred other communities to preemptively elaborate their consultation protocols and start enforcing their requirements for consultation early on. This not only shows how protocols and the FPIC norm are spreading across local communities, but it also indicates that the number of communities putting pressure on the government and demanding a thorough consultation process is increasing.

The bar graphs in Figure 5 below indicate the speed with which protocols have been published. The bar graph on the left shows the number of new protocols every year, and the bar graph on the right shows the cumulative amount.

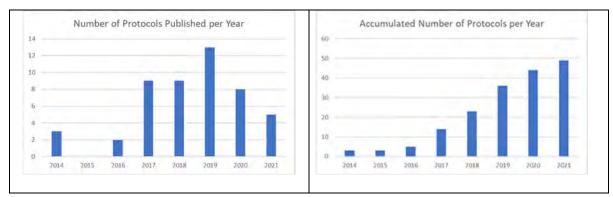


Figure 5. Bar graph on the left shows number of new protocols every year, and bar graph on the right shows cumulative number. Period is between 2014 (first protocol) and 2021(time of writing). Source: Author.

One of the most iconic examples of the importance of consultation protocols is the case of the São Luiz do Tapajos (SLT) Dam. The dam, if built, would impact the Munduruku indigenous people, who preemptively published their consultation protocol in 2014. The Munduruku people have been putting up a heroic fight against the SLT Dam, tenaciously

demanding their right for consultation (Fearnside 2015b). After a civil public action lawsuit³, their efforts yielded positive results when a federal judge determined that all project-related activities be put permanently on hold, highlighting the importance of consultation according to ILO Convention No. 169 (TRF1 2015).

In August 2016, IBAMA decided to shelve the permitting process for the SLT Dam (IBAMA 2016). This was a landmark decision because it set a precedent regarding how these projects must be conducted from there on. Parts of the government's executive branch that are dam proponents had argued that the area impacted by the project was not an indigenous territory, and thus the Munduruku people would not have to be removed from a traditional area given that the area in question was not traditionally theirs (Eletrobras 2016). The president of IBAMA at the time challenged this argument, stating that the impacts on indigenous people had not been adequately assessed (IBAMA 2016).

This was a long and convoluted legal battle. When analyzing various documents of this process, I found many references to ILO Convention No. 169 and to consultation protocols. Whenever the FPIC norm is mentioned, its legitimacy is acknowledged by all sides. Dam proponents, however, argue that, in the SLT case, indigenous people have the right to be consulted but not the right to block the project, given that their relocation would not be from an officially recognized indigenous territory (Eletrobras 2016). The SLT case highlights how these communities demand their right to be consulted and to actively participate in environmental governance decisions such as the construction of dams. It also shows how they are now beginning to influence the decisions of high-level policymakers.

³ Civil Public Action lawsuit n. 3883-98.2012.4.01.3902

A network of engaged organizations is diffusing the FPIC norm. Several of them can be identified in the protocols themselves. The Wajāpi protocol was promoted by their indigenous associations (Apina, Apiwata and Awatac) and made possible thanks to the support from the Amazon Cooperation Network (Rede de Cooperação Amazônica), the Iepe Indigenous Institute (Instituto de Pesquisa e Formação Indígena), and Rainforest Foundation Norway. The Munduruku protocol was led by the Munduruku Ipereg Ayu movement and their indigenous associations such as DaUk, Pusuru, Wuyxaxima, Kerepo and Pahihip. It relied on the support from partners such as the Eastern Amazon Forum (Forum da Amazonia Oriental), Greenpeace, the Federation of Agencies for Social and Educational Assistance (Federação de Órgãos para Assistência Social e Educacional), the Missionary Indigenist Council (Conselho Indigenista Missionário), the Ford Foundation, MPF, and the Nova Cartografia project. Some of these organizations are grassroots groups, some are civil-society groups, others are religious or public entities within Brazil, and some are international institutions. They fit perfectly the definition of norm entrepreneurs: "agents [who have] strong notions about appropriate or desirable behavior in their community" (Finnemore and Sikkink 1998, 896). They were proponents of consultation protocols, which frame FPIC as an appropriate norm that ought to be followed.

This list of organizations is but a short selection from those involved in creating two protocols in the Brazilian Amazon (the Wajāpi and the Munduruku ones). I have analyzed all protocols currently published in Brazil, coding the list of community associations (those that are primarily responsible for leading the process of creating protocols) along with the list of their partner organizations (NGOs, foundations, legal consultancy, etc.). This analysis showed the networks of norm entrepreneurs pushing for more thorough implementation of

the FPIC norm in Brazil. Networks are channels through which norms diffuse. The organizations in this process operate at different levels, are based in several countries, and come from various backgrounds (religious, environmental, legal, etc.) It is thus possible to see that the diffusion of the FPIC norm in Brazil has not been top-down or bottom-up but rather is happening through these transnational networks.

I argue that if it were not for these networks, the gap between the discourses of the Brazilian government and the effective implementation of this international treaty would be even wider. The government did ratify ILO Convention No. 169 and pass a presidential decree turning FPIC into law in Brazil. However, moving from ratification to effective implementation is a wide gap that policymakers are still reluctant to bridge. There are two political forces that explain the widening and narrowing of this gap. On one hand, the gap becomes narrower when these networks manage to convince high-level policymakers that conducting consultation processes is the right thing to do. One the other hand, the gap becomes wider when groups in favor or dams, ports, roads, large agri-business, mining, and other "development" activities manage to convince high-level policymakers that policies like that are impediments to progress and economic growth.

This research found evidence of both processes (widening and narrowing of the discourse-practice gap). One of the early promising signs of bridging the gap are documents about the SLT dam published by IBAMA and other important pro-dam actors such as Eletrobras. The documents show that high-level policymakers in government agencies generally concede that consultation is the right thing to do, and they accept consultation protocols as the gold standard for consultation guidelines (IBAMA 2016; Eletrobras 2016). Aside from the Munduruku case, another promising sign is the Juruna indigenous people,

who are directly impacted by the Belo Monte dam, and used their protocol to put the Belo Sun mining project on hold⁴ (PRR 2017). These cases show signs of more effective implementation of the FPIC norm, which is due to the promotion of consultation protocols by various networks.

Unfortunately, there are multiple other political forces working towards widening the discourse-practice gap. As of now there are more cases of FPIC rights being ignored than of consultation protocols being respected. The most recent attempt to violate the rights of indigenous and traditional communities in Brazil was the announcement by the Bolsonaro administration in 2021 that the government was considering the possibility of withdrawing from ILO Convention No. 169 (Giovanaz 2021). The effort was carried out by agri-business lobbyists and others who were arguing that the international convention was unnecessary in protecting indigenous groups because these communities are already protected under the Constitution (Giovanaz 2021). Needless to say, the networks of organizations promoting consultation protocols responded vociferously in opposition. At the time of writing, the question of whether Brazil will remain a party to the Convention remains unresolved.

The process from ratification to implementation of ILO Convention No. 169 has been dragging on for more than fifteen years. The government did not respect consultation rights, and it violated them in several cases. However, even though the discourse-practice gap is still wide, the "oughtness" characteristic of the FPIC norm is generally accepted by most. The norm is in the process of being diffused. If this gap is being bridged at all it is due to the

⁴ Civil Public Action lawsuit n. 2505-70.2013.4.01.3903

tenacious efforts of civil-society movements that are not willing to give up on the right to be consulted.

It is then interesting to consider the ways in which international norms diffuse. Indigenous and civil-society organizations formulated the FPIC norm in the late 1980s, but alone these groups could not convince countries to abide by it. The norm became accepted only after being incorporated into an international convention. However, ideas are not adopted simply because they are promoted as "the right thing to do." Incorporating principles of prescriptive behavior into international conventions does not, by itself, make the world a better place. There are two crucial subsequent steps for these norms to diffuse. First, countries must ratify the conventions. International legal instruments effectively influence state behavior because of their legal nature (Simmons 2009). Promoting norms encoded in international conventions is an extremely arduous process without ratification. However, after Brazil ratified ILO Convention No. 169 in 2004, the government did not start abiding by the FPIC norm right away. It manipulated the process and avoided complying with goodfaith consultation processes. Protocols would take another ten years to be published, and even longer to start influencing federal courts. Now that they are getting a stronger grip on the political system, it is unfortunate although not surprising that they will face more pushback. If anything, this is a sign that protocols are in fact constraining and changing the behaviour of high-level policymakers.

The second crucial step for a norm to diffuse and take hold is that those protected by the norm take ownership of it. Traditional populations started using ILO Convention No. 169 as a tool to protect their interests only after attending the workshops mentioned above and learning about the FPIC norm. Now their demand is clear: They must participate in

environmental governance decisions because their livelihoods depend on these resources. They have the right to a thorough consultation processes. The government's rhetoric acknowledges this right, but policymakers are still reluctant to respect it. The diffusion of FPIC is happening both due to Brazil's ratification and due to communities feeling empowered by this norm.

Presidential decree 5051/2004 (now incorporated into Decree 10,088/2019) is the legal device that protects the FPIC norm in Brazil. Interestingly, it did not become the main idea associated with consultation protocols. The presidential decree is fundamental from a legal perspective, but politically it is ILO Convention No. 169 that validates the FPIC norm. This is indicative of a norm diffusion process. As mentioned above, "[what] makes norms norms is that they develop 'stickiness', backed by a 'logic of appropriateness' to replace an initial 'logic of consequences'" (Acharya 2011, 116). What is developing "stickiness" in Brazil is ILO Convention No. 169. The idea that communities have the right to free, prior and informed consultation is deemed appropriate. Decree 5051/2004 has the function of legally protecting this norm, but the norm itself is encoded in the international convention.

Analytical Framework: How the Protocols Movement Influenced Policymakers

In this section, I use the analytical framework developed for this research project to investigate how the movements promoting consultation protocols influenced high-level policymakers.

1) Can social movement activists and organizations form coalitions? This case provides ample evidence that indigenous groups have successfully and effectively partnered with a large number of partners to promote their rights to be consulted and then to implement these rights once they became legalized. Without building

these coalitions, it is safe to say the application of ILO Convention No. 169 in Brazil would look dramatically different. It is also evident that the norms cast in the international treaty would not be diffusing and taking hold in Brazil if it were not for the coordinated and strategic work carried out by these various organizations.

- 2) Can social movements design an effective collective action frame? The collective action frame around the movement behind the protocols is very simple and effective. Local indigenous and traditional communities facing threats from development projects (e.g., dams, mines, highways, etc.) need to learn about ILO Convention No. 169 and must develop their own consultation protocols in anticipation of their battles against such projects. This action frame calls upon a large number of organizations to promote workshops, work closely with these communities, develop new protocols, and then promote them widely so as to broadcast to potential projects that these communities are empowered and aware of their right to a thorough consultation.
- 3) How much and which kinds of resources do social movements have? In this case, one of the most important resources was having legal scholars and organizations deeply familiar with national and international law. That expertise proved essential for the indigenous people to have an influential voice during ILO negotiations, and later for indigenous groups to figure out how to coerce and shame the government into abiding by the law. Another resource that was very important was the financial support from large donor foundations to support community workshops for local groups to learn about ILO Convention No. 169

- and to develop their own consultation protocols. As in many cases, the media was an important resource for these movements as well. A large number of newspaper articles, documentaries and other high-impact publications have called attention to the FPIC norm and to the protocols.
- 4) What activities do social movements do? During the early stages of this process, social movements participated in international negotiations and conferences to discuss drafts for the convention. After the treaty was voted on, movements have worked behind the scenes to push legislators to ratify the document and sign it into law. The movement behind consultation protocols and the implementation of the FPIC norm has been much more visible and vocal than early activities carried out by indigenous organizations. Activities focused specifically on the protocols include the training and educational workshops when communities develop their protocols, media campaigns that put pressure on government and industry representatives to follow the protocols and implement thorough consultation processes when projects emerge, and general awareness and education campaigns targeted at policymakers to teach them about consultation protocols.
- 5) How much access do social movements have to policymakers? During the negotiations for ILO Convention No. 169, indigenous groups had access to policymakers in the national delegations from the country where they were from, but, as discussed above, they were not able to come to any agreement regarding how the convention should be written. Organizations that support indigenous groups in Brazil, in particular the Catholic Church, had some access to policymakers during the process of ratifying the convention and signing it into

law. Other indigenous organizations had access to government representatives during the initial stages of the working groups tasked with discussing consultation guidelines. As mentioned above, these working groups made virtually no progress on the matter and many stakeholders walked away from negotiations. But there was some access to policymakers at that time. Since that initiative failed and social-movement organizations began working on the protocols, they have mostly tried to establish contact with policymakers to advocate for future development projects to follow the guidelines established in these community documents. This kind of access to policymakers is mostly limited to advocacy and awareness, and it is less targeted at building or establishing collaborative relations with policymakers.

- 6) Have policymakers changed their original framing around the issue? Yes, absolutely. When Brazil ratified the ILO Convention No. 169, policymakers used to talk about consultation in a rather vague and superficial manner, almost like a mere formality that did not deserve much attention. The current frame is significantly different. Recent statements by high-level policymakers indicate a solid awareness of the convention, the protocols, the FPIC norm, and how much this process matters for development projects to move forward. Their frame has shifted from vague to specific, and from consultation as a superficial procedural formality to consultation as a fundamental milestone in these projects.
- 7) Has the movement been able to include its cause on the political agenda? Yes, as discussed above, consultation protocols were used in multiple court battles and from the judicial agenda they then moved to the political agenda. At first, when

protocols were created, they were not part of the political agenda of high-level policymakers. This became the case after the judicial system started to support this initiative, which became an impediment to several development projects on the political agenda. Consultation protocols then took center stage in the agenda when policymakers realized that, without paying attention to these documents, other projects on the political agenda which they cared about were not going to move forward.

- 8) Have key actors changed their position, or at least announced an intention to do so? Yes, as discussed above key policymakers first shifted their discourse from "the government has carried out consultation with affected communities in Belo Monte," to "the government did not adequately consult impacted communities because there are no guidelines," to finally "the government understands that consultation protocols ought to be acted upon in future cases of consultation."

 There has not been a case yet when consultation for a development project has been carried out in full accordance with protocols, but there have been clear signals that government representatives are at least showing intentions of doing so in the future.
- 9) Have policy institutions announced procedural changes that align with the overall goals of social movements? The fact that IBAMA has archived the SLT dam permits arguing that the permitting process could not proceed due to lack of consultation is a strong indication that the agency is changing its procedures and becoming more aligned with the goals of social movements. There has not been a formal procedural change yet, and the agency is not following on its own

- footsteps in other projects, see Ferrante, Gomes, and Fearnside (2020). Having said that, the agency did change its old "standard" procedure once in the SLT case and may do it again if the pressure by social movements continues.
- 10) Have social movements organized campaigns on target actors? Yes, many. There have been a large number of campaigns naming and shaming key policymakers for not following the FPIC norm established in ILO Convention No. 169. Many articles have appeared in the press denouncing the lack of consultation with indigenous communities impacted by the Belo Monte dam. Finally, an ongoing campaign by a wide host of partners promoting the consultation protocols.
- 11) Have social movements and policymakers achieved final agreement on substantive issues? As mentioned above, there has not been a case yet when government representatives and industry leaders have formally agreed to carry out a consultation process in line with a specific protocol by a community that would be impacted by a given project. Nevertheless, there has been visible progress on substantive issues, such as a commitment to follow the FPIC norm and several indications that protocols will be used to guide these processes.
- 12) Have policymakers changed their behavior? Unfortunately, they have not. There is, at this point, no indication that key policymakers will behave differently in future upcoming development projects. The general expectation on the part of social movements is that they will need to continue applying significant pressure on policymakers to shape final outcomes because, otherwise, the expected behavior is that policymakers will continue to not respect indigenous communities and their right to free, prior, and informed consultation.

Analysis of the Consultation Protocols Case

This chapter analyzed the rhetoric-practice gap in Brazil regarding consultation. The FPIC norm was created by indigenous and civil-society groups and later validated by ILO Convention No. 169. The diffusion of this norm cannot be explained simply as top-down or bottom-up. Rather, it requires understanding the transnational networks that promoted consultation protocols, which became an instrument to bridge this gap. Studying environmental issues should not be restricted to the analysis of environmental conventions. This case shows that a human-rights convention (indigenous rights in particular) is being used as one of the most powerful legal and political instruments of environmental politics in Brazil.

Environmental governance writ large is the inquiry into *who* governs *which* natural resources and *how* decisions are made. The FPIC norm and consultation protocols influence these three domains. They claim that traditional communities have the right to participate in these decisions (who), that natural resources in their territories are important for their livelihoods (what), and that decisions ought to be made after good-faith consultation processes (how). Protocols and their framing based on ILO Convention No. 169 widen the scope of this field. These documents are changing how the environment is governed in the Amazon. Local communities have always been the legitimate governors, but at times they were deprived of their right to make decisions about the management of these resources. They still cannot veto government projects (except in cases of compulsory relocation), but this convention does change the power-sharing dynamics of who has a say in the process of deciding the fate of rivers, forests and mineral resources in Brazil.

Consultation protocols can halt infrastructure projects, which is a victory for those directly impacted and for the broader network. They grant precious time for scientists to challenge impact assessment reports, for other communities to join the movement, for journalists to raise awareness, and for activists to persuade policymakers. Environmental governance is a field of contested powers where different authorities claim legitimacy over their ruling of natural resources. Protocols are shifting these dynamics. Currently, it is impossible to understand dam governance in the Brazilian Amazon without paying attention to these protocols and this international convention.

CHAPTER 5

USING SOCIAL NETWORK ANALYSIS TO BETTER UNDERSTAND SOCIAL MOVEMENTS

This chapter provides a brief introduction to the method of social network analysis (SNA) and presents an overview of previous studies that offered creative insights into how one can use SNA to better understand social movements. The chapter offers a literature review on SNA, but its purpose is not to find gaps or identify inconsistencies. Rather, it is to show the wide range of applications SNA can have for studying social movements. This method is useful in explaining social movements and providing insights into their internal workings, which can then explain under which conditions do movements successfully influence policymakers according to the analytical framework used in previous chapters.

An Introduction to the Method of Social Network Analysis

Social network analysis (SNA) is a set of theories and methods to systematically understand social relations and interactions. In the case of this research, it is a method to study how people and organizations interact with one another, create social movements and coalitions, elaborate strategies, and share resources. Hanneman and Riddle (2005, chap 2, online) define a social network as "a set of actors (or points, or nodes, or agents) that may have relationships (or edges, or ties) with one another. Networks can have few or many actors, and one or more kinds of relations between pairs of actors." Nodes can be people,

organizations, countries, or any other kind of actor that interacts with other similar actors. In SNA there are many ways to determine ties among nodes. Actors can be connected because they work at the same organization, are part of the same religious community, attend events together, etc.

In network studies there are many ways to analyze actors and their connections. One option is to focus on one particular actor and study all the connections this actor has with other actors (e.g., focus on one person and inquire about the person's relations with family members, coworkers, friends from church, etc.). This is called *ego-network analysis*. A second option is called *demographic network analysis*, which refers to studies where the researcher determines artificial boundaries to select which actors will be included (e.g., students in a classroom with family names beginning with letters A through M, but not those with names beginning with N through Z). The third option is called *full network analysis*, which refers to studies that examine the connections of all nodes that are part of a network (e.g., all members of a club, all countries that have trade agreements, all employees of a company) (Borgatti, Everett, and Johnson 2013; Hanneman and Riddle 2005). This dissertation uses a full network analysis to understand how social movements influence policymakers.

In full network studies there are three levels of analysis (Borgatti, Everett, and Johnson 2013). The first is the node level, in which we describe characteristics of an actor in a network. Node measures are very helpful for studying those in central or leadership positions. There are numerous ways to measure how central an actor is. The most common measure is called *degree centrality*, which is a measure of the number of ties a node has.

Another common measure is called *closeness centrality*, which is the number of ties it would

take from a node to reach every other node in the network. The third common measure is called *betweenness centrality*, which is a calculation of how many times a node is located on the shortest path between two other nodes.

The last common measure is called *eigenvector centrality*, which calculates a score for each node based on the centrality of other nodes connected to the node in question. In other words, nodes A and B could have the same number of connections, but node A could be connected to other nodes that themselves have high centrality, whereas B could be connected to nodes that are more peripheral in the network. In this case, nodes A and B would have the same degree centrality but A would have a higher eigenvector centrality. All four measures of centrality indicate how powerful a node is in the network, and these measures are thus good proxies for evaluating leadership positions (Burkhardt and Brass 1990; Brass and Burkhardt 1993). I use all these measures to better understand the movements behind the Lagoa and the Consultation Protocols cases. I identify who the central actors are in each movement both with the SNA method using the databases I built (explained below), and with the process-tracing method and document analysis as explained in previous chapters. Regardless of the methods used, the actors are obviously the same. The advantage in using different methods to analyze the same actors and processes is that each method gives us complementary information on what makes an actor a central leader in a movement.

The second level of analysis in SNA is the tie level, in which we describe and calculate the characteristics of ties between nodes. A tie can be *weak* or *strong* (friends see each other once a month or once a year). Ties can be *binary or valued*. Binary data (zero or one) indicate presence or absence of a relation (A and B either are or are not cousins),

whereas valued data indicate the frequency or intensity of a relation (A and B see one another three times a month). Ties can also be *directional or non-directional*. Directional data indicate that resources or information flow from one node to another (A borrows money from B), and non-directional data are used for events or relations (A and B went to the movies, or A and B are married). A tie can indicate different *kinds of connections* (A can have a tie with B because they both joined a protest, and A has a different tie with C because A and C share office space). If two nodes share multiple ties (i.e., they are co-workers and friends and cousins), then this is called a *multiplex tie*. Finally, ties can be *actual or perceived*. Actual data are generally collected post-facto in places that record data (classroom attendance sheet, meeting minutes, etc.), and perceived data are generally solicited during interviews or surveys (who do you remember being in that meeting with you?) (Borgatti, Everett, and Johnson 2013; Hanneman and Riddle 2005; Krackhardt 1987; Brands 2013).

At the tie level we investigate whether actors can easily reactivate dormant ties, and whether weak ties (infrequent contact) are more or less likely to facilitate innovation and new opportunities. For the Lagoa movement, I use the database (described in chapters 3 and 6) to extract frequency of connections, and I use that as a proxy to measure tie strength. In the database, all data are binary, non-directional, and indicate actual connections. For the Protocols movement, I use another database (also explained in chapter 6) and extract the same kinds of information. In both cases, the SNA results indicate what kinds of relations central actors have with one another and with peripheral actors.

The third level of analysis in SNA is the network as a whole, in which we describe and calculate properties of the full network. These are known as structural analyses. At the network level, we investigate the patterns of relations among nodes. For example, we can

calculate the *density* of a network, which is the degree that actors are connected amongst one another. To calculate density, we consider all actors in a network and all their existing ties, and then we compare that to the number of possible ties in the entire network. In dense networks it is common to see a high degree of reciprocity, shared norms, social monitoring, and sanctioning (Coleman 1988). Other measures commonly used to study an entire network are *size* (how many nodes are part of the network) and *centralization* (calculated based on the difference between the most and least central nodes).

The advantage of using a full network approach is that it is possible to assess the degree to which organizations are connected. Another advantage is that full network analysis reveals which nodes are most central, which nodes form the pathway that connects one hub to another, and which nodes are peripheral. At the network level, we ask questions like "do well-connected networks tend to diffuse ideas faster?" (Borgatti, Everett, and Johnson 2013). One of the questions I ask is "What are the characteristics of networks that have the power to influence policymakers? Are they centralized or decentralized? Are they dense or sparse? Are they large or small?"

The structure of a network can also take several forms. For example, networks can have a small number of highly central actors in the middle and a large number of actors in the periphery connected only to central actors but not to one another. This structure is called *core-periphery*, also known as a centralized, star, or radial structure. These structures are known for spreading information and resources quickly if the spread starts from the core, but slower if the spread starts at the periphery. Another common network structure is called *clique* (also known as "small world"), which is characterized by a group of actors that are maximally connected to one another. In clique networks it is common to see members

hoarding knowledge and other resources amongst themselves and not sharing it with the wider network. In these settings it is easy to search and identify which groups hold certain information or resources, and it is hard or uncommon to see transfers of information or resources between cliques. The third common structure is for a network to be diffuse, in which all actors are connected, directly or indirectly, to most other actors and there is no clear core or subgroups. Figure 6 below provides examples of a core-periphery network, one with a few cliques, and a diffuse one.

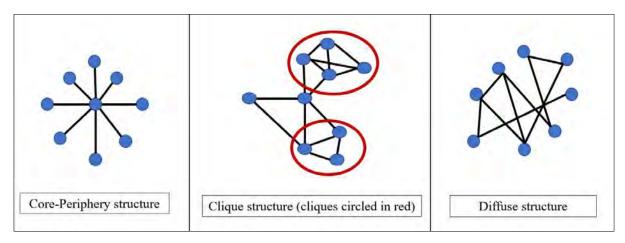


Figure 6. Examples of different network structures. Source: Author.

Actors and networks influence one another. Actors that have high degree centrality can more easily receive ideas and resources from the network, thus the network as a whole influences what happens to central actors (e.g., greater likelihood of becoming infected with a disease, greater social scrutiny by peers, etc.). However, key actors can also use their high centrality to influence what happens to the network by becoming early adopters and spreaders of a new idea (Valente 1995, 1996; Valente and Davis 1999).

There is a lively debate both in SNA circles as well as among social movement scholars regarding the tension between agency and structure. To what extent do the connections someone has in a network constrain that actor or predetermine decisions and behaviors that are acceptable? In this case, the structure would have primacy over agency. Another question is: to what extent can an actor break free from social imposition or break into new social circles because of the actor's intentional behavior? In this case, agency would have primacy over structure. These are questions that remain open for debate. They matter significantly to determine the ability of social movements to influence policymakers. Were movements successful because one or two actors in the network had a previous tie with key policymakers and used their connection as leverage (i.e., success due to network structure)? Were movements successful because they managed to build new coalitions with actors that were previously not part of the initiative but that later became crucial for the movement's success (i.e., success due to agency)? I offer an in-depth discussion on this topic in the conclusion chapter. But the short answer is simple: agency and structure are co-constitutive. For the remainder of this chapter, I consider how SNA can be and has been used to better understand social movements. But before we proceed, it is important to provide a brief overview of network theory.

A Brief Discussion about Network Theory

There is a common claim that the field of social network analysis is "just" a method, and it has no theory. Borgatti and Halgin (2011) reject that claim. They discuss two main theories in the field, both of them based on what they call the "flow model" and argue that they form the bulk of what is already established in network analysis. They also indicate other theories based on the "bond model" currently being develop and that offers new lines

of inquiry that have the potential to fill gaps in the field. At the end of this section, I provide a brief discussion about the importance of distinguishing methods from theory and methodology, and I argue along with Barkin, Chase, and van Wees (2021) for a research approach based on methodological pluralism.

Borgatti and Halgin (2011) begin by recalling the basic definition of network and the purposes of creating theories that exclaim how they work. "A network consists of a set of actors or nodes along with a set of ties of a specified type (such as friendship) that link them. The ties interconnect through shared end points to form paths that indirectly link nodes that are not directly tied. The pattern of ties in a network yields a particular structure, and nodes occupy positions within this structure. Much of the theoretical wealth of network analysis consists of characterizing network structures (e.g., small-worldness) and node positions (e.g., centrality) and relating these to group and node outcomes" (Borgatti and Halgin 2011, 1169). The authors make a very insightful claim that "it is the researcher - by choosing a set of nodes and a type of tie - that defines a network" (Borgatti and Halgin 2011, 1169). This could lead to problems of adding nodes that are not part of the network or even missing nodes that should be included. But according to the authors, this is a naive concern. They note that "the choice of nodes should not generally be regarded as an empirical question. Rather, it should be dictated by the research question and one's explanatory theory" (Borgatti and Halgin 2011, 1169).

It is then important to consider network borders and how they are defined. Borgatti and Halgin (2011) consider that groups have insiders and outsiders, but networks should not be confused with groups. According to the definition, networks are a set of nodes along with a set of ties, keeping in mind that ties do not need to connect all the nodes. Studying a

network is simply studying nodes with a certain characteristic (defined by the research question) and investigating whether those nodes share ties with one another. Thus, it is entirely possible for a researcher to study the network of a set of nodes that are not connected at all and then to investigate whether or not these nodes ever become connected. The example they offer is to investigate the network of friendships in a classroom, considering that on the first day of class students do not know one another and thus are not friends. In the beginning, the network is fragmented, and all nodes are disconnected, and over time the bounds of friendship grow and ties form. In their book "Networked Politics: Agency, Power, and Governance" Miles Kahler (2009) and collaborators investigate under what conditions networks emerge, but Borgatti and Halgin argue that this question does not make sense because networks are always there - or better said, networks come into existence once a researcher defines its nodes and ties. However, Borgatti and Halgin point out that it does make sense to ask under what conditions nodes form ties with other nodes and how these relations change over time.

There are two widely accepted and established theories in network analysis. The first is the strength of weak ties (SWT theory) developed by Granovetter (1973), and the other is the structural holes (SH theory) developed by Burt (1992). The theory developed by Granovetter has two premises. The first is that "the stronger the tie between two people, the more likely their social worlds will overlap - that they will have ties with the same third parties" (Granovetter 1973, 1170). The main assumption behind this theory is the principle of homophily- people tend to form relations with others that are similar to themselves. If Mary is friends with Beth because they like similar songs, go to similar places, have similar political opinions, and so on, AND if Beth is friends with Tina also for similar reasons,

THEN the theory predicts there is a high likelihood that Mary will also be friends with Tina even if the friendship tie between Mary and Tina is not as strong as the ties each of them has with Beth.

The second premise of SWT theory is that "bridging ties are a potential source of novel ideas" (Granovetter 1973, 1171). In a group of friends where everyone is friends with everyone, friendship ties are strong and information circulates quickly, but the tendency is that every person will try to conform to group norms, agree with others, and try to fit in.

These settings become echo-chambers. If someone manages to create a tie with a person outside of this circle, that bridging tie becomes a new source of information that those in the group can only access through the person who made the connection. This new tie is likely a weak one, because the person making the connection has stronger relations with the original group of friends. Weak ties are characterized by having transitivity and allowing information to flow (Granovetter 1973). But even though the tie is weak, it can work well to generate new ideas, open possibilities, and foster innovation.

From an individual's perspective, this is a theory of social capital. The more weak-ties someone has, the higher their social capital. From a group-level perspective, this is a theory of social mobilization. If members of a group have many strong ties with one another, it is harder for this group to establish relations with outsiders and it becomes harder to mobilize the entire group for a given action. If members of a group have mostly weak relations with one another, it is easier for any one of them to develop relations with outsiders, which in turn makes it easier for at least part of the group to mobilize towards a given action.

The theory of structural holes developed by Burt (1992) is also a theory of social capital but focused specifically on ego networks. Imagine that John (letter J in Figure 7

below) has three friends (A, B, and C) and none of them are friends with one another. Imagine that Scott (letter S in Figure 7 below) also has three friends (T, U, and V) and they are all friends with one another. Burt's theory predicts that Scott will receive redundant information from his friends whereas John will receive different information from each of his friends, and, as a consequence, John is more likely to be involved with new projects, be perceived as more creative, and be a more desirable or strategic friend to have (i.e., have a higher social capital). The concept of structural holes refers to the "non-ties" that exist in John's network, namely the lack of connection between A and B, between A and C, and between B and C.

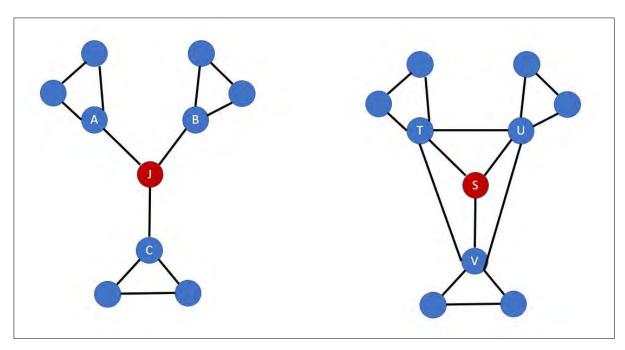


Figure 7. Illustration of structural holes in Burt's theory. Source: Author.

One of the main differences between Granovetter's and Burt's theories is about the ontological nature of social relations. Granovetter assumes that people form relations with

others based on the characteristics of the self and they do it in a search for conformity. Burt has a more instrumental view and assumes that people strategically seek relations with others based on what the self can extract from each connection. The nature of these relations is very different. Having said that, Borgatti and Halgin (2011) point to the fact that the results from both theories are remarkably similar. Using the same Figure 7 above, we can use Burt's theory to see that John has more structural holes, and thus we can predict that he is less likely to receive redundant information from his connections. Using Granovetter's theory, we can see that the connections between John and any of his friends are bridge ties, in other words, John is able to bridge or connect A to B, or A to C, or C to B. "But whether we call them nonredundant ties or bridges, the concept is the same and so are the consequences: more novel information" (Borgatti and Halgin 2011, 1171). Although the theories differ in how they view social relations, both provide explanations for the same social outcome - some relations are more likely to foster innovation whereas others are not.

It should be obvious, but nonetheless worth underscoring, that both theories share the ontological assumption that relations matter for us to understand the social world. A consequence of this assumption that is not apparent in either theory is that the intrinsic characteristics of the nodes matter less than their relations. This is not to say that these theories consider node characteristics to be irrelevant, but they do not focus on how creative, smart, or innovative someone inherently is. What matters most is how well or poorly connected actors are. This is, of course, a very controversial proposition that becomes virtually impossible to verify empirically. Are creative people able to innovate because they have an intrinsic skill to be creative, and this skill pushes them to make connections with others in diverse social settings, OR are they creative because they are connected with people

in diverse social settings, which allows them to practice creative skills? This chicken-and-egg problem is not easily resolved in either theory. Borgatti and Halgin resolve this problem by setting borders between academic fields.

According to balance theory, a person seeks to be congruent with those she likes. When she is not, she feels dissonance and seeks to reduce it. We could ask why, but most of us in the management field are willing to let that one go and let the psychologists deal with it. Ultimately, at what point we feel enough explanation has been given to be satisfying in a given context is a question for the sociology of science and not a question about a particular field such as network theory (Borgatti and Halgin 2011, 1178).

In other words, as far as network theory is concerned, a foundational ontological assumption of the field is that social relations matter, be they a result of actors purposely seeking to build relations or be they a serendipitous consequence of larger social processes.

Once relations are formed, they produce social outcomes that matter for the world. If we are to understand the social world, we ought to investigate how actors are connected with one another.

The most important common characteristic of both SWT and SH theories is their preference for explaining social outcomes based on how nodes are positioned in the network (their connections) and the overall structure of the network. Borgatti and Halgin note that these theories are based on a flow or pipes model. The central assumption of this model is that the longer the path connecting two nodes, the longer it will take for information and resources to flow through them.

From this general model, we can readily derive a number of theoretical propositions that form the core of theories like SWT and SH. For instance, nodes that are far from all others will, on average, receive flows later than nodes that are more centrally positioned. Similarly, nodes that are embedded in locally dense parts of a network will often receive the same bits of flow from their various contacts, because the contacts are tied to each other as well. These flow outcomes (time until arrival; amount of nonredundant flow received) are then related to a variety of more general outcomes, such as creativity, likelihood of promotion, getting a job, etc. (Borgatti and Halgin 2011, 1172).

Another way to think about networks is using what Borgatti and Halgin call the bond or coordination model. Imagine a factory boss negotiating salaries with the company's employees. If the employees are not connected, the boss has a lot more power over any individual employee and might be able to pay lower wages. If the employees start to share information and coordinate, they start to gain leverage over the boss. If the employees bond together and unionize, they virtually become one negotiating unit, then the boss has much less power over them, and wages generally go up. In this coordination model, we look at the whole network and "a common underlying theme is that the network tie serves as a bond that aligns and coordinates action, enabling groups of nodes to act as a single node, often with greater capabilities" (Borgatti and Halgin 2011, 1174). The bond model assumes that ties serve two functions- exchange of information and solidarity.

It is worth noting that "the flow model is the most developed theoretical platform in network theory, but it is not the only one. The field has clearly identified phenomena and developed theoretical explanations that cannot be reduced to the flow model. One such area

is the study of power." (Borgatti and Halgin 2011, 1173). In theories based on the flow model, nodes with high centrality scores are more powerful and those closely connected with such nodes become a bit more powerful by extension (i.e., power by proxy). However, what Cook and Emerson (1978) show is that this is not necessarily the case. If someone is only connected to a powerful node, they become the weak person in that dyad (the powerful node might choose to make a deal with others and not with the weak node). If someone is not connected with powerful others but has ties with many peripheral nodes, that person might become more powerful relative to peripheral others because they may have more options to choose from when making a deal. "Thus, whereas a basic principle in centrality phenomena is that being connected to well-connected others implies greater centrality, in power phenomena it can be the other way around: being connected to weak others makes one powerful, and being connected to powerful others makes one weak" (Borgatti and Halgin 2011, 1173). What is fascinating is that regardless of us looking at networks as pipes through which information and resources flow or looking at them as mechanisms that nodes use to accumulate power, in either case what matters to explain the observed outcomes is how nodes are connected with one another, or, in other words, the overall structure of the network.

As the field of network studies grows, we see simultaneously the development of network theories as well as methods for network analysis. For example, after Granovetter presented his SWT there have been subsequent developments on how we can measure tie strength. When Burt published his book on structural holes, he offered both the theory and the methods to identify and calculate network structure. Because theories posit possible explanations for the social world, scholars develop ways to collect and analyze data that can

confirm or challenge such theories. There is, however, no requirement for a specific theory to be tested only with a certain method, nor is there any constraint on using a given method only to study one or another theory. This is to say that network theories, namely theories that posit that relations create social structures, which then explain social outcomes, can be explored, challenged, proven, or investigated using SNA methods, ethnography, surveys, interviews, or any other tool researchers have to investigate how actors are connected with one another and how they derive opportunities and constraints from such connections.

Furthermore, the same can be said about the number of theories that can be explored with a specific method. For instance, SNA methods can be used to explore theories of organizational studies (do well-connected companies make more profit), education theories (do students learn best in small or large groups), theories of anthropology and kinship (how do people from different families have easier or harder entries into public office), and theories of social movements (how do people get recruited by their peers, or how do different relations among organizations facilitate social mobilization), among others. This goes along with the argument proposed by Barkin, Chase, and van Wees (2021), which is the claim that "neither methods nor epistemology dictate the other. 'Method,' as used here, refers to specific techniques for acquiring, analyzing, or modeling information. A specific kind of regression analysis or process-tracing or discourse analysis is a method. 'Methodology' refers to the way in which methods are put together to answer a question in the context of a specific research project. Methods are thus transitive across research projects; the technical requirements of a good regression or a good discourse analysis are consistent across cases. But methodologies are specific to

research projects; since a methodology is a way of answering a specific question,

there is no reason to expect it to be transitive across questions" (Barkin, Chase, and van Wees 2021, 12).

Similar to the issue of methodology, a research question is very much driven by the theoretical framework chosen for the analysis. In other words, the set of theoretical assumptions that indicate what matters in the explanation of a given situation. For this project the research question is "how do those impacted by dams influence policymakers regarding decisions about such dams?" The assumption behind this question is that those impacted by dams are generally perceived as powerless, and thus it begs the question how they manage to influence others who are generally perceived as powerful. The theories that provide the most robust explanations for this question are theories of social movements discussed in chapter 2. In short, theories that explain how people get together, join forces, recruit allies, frame the discussion, set the agenda, negotiate, and so forth. The next step in the process is determining what are possible methods to investigate the assumptions in these theories.

As mentioned earlier, theories do not dictate methods. In order to investigate how activists get together, recruit their friends, organize protests, and so on, we can use methods such as participant observation, interviews, surveys, analysis of archival data, and also SNA. For this research project, I use process tracing and analysis of secondary data to understand the Lagoa and Protocol movements, as discussed in chapters 3 and 4. In chapter 6, I use SNA to analyze the same movements. This approach is what we call methodological pluralism. "Start with a research question and figure out what methods might be useful in answering that question, whether or not those are the methods other scholars asking similar questions are using, whether or not they are the methods in which the researcher has been

trained" (Barkin, Chase, and van Wees 2021, 13). The next section outlines how scholars of social movements have used SNA as a method to study movements.

How Can We Use SNA to Study Social Movements?

There is little doubt or debate about the fact that "social movements are in other words, complex and highly heterogeneous network structures" (Diani 2003a, 1), but there is still some controversy in the literature regarding the usefulness of studying social movements from a network perspective. One reason is that it is hard to collect data that show the relations between multiple actors in a social movement, and if the data are not reliable then looking at social movements from the perspective of this network data would not be a good strategy. Another reason is that, obviously, social movements can only exist because of the relations among multiple actors and, thus, looking at networks tells us little about movements because in the end all social movements have networks. The work by Mario Diani and Doug McAdam moves the study of social movements and networks beyond such obvious generalized statements. Their work is an effort to use network analysis to understand "how networks matter" (Diani 2003a, 3). The book they published in 2003 Social Movements and Networks - Relational Approaches to Collective Action brought the two fields together and became a foundational reference for numerous works that other scholars published later.

For the review I am presenting in this section, I rely on Diani and McAdam and their contributors along with a number of other publications on social movements that have used SNA. All of them contribute to our understanding about how networks matter for social movements, and all of them use a wide range of network metrics to further this understanding. They also employ a diverse set of theoretical approaches towards social movements; this emphasizes the point that SNA is a method and thus can be used in

combination with multiple epistemological stances. As discussed in chapter 2, scholars of social movements have developed many theories to explain these phenomena (resource mobilization theory, political opportunity structure, relative deprivation theory, etc.). It is possible to use SNA as a method to answer research questions guided by any of these theories because, ultimately, all social movement theories focus in one way or another on how people challenge those in power by forming relations with peers and allies.

In order to show how SNA can be used in a variety of ways, we can divide the literature in two main groups. First are node-level studies that look at social movements from the perspective of how individual actors play a role in movement dynamics. Actors have attributes (their personal characteristics) that influence how they engage with a movement. Actors have different levels of education, professions, personal values, and unique connections with non-movement members, all of which are variables that influence how someone participates in a social movement and how movements impel some people to act but not others. Furthermore, individual participants may have more or less ability to influence the movement. Understanding a movement from the perspective of its leader is very different from understanding the same movement from the perspective of a peripheral participant.

Thus, looking at actor attributes provides useful insights into movement dynamics, and SNA has analytical tools to facilitate this understanding.

Still, within the group of node-level studies are those that focus on social movement organizations (SMOs) and their connections with other organizations. Even though social movements are ultimately made of people, it is easy to verify empirically that people gather around organizations, and these become the institutions that do most of the framing, internal coordination, and external negotiations on behalf of a movement. Looking at a movement

from the perspective of SMOs is different than looking at it from the perspective of the individuals in those organizations, but, nonetheless, SNA methods are used in similar ways.

For example, if a union leader falls sick and needs to be replaced by another peer, the former leader might still maintain personal relations with people with whom the former leader was previously connected, but the nature of those relations will change because the person is no longer a union leader. From the union's perspective, substituting one leader for another certainly has an impact on the movement, but, as long as the leadership visions are aligned, we should not expect too many changes (the membership base is still the same, the new person in the leadership position now has access to the same information and resources that previous leaders did, etc.) The point here is that using SNA methods for node-level studies will be very similar, regardless of whether the nodes individuals and SMOs. In both cases, we look at characteristics of nodes and compare nodes with different features. In SNA, the nodes are the actors, and therefore individuals and organizations can be nodes. Thus, all the centrality measures and other structural metrics that are used to evaluate nodes can be used in either case.

The reason for making this distinction is because studies that use SNA to understand social movements from the perspective of individuals have different insights than those that use the same methods to investigate movements from the perspective of organizations. These differences also stem from theoretical preferences adopted by different authors. Authors who subscribe to rational-choice theory, for instance, have a strong preference to understand an individual's agency and tend to dismiss theoretical approaches that give explanatory power to SMOs or to a political structure that supposedly constrains self-interested actors. These authors use node-level analysis to investigate the characteristics of individuals and how these

actors make rational calculations to estimate risks and rewards of future action and decide what their own behavior should be in the context of participating in a movement.

Authors who subscribe to theories of political opportunity structure tend to investigate how unions, non-profit organizations and larger institutions keep tabs on one another and form strategic coalitions to weaken those in power. These authors also use node-level analysis to look at the characteristics of organizations – which ones are large foundations that offer grants to NGOs that implement projects in local communities. In these example, foundations, NGOs and communities will be nodes, and looking at their individual characteristics tells us a lot about how they partner with one another.

In this research, I use SNA to analyze SMOs and their networks. I use secondary data to gather information on how different organizations are connected and partner with one another. For the Lagoa social movement, these SMOs include MAB, the community association that represents Lagoa residents, MPF, DPU, among others. For the movement behind consultation protocols, SMOs include indigenous associations, NGOs that organize workshops for local communities to develop their protocols, and international foundations supporting the promotion of the FPIC norm, among others. The analysis of these networks is presented in chapter 6.

The second main group are studies that use SNA at the network level, focusing on the entire network of people and/or organizations that form a movement. Whole network studies pay less attention to the characteristics of each node, and rather focus more on how nodes are connected and what kids of nodes an overall network has (is a network have overwhelmingly homogenous or heterogenous regarding the characteristics of its nodes?). It is also important

to note that any study can, and many often do, use node-level and network-level analysis to better understand a network.

This is the approach I use in this research. Aside from the node-level analysis described above, I also use a network-level analysis to understand these movements. Here SMOs are nodes, and I investigate their relations. This outsider's or bird's-eye view is quite distinct from the perspective of those operating within a movement. The network-level approach allows the analyst to understand how and why some organizations form close partnerships with others, how resources and information flow within the network, and how groups are densely or loosely connected. Furthermore, a network-level analysis allows us to investigate the nature of relations within the network. Organizations may foster either cooperative or competitive relations, coalitions might use conciliatory or confrontational tactics with their opponents, and all these different kinds of relations matter for understanding the outcomes of a social movement. Network-level analysis provides tools to understand how different relations shape the network as a whole. According to Diani and McAdam (2003, 6), "a network perspective may illuminate different dynamics, which are essential to our empirical understanding of movements."

It should be clear, but it bears underscoring, that grouping studies into these categories is somewhat arbitrary and only useful to some extent. Ultimately, scholars studying social movements always need to keep in mind the big picture of their study, regardless of whether they are looking at it from the perspective of individuals, organizations, or the entire network.

Node-Level Analysis of Social Movements

The first set of authors who use SNA to learn more about social movements focuses on the perspective of individual actors, often using ego-network analysis. Here we can ask a few broad questions: How do one's social connections influence one's decision to join a movement? This set includes a large number of studies that investigate recruitment. Once someone has joined a movement, what can the person expect from the new ties? New connections can be a source of new information, professional training and new skills, and socialization into new circles. Lastly, we can also ask how one's entry into a movement changes the movement's dynamics, which can happen if the new actor brings in additional resources, if the newcomer is followed by a large number of new recruits, challenges existing leadership, creates factions, or mediates internal conflicts and emerges as a new leader. These are all research questions that benefit greatly from using an SNA method, because this method allows us to systematically investigate multiple actors, their characteristics, resources and relations.

It is clear to social movement scholars that movements are not an aggregate of random individuals – rather, movements are mostly coordinated by social organizations that channel individual efforts to participate in a larger initiative. Looking at a movement from the perspective of the organization explains the formation of echo-chambers (when information circulates repeatedly and generates a high level of buy-in and agreement), the flow of resources (foundations offering grants to NGOs), and situations of clogged or overcrowded leadership spaces, which leads to some organizations becoming more central and others being pushed to the periphery. Scholars who use SNA methods to understand social movements from the perspective of organizations as nodes ask questions such as:

"what are the traits of nodes that account for individual SMOs' centrality or marginality in a network? How do preexisting ties - both organizational and between leaders (or managers/ entrepreneurs in the case of firms) affect chances of new alliances to develop, or the location of specific organizations in a broader organizational field? Answers to these questions also predict influence in the larger political system and attitudes towards collaboration with external actors" (Diani and McAdam 2003, 11).

It is important to keep in mind, though, that students of movements have long argued that reducing movements to single organizations is a serious error and that movements are fundamentally coalitional in their structure. Coalitions, however, vary considerably in the strength and the number of bonds that hold their members together, in the density of relations among their members. Furthermore, coalitions can be more or less coordinated and more or less directed at a single object (Krinsky and Crossley 2014, 8).

This becomes clear when we look at how SMOs build coalitions with some funding organizations while still competing with one another for those very funds. The relations that each SMO builds with others in its networks vary depending on a number of variables, such as: how many other SMOs are operating in that particular area, how much attention from the media and potential financial supporters the issue in question attracts, and how embedded SMOs are in their particular community.

These variables can be assessed with SNA metrics. For instance, degree centrality is often used to measure the number to connections a SMO has, and we can further investigate whether these relations have directionality. In-degree centrality is a measure of how many other nodes are seeking that particular SMO for advice, funds, or prestige. An organization

with high in-degree centrality is perceived by others to be powerful, and others will tend to associate themselves with such an organization in search of influence and to raise their own status. An SMO with high out-degree centrality would suggest that it is trying to showcase its work, expand its reach, or trying to actively promote a certain cause. This could be for example the case of grassroots organizations seeking members to join protests, or a nonprofit organization promoting public events to raise awareness against feminicide or climate change, or for indigenous rights. For an organization that has high in-degree and low out-degree centrality, this means that others are constantly looking for this organization (e.g. trying to establish connections, looking for funding or advice, etc.) and that this organization is not actively reaching out to others. This gap in in-degree and out-degree centrality is often considered a measure of status or prestige.

Diani (2003b) studied environmental SMOs in Italy and tried to assess the extent to which these metrics reflected empirically the available data. He suggests that in-degree centrality is not necessarily the best measure of influence or leadership in all cases. When a social movement is fractured by internal disagreements, the ability to mediate and connect multiple groups is more important than the number of ties. This is known as brokerage, which can be measured by betweenness centrality, defined as "the degree to which an actor is on the path 'between' other actors in the network and can thus presumably mediate relationships between those actors" (Ansell 2003, 126). It is important to note that betweenness centrality is only one measure of brokerage, among many others. An SMO in a brokerage position might only have a few ties, but if these ties connect that node to different hubs, that position might be more important than the position of another node with multiple ties all within one hub. Brokers in social movements are not those who simply happen to

know others in different walks of life. Although this can be the case, those who become brokers are often the organizations that are able to build connections with a diverse set of contacts. These skills are rare and yet fundamental for a movement to hang together, and therefore being "the connector" or the "mediator" might be more important than being "the leader" or most popular member or the one with most prestige.

SNA metrics are useful tools for us to understand the internal dynamics of a movement. An organization with high out-degree centrality is probably fulfilling the function of a leader who is trying to promote a cause, expand the number of members, etc. In the same movement, it is possible to have a different organization with high in-degree centrality that is receiving information about what is happening on the ground, controlling how resources are distributed, and sending out little communication about future strategies if they are operating in an environment that requires secrecy. It is more common that nodes with high in-degree centrality will also have medium or high out-degree centrality, but this is not necessarily the case. Lastly, Ansell (2003) calls attention to SMOs with high closeness centrality, which measures the distance of a path for a node to reach others in the network. "Actors with high closeness centrality can presumably more easily and directly connect and interact with other actors in a network. High closeness centrality means that an actor can easily influence and extract resources from the full network" (Ansell 2003, 126). These are the SMOs that quietly and strategically align themselves closer to other powerful ones, but are not necessarily the center of attention.

Social Movements as a Whole: The Perspective from the Network Level

In this section I discuss the use of SNA methods to understand social movements as wholes, not from the perspective of the actors involved and their connections with others, but

rather from the perspective of the movement itself as the result of an emergent process. Scholars who focus on studying social movements as networks seek to understand how the relations within the network influence the ability or capacity of actors to mobilize. In other words, they are trying to understand the "levels of collective performance that different social units can achieve" (Diani 2003a, 11). This approach allows us to investigate how movements grow from occasional events into sustained campaigns, to identify how leaders may change the frames and call upon different identities to build their cause, and to recognize commonalities across a wide range of movements.

As mentioned earlier in this chapter, there are a few basic metrics to study whole networks. The simplest one is network size (i.e., the number of nodes in a network). It is one thing to have a social movement composed of ten or twenty organizations, and quite another to have a movement with hundreds of them. This is not to say that a larger social movement network is necessarily better than a smaller one, they are just different. The internal communications among members will be different, they will each present themselves in their own way to the media and to the wider public, the way each of them organizes demonstrations and puts pressure on their targets will also vary a lot. The second basic measure is network density, calculated based on the number of actual ties as compared to possible ties in a network. Imagine a network with ten organizations and imagine that all organizations are directly connected with one another - this network has a very high density. Imagine now that any one of these organizations is only connected to two others-this network has a very low density (see Figure 8 below). Peer pressure and social monitoring tend to be more common in networks with high density. This is because everyone knows what others are doing and how everyone is responding to any given action.

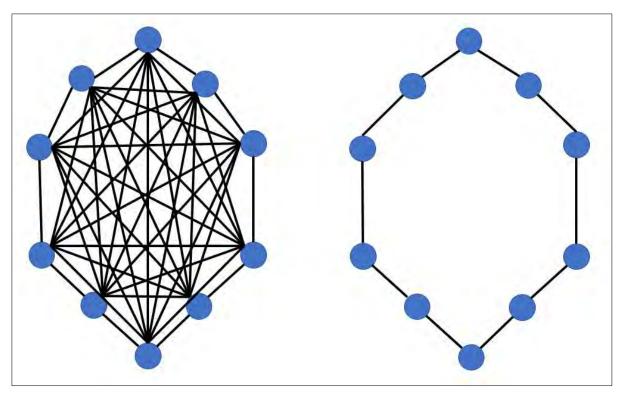


Figure 8. The network on the left is a high-density network, whereas the one on the right has a lower density. Source: Author.

The third important concept is degree centralization, which is a calculation that compares nodes based on their degree centrality to determine the extent to which ties in a network are connected around one node or group of nodes. Interestingly, if we compare the degree centralization in each of the two 10-node networks in Figure 8, their scores will be the same. In both networks the number of connections any one node has is the same (in the high-density network each node has nine ties, and in the low-density network each node has two ties). This means there is not one node in either of the networks that is more central than the others. Let us now compare this situation to the network in Figure 9. In this case there is one node (red) that has nine ties, two nodes (green) that have two ties, and seven nodes (blue) that have three ties each. This network is more centralized than the previous two. It is

important to note that this calculation of degree centralization is based on the scores of degree centrality of each node, but as discussed earlier there are other ways to calculate node centrality (betweenness centrality, closeness centrality, etc.).

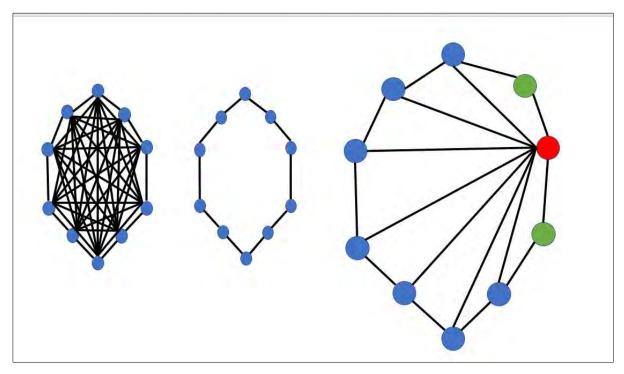


Figure 9. The networks on the left and center have low degree centralization and the network on the right has high degree centralization. Source: Author.

These are the three measures I use to analyze the networks in this study. I would like to elaborate a little more on how these three measures influence one another. When networks have a small size, they are more likely to have higher density and low degree centralization. This is because in small networks it is easier for everyone to know others and maintain relations with them. In a company of twenty or so employees, it is possible for most of them to work closely and frequently with one another. When a network is large, density tends to be lower and degree centralization tend to be higher. In a company of two hundred employees, it

is much harder for workers to know everyone else and work closely and frequently with everyone else. In larger companies, it is more likely that we will find clusters of employees working with one another but not with others in the company. These clusters probably work under a manager who maintains relations with other managers. Thus, in networks with a larger size, the density tends to decrease (the number of ties employees can maintain with colleagues is small in comparison to the total number of possible ties they could have with other employees). In these settings it is also more likely that the degree centralization will be higher (managers will have more ties than an average employee, and they centralize the flow of work and communication between different clusters in the organization).

These relations are also applicable to social movements. In smaller movements, we are more likely to find networks when activists know one another, have a similar frequency of relations with other another, and share information and resources in a more diffused manner. In other words, these networks tend to have high density and low degree centralization. When movements grow, we are more likely to see networks where some actors become more prominent in a certain hub and work closely with other actors in that hub. For example, this would be the case of a grassroots organization working more closely with communities in an area and much less frequently with communities in a different region. Consequently, in larger social movement networks are also likely to have lower density and higher degree centralization.

This discussion matters because it speaks to the cohesion, strength, resiliency and fragility of a network. If a network has high density and a few key nodes are removed (either coopted, defunded, imprisoned, killed or otherwise), that network is more likely to reconfigure itself and continue operating because the remaining nodes know one another and

have a similar amount of resources and information as their peers. When a network has low density and high degree centralization, the nodes that occupy positions of leadership can be more easily targeted by opponents. When these central nodes are taken down, it is much harder for the remaining nodes in the network to reconfigure and restrategize.

Thus, networks of larger sizes are more robust and resilient when they manage to increase density and decrease degree centralization. Let us compare, for instance, the networks in Figure 10. The network on the right in the top row has a lower network density, and thus if two non-adjacent nodes are removed, the network breaks apart (bottom row). This means this network is more fragile. The network on the left has a much higher density, and thus the removal of the same two nodes does not cause the network to break apart. For this ten-node network to break apart it would be necessary the removal of nine nodes, and thus this network is more robust and resilient.

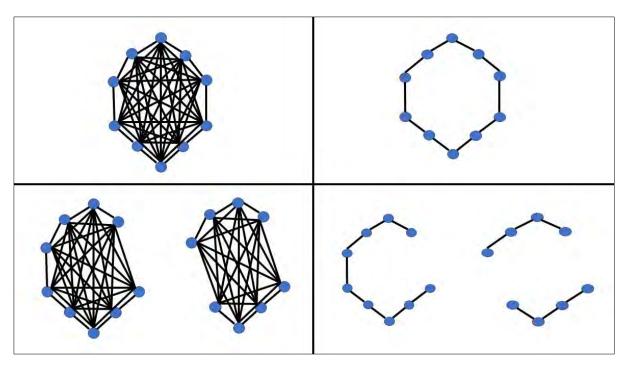


Figure 10. Examples illustrating how higher density increases network resiliency. The network on the top left continues to hold after the removal of two ties in the bottom left, but the network in the top right becomes fragmented after the removal of two ties in the bottom right. Source: Author.

Network fragmentation is a measure that indicates how many pieces or chunks a network has, formally known as components. If all nodes are connected to at least one other node (if the network is held together in one component), then the network is not fragmented. If some nodes or ties are removed and the network breaks into two components, then it becomes fragmented. The level of fragmentation is a measure of how many components there are. The fact that a network is not fully connected (i.e., it is fragmented) does not mean that it is no longer one network. It is useful to remember that it is the researcher who defines the network. For example, if I am interested in understanding how various groups oppose large dams in the Amazon and I decide to consider them as the whole network, they may or may not be connected to another one, or it is possible that some of them are connected

amongst themselves, and form clusters separate from other clusters. Network fragmentation can only be observed at the network level. From the perspective of each node, one actor may or may not be linked to others, but this tells us nothing about the overall level of connections across the network. Furthermore, from the perspective of individuals in a clique, the network might seem very dense, but once we step out of the clique, we may notice high levels of degree centralization or even fragmentation.

Applying SNA Methods to Better Understand Social Movements

Granovetter applied his theory of weak ties to analyze a study previously conducted by Gans (1962) describing how the Italian community of West End in Boston was fragmented and how this high level of fragmentation rendered the community unable to mobilize against urban renewal projects. People in different family groups had weak ties to others (sporadic connections, friend of friends, etc.), but none or too few of these weak ties were bridges that connected people in different clusters. In that setting this was mostly because people living in West End had jobs in other parts of Boston and formed weak ties with peers at various job sites which were not connected with the community in the neighborhood. "It is suggested, then, that for a community to have many weak ties which bridge, there must be several distinct ways or contexts in which people may form them" (Granovetter 1973, 1375). The larger implication of this argument is that weak ties that bridge those in different hubs facilitate information flow and social connections which in turn foster social mobilization.

There is a very interesting study by Osa (2003) that looks at resistance movements opposing the communist regime in Poland from the mid 1960's to the early 1980's.

Considering that resistance movements can vary significantly, this imposes some challenges

to the analytical task of comparing them. Some movement networks are very large (have many nodes), but they are loosely coordinated and do not have much power to mobilize its members (low density) and thus cannot put much pressure on the political system. Other networks might have higher density (members more tightly connected), which makes it easier for them to mobilize, but if the network is too small it may not be able to have much political influence. To solve this problem, the author uses a measure of network centralization rather than network density. She argues that

comparisons of densities of different size networks are not valid because network density is limited by size. This is because the number of relations (ties) an agent (node) can sustain declines as the size of the network increases. However, centralization measures can be usefully compared. While network density describes 'the general level of cohesion in a graph; centralization describes the extent to which this cohesion is organized around particular focal points' (Scott 1991, 92). Mobilization is facilitated when the network is relatively centralized, and hard to sustain when it is not (Osa 2003, 83).

In this study Osa (2003) compares different resistance groups that opposed the communist regime, and she asks why some managed to sustain their opposition for many years while others were vulnerable to repression and easy for the government to crack. She enquires into the network characteristics of these groups, although she is cautious to note that network structure should not be seen as the only explanatory variable. She contends that network structure (i.e., network size, density, centralization, etc.) did influence the outcomes these groups were trying to achieve, but other things such as the overall political context and cultural frameworks mattered as well. Her results indicate that networks with a more

complex structure were more resilient and managed to endure the communist repression. She assesses complexity by measuring the size of the network, the number of cliques, the level of membership overlap (measured by how many people were affiliated with two or more social movement organizations), and the number of brokers. She concludes that "as the measures of network structural complexity increase, there will be a greater likelihood of sustained protest mobilization" (Osa 2003, 101).

Even though the context is vastly different, these results are quite similar to those of the study conducted by Arce (2016) on resistance movements against mining operations in Peru. He divides activist groups into two categories: rights-based mobilizations and service-based ones. Rights-based mobilizations are campaigns framed around the rights of communities to secure land, clean water and cultural survival, and they tend to be very much against mining operations. Service-oriented campaigns try to create compromises that allow the mining enterprise to take place as long as the community receives goods and services such as hospitals and schools. He argues that rights-based mobilizations "create different kinds of community alliances and coalitions, producing organized and sustained challenges to resource extraction. The combination of broader claims with broader coalitions makes rights-oriented mobilizations more likely to yield collective goods or benefits for larger groups vis-à-vis service-oriented protests" (Arce 2016, 470).

Arce's study shows that "only rights-oriented mobilizations have led to organized and sustained challenges against extraction" (Arce 2016, 474), whereas service-based mobilizations generally reach a compromise with mining companies and dissolve afterwards. He argues that rights-oriented frames are more successful at sustaining a movement and influencing policymakers in the long-term for two main reasons. First, these mobilizations

emerge in places with previous histories of collective action and social organizing (areas with pre-existing farmer's associations and community boards to decide on water usage). Arce argues that this social context increases a movement's associational power, defined as the ability of organizations to reframe their purpose (e.g., a farmer's association becomes the liberation front against mining).

The second reason why rights-based mobilizations were more successful in the long term is because they managed to create coalitions with partner organizations external to the movement.

In several protests against new extractivism, the participation of Oxfam and other NGOs was crucial for the coordination of collective action among aggrieved communities affected by mining. These agriculture-based organizations as well as NGOs exemplify the different kinds of community alliances and coalitions behind organized and sustained challenges against extraction. (Arce 2016, 475)

This ability to create coalitions is what Arce calls collective power. He falls short in framing his analysis with SNA measures, but the task is quite simple and falls squarely along the same lines as the conclusions outlined by Osa (2003).

Although context matters greatly, resistance movements seem to be more successful when they emerge organically and develop complex social relations. According to Osa (2003) and Arce (2016), movements are more successful when they are characterized by networks with large size (a high number of participating SMOs), with a high number of cliques (many cases where actors in a sub-group are highly connected with one another and this connection is greater than the connection with the rest of the network), they display a high level of multiplex ties (i.e., when two nodes share multiple ties) measured by

membership overlap, and it is possible to identify many brokers that both facilitate the inmovement coordination as well as make connections with key policymakers. In the case of
the resistance movements in Peru, rights-based mobilizations were spread around the country
- so although the movement was somewhat fragmented, the network was large. The
movement was concentrated in areas with high agricultural activity prior to the pressure from
mining, which means the actors in these areas knew one another from previous interactions
in social organizing (farmer's associations and water-management boards). These sub-groups
created cliques with high levels of information sharing and social monitoring. Finally, the
fact that they managed to establish coalitions with external partners is both a result of
someone in the movement being a broker and facilitating that connection and is a condition
that facilitates future brokerage opportunities because these nonprofit organizations can
provide support for the movement to gain access to the media and to high-level
policymakers.

All of this is to say that, although many authors studying social movements may not frame their analyses and arguments using SNA metrics, this is a method that can provide greater clarity and precision to many of these studies. It is a method that allows us to gather and organize data so that we can see things we were not seeing before. There are many other useful methods to study social movements, and this is a powerful one that deserves consideration in the field. This method allows us to map the relations among groups and see how they share information and resources. We know that this sharing depends on the size of the network and on its density and centralization. SNA gives us a way of identifying how movements engage with decision-makers and how resilient they might be to government

opposition. We do this by evaluating their lobbying capacity and by examining brokerage positions and the degree of network cohesion.

CHAPTER 6

THE SOCIAL NETWORK ANALYSIS OF THE LAGOA AND PROTOCOL MOVEMENTS

This chapter uses SNA to analyze the Lagoa and Protocol social movements discussed in chapters 3 and 4, respectively. The data used for the analysis of both movements are solely secondary data. The first part of this chapter discusses the Lagoa movement, and the second part covers the Protocols movement. For each case, I explain how I gathered and organized the data. I then discuss the results from the SNA analysis and explain how this method complements the process-tracing analysis discussed in earlier chapters.

The SNA Analysis of the Lagoa Movement

Gathering SNA Data from Newspaper Articles

I have created a database with newspaper articles about the Belo Monte dam, ranging from local news anchors reporting on community meetings and protests all the way to international news outlets. The database with news articles contains 868 articles from the period from January 2010 (when dam construction was confirmed) to May 2020 (when data collection ceased). They cover a wide range of issues related to the dam, such as impacts on indigenous communities, violence faced by other traditional but non-indigenous communities, deforestation, fisheries, corruption, urban problems in Altamira, and the Lagoa

neighborhood, among other topics. For the analysis of the Lagoa social movement, I use the sub-sections of news articles that covered urban problems and the Lagoa case in Altamira. I use a full network design where nodes represent all peoples and organizations involved with the movement. I use newspaper articles to extract information about nodes and their ties. I code the information in each article using an edge-list structure. That means articles are in multiple rows in one column and organizations mentioned in each article are on the same row but on another column (see Table 1 below as an example.) The table only includes peoples and organizations that were identified in each article as being supportive, allies, or directly part of the Lagoa movement. For example, if a news article described an event where protesters blocked the road or invaded the dam's construction site to pressure for better sanitation conditions, those included on the table were: a) the names of all organizations that were directly involved in promoting and carrying out the protest, b) the organizations that did not organize but joined the protest, and c) partner organizations mentioned in the news article that released statements supporting the protest. The database contains 7,670 datapoints, where each datapoint is the name of a person or organization. The table below is a representation of this database. In the analysis for this chapter, I did not include the organizations that protesters were targeting (for instance the dam company itself, the environmental regulatory agency, the bank funding the project, certain political parties, etc.)

Table 1. Example of the edge-list structure used to code organizations mentioned in different news articles that covered the Lagoa social movement

News Article	Organizations Mentioned
Article 1	Organization Alfa
Article 1	Organization Bravo
Article 1	Organization Charlie
Article 2	Organization Delta
Article 2	Organization Alfa
Article 3	Organization Alfa
Article 3	Organization Echo
Article 3	Organization Foxtrot
Article 3	Organization Charlie

Note. Source: Author.

In this example, organization Alfa is mentioned in all three articles, organization

Charlie is mentioned in two, and all the other organizations are mentioned only once. This

means that organization Alfa is more vocal and visible, and probably better connected to

others. When I analyze this database, I consider that there is a tie between all organizations

mentioned in a news article. In other words, if article 1 says that organizations Alfa, Bravo,

and Charlie were involved in organizing, carrying out, or releasing statements in support of a

protest, I consider that there are ties among these organizations. In this network, ties are *non-directional* (i.e., it is not possible to know whether Bravo passed on any information to Alfa

or vice versa), all we can know is that there is a connection between Bravo and Alfa. The tie

that connects these organizations is the *characteristic* that they were mentioned in an article

describing their opposition the dam. From an SNA perspective, this type of data is *binary* (an

organization was or was not mentioned in a news article), and these are *actual* ties, as opposed to perceived ties (verified by published and available news articles).

The network analysis of the database for the example in Table 1 will show that organization Alfa has ties to Bravo, Charlie, Delta, Echo and Foxtrot (total of 5 ties). Charlie has connections to Alfa, Bravo, Echo and Foxtrot (4 ties). Bravo is only connected to Alfa and Charlie (2 ties). Echo and Foxtrot have an identical network, both being connected to one another, plus Alfa and Charlie (3 connections each). Lastly, organization Delta is solely connected to Alfa (1 tie). This means that Alfa has the highest degree centrality (highest number of ties), followed by Charlie, then Echo and Foxtrot, and then Bravo and lastly Delta.

One disadvantage of using SNA to study social movements is that the SNA approach used here does not have an easy way to account for temporality. For instance, Table 1 indicates that Charlie was connected to Alfa, Echo and Foxtrot at the time when article 3 was published, and that Charlie was connected to Alfa and Bravo when article 1 was published. For the sake of simplicity, let us imagine that article 1 was published in 2017 and article 3 in 2018. The most reliable assumption from this example is that Charlie and Alfa probably have a stable partnership long enough to have lasted from 2017 until 2018. But this table provides no information about the connections of Charlie with Echo and Foxtrot in 2017 nor about the connections of Charlie with Bravo in 2018. Were Echo and Foxtrot not around in 2017, or were they around but simply not connected? What about Bravo, which had a connection with Charlie and Alfa in 2017 but is not shown in 2018? None of these questions can be answered easily with this SNA approach. This underscores the importance of using multiple methods that can complement one another (process tracing can explain some of the things that SNA leaves out, and SNA can clarify things that process tracing misses).

Furthermore, options exist to mitigate the limitation of temporality in SNA, which are employed here. Considering Tarrow's definition that contentious politics shall only be considered social movements if they are sustained over time, it is possible to list a series of key events that happen over years that we can retrospectively identify as milestones or turning points. Thus, one way to circumvent the temporality limitation in SNA is to break down the analysis into different periods using the milestones observed, and then investigate the connections among actors during each period.

Results of the SNA Analysis

For the social movements fighting for residents in Lagoa, there are two milestones that changed the pace, the dynamics, and the likelihood of success of the movement. The first was in early 2015 after the first large public hearing and when DPU started operating in Altamira. This defines the first period of mobilizations, beginning in early 2012 and lasting until late 2014. The second period of mobilizations was the roller-coaster period between 2015 and late 2017, which was marked my Norte Energia not budging while IBAMA started to side with social movement organizations. The third and final milestone in the process was when IBAMA's president announced that the agency would require Norte Energia to include all families in the Registry and relocate them away from the pond. The last period, between 2018 and 2020, was marked by Norte Energia trying to delay the process but ultimately removing all families from the area.

Figure 11, below, shows the configuration of the network during the first period (2012-2014). The orange node in the center represents people living in Altamira who were being impacted by the housing problem. It is not surprising that this node would be the most prominent, considering that this figure represents the network of articles that talked about the

housing boom and the beginning of the problems in Lagoa. The red node represents MAB, the grassroots organization that was still trying to coordinate a movement. The yellow node represents MPF, which was, at the time, deeply involved with all problems coming out of Belo Monte (indigenous issues, deforestation, etc.) and was being asked to step in and get involved with issues around housing and urban violence. Finally, the green node represents DPU, which first came to Altamira at the time of the large public hearing in late 2014. The colors do not represent anything in particular - they simply make it easier to describe the figure.

The map on the left of Figure 11 represents the network with all the nodes and ties of that first period. The map on the right represents the same network with the difference that the size of the nodes indicates their degree centrality. It is interesting to note that DPU at that time has a very low degree centrality. This makes sense, because there was no DPU office in Altamira until after the major hearing of late 2014. This means that not too many organizations (nodes) had connections with that institution at the time. The map is a visual representation of the SNA analysis of the first period. The results of the SNA analysis are the following: The size of the network is 35 (number of nodes), and there are 196 ties. The density is 0.165 (the number of actual ties divided by the number of possible ties), and the degree centralization is 0.855.

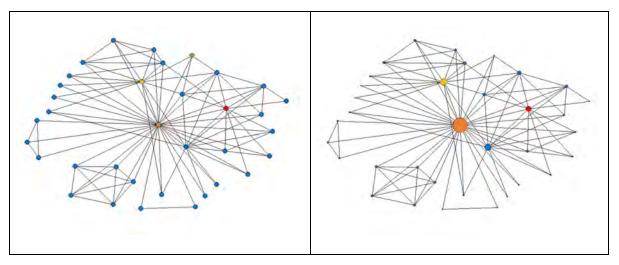


Figure 11. Lagoa mobilizations during the first period (2012-2014). The map on the right is the same as the one on the left except that the nodes are sized by their degree centrality. Source: Author.

Figure 12 below represents the ties between multiple social movement organizations working on housing problems and the Lagoa case during the 2015-2017 period. This figure visually represents the intensification of the dynamics during that tug-of-war phase. The Lagoa case became one of the ugliest and smelliest black eyes in the Belo Monte story. While the dam company continued to reiterate its position of denial, residents in Lagoa managed to grow an extensive network of partners. This period was marked by multiple articles, reports, street protests, and all sorts of demonstrations pushing IBAMA to have a stronger position and enforce its own policies on Norte Energia. As mentioned above, one of the central problems was that all permits issued by IBAMA had explicit conditionality for basic sanitation, which had not been met.

The maps on the left and right of Figure 12 are the same, except for the difference that the one on the right shows nodes by degree centrality. The maps are a visual representation of the network during the second period. The results of the SNA analysis are the following: The

size of the network is 85 (number of nodes), and there are 1446 ties. The density is 0.203 (number actual ties divided by possible ties), and the degree centralization is 0.67. In comparison to the first period, it is possible to observe an increase in the number of nodes - which makes sense considering that core actors in the movement at that time were reaching out to others and trying to make new alliances to gain momentum. It is also worth noting that despite an increase the size, activists also managed to increase the density of the network from 0.165 to 0.203 - which indicates that there were many more connections amongst the nodes. This resonates strongly with the content of the news articles, which reveal that this period was marked by intense communication and activism, bringing actors together and encouraging them to create new bonds.

As evident in Figure 11 and Figure 12, it is possible to observe MAB (in red) gained increasing prominence in the network across the two periods. The DPU (in green) was also operating in Altamira during those years, and it appears in numerous articles as the institution that managed to contain the problem from spreading further because this agency was helping people in eviction cases and in instances when Norte Energia was trying to underpay compensations. Residents in Lagoa (in orange) and MPF (in yellow) continue to be the main actors in this network for obvious reasons. Another interesting comparison between the first two periods of the moment is that despite an increase in the size of the network, degree centralization went down. This is counter-intuitive because, as discussed above, degree centralization generally increases when networks grow. The degree centralization in the first period was 0.855 and it went to 0.67 in the second period. This is a reflection of actors maintaining ties with a large number of others (increasing density), and thus not relying on a few perceived central leaders.

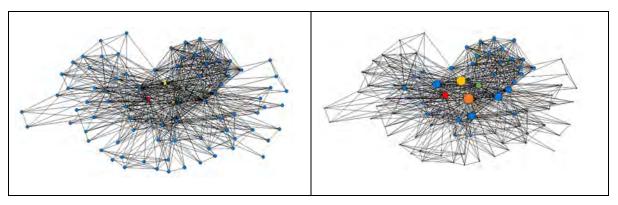


Figure 12. Lagoa mobilizations during the second period (2015-2017). The map on the right is the same as the one on the left except that the nodes are sized by degree centrality. Source: Author.

The third period of mobilization is represented in Figure 13 below. The most interesting thing to note about this network is the inclusion of IBAMA (in pink), a node that used to be a target of the social movements and later became a partner. Equally interesting to note is that the Lagoa residents themselves became somewhat more peripheral in the network, while MAB, the grassroots organization that started coordinating operations, took a larger and more central position later on. MAB became an advocacy organization campaigning for the rights of Lagoa residents. This goes to show how much residents in Lagoa relied on MAB's leadership to carry the movement forward. Here it is possible to see how MAB, MPF and DPU became close allies and very prominent actors. They were connected with a large number of other actors in the movement, and each of them had direct connections both with Lagoa residents and with IBAMA.

The map in Figure 13 is a visual representation of the SNA analysis of the third period. The results of the SNA analysis are the following: The size of the network is 28 (number of nodes), the smallest since the beginning of the mobilizations. There are 462 ties, the density is 0.611 (number actual ties divided by possible ties), and the degree

centralization is 0.419. This shows a period of matured relations in the network, with a few central organizations and dense connections across the network. It is interesting to note that once the movement became established, there was a decrease in size that was followed by an increase in density and a decrease in degree centralization. These trends make sense, as discussed above. In smaller networks it is easier for nodes to maintain relations with a larger number of other actors and therefore these movements become more coherent and robust.

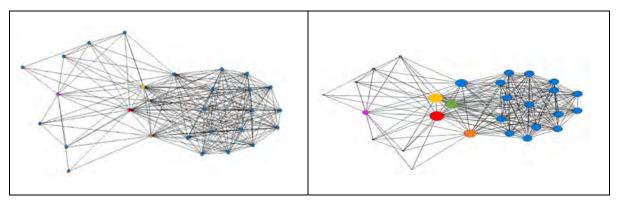


Figure 13. Lagoa mobilizations during the third period (2018-2020). The map on the right is the same as the one on the left except that nodes are sized by degree centrality. Source: Author.

A Few Considerations about the Lagoa Movement from a Network Perspective

The first SNA map in Figure 11 indicates that during that early period there were fewer actors involved, and SNA maps in Figure 12 and Figure 13 show a larger network and denser connections among a core group of actors. One interesting thing to note is that although there are clearly some organizations that are more central than others, there is no central organization that dominates the entire network. The degree centralization is low and it further decreases as the movement progresses. This seems to be consistent with the analysis presented in Chapter 3. In practical terms, what this means is that most actors have similar

access to information and resources. This is not to say that these organizations are all naively friendly and collaborative with one another - rather, it means that these organizations are keeping one another in check (i.e. there are high levels of social monitoring). A greater number of central actors also means that each of them could reach out to more partners and seek support, which was particularly vital during the roller coaster of the second period. Furthermore, not having one central leader renders the network more resilient over time and more successful in influencing policymakers. The impact of the pushbacks from the government was somewhat distributed among different organizations. In other words, the network cushioned the repression, and the actors being together meant that each one only had to absorb part of the governmental incursions.

It is also interesting to note that during the second period of the mobilizations (Figure 12), there were many actors with a high number of connections to other actors. This indicates a period of relatively unstable partnerships in which organizations are trying to diversify their connections and test how much they can rely on allies. During the third period (Figure 13) it is possible to note that some organizations dropped out of the network, while others become more central and established strong partnerships with one another. This reduces the need for any individual organization to constantly be looking for support from other partners. After all, the process of "networking" is time and energy intensive. Having a few reliable partners is much preferred over having a large number of loose and weak partnerships. As discussed in earlier sections, influencing policymakers is a process that takes time and commitment. Organizations require access, resources, skills in framing and presenting their message, ability to activate larger support in key moments, etc. The coordination among organizations in a network is better with fewer but more-reliable allies.

What can we see using an SNA analysis that we otherwise would not be able to see? First, the Lagoa movement attracted the largest number of supporters when things were most uncertain and most visible. The period between 2015 and 2017 was marked by social movement organizations actively trying to expand their reach, calling for external support, publishing reports with outside organizations and calling out government officials to at least get them to see all the problems people in Altamira were experiencing. The volume of news was large, and this could be seen with different methods. But SNA gives us a simple way to quicky compare this. Comparing the maps in Figure 11 and Figure 12 clearly shows an increase in the size of the network.

The second answer to this question is the issue of leadership. Some news articles indicate that MAB was a leader whereas other indicate that this was case was a success thanks to MPF. Interviewing these organizations would also offer very subjective answers to this question. The method of SNA has a simple way to calculate centrality, which is tightly connected to leadership. The Lagoa movement is a clear example of coordination and collaboration among different organizations. This matters because it changes our understanding of how the movement influenced policymakers. The question of centrality and leadership goes beyond an arbitration of which organizations deserve the credit. It is mostly a question of how that constellation of core institutions has managed to mobilize residents, design a collective action frame, pool resources, organize protests, set the agenda, join meetings, and pressure policymakers. All these central features of social movements require coordination and leadership, and SNA allows us to better understand how social movement organizations carry out these activities.

The third important result from an SNA analysis that would be hard to see otherwise is the moment when policymakers make a change and switch sides. As we can see in the three maps above, IBAMA is only present in the third one. It was at that moment, in March of 2018, when IBAMA's president announced for the first time that the agency would shift its position and start requiring Norte Energia to compensate families in Lagoa. From that moment onwards, IBAMA becomes an ally of those who fought alongside residents in Lagoa.

Many other methods such as interviews and process tracing would certainly be able to identify the moment when IBAMA shifted sides. But none of them would have an easy way to analyze how this shift changes the network and the social movement as a whole. What we can see in the maps of the third period is a network with the smallest size and the highest density of the entire process. This is indicative of a period when organizations had a few partners that had been tested over time and were known to be reliable, and, not coincidently, a period of dense connections across these fewer organizations. This makes sense because, at that point, organizations such as MAB, DPU and MPF were closely monitoring to see if IBAMA would follow through in its commitment to require Norte Energia to relocate Lagoa residents. The news articles from that period indicate joint visits and inspections when Lagoa residents were visiting their future new homes and being accompanied by MAB, IBAMA, DPU and MPF representatives.

The SNA Analysis of the Protocols Movement

Gathering SNA Data from Consultation Protocols

The data for analyzing the protocols movement comes from a database I have built that contains the protocols currently published in Brazil. Although there is no one central

organization that is responsible for collecting all protocols, there are various partner organizations that make several protocols available on their websites. These organizations include: MPF, Rede de Cooperação Amazônica, and Observatorio- Protocolos de Consulta e Consentimento Livre, Prévio e Informado. I have consulted the websites of these organizations and collected all the protocols they make available. There is a large overlap across these websites. I have also closely followed the news around the topic and regularly checked other online sources to make sure my database is as complete as possible. I cannot guarantee that I have included every single existing consultation protocol in Brazil, but I am highly confident that virtually all of them are included. The database has 49 consultation protocols and a total of 815 datapoints, where each datapoint is the name of an organization mentioned in a protocol.

I also coded the information in this database using an edge-list structure. All protocols are in multiple rows in one column and the organizations and peoples mentioned in the protocols are in the same row but in another column (see Table 2 below as an example). It is important to note that I did not make any distinction between the peoples and organizations mentioned in the protocols. For instance, the main organizations responsible for each protocol are always the community associations that represent the community authoring the document. But even though the *Consultation Protocol of Community Saint Jones* (a hypothetical example) was authored by the Saint Jones Community Association, the protocol also indicates several nonprofits, grassroots groups, religious organizations, and foundations that supported the Saint Jones community to elaborate their protocol. In this database, I include the communities themselves along with all peoples and organizations that supported the process that were mentioned in each of the protocols. Similar to the Lagoa SNA analysis,

I conduct a *full network* study where ties are *non-directional* (no information regarding which organization spread information about consultation protocols or how it attracted the support of others). Here again, ties are characterized by the fact that each dyad of organizations was mentioned in a given protocol. In this database, I also include the attributes of each organization. Thus, it is later possible to analyze how local communities partnered with different kinds of organizations to elaborate their protocols.

From an SNA perspective, this type of data is *binary* (an organization was or was not mentioned in a protocol), and these are *actual* ties, as opposed to perceived ties (these relations are indicated in protocols that are published available).

Table 2. Example of the edge-list structure used to code organizations mentioned in different consultation protocols, along with their attributes.

Consultation Protocol	Organizations Mentioned	Attributes of Organizations
Protocol 1	Organization Golf	Community Association Golf
Protocol 1	Organization Hotel	Nonprofit organization
Protocol 1	Organization India	Religious organization
Protocol 2	Organization Hotel	Nonprofit organization
Protocol 2	Organization Juliet	Community Association Juliet
Protocol 3	Organization Kilo	Foundation
Protocol 3	Organization Lima	Grassroots organization
Protocol 3	Organization Hotel	Nonprofit organization
Protocol 3	Organization Mike	Community Association Mike

Note. Source: Author.

In this example, organization Hotel is mentioned in all three protocols, which means that they are probably actively involved in promoting consultation and the FPIC norm. It is

also important to note that not all protocols indicate partner organizations, but every single one has the community authoring the protocol (in this example, they are the associations of the Golf, Juliet, and Mike communities).

Here again we face the challenge of accounting for temporality using an atemporal method. In the case of the Lagoa Movement, the news articles span a 10-year period and there were a few important milestones that could be used to define each period of the movement. For the case of the protocols, this is harder. The first protocol in Brazil was published in May 2014 and, as discussed in chapter 4, the spread of consultation protocols increased in the following years. But even though the 8-year time span between 2014 and the end of data collection is not short, we have not yet seen enough milestones in the diffusion process that allow us to break the movement into different periods.

There have certainly been many important victories, such as the SLT dam being put on hold because of the Munduruku protocol, as discussed in chapter 4. Achievements like this certainly encourage the spread of more protocols in other communities. Nonetheless, there have not been turning points yet that clearly define different periods in the movement. I have thus decided to analyze all protocols as being part of one large universe. In other words, all protocols are included in the following analysis and are not broken down into periods according to their publication year.

Results of the SNA Analysis

For the analysis of the protocols, there are a few things I am interested in. First, which actors were involved with different protocols, and what can we infer from that. Second, which kinds of organizations were most prevalent as norm diffusers.

The maps in Figure 14 below show the network of protocols and their actors. The blue squares are protocols, and the red dots are actors involved with the protocols. It is important to note that this is a 2-mode network, meaning that the map includes protocols and actors (two different kinds of nodes). It is possible to observe in this image that a number of actors are only connected to one protocol, whereas other actors are connected to two or more protocols. The map on the left shows all actors in red, and the map on the right shows most actors greyed out and the local communities in yellow. The map on the right shows that most communities are only involved with one protocol.

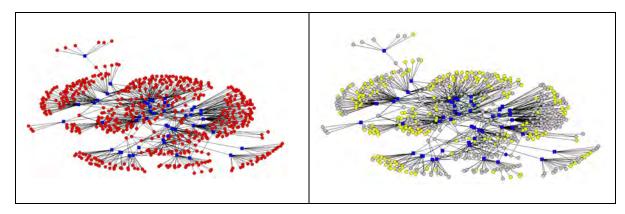


Figure 14. Network of Consultation Protocols and actors involved with each protocol. Blue squares represent the protocols, and red nodes on the left represent all actors. On the right side, most actors are greyed out and yellow nodes represent local communities. Source: Author

Local communities are the main authors of each protocol. For example, community A partners with organizations Alfa, Beta and Gama to organize A's protocol. Community B partners with organizations Alfa, Beta and Lambda to organize B's protocol. Thus, in most cases, the communities authoring the protocols only appear once in the network, whereas their partners (Alfa, Beta, Gama and Lambda) might appear in multiple protocols. In SNA

terms, these communities show as peripheral because they have a low degree centrality (they are only directly connected to organizations that partnered with them to develop their own protocol). I would like to note, emphatically, that this does not mean that these communities are unimportant. These communities are at the forefront of the resistance movement and are actively engaged with a number of partners to defend their territories. They are, as noted, the most important actors in the development of a protocol. The fact that they are peripheral in the network also does not mean they are the recipients of these protocols (i.e., that other organizations are bringing a protocol from the top down and delivering it to these communities). This simply means that the diffusion process is happening through these partner organizations and not on a community-to-community basis.

This raises the question: Who are the other actors involved in protocols network? The map in Figure 15 below shows the network is extremely diverse. In this image the protocols are dark blue, and the nodes are colored based on their attributes. Yellow nodes are local communities, grassroots organizations are orange, funding organizations are pink, governmental organizations are red, individuals are aqua-blue, labor unions are light green, NGOs are dark green, religious organizations are purple, and universities, educational and research centers are grey. This indicates how local communities have created ties with a host of different partners to support them in their struggle for the right to be consulted.

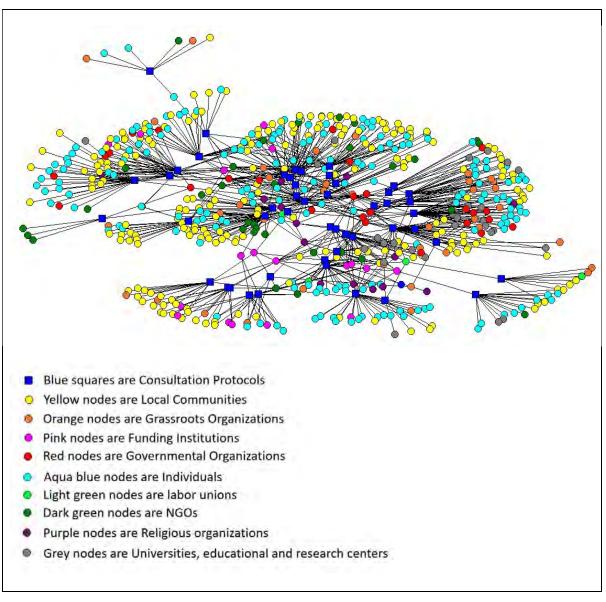


Figure 15. Network of consultation protocols indicating a large diversity of organizations involved with each protocol. Source: Author.

In the network of consultation protocols there are 49 protocols (dark blue squares) and 557 actors (colored round nodes). It is important to note that most protocols are authored by more than one community. Frequently, one protocol covers a region with various neighboring communities. For example, the protocol of an indigenous territory will include

all the indigenous communities living there. This is why the map shows a large number of local communities (yellow nodes) and only 49 protocols.

If most communities are only involved with their own protocol, the next question to consider is: Which actors are involved with two protocols or more? This would reveal how the idea of creating a protocol and how the FPIC norm are diffusing from one community to another through the work of those who are involved with two protocols or more. This question can easily be answered with the SNA method. Figure 16 below shows all the 49 protocols and only the nodes that are connected to two protocols or more. The image on the left shows all actors in red, and the one on the right shows the same actors colored according to their attributes. This map shows that only a few actors were involved with more than one protocol. The original network has 557 actors and this one has 84. This means that 473 (557-84 = 473) actors were involved with just one protocol. Most (but not all) of them were local communities. The main point here is that out of 557 actors, there is a group of only 84 that were involved with two or more protocols. This is quite a feat! It means that hundreds of local communities now have their protocols developed with the support of some 84 core partner organizations. The partners in this network are the norm promoters and conveyor belts described by Keck and Sikkink (1998).

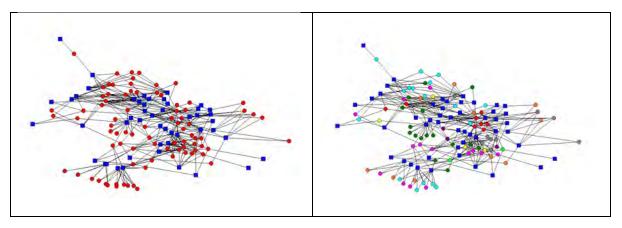


Figure 16. Network of actors involved with two or more protocols. Blue squares are the protocols, and actors are round nodes. On the left all actors are red, and on the right actors are colored based on attributes. The attribute code is the same as Figure 15 above. Source: Author.

It is interesting to note that there are four local communities on map in Figure 16, represented by the four yellow nodes on the map at the right. These four actors are community associations that have been involved with protocols other than their own. In three of these four cases, the community association was only involved with two protocols (their own and that of a neighboring community). When it is their own protocol, these community associations are mentioned as the main actor to be consulted. When it is the protocol of a neighboring community, they are mentioned as a partner organization that was important during the development of the protocol and that might be invited to listen in during the consultation process in the event one is implemented in the future.

There is only one community association that was involved with four protocols. This is quite an interesting case because out of the hundreds of communities that developed their own protocols this is the only case of a community association that clearly became a norm promoter. This community association was first involved with their own protocol, which was

published in July 2017. The same association was then involved with three neighboring communities that published their protocols in October 2017, February 2018, and June 2020.

The map on the right in Figure 16 shows four yellow nodes, which in and of itself is curious considering that hundreds of yellow nodes disappeared after we filtered for nodes involved with two or more protocols. Because the map showed which four communities were involved with multiple protocols, it was easy to go back to the main table and cross reference the dates of the protocols and the regions where these communities were located. This process revealed that these four communities were involved with their own protocols first, and later with the protocols of their neighbors.

The map on the right of Figure 16, which is colored by node attribute, also shows other interesting insights aside from the case of the four local communities mentioned above. The map in Figure 17 below is exactly the same as Figure 16, except that the nodes are rearranged for easier visualization. I would like to call attention to four interesting cases highlighted here in the numbered ovals.

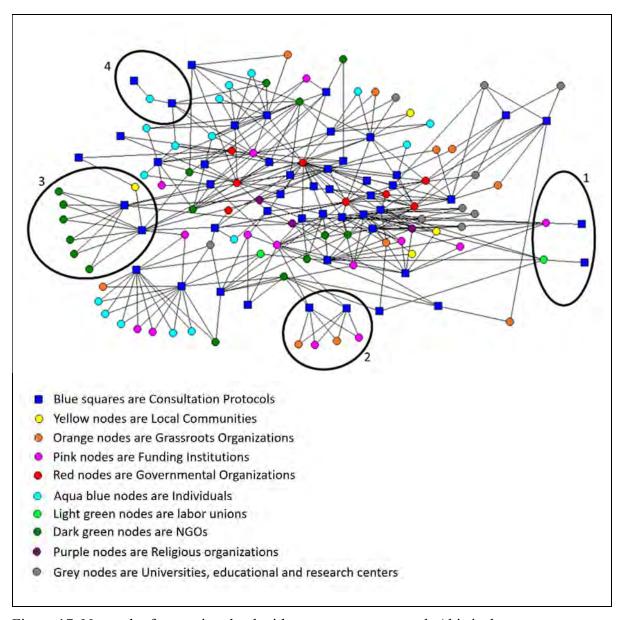


Figure 17. Network of actors involved with two or more protocols (this is the same map as Figure 16 but rearranged for easier visualization). Source: author.

In the first oval we see a case of two protocols that were facilitated by two different partners - one was a funding organization (pink node), and the other was a labor union (light green node). In both cases, the partner organization (funding institution or labor union) are well-connected actors with ties to multiple other protocols. It is important to keep in mind

that there are also other actors involved with each of the two protocols highlighted in oval #1 (the communities that are the main authors of the protocols along with other supporting organizations). However, all these actors were only involved with one protocol and thus are not shown in this image. The comparison between the protocols in oval #1 is interesting because aside from the local communities and other partners that were only involved with those protocols specifically each of these protocols is only connected to the larger network through one node AND the connecting node (a.k.a. broker) is not the same kind of actor: one is a funding institution and the other is a labor union. This only goes to show that norm diffusion cannot be explained by looking simply at the kinds of actors involved in a network. In other words, actors promoting a certain norm are not just NGOs or governments or labor unions. One crucial piece of information required to understand how ideas spread is the position of each actor in a network. The connections a node has are a strong indicator to predict whether the actor will be a norm diffuser, more so than the kind of actor itself. This point has been previously discussed in Barkin, Chase, and van Wees (2021).

The second oval also provides an insightful comparison. In this case both protocols are connected to the larger network through two nodes (a green and a pink node outside of the oval). What is interesting in this case are the orange and pink nodes inside the oval. These four nodes are only connected to the same two protocols in the network. Again, it is worth keeping in mind that the communities that are the main authors of these protocols are not shown here because this image only displays actors that were involved with two protocols or more. It is interesting to observe that these four organizations were involved with the same two protocols because it shows they had learned on two different occasions how to develop a protocol. I would dare to predict that these four organizations have a high likelihood of

becoming norm diffusers and of being involved with other protocols in the near future. Orange nodes represent grassroots organizations and pink nodes represent funding institutions. The data do not allow for much speculation, but it is reasonable to imagine that the two protocols in oval #2 were a good opportunity for these two grassroots organizations to develop strong relations with the two funding institutions, which could potentially lead to more funding revenues in the future.

The case in oval #3 is worth noting for two reasons. These two protocols were developed by a large number of partner organizations. One protocol has 13 ties and the other has 10 ties, aside from the numerous communities that authored each protocol that are not shown here. It is interesting to observe that 6 NGOs supported the development of these (and only these) two protocols. As with the case in oval #2, I predict that at least a few of these NGOs are likely to get involved with other protocols in the near future. This is because these two protocols were opportunities for these NGOs to either become connected or strengthen previous connections they might have had with other central actors in the network. They have learned how to facilitate the process to develop a protocol and can now spread the message to other communities.

The second comment that is worth noting in oval #3 is the yellow node that connects one protocol in the oval to another protocol outside the oval. That yellow node is a local community association, one of the four cases mentioned earlier of communities that are acting as norm promoters. The fact that a local community is diffusing a norm is interesting in and of itself. But what is even more interesting is the comparison of the number of ties between the two protocols. The protocol outside of the oval is authored by that local community in question. This protocol only has 2 ties shown here and another 3 ties that are

not shown because they are nodes involved only with that one protocol. Thus, that protocol has 5 ties in total, one with the main author (the community association represented by the yellow node) and the other four with partner organizations. The community association is cited as a partner by the other protocol inside the oval. The protocol inside the oval has 13 ties shown here and another 19 not shown here, a total of 32 ties. There are 10 communities that authored the protocol inside the oval, which means that the remaining 22 nodes are partners (one is the yellow node representing the neighboring community association plus another 21 partners).

Comparing protocols by the number of ties is very intriguing. Some protocols have very few actors, while others have a large number. In the database I built for this research there are 49 protocols. The protocols with the smallest number of actors involved have 5 ties each (one of them is the one outside oval #3 discussed here). The protocol with the largest number of actors involved has 40 ties. Thus, the range is very wide. With the data currently available it would be sheer speculation to investigate whether the number of ties has any correlation with other things, such as which organizations are the most active norm diffusers or which communities are most likely to be connected to central actors. At this point, all I would like to note is that it is interesting to observe that some protocols have very few actors while others have many. It is also intriguing to note that, of the two protocols with the smallest number of ties (5 actors in each), one of them has a community association that seems to be quite actively involved with protocol making.

The last case I would like to analyze in this map is oval #4. Personally, I find this the most striking case of all protocols analyzed here. The aqua blue node connecting the two protocols is an individual. If it were not for this one person, one of the protocols would either

be completely disconnected from the network or would not exist all together. Protocols are now spreading quickly and gaining traction, which allows us to anticipate that communities and their partners will start developing new protocols simply by reproducing the overall format established in this first wave of protocols. If this happens, future protocols will be disconnected from this core network because actors developing them would not be directly connected to any actor in this network. This has not happened yet, but it is likely to start happening soon.

In the case of the two protocols highlighted in oval #4, there are two possibilities for interpretation. The first option is to imagine that both protocols would exist regardless of the individual connecting them. This would then be a case of a community and a set of partner organizations (almost) entirely disconnected from the main network, and simply using the established format to develop a new protocol.

The second possible interpretation is that the person in the aqua blue node was the norm promoter that facilitated the emergence of the second protocol. I would need to conduct interviews with the actors involved to determine which case is empirically valid. Without this information, it is hard to determine which was the case. However, the information available in both protocols supports the second interpretation. The protocol that is better connected to the rest of the network (the one in the in lower right side of oval #4) was published in 2014 and the other protocol in the oval was published in 2019. The later protocol (which is less connected to the network) also says explicitly (on page 3 of the document) that the person represented by the aqua blue node was responsible for advising the process and developing didactic material for the workshops.

There is not enough information to assert that the individual in question was solely responsible for transmitting the knowledge about protocols, ILO Convention n. 196 and the FPIC norm. It is not possible to affirm with certainty that if it were not for this person the protocol would not exist. Chances are that the empirical reality was a combination of the first and second interpretations - that the protocol would probably exist regardless of that individual, but the person probably had a strong influence in initiating and shaping the process. But the fact that this person was involved with one of the first protocols and later was responsible for advising a second one shows that norms do not need to be housed in a formal institution to be promoted, as individuals not affiliated with any organization can work as independent consultants and advisors in the process of norm diffusion.

This is yet another case where the SNA method allows us to see things that we otherwise would have missed. In the universe of dozens of protocols and hundreds of communities and partner organizations (and growing!), there is, at best, a very small chance that anyone would be able to identify this case at random. Missing this case would have been detrimental to our understanding of norm diffusion and our analysis of how protocols are supporting local communities in their struggles to influence policymakers.

The next step in the SNA analysis of the protocols movement is to examine the structure of the network, as I did before with the Lagoa movement. It is harder to calculate that in a 2-mode network (protocols and nodes). Thus, the first step is to transform it from a 2-mode to a 1-mode network. What this means is that we are no longer paying attention to the protocols, but simply to the relations between organizations. In the 2-mode network ties connected organizations to protocols, and in a 1-mode network ties connect organizations to other organizations involved in the same protocol. There is a tie between two nodes when

they have joined a protocol together. Figure 18 shows the network of actors that joined at least one protocol. The maps on the left and on the right are identical, except that the map on the right shows nodes colored by attributes.

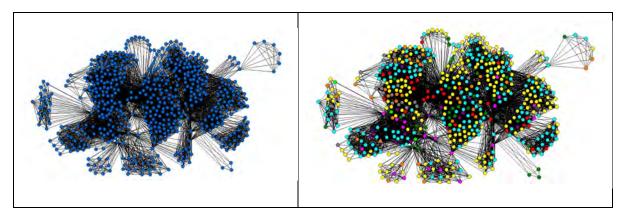


Figure 18. Network of nodes involved with all consultation protocols. Maps on the right and left are identical, except that map on the right is colored according to node attributes. Source: Author.

This map shows the 557 nodes that were connected to at least one protocol. The image is visually busy and does not easily lend itself to interpretation. All we can tell is that there are some nodes that are highly connected to others, whereas some nodes are more peripheral. This is not surprising, considering that we knew from comparing maps 6.5 and 6.6 that hundreds of nodes were only involved with one protocol and only 84 nodes were involved with two or more protocols. The results of the SNA analysis of this network as follows: The size is 557 (number of nodes), and there are 15,686 ties. The density is 0.0506 (actual ties divided by possible ties), and the degree centralization is 0.555. In and of itself this information does not provide useful insights into the protocol movement. The only somewhat useful piece of information is the size of the network because getting 557 actors involved in a movement is not insignificant. But large networks are known for having low

density scores because the larger a network is the harder it is for any one actor to maintain or create relations with others, and thus the proportion of actual ties by possible ones decreases.

The next set of maps in Figure 19 is more useful for interpretations because it depicts the connections between the 84 actors that have joined two protocols or more. These 84 nodes encompass funding organizations (pink), governmental organizations (red), grassroots organizations (orange), individuals (aqua blue), labor unions (light green), local community associations (yellow), NGOs (dark green), religious organizations (purple), and universities, educational and research centers (grey). This core group of protocol promoters is composed of the whole spectrum of organizations involved with this diffusion process. This shows that protocols are not spreading only thanks to the work of nonprofits, grassroots organizations, or international foundations. Protocols are spreading because there is a diverse network of institutions diffusing this norm.

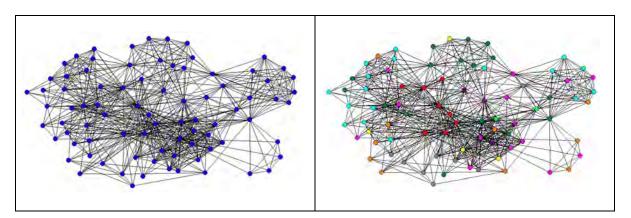


Figure 19. Network of 84 nodes that have joined two or more protocols. Source: Author.

Considering that these are the actors that are diffusing consultation protocols, it is worth investigating further how they are connected to one another. The results of an SNA analysis of this smaller network are the following: The size of the network is 84 (number of

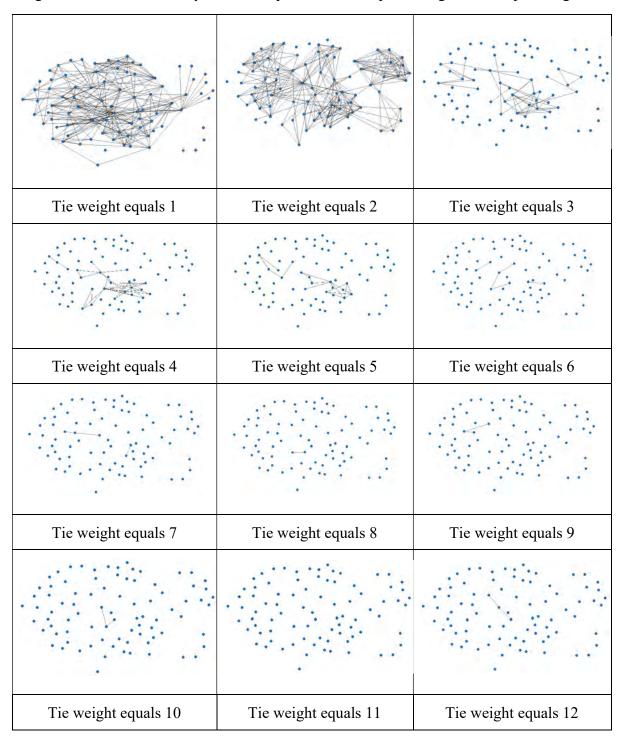
nodes), and there are 1408 ties among them. The density is 0.202 (number of ties divided by possible ties), and the degree centralization is 0.571.

A Few Considerations about the Protocols Movement from a Network Perspective

In this section I consider multiple analytical perspectives that shed light on the network of 84 nodes that have joined two or more protocols. This sub-set of actors is interesting to observe because they are the core norm promoters and the ones that directly influence policymakers.

The next set of images in Table 3 shows the valued ties in this network weighted by number of protocols. This means that ties with a weight of 1 indicate a connection between two actors that have participated in 1 protocol together. A tie with a weight of 2 indicates a connection between two actors that have participated in 2 protocols together. The most common case is ties with low weights. This makes sense because once two organizations have worked together on a few protocols, it is easy to imagine that each of them will move on independently and continue spreading consultation protocols among other nodes in each of their networks. Having said that, we do see some organizations in this network that have worked with one another on multiple protocols (cases of 8 protocols or more, with one case of three organizations that have worked together in 12 protocols). The images in Table 3 below show this network with ties weighted from 1 through 12.

Table 3. Network of 84 nodes that joined two or more protocols, with indication of tie weight, which is measured by number of protocols that a pair of organizations joins together



Note. Source: Author.

There are a few things that can be interpreted from the analysis of tie weights. The most common cases are pairs of organizations that joined between one to four protocols together. Organizations that have joined five protocols or more with another partner are uncommon. On the map indicating tie weight equal to 6, we see one pair of organizations that has joined 6 protocols together, another pair that has joined a different set of 6 protocols, and four organizations that have joined 6 protocols together. The next map shows that three organizations have joined 7 protocols together, and another two organizations have joined 8 protocols together. There were only two organizations that have joined 8 protocols together. There were also three organizations that have joined 9 protocols together, and another three that joined a separate set of 10 protocols together. No pair of organizations joined 11 protocols together, but there were three pairs of organizations that joined 12 protocols together.

This analysis shows some interesting findings. The first is that among the group of 84 actors that are the main norm promoters and have been working to diffuse consultation protocols, most of them are working with a diverse set of partners within the universe of 84 nodes. It is not common to see actors working repeatedly with the same partners, as indicated on maps with higher tie weights. This shows that these organizations are autonomous and independent and are able to form their own connections with other actors in the network. This also debunks the conspiracy theory that there is a core group of nonprofits fueling the papermill of consultation protocols. The majority of organizations involved with multiple protocols forms a diffuse network, indicating that, although these actors have shared goals, they are working independently from one another.

This is also reflected in the protocols themselves, although it is harder to see that without an SNA analysis. Most protocols contain a brief introduction explaining how that particular community (or group of communities) developed their protocol. These introductions indicate that communities relied on their existing partners to begin the process, and often reached out to new ones inviting them to be consultants or advisors because of their previous experience with other protocols. In this network, actors work independently and form new connections based on their reputation and experience gained in previous interactions. Although the density of this network is not high (only 0.202 as indicated above), the network is dense enough that unconnected nodes can form ties and that a potential bad reputation would certainly travel across the web.

The other interesting finding from the analysis of tie weights is that the three nodes that joined 12 protocols are all governmental organizations. They are MPF, MPE and the National Indian Foundation (Fundacao Nacional do Indio, FUNAI). The reason why they are such prominent actors in the network is because they are cited in almost all protocols as institutions that communities trust as partners, and communities require the presence of representatives from these institutions if they ever go through a formal consultation process. Representatives from these institutions may or may not have been directly involved with the development of the protocols where they were cited as trusted partners.

As mentioned above, I have included in the main database all organizations that each protocol indicated as a partner. There are protocols that clearly indicate that representatives from MPF, MPE, and/or FUNAI have participated in the workshops when the community prepared its protocol. Although it is common that communities disclose in their protocols which partners have supported the development of the document, many do not. Often

protocols just indicate which organizations a community trusts and wants to be present if a formal consultation process is ever conducted. Thus, organizations such as MPF, MPE and FUNAI have entered the database either because they were actively involved in promoting protocols or because they were named in other protocols as trusted partners.

Why would a community name these institutions as trusted partners, even if no representative was present when the protocol was developed? The answer is simple.

Protocols are a political tool that communities use to influence policymakers. Including governmental organizations as trusted partners in such documents is very strategic.

Let us consider the larger context. There are agencies and governmental branches known to favor "development" projects such as dams, roads, ports, etc. These actors work to influence high-level policymakers to secure funding and permits to implement these projects. Meanwhile, high-level policymakers are also targeted by other actors that push back against projects that impose undue burdens and severe negative impacts on local communities. Small rural communities are completely absent at this high decision-making level. There are no members of these communities who by him or herself could even enter a negotiation room where these projects are discussed. The way that people in small communities influence these high-level negotiations is by having partners that can represent their interests. The stronger these partners are, the more represented and protected these communities are. Indicating in a protocol that governmental agencies such as MPF, MPE and FUNAI are trusted partners signals that these communities are aligned with the actors that can directly influence policymakers.

This indicates that the influence process is not directly from local communities to high-level policymakers. Rather, it is a process of *influence by proxy*, where local

communities build alliances with partners who then influence high-level policymakers by representing and bringing the concerns of the communities. The influence is not from local communities to policymakers directly because they are at different levels of governance *and* at different sides of the negotiation. What I am calling *influence by proxy* is a two-step process. First, local communities need to partner with organizations on their side that also have access to high-level policymakers. This first step changes the governance level from local to national. The second step is when these partner organizations advocate on behalf of these communities and influence policymakers to shift sides. This happens at high governance levels and bridges two different sides of the negotiation. Communities are using consultation protocols to signal that they have powerful allies (going from local to national governance levels). The partner organizations then use the protocols to claim their authority in representing the interests of these communities (crossing different sides of the negotiation at high governance levels).

There is one last SNA analysis that adds further insights into this finding. Figures 20 to 23 below indicate the node measures of the 84 nodes that were involved with two protocols or more. There are a few basic network measures that I look into. At the node level, I use degree centrality, closeness centrality, betweenness centrality, and eigenvector centrality. The maps below are sized according to these various centrality measures.

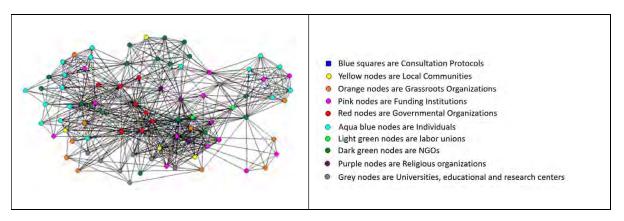


Figure 19 repeated for ease of comparison. Color code indicating node attributes.

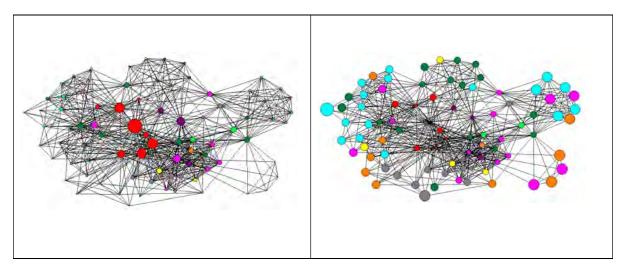


Figure 20. Nodes sized by degree centrality. Figure 21. Nodes sized by closeness centrality.

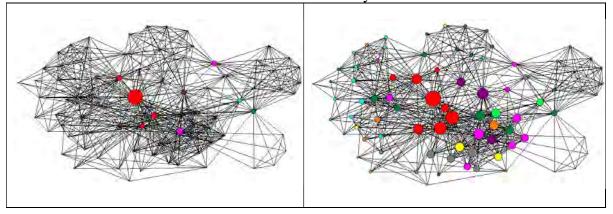


Figure 22. Nodes sized by betweenness centrality.

Figure 23. Nodes sized by eigenvector centrality.

What the maps in figures 20 to 23 show is that different actors perform different roles in the network. As discussed in chapter 5, node measures are very useful for studying actors in central or leadership positions, which are correlated to positions of power. Degree centrality is a measure of the number of ties a node has, which in this case indicates the number of protocols an organization has been involved with. Figure 20 shows that there are a handful of organizations with similarly high degree centrality scores. This goes to show that even though there are some organizations that appear more frequently in protocols (such as MPF, as discussed above), there are many organizations that have been involved with multiple protocols and there is no one main leader in this network.

Figure 21 presents the nodes sized by closeness centrality. This is a measure of the number of ties it would take for a node to reach every other node in the network. Not surprisingly, nodes that are more peripheral would require more ties (more connections) to reach other nodes in the network, and this is why these nodes have high closeness-centrality scores. What this map shows is that there is a large number of organizations that are somewhat peripheral. This reinforces what was said above, particularly in the table that depicts tie weights. Most organizations in this network have only been involved with two or three protocols (and there are hundreds of others that were only involved with one protocol, which are not even shown here). The network of these 84 organizations that have been involved with two protocols or more is not centralized around a few core leaders - this network is diffused, and organizations work independently. It would take many indirect connections (friends of friends) for them to reach the central actors.

Betweenness centrality is a calculation of how many times a node is located on the shortest path between two other nodes. Figure 22 shows that MPF (large red node) has the

highest score, and what that means in this context is that other nodes know that MPF is one of the only actors that operates at high governance levels and can directly challenge "development" projects by influencing policymakers through lawsuits. Knowing this, other actors build partnerships and strategically position themselves so they can quickly and easily reach MPF if needed. Most nodes in this network are actively trying to reduce their path to get to MPF, not because MPF is a leader that gives anyone directives on what to do, but rather because MPF is everyone's last resort if a consultation protocol is ignored by the government.

Interestingly enough, the node with the second-highest betweenness centrality is the Ford Foundation (pink node in the lower right side of MPF). They are often mentioned in protocols as a funding partner, and this is probably why there are many protocols that include the Ford Foundation as a partner. In other words, it is easier to fund multiple protocols than to be physically present in numerous workshops where they are developed. As a matter of fact, the Ford Foundation is the funding organization that has supported 11 protocols. The second largest funding organization is Rainforest Foundation Norway, which has funded 9 protocols. Organizations that score high in betweenness centrality are not the leaders of the movement, they are simply the "go-to" organization for a specific issue. Therefore, others position themselves closer to these actors to reduce their cost of reaching these nodes. The go-to organizations when a legal suit is needed are actors such as MPF, MPE, DPE and DPU (all of which have high betweenness-centrality scores). The go-to organization when funding is needed are actors such as the Ford Foundation, the Rainforest Foundation Norway, and Fundo Casa (all of which also have high betweenness-centrality scores).

The last important node measure is eigenvector centrality, which is shown in Figure 23 above. This measure calculates a score for each node based on the centrality of other nodes connected to the node in question. Therefore, Figures 20 and 23 are closely related. Organizations that have more ties (and thus higher degree centrality) are also more likely to be connected to others that, themselves, are well-connected nodes (and thus have higher eigenvector centrality as well). What eigenvector scores indicate is that there are many organizations connected to well-connected partners, which further reinforces how diffused this network is. Although, as mentioned earlier, most organizations have only been involved in a handful of protocols, they are all interwoven in a network of strong well-connected partners.

A network that has several organizations with similar eigenvector scores, as this one has, is a network with strong social norms. If someone does anything that hurts their own reputation, the repercussions of that mistake will travel further in a network like this one than would be the case in a network where nodes are not connected to other well-connected nodes. The fact that Figure 23 depicts several nodes with relatively similar eigenvector centralities means that these organizations know of one another. The organizations that have high eigenvector centrality scores not only have many partners, but those partners are also key players that have ties with other important nodes. This increases the pressure to comply with social norms and expectations.

How do information and resources flow through a network? It is hard to answer this question in an abstract scenario, but in the case of the protocols network it is possible to contend that information and resources are most likely flowing through the nodes with high eigenvector scores. The protocols themselves (the only empirical data used in this analysis)

do not provide enough information to affirm this with absolute certainty. However, this is a safe assumption when we look at the attributes of organizations with high eigenvector centrality. The map shows that these nodes range from governmental institutions to grassroots organizations, and they include nonprofits, funding organizations, religious institutions, and a labor union.

Actors that are connected to well-connected others are not the same kind of actor — they are connected to diverse partners. What makes it possible for this network to be so effective in diffusing the FPIC norm and promoting consultation protocols is that these organizations build partnerships that complement one another. This is not to say that they are all naively being friendly towards one another — they are strategically picking partners that can help them achieve their goals. To successfully diffuse the FPIC norm, promote the development of consultation protocols and, ultimately, influence policymakers, a network needs legal expertise, trusted and open channels of communication with local communities (which takes years to establish and is often done by nonprofits or religious organizations), funding to promote workshops that bring experts to these communities and assist in the development of the protocols, and a team of engaged and politically savvy organizations that can educate key players on the importance of protocols and why they matter. This last set of actors are the ones that make norms "stick", to use Acharya's term.

There is possibly no organization that can do all of this, and not even several organizations of the same kind could do it all. These activities require different expertise, skills, timing, rules of professional conduct, etc. No single organization can be a large foundation and also maintain personnel on the ground working with local communities on their day-to-day issues. It is also not possible for such a network to have only nonprofits and

expect that they would have the ability to bring lawsuits against the government as well as the ability to educate policymakers and the wider public on the importance of protocols. It is much more efficient for these organizations to develop their reputation as being good at one or a few of these things and then to look for partners that can do other things. These key organizations have many connections in their own fields, and, once they establish partnerships with other key organizations in their fields, we see a network with a handful of nodes that have high eigenvector centrality scores. These organizations share information and resources not because they are naively friendly towards one another but rather because the sharing is the very characteristic of building ties with partners that can help advance their goals. They share information and resources with partners that complement what they do so that the movement can achieve its goal.

What Can an SNA Analysis Show That Other Methods Do Not?

As discussed here, the method of SNA offers rich insights into the internal dynamics of a social movement. It is hard to sift through the events as they unfold. The process-tracing analysis was useful for identifying how one event led into another and how the movement was responding to different pressures while also trying to find new ways to put pressure on decision makers. The process-tracing method is not useful for analyzing individual actors. It is easy to lose track of the trees when we are looking at the forest. The events unfolded in a dynamic fashion, and it becomes virtually impossible to keep up with which organizations joined each protest, who signed which petition, and which roadblock was supported by which grassroots group. The network approach is extremely useful in these cases.

Network analysis tells us things we could not have seen with other methods. For instance, when we are faced with a large volume of actors in a social movement, this method

is essential in distinguishing the central from the peripheral ones. The actors that enjoy calling attention to themselves (campaigners, activists, protesters, etc.) can be spotted with other methods. But there are some central actors that are subdued and might prefer to operate more quietly. SNA makes it possible to identify them and differentiate them from quiet peripheral actors.

Beyond analysis of individual actors, SNA is also quite useful for conducting a comprehensive analysis of a movement. Process tracing is a good method for analyzing direct causalities (e.g., how things in one protest cycle led to a public hearing, which then led to the establishment of a committee). But process tracing is a much weaker method for analyzing diffused causality (e.g., how the lack of consultation in Belo Monte led to the creation of the Munduruku Consultation Protocol and also created a push for a core set of organizations to actively promote this idea across multiple states in Brazil).

A network analysis can also provide insights into things that would be hard to understand otherwise. For instance, why have these movements not fallen prey to persecution and repression from the government? One reason might be that the network was diffuse enough to make it resilient. There was no one central organization that was carrying the movement on their shoulders (which would have made it easier to take down and break the movement apart). The method is also very practical to analyze the size and reach of a movement. Although it is not enough to look simply at the number of SMOs in a movement, their media coverage, or how many local communities they have reached, these are all useful pieces of information that SNA can provide, which can then yield into a more in-depth analysis.

As discussed above, the issue of leadership is very central to social movements and very tricky to analyze as well. The SNA method provides numerous tools to assess different levels and kinds of leadership. For instance, the basic centrality measures were effective in identifying which organizations were actively supporting the Lagoa residents, and the method showed that they were different kinds of organizations collaborating with one another and coordinating their actions. Leadership comes in different sizes and formats, as the protocols case showed. There are some organizations that were leading the movement by providing funding to numerous protocols, others were leading by providing training and mentoring. SNA analysis is a terrific tool to see how diverse a movement is and how interconnected its members are.

Here I have discussed the useful insights that the SNA method has provided to this analysis. In the next chapter (Conclusions) I discuss what the SNA and process tracing methods combined have shown about the process of how networks of social and environmental groups influence decision-makers regarding the construction and management of large dams in the Brazilian Amazon.

CHAPTER 7

CONCLUSION

Central Points and Key Findings

After the first Meeting of the Indigenous Peoples of the Xingu in 1989 when Tuíra, the Kayapó indigenous leader, threatened a government represented, the resistance movement succeeded at putting the Belo Monte dam project on hold for more than ten years. The fact that Belo Monte eventually was built is by all accounts a disaster. The project has caused lasting environmental damage, irreversible social and cultural catastrophes, and was an economic and financial misallocation of public money. However, in midst of the horror and chaos brought by Belo Monte, several groups carried out relentless resistance movements and organized campaigns targeting high-level policymakers and trying to influence their decisions. Most of them have failed at effectively influencing policymakers. This is unfortunate but not surprising. What is intriguing is the fact that a few groups have successfully managed to influence decisionmakers. How did they do it? This research answers that question.

Successful social movements build networks that are dense, diffuse, and diverse.

Social movements are a collective action phenomenon, carried out by organized groups of people who work towards achieving a shared goal. When these groups manage to create alliances and coalitions that foster dense social relations, movements become more effective

at providing support for their members, keeping members accountable to one another, and rendering the overall group more resilient against opponents. The structure of the network of these movements also matters. Social movements that build a command-and-control or centralized structure can more easily be taken down by their opponents, and movements that are structured in several hubs can more easily disintegrate and become fragmented. Thus, social movements that manage to keep a diffuse structure are more resilient. They are also more effective at distributing resources and information, which is a key aspect of movements that successfully influence policymakers.

Lastly, diversity among members is vital. Putting together a social movement is no easy feat. The kinds of activities that are required vary from small community meetings, to fund raising, to engaging with the media, to filling lawsuits, to organizing campaigns. There is no one organization that can do it all. There is no one kind of organization that can do it all. It takes foundations that can assist with the fundraising. It takes grassroots and community associations to carry on local meetings. It takes scientists and lawyers to put together a lawsuit. It takes nonprofits and media to prepare a campaign. It takes a village! The results of this research show that successful social movements have diverse members. I argue that diversity is required for social movements to become successful.

This dissertation looks at two case studies of social movements that have successfully influenced policymakers. The first is the Lagoa case, a movement that has successfully, and against all odds, managed to influence policymakers and forced IBAMA to reverse its position. As discussed in chapter 3, while Belo Monte was being built there were thousands of people who were not properly compensated for the impacts they were shouldering. All of these people lost their homes to make way for the reservoir, and started to build new

dwellings in and around a pond in Altamira. The area became a slum, with all the problems and degrading conditions associated with it. These houses were built on stills, and people in Lagoa were living on top of their own raw sewage. How did the dam company and the government respond? They ignored it. They denied it. They said those people had already received compensation for their previous homes, and thus did not deserve any further compensation. It took years of organizing, but the Lagoa social movement eventually managed to convince IBAMA that this situation was fully unacceptable, and the government finally changed its position and forced the dam company to provide new homes and relocate all residents away from Lagoa.

The second case I analyzed in this dissertation was the consultation protocols, discussed in chapter 4. This movement is still ongoing. It began with the Belo Monte dam and quickly spread to other dams and other "development" projects. This is the case of numerous groups that have been trying to promote consultation protocols, which are documents developed by local communities to explain how they would like to be consulted in case a large project comes to their area. This movement is a response to the fact that Brazil is a signatory of ILO Convention No. 169, which promotes the principle of Free, Prior, and Informed Consultation. Despite having signed and ratified the convention, the Brazilian government ignored this principle when Belo Monte was approved. Those impacted by the dam were never freely consulted, nor previously informed about the dam. The government claimed that ILO Convention N. 169 does not offer specific guidelines about how consultation ought to happen. The movement behind consultation protocols is a response to this that tries to outline in very specific ways how each community wants to be consulted. This movement has been incredibly successful at influencing the judicial system in Brazil,

and it even managed to put another large dam on hold (the São Luiz do Tapajós Dam). The judge ruled that the plans for that dam shall not proceed until the indigenous communities in the area are fully consulted. This is an enormous victory.

I built two databases and used them to infer information about social relations and coalitions. The database about the Lagoa case contains 868 news articles from 2010 to 2020. I use these articles to recount the story of the Lagoa struggle, using the method of process tracing and content analysis. I identify who were the actors that waged this successful social movement and how they collaborated with others to organize their activities. The second database contains all the consultation protocols currently published in Brazil, and it includes all the communities and their partners involved in this process.

Chapters 5 and 6 use the method of SNA to analyze the networks of both movements and draw conclusions about which characteristics render them successful. There are three important features of these movements that we see in the SNA results. First, they do not have one single leader. The networks of both Lagoa and the protocols movements are diffuse. Second, there are many relations amongst different nodes, as opposed to each node only having relations with another one or two- what we see is that many actors are in contact with many others. These networks are dense. Lastly, we also see that these actors come from different backgrounds. We see that both networks are formed by grassroots organizations, nonprofits, local communities, public prosecutors, media outlets, etc. We can see here that actors hold relations with others who are different from them. The network is diverse. These are very important insights. What these results indicate is that successful social movements have managed to build networks that are dense, diffuse, and diverse.

Why Density, Diversity, and Diffusion Matter?

Successful social movements build networks and effectively share information and resources. Building alliances is an effective way to increase power. It is important to keep in mind that social movement actors contend that policymakers are not paying attention to their needs. They often feel and are perceived by others as outsiders, voiceless and powerless. Building diverse networks emerges out of the necessity to have allies with more leverage over the political system. As Keck and Sikkink (1998, page x of the preface) put it:

Where the powerful impose forgetfulness, networks can provide alternative channels of communication. Voices that are suppressed in their own societies may find that networks can project and amplify their concerns into an international arena, which in turn can echo back into their own countries." Building diverse networks becomes an effective way for those outside the formal political system to channel their voices and gather their efforts in order to pressure for change.

There are several aspects of working in diffuse networks that increase the power of social movement. Greater ability to pool resources from the outside, and agility in distributing what is already within the network. Moreover, "At the core of network activity is the production, exchange, and strategic use of information." (Keck and Sikkink, page x of the preface). Why is information such a powerful resource? Because modern-day political systems are less governed by force and violence than previous ones, and are much more based on the legitimacy of those in power who in turn ought to govern according to shared cultural and legal principles. Having information that exposes how governors are not ruling as they should, creates leverage that constrains those in power and impels them to adapt. The curious thing about influencing policymakers and others within the formal political system is

that "governments are the primary 'guarantors' of rights, but also their primary violators" (Keck and Sikkink 1998, 12).

Thus, the legal and cultural apparatus used to place certain actors within the political system, is also used by networks to constrain and gain leverage over those in power. "Since they [networks] are not powerful in a traditional sense of the word, they must use the power of their information, ideas, and strategies to alter the information and value contexts within which states make policies." (Keck and Sikkink 1998, 16). Diffuse networks are more effective at finding, leveraging, and spreading information. This is why diffuse networks are essential for social movements to become successful. Information is never neutral and should never be considered out of context. It is not the information itself that makes networks powerful- it is how they create and use it. "Their ability to generate information quickly and accurately, and deploy it effectively, is their most valuable currency; it is also central to their identity. Core campaign organizers must ensure that individuals and organizations with access to necessary information are incorporated into the network" (Keck and Sikkink 1998, 10).

Let us recall, for instance, how MAB and the community association in Lagoa created their own version of the social registry, and used that to put pressure on IBAMA to recognize that the registry by Norte Energia was invalid. Activist networks rely on concrete information, but that is not even what matters most to them. Rather, what makes networks powerful is their ability to frame that information and use it strategically. "Influence is possible because the actors in these networks are simultaneously helping to define the issue area itself, convince target audiences that the problems thus defined are soluble, prescribe solutions, and, monitor their implementation" (Keck and Sikkink 1998, 30). These tasks

depend on networks that have members from diverse backgrounds able to collect and frame information, as well as members operating in coalitions that are diffused enough for information to flow.

Having said that, the strategic use of information is not all that matters. There are other things we must take into consideration when analyzing the ways in which social movements build networks to influence policymakers. Tarrow (2011) argues that social movements are conducted through dense networks. He reminds us that people do not engage in social movements simply because they are part of a social group or class (e.g., peasants, workers, farmers). Rather, they do it because of the social relations in which they are embedded. Having multiple ties with one's communities and being part of interwoven social relations is a feature of dense social movements. Dense social networks also foster social monitoring. A person is less likely to be rude to a stranger, if they live in a small town where most people know everyone else. A person is more likely to follow through on a promise, if they know that breaking their word will negatively impact their reputation across multiple areas of their life became their boss, their friends, their church members, and their neighbors will know that they broke a promise. When multiple people know one another, when there are cross cutting and interweaving social relations in a community, we have a dense social network. I argue, along with Tarrow, that successful social movements build dense social networks.

Are Networks Agents and/or Structures?

For Tarrow, first the structure needs to change for then the actors to mobilize. He does not conceive the possibility of actors' mobilizations causing the structure to change. His structuralist view is deterministic and almost presupposes an analysis of social movements in

and off themselves. Taking it to an extreme, it almost suffices to look simply at the structures (political opportunities and threats) to know whether movements can succeed or not. If an analysis of the structure determines that there is possibility for success, then the analyst would look more carefully at the movements themselves and investigate their networks, repertoires, frames, etc. But for Tarrow, the structures preexist social movements, and determine whether movements may exist and succeed.

The cases analyzed here indicate the opposite. In that sense I think it's fair to say that Belo Monte was a moment of inflection in Brazilian politics, because it caused a change in the regime. The structures of political opportunities were such that before Belo Monte there were actors who were totally outside the dynamics of power relations (they had no power, no voice, no representation). During the social movement struggles, things changed, and these actors came into play. They started gaining some power to influence policymakers which changed the relations among regular actors. The Lagoa case was not simply a case of a mobilization that succeeded because there were changes in the structures of political opportunity that in turned caused IBAMA to change its position. The Lagoa movement has caused the political structure at this federal agency to change.

These communities perceived an opportunity when they calculated that the likelihood of success was within reach. They had enough information and partnered with a wide range of allies to frame their cases as a matter of right-vs-wrong and they felt they were fighting against injustices committed against themselves. They managed to find leverage in the system, identify elites that partnered with them. They calculated the costs of taking action (protests, long meetings, community organizing, etc.), and decided that even though these costs were high, it was worth their effort. IBAMA went from being complicit with Norte

Energia to being an agency that now regulates and monitors Norte Energia (which has always been their mandate, but unfortunately was ignored for many years).

The protocols case is even more iconic. That movement has changed the way IBAMA functions. IBAMA is no longer issues licenses when consultation protocols are not being followed. These movements are changing the very political structure that once oppressed them. The reason why these actors are changing these structures is because they are a part of what makes the structure what it is. The raison d'etre for an agency like IBAMA is to license and regulate the social and environmental impacts of "development" projects. Issuing licenses and regulating the impacts of these projects is what makes IBAMA what it is. Once social movements start to modify how IBAMA issues these licenses and regulates these impacts, social movements are changing how IBAMA functions. In other words, they are making IBAMA be a different agency- a more effective, transparent, and accountable one.

I posit that political structures and social movements are co-constitutive. Movements shape and transform the political system that they target. Moreover, they are also constituted by the social and political context in which they emerge and are embedded in. Now that I have established that these actors have agency to mold and transform the structure, I would like to discuss how the structure also defines, constrains, and enables these actors. IBAMA is a bureaucracy. It has multiple divisions, departments, directories, offices, etc. It has a systematic way in which information is handled, processed, distributed, and stored. Navigating that system is something that most social movement activists did not know how to do when they started protesting against IBAMA. The way that IBAMA as a governmental agency is set up (IBAMA as a structure) has in turn molded actors into paperwork-activists.

They had to learn how to find information, the channels in which they would challenge it, how to file documents, how to stay informed with updates, etc.

It is worth noting that in the beginning of the protest cycles, activists were not even targeting IBAMA that much. Their focus was the Belo Monte project, Norte Energia, the Brazilian president (Dilma at the time), add BNDES as the funding agent. Over the years, they realized that targeting these actors would not be as effective as they originally hoped for. Once it became clear that targeting IBAMA could be more effective, the movements themselves changed. The initial large scale media campaigns against the government or the BNDES bank became more secondary, and activists changed their modus operandi by focusing more on the legal bureaucracy unfolding inside IBAMA. This caused them (activists) to change- to become more versed in legislative and administrative procedures. This becomes clear for instance, in the content analysis of the news articles in the database mentioned in chapter 3. As activists started to focus their efforts more specifically at targeting IBAMA, the way they framed their cause, the way they talked during interviews with journalists, the way they timed their intervention, showed a more refined and keened understanding of the Brazilian legislation, of the institutional setup of IBAMA, of the attributes and authorities of each sub-division within various governmental agencies. They have changed as a movement in order to successfully adapt to the structure they were under.

In this sense, I am less aligned with Tarrow and my research overlaps much more with Keck and Sikkink's in viewing networks both as actors and structures.

Part of what is so elusive about networks is how they seem to embody elements of agent and structure simultaneously. When we ask who creates networks and how, we are inquiring about them as structures-as patterns of interactions among organizations

and individuals. When we talk about them as actors, however, we are attributing to these structures an agency that is not reducible to the agency of their components (Keck and Sikkink 1998, 5).

Thus, the difference between networks-as-actors and networks-as-structures, to a large extent, is in the eyes of the beholder. When we as analysts look at networks as patterns of communication and exchange, as shared norms that motivate and constrain actors, as systems of power that interact with other systems of power, we are looking at them as structures. When we as analysts look at networks as a multitude of people and organizations, interacting, pooling resources, passing information back and forth, deciding how they will frame a campaign, attending meetings and negotiating with policymakers, we are looking at them as actors. Ultimately, we need to keep in mind that they are both. It is not that networks are sometimes agents and sometimes structures. Rather, they are both at the same time at all times. But it is up to the analyst to be aware and select which lens is most appropriate to answer each research question.

Networks as Analytical Tools

The distinction between network-as-actors and networks-as-structures is useful in the sense that clarifies our analytical lens. But the networks themselves are both, or better put, they can be. It is important to remember here the definition of a network presented by Borgatti and Halgin (2011): It is the analyst that creates the network by determining the selection criteria for which nodes are considered part of it. Once we have a research question and have decided that we will answer it using SNA, we must then define which actors constitute the object of our analysis. We establish who are the actors that we will include as nodes in the network and by extension define which are the actors outside of the network.

We then start studying what are the dynamics of that network-as-an-analytical-tool. The network-as-an-analytical-tool can then be studied as a political structure as well as an actor.

When we inquire about how networks recruit, constrain or motivate their members, how networks foster certain behavioral norms, how they operate as a governance system that are different from states or markets, we are looking at networks as structures. For that investigation, we might use analytical tools such as network density, the number of hubs, clusters and cliques, the structure of the network and how it diffuses information, among others. When we inquire about how organizations come together, establish a common goal, negotiate how to frame their campaigns, divide tasks among themselves, we are looking at networks as actors. For those investigations, we might use analytical tools such as which actors are most central, what kinds of ties they form between one another, which nodes have multiplex ties and why, what are the characteristics of each node (size, budget, identity etc.).

In this last part it is important to emphasize what Keck and Sikkink stated. The agency of the network is not reducible to the agency of individual nodes. This goes along with the discussion in chapter 2 that movements should not be reduced to the social networks of the actors that form them. A movement is greater than the sum of its parts. Thus, looking discretely at each organization in an activist network does not give us the picture of the network as whole. If we know that a movement is made of local communities, journalists, international foundations, and NGOs, we know nothing about how these actors interact and how they might be able to create something as powerful as a social movement. The characteristic of a node alone gives us nothing about the other nodes. It is precisely by looking at the interactions between these nodes that we realize how they become powerful. It is the fact that a handful of nodes have a number of ties substantially larger than the other

nodes, that we can know that those organizations are more important. It is by looking at the kinds of relations that organizations foster with other organizations (A is just a source of funding to B, or A and B go together to field trips, and share office spaces, etc.), that we can know how that network as a multifaceted and complex actor operates from within.

According to Keck and Sikkink (1998, 26) "success in influencing policy also depends on the strength and density of the network and its ability to achieve leverage.

Although many issue and actor characteristics are relevant here, we stress issue resonance, network density, and target vulnerability." It is on this aspect of their work that Keck and Sikkink lack methodological rigor. They use definitions of SNA in inaccurate ways. This is problematic because definitions are our tools as analysts. If definitions are not sharp and clear, the resulting analysis becomes confusing and flawed. Keck and Sikkink (1998, 28) say that "networks operate best when they are dense, with many actors, strong connections among groups in the network, and reliable information flows. (Density refers both to regularity and diffusion of information exchange within networks and to coverage of key areas)". Later the authors continue by saying that

"measuring network density is problematic; sufficient densities are likely to be campaign-specific, and not only numbers of "nodes" in the network but also their quality-access to and ability to disseminate information, credibility with targets, ability to speak to and for other social networks-are all important aspects of density as well" (Keck and Sikkink 1998, 29).

In the field of social network analysis, these statements are wrong. Network density has a very specific meaning in SNA. Network density is the degree to which actors are connected amongst one another. To calculate density, we consider all actors in a network and

all their existing ties, and then we compare that to the number of possible ties in the entire network. In dense networks it is common to see a high degree of reciprocity, shared norms, social monitoring, and sanctioning (Coleman 1990).

Furthermore, Keck and Sikkink (1998, 206) continue "not surprisingly, networks are more effective where they are strong and dense. Network strength and density involves the total number and size of organizations in the network, and the regularity of their exchanges". In SNA these concepts mean different things. First, in SNA we do not measure the strength of a network, we only measure the strength of a tie. Second, in SNA we measure network density based on the number of possible ties, and not based on the number of nodes. The number of nodes is a measure of the size of the network. Third, in SNA we can account for different node attributes (size and type of an organization, for instance). But node attributes are not considered when we analyze ties- for instance, when we measure network density (number of actual ties divided by the number of possible ties) we consider all ties and all nodes regardless of node attributes. Thus, network density really has nothing to do with the size of organizations. It is, however, negatively corelated with the size of the network. Larger networks, those with more nodes (regardless of the size of the nodes), tend to have low levels of density.

Finally, in SNA we can account for tie characteristics such as frequency in communication for instance. If A has a tie with B because they exchange information, we can analyze the frequency, quality, reliability, and format of that communication to compare these channels of communication. But analyzing tie characteristics will give us no information about the density of a network or the size of its nodes.

Thus, these quotes from Keck and Sikkink are problematic because they confuse definitions. What can we make of their arguments? They say that networks operate best when they are dense. As discussed above, this research corroborates this argument. Dense networks have a high degree of social monitoring. This might lead to movements having a lot of control over how members behave. This is important and is certainly part of a successful movement. It is part of the WUNC displays discussed by Tilly. But there are two downsides to having a dense network.

First, dense networks tend to be homogenous and do not foster diversity. As discussed here, diverse networks are essential for social movements to be successful. Second, dense networks tend to have rigid structures, generally centralized or organized around hubs. I argue that diffuse networks are more conducive to successful social movements. There is a value in having nodes loosely connected in a network- they are free to explore possibilities and connections outside of the network. They can be brokers that facilitate connections with elites and allies.

Furthermore, density strictly speaking, is hardly ever high on a mathematical sense when we look at networks of social movements. These are large networks. Density is calculated based on the number of possible connections. If a movement has 500 nodes, it is virtually impossible for a large number of nodes to maintain relations with a large number of others (which would lead to high density). Chances are that any one organization is connected directly only to a handful of others. Thus, density is generally low anyways. It is still worth comparing and analyzing, but it is generally low.

What can we make of the other arguments presented by Keck and Sikkink (1998)?

Networks are more effective when they have a large number of actors? Well, it depends. I

argue that having a movement with 500 organizations, where almost all of them are local communities is probably going to be a less effective movement than one of similar size (or even smaller) but with a greater diversity in the types of member organizations. As discussed in chapter 6, it is nearly impossible for one organization to operate and do the things that a community association does (building connections with people on the ground) and simultaneously operate as a large NGO able to fundraise, pay for lawyers, and attend conferences. Thus, although I certainly agree that size matters, I argue that node characteristic as well as the overall network structure of how they are connected matters more than the number of nodes. The analysis of the consultation protocols presents this very clearly.

My strongest contribution to this debate is simple: I am building on the existing literature and advancing it. I concur with Keck and Sikkink that networks are both, actors and structures. I provide a more judicious and systematic outline of how to use SNA as a method to understand how networks work and to investigate how they influence policymakers. I build on the work of Tarrow, who provides a very clear analytical framework to study social movements. I concur with him that structures of political opportunities and threats matter to understand when and how movements succeed at influencing policymakers. I advance his work by suggesting that the movements themselves are able to activate and transform these political structures, as opposed to simply being subject to a deterministic view of them. I combine the works of these three authors with the writings by Tilly, Betsill and Corell to create an analytical framework that pays close attention to the process of creating social movements, building networks amongst its members, sharing information and resources, creating alliances with elites and external supporters, and negotiating with policymakers.

Finally, my contribution is not just one of synthesis of the works of these authors, but it is also a contribution that invites the field to seriously consider using SNA as a reliable and verifiable method that can yield insightful analyses to our collective future research enterprises.

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