HOW MUCH FOR OLD CHICO?
WATER GOVERNANCE AND THE COBRANÇA
IN THE SÃO FRANCISCO RIVER BASIN

by

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Abstract

This thesis analyzes the governance patterns and power configurations that both shape and are shaped by basin-level water governance as it has been applied in Brazil's São Francisco River Basin. Specifically, it focuses on bulk water charges (the cobrança) and the re-scaled, decentralized, and participatory governance space of the São Francisco River Basin Committee (CBHSF) and articulates this empirical analysis with debates around the neoliberalization of nature and the state-society relationship in Brazil. Using data obtained through informal interviews and participant observation over three months during 2011, this thesis suggests that traditional governance patterns -- especially patron-client relationships, the threat of force, and pharaonic development schemes -- continue to dominate water-related decision making in the basin. Although CBHSF has at times been a space of socioenvironmental resistance, the committee continues to be embroiled in an "existential" struggle between partisan and personalistic aims of "the government" and civil society's desire to foster a committee capable of working with(in) a responsive state. The cobrança, rather than privileging "economic rationalities," has been one of the political tools employed in this ongoing struggle. The cobrança is an example, furthermore, of how the saturation of governance with certain political logics has shaped -- and limited -- neoliberalization in the São Francisco River Basin. This context challenges institutionalization-centred analyses of neoliberalization; however, a socio-natures frame provides a means for close engagement with neoliberalizing processes "on the ground" and for accessing the ways in which concomitant governance patterns can complement, contest, or even subsume neoliberalizing processes.
Preface

The research contained herein is covered under the ethics certificate H11-01029 approved by the University of British Columbia's Behavioural Research Ethics Board. It has not yet been published.
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List of Acronyms and Abbreviations

AGB Peixe Vivo: Peixe Vivo Executive Association for the Support of Basin Management, 
Associação Executiva de Apoio à Gestão de Bacias Hidrográficas Peixe Vivo


APA: Environmental Protection Area, *Área de Proteção Ambiental*

CAC: Command-and-Control regulation

CBHSF: São Francisco River Basin Committee, *Comitê da Bacia Hidrográfica do Rio São Francisco*

CEEIBH: Special Committee for Integrated Study of River Basins, *Comitê Especial de Estudos Integrados de Bacias Hidrográficas*

CEEIVASF: Executive Committee for Integrated Study of the São Francisco Valley, *Comitê Executivo de Estudos Integrados do Vale do Rio São Francisco*

CEMIG: Minas Gerais Electric Company, *Companhia Energética de Minas Gerais*

CHESF: São Francisco River Hydroelectric Company, *Companhia Hidrelétrica do Rio São Francisco*

CNRH: National Water Resources Council, *Conselho Nacional de Recursos Hídricos*

CODEVASF: São Francisco and Parnaíba Valley Development Company, *Companhia de Desenvolvimento dos Vales do São Francisco e do Parnaíba*

CVSF: São Francisco Valley Commission, *Comissão do Vale do São Francisco*

DNOCS: National Department of Works to Combat Drought, *Departamento Nacional de Obras Contra as Secas*

EI: Economic Instrument

IBAMA: Brazilian Institute of the Environment and Renewable Natural Resources, *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis*

IWRM: Integrated Water Resource Management

MI: Ministry of National Integration, *Ministério da Integração Nacional*
MMA: Environment Ministry, Ministério do Meio Ambiente

MP: Public Ministry/Public Prosecutor, Ministério Público

PCJ: The jointly administrated Piracicaba, Capivari, and Jundiaí River Basins

PSDB: Brazilian Social Democratic Party, Partido da Social Democracia Brasileira

PT: Worker's Party, Partido dos Trabalhadores

SINGREH: National System of Water Resources Administration, Sistema Nacional de Gerenciamento dos Recursos Hídricos

SUVALE: São Francisco Valley Superintendence, Superintendência do Vale do São Francisco

TVA: Tennessee Valley Authority
## Glossary and Translations

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Caatinga</td>
<td>A semi-arid biome with scrubby vegetation in the Brazilian Northeast</td>
</tr>
<tr>
<td>Carta de Petrolina</td>
<td>Literally translated as the &quot;Letter of Petrolina&quot; and referring to a &quot;memorandum of understanding&quot;-like document between CBHSF, federal ministries, state governments, ANA, and ABG Peixe Vivo (Carta)</td>
</tr>
<tr>
<td>Centavo(s)</td>
<td>Cent(s), as a unit of Brazilian currency</td>
</tr>
<tr>
<td>Cerrado</td>
<td>A savannah biome in central Brazil</td>
</tr>
<tr>
<td>Cobrança</td>
<td>Bulk water charges set forth in Law 9433, defined by basin committees, and approved by CNRH</td>
</tr>
<tr>
<td>Conivência com a seca/semi-árido</td>
<td>Co-existing with drought/a semi-arid climate</td>
</tr>
<tr>
<td>Coronelismo</td>
<td>Coined in the Old Republic with reference to National Guard colonels and used to refer generally to a system of patron-client political machines (especially in the rural Northeast)</td>
</tr>
<tr>
<td>Mata Atlântica</td>
<td>Atlantic Forest</td>
</tr>
<tr>
<td>Nordestino(s/a/as)</td>
<td>Those who live in the Northeast of Brazil</td>
</tr>
<tr>
<td>Plano Decenal de Recursos</td>
<td>The Ten-Year Water Resources Plan for the São Francisco River Basin (Plano)</td>
</tr>
<tr>
<td>Quilombola communities</td>
<td>Afro-descended traditional communities</td>
</tr>
<tr>
<td>Real/reais</td>
<td>A unit of Brazilian currency</td>
</tr>
<tr>
<td>Salitreiro(s/a/as)</td>
<td>Those who live in the Salitre River Basin and used specifically herein to refer to a group of protesters from the Salitre River Basin</td>
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</table>

1 This is a list of Portuguese-language terms and phrases used in two or more places in the text; less frequently used terms are translated within the adjacent text or in a footnote.
<table>
<thead>
<tr>
<th>Sertanejo(s/a/as)</th>
<th>Those who live in the <em>sertão</em></th>
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<td><em>Sertão</em></td>
<td>Translated variously as &quot;hinterland,&quot; &quot;badlands,&quot; or &quot;outback&quot; in other literature and referring to the dry interior of much of the Northeast.</td>
</tr>
<tr>
<td><em>Transposição</em></td>
<td>A controversial inter-basin transfer project from the São Francisco River Basin (also known as the <em>Projeto de Integração do Rio São Francisco com as Bacias Hidrográficas do Nordeste Setentrional</em>).</td>
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Acknowledgements

I wish to offer my deep gratitude to my supervisor, Dr. Karen Bakker, who has both pushed and inspired me to achieve. The clarity of her insights and her support for my academic development have been invaluable over the course of my studies. I very much hope that I am able to make her as proud to be my supervisor as I am to be her student. Special thanks are also owed to my committee: I am beyond grateful for the encouragement of Dr. Juanita Sundberg, who insisted on the importance of both passion and compassion in research; I also count myself very fortunate to have had Dr. Jamie Peck's enthusiastic and generous guidance throughout. Thank you.

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To Kim, Aroldo, and others who helped and hosted me during my fieldwork: thank you for being so warm and welcoming! I am also grateful to the São Francisco River, which was my only constant companion during about three months and 7000 km of fieldwork. I am thankful for the
opportunity to have engaged with some of the issues affecting the basin. And lastly -- and perhaps most importantly -- I wish to thank everyone who participated in this research.

As I traveled throughout the São Francisco River Basin, the phrase I heard repeatedly was "é complicado" -- so often, in fact, that I flirted with the idea of titling my thesis "The São Francisco River: É Complicado," but the English translation "it's complicated" does not share the same connotative colour: "é complicado" might be said with a disheartened sigh, an evocative eyebrow, savoury conspiration, syllabic reinforcement ("é com-pli-ca-dissímo"!), or as a verbal rush for the exits, but its usage united the São Francisco basin -- up- and downriver -- as a minimally confrontational and simultaneously meaningful-yet-vague explanation of many actors, patterns, and situations I encountered.

In this thesis, I have found myself in the position of making explicit some of the perceptions and events that prompted the repeated deployment of this opaque descriptor. As I wrote up my research, I struggled to represent both some very uncomfortable findings but also the compelling experience of becoming acquainted with the basin and CBHSF. Respondents as well as residents of the basin were almost universally welcoming and helpful, often going out of their way to assist me in my research. I encountered no hostility without exponentially more hospitality. I came to feel a great deal of affection and respect for the territory, the river, and its people; for the cultures and traditions; for the changes and innovations; and for spaces of dissonance and resonance. It would be deceptive, however, for this thesis to reflect only the fondness I feel or the congenial receptions I was grateful to have received. And thus, as I wrote, I came to understand the phrase "é complicado" in terms of its ultimate veracity and to develop a somewhat more "inconsistency-tolerant" perspective. Although I have done my best, there are ways in which I feel my representations have fallen short, so as I present the research herein, I find myself also in the position of affirming (and forewarning): "é complicado mesmo."
To Leo and Bear
1. Introduction

1.1 Introduction

This thesis analyzes the governance patterns and power configurations that both shape and are shaped by basin-level water governance as it has been applied in Brazil. In particular, the analysis focuses on two policy processes -- the commercialization of water on the one hand and decentralized, re-scaled, participatory governance on the other -- in the context of neoliberalization as well as ostensibly more autochthonous political projects in Brazil. These policies have been part of a package of reforms that have gained international prominence since the early 1990s and encourage both basin-level water governance and the use of Economic Instruments (EIs).

In 1997, Brazil passed similar water reform legislation at the national level, and in this thesis I examine its manifestations in the São Francisco River Basin. In 2001, the São Francisco River Basin Committee (CBHSF) was among the first basin committees to be implemented in the country. In 2011, ten years after its creation and one year after it began applying and collecting bulk water charges (the cobrança), I traveled to the basin to investigate decision making on the committee, CBHSF's role in water governance in the basin, and the effects of bulk water charges.

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2 I employ the term "basin," but "catchment" and "watershed" are also used in varying regional and national contexts (sometimes in conjunction with "basin" to indicate hierarchies of territorial scale). I have made the choice to use only "basin" (and "sub-basin" and "micro-basin") because it provides the most direct translation from Brazilian Portuguese.

3 I do not mean to invoke a sense of untouched "indigeneity" nor to allege disconnection from global flows of ideas, people, capital, etc... I use the term autochthonous here because it is perhaps the least problematic term among many (such as native, local, or endemic). I use the term in loose reference to its geological application, which is to say: rocks that were formed where they were found. I do not wish to assume that the many components of these political projects and movements are exclusively "local" but I do want to honour their place-based (and perhaps place-bound) emergence without privileging or pre-supposing influence or "importation" from "elsewhere."
on governance. These questions (listed below) draw on (i) political ecology and political economy conceptual frameworks (specifically research on the neoliberalization of nature), (ii) work by Brazilian(ist) scholars on participation and configurations of "stateness," and (iii) research in (and critical of) resource management that speaks to increasingly fraught environmental problems (and their social and economic axes). I engage with water governance in the São Francisco River Basin in conversation with these particular areas of research because, in policy and practice, participation fostered through re-scaled and decentralized governance has been supported by both pro-market neoliberals and socioenvironmentally minded reformers -- internationally and, especially, in Brazil -- and while there is somewhat less ambivalence in the literature about the ideologies associated with EI, the commercialization of water is nevertheless highly topical in these three areas as well.

I intended initially to focus on the cobrança's effects on decision-making patterns, but my empirical findings inverted the emphasis of my enquiry. With the introduction of an EI, I had anticipated seeing increasing importance of economic logics and economic actors mobilizing in defence of their interests to the detriment of (presumed) previous participatory gains. On the one hand, I had been primed by literature on neoliberalization to expect economic concerns (especially those of private business interests) to be privileged through the commercialization of water. Critiques of decentralized, re-scaled, and participatory governance in literature on neoliberalization would have also led me to believe that CBHSF would be unequal to the task of protecting marginalized groups in such a scenario; however, my own previous research in a sub-basin of the São Francisco as well as generally optimistic studies of participation in Brazil conversely suggested that CBHSF could provide a space for progressive decision making and state-society cooperation (at least until the introduction of the cobrança). Contrary to my expectations, I instead encountered somewhat blasé economic actors and a sharp conflict
between the federal government and socioenvironmental activists. Even with changing modalities of decision making, traditional governance patterns appeared robust, civil society sought a responsive state while fending off the partisan and personalistic interests of the government, the cobrança became a (polyvalent) political tool in that dispute, and neoliberalization -- like economic actors -- appeared somewhat secondary.

1.2 Research Questions

1. What are the governance patterns that characterize decision making within CBHSF?

2. How have changing governance modalities (decentralized, re-scaled, and participatory water governance manifested as CBHSF) reinforced, contested, or altered governance patterns?

3. What effects have bulk water charges, or the cobrança, had on governance patterns both within CBHSF and in the São Francisco River Basin at large?

4. Can theorizations of the state-society relationship and the neoliberalization of nature -- as two bodies of literature that engage with EIs and decentralized, re-scaled, and participatory governance (discussed in Chapter 2) -- adequately explain or predict governance patterns in the São Francisco River Basin? Alternatively, what empirical limits do they encounter?

1.3 Rationale and Overview

CBHSF -- created in the wake of late-1990s Brazilian water governance reforms that emphasized stakeholder involvement in basin-level decision making -- is an example of the sort of decentralized, re-scaled, and participatory governance forum that seems to be embraced by rather distant ends of the ideological spectrum (as discussed in Chapter 2). On the one hand, "local"
projects that solicit and defer to "public" engagement have captured the imagination of the left (in Latin America and elsewhere), who see these changing modalities of governance as "deepening democracy" (Fung and Wright 2003). On the other hand, reforms that appear to substitute governance for government are suspected of being associated with the underlying anti-statist agenda of neoliberalization -- albeit veiled in the unnervingly gentle "Mr. Hayek was my father; please call me Fred" tone of its more recent manifestations (Ruckert 2006; Taddei 2011).

But if the same general policy contours can be produced through and (re)produce two such ideologically incongruous projects, researchers must investigate governance patterns and whether changing modalities of governance have altered such patterns and the political projects that they benefit before leaping to normative conclusions, as Ferguson (2010) and others have noted.

Water use charges, or the *cobrança*, implemented in the São Francisco River Basin in 2010, increase to the magnitude and urgency of the matter. The *cobrança* is intended to defined by CBHSF and used to fund interventions identified through the committee and executed by its basin agency (AGB Peixe Vivo). The danger, however, is a curious "physical phenomenon" that takes place when money comes into close proximity with water: water -- as we say in the Western United States, where I grew up -- flows toward money. And as Lemos and Agrawal (2006, p. 319) note: "a number of observers of changing environmental governance have raised concerns about the degree to which increasing recourse to market actors and processes undermines social goals related to higher levels of democratic participation, creates problems of unequal access to resources, and raises the spectre of lack of accountability." But the Pigouvian case could also be made that, depending on the form and function of the *cobrança*, it might become a tool for changing the detrimental behaviour of profit-minded water users and mitigating harms caused by socioenvironmental externalities -- perhaps while even, if optimistic.
literature on participation proves relevant, spotlighting socioenvironmental lacunae left unaddressed in traditional governance settings and prioritizing interventions for progressive redress.

It is also critical, however, that the reforms that have produced CBHSF as well as its subsequent animation be understood in the context of and in conversation with existing governance patterns -- be it so as to understand the manifestation of a variegated international ideology, to grasp the causes and contours of autochthonous innovation, or engage with (as this thesis attempts to do) the dynamic interaction of several, sometimes-convergent and sometimes-divergent, co-affective yet appreciably distinct concomitant governance patterns and processes.

1.4 Basin-level Water Governance in Brazil

Water governance in Brazil was historically both centralized and fragmented (Abers and Jorge 2005). Government agencies created their own agendas independently and without reference to competing uses; municipalities, despite their central role in planning and water-related infrastructure, were not regularly consulted; the private sector could rest assured that their indiscretions would rarely be punished; and environmental needs ranked low among relevant considerations (Abers and Keck 2006). Without defined, overarching policy objectives, water was left to be colonized by interest groups and regional elites; as will be discussed in detail in Chapters 3 and 4, political bosses in the Northeast built ties to federal agencies that allowed them to manipulate water availability to their own ends while the hydroelectric sector dominated national management priorities to the detriment of nearly all other uses (Abers and Keck 2006).

These fairly dysfunctional circumstances motivated the search for an alternative approach to water-related decision making and led activists in São Paulo to begin organizing around the idea of water reform in the mid-70s. The model that was eventually created in São Paulo (and, after
considerable political wrangling, was passed into law by the state government in 1991) laid the groundwork for legislation adopted by most states and by the federal government in 1997 as Law 9433. Law 9433 also delivered on the mandate enshrined in articles 20, 21, and 22 of the 1988 Constitution for a *Sistema Nacional de Gerenciamento dos Recursos Hídricos* (SINGREH, or National System of Water Resources Administration) (Pereira and Formiga-Johnsson 2004; Abers and Jorge 2005; Abers and Keck 2006). The model that was eventually adopted was heavily influenced by the French *Agences de l'Eau* and reproduces elements of the Dublin Principles (presented in Chapter 2).

The principles of Law 9433 (Brazil 1997) state that:

1. Water is a public good;
2. Water is a limited natural resource, endowed with economic value;
3. In situations of scarcity, priority use of water resources is human and animal consumption;
4. Water resource management must always provide for multiple uses of water;
5. The river basin is the territorial unit for the implementation of the National Water Resources Policy and action of SINGREH;
6. Water resources management must be decentralized and rely on the participation of government, users, and communities.

Furthermore, its objectives include:

1. To assure current and future generations have the necessary availability of water with quality standards adequate for respective uses;
2. The rational and integrated use of water resources, including for transport, with a view toward sustainable development;
3. The prevention of and defence against critical hydrological events of natural origin or due to the inappropriate use of natural resources.
Under this law, waterways that cross state lines remain under the jurisdiction of the federal government while those entirely within a given state fall under the legal purview of that state.\footnote{Because Brazil is a federated republic, this is one element of the French system that did not translate well. While many large rivers are federal, almost all tributaries are state waterways; this has continued to hamper integrated management under these reforms.}

In most instances, committees are made up of representatives from civil society, traditional communities, water users, and various levels of government. Generally, committees are tasked with generating basin master plans, deliberating about projects, conflict resolution, and implementing bulk water charging. The work of basin committees is supported by executive basin agencies and, at the level of the federal government, the \textit{Agência Nacional de Águas} (ANA, or the National Water Agency).

The creation of basin committees and attendant processes of re-scaling and decentralization have taken place in the context of a much larger rise in the prominence and number of participatory governance spaces within Brazil, which can be traced to the end of the military dictatorship and the process of democratization in the 1970s and 1980s. Many activists during this time saw the move toward democracy as an opportunity to encourage more decentralized decision making after many decades during which “authoritarian regimes in Latin America monopolized decision-making power, limited consultation to restricted circles of elite allies, and suppressed popular organization;” decentralization was thus seen by a “wide array of actors” as an antidote to a repressive, centralized state (Abers and Keck 2009, p. 290). Among their numbers were, of course, actors who "decried the inefficiency of a bloated central state apparatus\footnote{Although this may not necessarily indicate that all of these actors were sympathetic to the neoliberal project as this is a rather common complaint in Brazil that, in my experience, is not tethered to specific ideologies.} as well as those who "saw decentralization as a way to augment popular control of government decision making or create public spaces for expression and deliberation" (Abers and Keck 2009, p. 290). As the
movement has matured, many political actors have sought “shared state-society management, with greater popular participation and diminished verticality in the decision-making process, as a means to diminish technocratic and bureaucratic administration” (Mesquita, p. 9).

This paradigm is reflected in the 1988 Constitution (known also as the "Citizens' Constitution"), and a robust and varied array of participatory spaces have spread across Brazil in the two and a half decades since its enactment. The most famous examples are *orcamento participativo* (participatory budgeting -- of which there are hundreds of examples within Brazil and thousands worldwide) and the health and social assistance councils (which number in the thousands within Brazil alone) (Avritzer 2002, 2009). Participatory spaces in Brazil and their international spinoffs have been the subject of both “alter-globalization” praise and “neoliberalism by any other name” scepticism, but Avritzer (2002, p. 5) makes the case that they are emblematic of a specifically Latin American democratic tradition that thrives on citizen participation and challenges Western European theories of democracy that privilege elite representation; he writes that in Latin America "democratization ceases to be regarded simply as the institutionalization of political competition and becomes a societal practice in need of institutionalization." As I discuss in Chapters 3, 4, and 6, attention to informal and political patterns of governances (as opposed to formal, institutional decision making channels) is epistemologically indispensible in the Brazilian context, often illuminating otherwise inexplicable and contradictory trends and occurrences.

Among the changes outlined in Law 9433 is a means of assessing bulk water charges, known as the *cobrança pelo uso de água* (or *cobrança* herein).\(^6\) The legislation outlines objectives such as

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\(^6\) Prior to the 1997 reforms, a system of bulk water charges existed in only one Brazilian state: Ceará, which implemented bulk water tariffs by decree in 1996. Ceará is also an outlier in several other respects, including its centralized, governmental model of basin-level water management within the state.
"recognizing water as an economic good and giving users an indication of its real value; incentivizing rational use; and obtaining financial resources for the programs and interventions set forth in the basin master plans" (Brazil 1997). River basin committees are tasked with setting prices and defining mechanisms for valuing water diversion, capture, and extraction as well as the discharge of effluents, and executive basin agencies manage and distribute the funds according to committee-defined objectives (Brazil 1997). At the time of writing, the cobrança has been implemented and is being collected in four federal basins (the Paraíba do Sul, PCJ, São Francisco, and Doce basins). When the cobrança was introduced, it enjoyed the support of the World Bank and other institutions urging that its revenue be used to "achieve full cost recovery for operation and maintenance, and partial cost recovery for investments" (Asad, Azevedo et al. 1999, p. 50); however, the cobrança has taken on a political life of its own in the hands of CBHSF -- and one that is quite dissociated from economically "rational" "balancing water values and costs" as well as considerably more ambivalent than the law's putatively neoliberal appearance and accoutrements would suggest (as I discuss in Chapter 5 and 6).

1.5 The São Francisco River Basin and the Committee

1.5.1 The São Francisco River Basin

The São Francisco River -- known to indigenous groups as Opará ("River-Sea"), to its riparian communities as Velho Chico ("Old Chico"), and in textbooks as "The River of National Unity" -- arcs 2,700 km northeast across Brazil's outthrust Atlantic hem. Its basin area -- an impressive

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7 Although up to 7.5 percent of revenues may be applied to implementation and administrative costs.
8 PCJ is the acronym by which the jointly administrated Piracicaba, Capivari, and Jundiaí River Basins are known.
9 Chico is a Portuguese-language nickname for Francisco.
girth\textsuperscript{10} of 640,000 km\textsuperscript{2} -- embraces waters, peoples, cultures, traditions, flora, and fauna from two regions (the Southeast and the Northeast) and portions of six states (Minas Gerais, Bahia, Goiás, Pernambuco, Alagoas, and Sergipe) as well as the Federal District (see Figure 1.1) (CBHSF 2004a; Simpson 1998; Lucas and Aguiar Netto 2011). Comprising about eight percent of Brazil's territory and enveloping arguably the most historically important waterway in the country (as explored below), the São Francisco River Basin is compelling in its size, complexity, diversity, and disparity.

\textsuperscript{10} The \textit{Plano} gives two different sizes for the river basin in two different sections of the document (634,781 km\textsuperscript{2} and 638,576 km\textsuperscript{2}) while the committee's website puts the basin at 639,219 km\textsuperscript{2}, the Organization of American States at 636,920 km\textsuperscript{2}, and other studies at 640,000 km\textsuperscript{2} (CBHSF 2004a; Simpson 1998; Lucas and Aguiar Netto 2011). I use 640,000 km\textsuperscript{2} solely for the sake of simplicity.
Its Portuguese name, *o Rio São Francisco*, was given when Italian explorer Amerigo Vespucci sighted the mouth of the river on the 4th of October, the feast day of Saint Francis of Assisi, in 1501 AD (only one year after the Portuguese explorer, Pedro Álvares Cabral, encountered what would later become Brazil); in the intervening centuries, the river has been a microcosm of the country's colonization, consolidation, and "development." The first settlement on the river, Penedo, was founded in the mid-1500s near the river's mouth, and by the end of the century,

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11 Created with Open Source software available at http://mapas.mma.gov.br/i3geo/mma/openlayers
Europeans began to push into the interior. The river played a critical role in the colonization of Brazil, providing an entryway into otherwise harsh terrain (with understandably unreceptive residents). Arruti (1995) describes Portuguese strategies of conquest with respect to indigenous populations in the sixteenth and seventeenth centuries in three distinct but overlapping (and, in a certain sense, ongoing) phases: first, "just wars," superimposing a "Holy War" framework on the "New World" and waging extermination campaigns; second, a missionary wave led by Jesuits and Capuchins; and lastly, intermarriage with the aim of assimilation. As colonization thrust deeper into the territory, the river facilitated the transport of sugar, beans, salted meat, corn, and flour to the mines on the upper reaches of the São Francisco, and carried precious metals back downriver (Camelo Filho 2005). Three commodities in particular -- sugar, cattle, and gold -- tell a large part of the basin's colonial history (Camelo Filho 2005); sugar cane was (and still is) cultivated along the coast while cattle ranching was vigorously pursued in its interior and gold mined far upstream. Large-scale land holdings became the norm early on through a system of *sesmaria*, or granting land for productive use (Linhares 1995). On the coast, sugar cane plantations exploited the labour of African slaves, as did the mines upriver (Camelo Filho 2005) and smaller cotton- and cattle-producing slaveholdings inland (Versiani and Vergolino 2003); indigenous labour was also (forcibly) incorporated (Linhares 1995) and sharecropping was widespread (Silva 1997). Paradoxically, the basin was also the site of communal territories as well as private lands where collective grazing took place without "feudal" entanglements; on these lands, Silva (1997, p. 127) writes, the rich and poor eschewed fencing and recognized ownership of cattle by their brand. He also notes, however, that land was far from the most important resource in the region: "if the lands

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12 The Portuguese were not the only Europeans interested in the territory; the lower São Francisco was briefly taken by the Dutch in the 1600s and the region was also frequented by the French (Arruti 1995).
are communal, the same does not occur with ponds, pools, or springs. A rare and fragile resource, water provokes much greater attention."

Water continues to be a major preoccupation for economic pursuits in the basin to this day. Irrigated agriculture has gained prominence (discussed in detail in Chapter 3), both as a matter of public policy and private profit. Among the major agricultural hubs are Montes Claros, MG (cattle, eucalyptus); Barreiras, BA (soy, cotton, and corn); and Juazeiro, BA, and Petrolina, PE (fruits such as grapes, mangos, and melons). Irrigation accounts for 69 percent of the water captured and 86 percent of the water consumed in the basin (although the latter number is difficult to measure with certainty as return flows push it downward and high rates of evapotranspiration -- reaching an annual rate of 3000 mm in some areas -- drive it up) (CBHSF 2004a; Ioris 2001). Since the mid-1900s, São Francisco River has also been radically modified for the production of hydroelectric energy; the basin's total capacity is now 25,795 MW of electricity (CBHSF 2004a), and the major dams on the river's mainstem are the Paulo Afonso complex (inaugurated in 1954), Três Marias (1962), Moxotó (1978), Sobradinho (1980), Itaparica (1988), and Xingó (1994). The dams are operated by the Companhia Energética de Minas Gerais (CEMIG) and Companhia Hidrelétrica do Rio São Francisco (CHESF). There are a number of smaller hydroelectric installations as well. Reservoirs are also used for aquaculture in net pens; the basin presently produces around 2,500 tonnes of tilapia, pacu, tambaqui, and the hybrid tambacu per year (CBHSF 2004a). Mining has continued, albeit in an

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13 Later renamed for politician and president of CHESF, Apolônio Sales.
14 Renamed later for Luiz Gonzaga, one of the most famous musicians of the Northeast.
15 CEMIG is Brazil's third-largest energy company. It is publicly traded with a majority of stock held by the government of the state of Minas Gerais.
16 CHESF is a semi-public company within Electrobras, linked to the federal Ministry of Mines and Energy.
altered form from the days of the gold rush; the upper reaches of the river stretch into the "Iron Quadrilateral," and in addition to iron ore, the area also possesses deposits of manganese, gold, diamond, calcarium, mercury, zinc, copper, lead and dolomite, and precious stones (Domingues et al. 2003). Tourism and industry round out the São Francisco's economic profile (CBHSF 2004a).

These economic activities have profoundly affected the basin, provoking consequential hydrological and geomorphological changes that include degradation of springs and altered erosion and sedimentation from modified flows and land use patterns (CBHSF 2004a; Vadas 1999); between 1948 and 2004, it is estimated that the São Francisco River has lost 35 percent of its flows (Cedraz et al. 2011). Because the basin has distinct wet and dry seasons, hydroelectric installations have inverted flow regimes as reservoirs fill up in the wet season and release water in the dry season when it is needed for energy production. This has compounded already serious disruptions to the reproductive cycles of ichthyofauna (such as migration blocked by dams and the loss of nurseries through the destruction of marginal lagoons and riparian vegetation); these problems are especially acute for fish and fishing communities in areas where the effects are multiplied by a lack of perennial tributaries (CBHSF 2004a; Vadas 1999). Mining, agriculture, industry, agroindustrial processing, and inadequate solid waste and wastewater management have also compromised water quality (Vadas 1999). Vadas (1999, p. 103) draws the sad conclusion that the "proliferation of problems in the Rio São Francisco Basin" are primarily "anthropogenic, that is, people have contributed almost exclusively to the degradation of the Rio São Francisco Basin."

Vadas states furthermore that "increased economic development in the basin has succeeded in improving the quality of life for many... (as intended)," but in spite of increased "development" -- or, alternatively, because of the way that it has been carried out -- the São Francisco River
Basin is a territory of dramatic economic contrasts. With values above 0.800, the Human Development Index (HDI) places parts of the Upper São Francisco (an area within the more affluent Southeast of Brazil) on equal footing with countries in the "very high human development" quartile, but elsewhere in the basin the HDI dips as low as 0.343 -- a value on par with countries in the "bottom" ten of all those ranked in 2011 (CBHSF 2004a; UNDP 2011); this comes as no surprise given that most of the basin falls within the Brazilian Northeast, a part of the country in which seventy percent of Brazil's rural poor and eighty percent of its extremely rural poor live, thus -- although the São Francisco basin contains about eight percent of the nation's population -- eighteen percent of its rural poor reside in the basin (Torres et al. 2011). Access to water services is fairly widespread in spite of these numbers (between 82.4 percent and 97.6 percent of the population, depending on the region -- although quality varies), but sewage collection ranges between 77.7 percent in the upper reaches of the basin and 23.4 percent near the river's mouth (however, sewage treatment remains a persistent problem in the basin as a whole) (CBHSF 2004a; Vadas 1999).

The São Francisco basin also exhibits considerable diversity -- and disparity -- between its four administrative regions: the Upper, Middle, Lower-Middle, and Lower São Francisco. The Upper São Francisco stretches from its headwaters to near Pirapora, MG. This region has a relative abundance of water and supplies around 42 percent of the river's total flows. In fact, the state of Minas Gerais, which encompasses both the Upper and a portion of the Middle São Francisco, contributes an astounding 73.5 percent of the São Francisco's overall flows (Minas Gerais is thus sometimes referred to as the basin's caixa d'água, or "water tank") (CBHSF 2004a). The basin's industry and mining sectors are also mostly concentrated in this region, as is a substantial portion of its population; the Upper São Francisco, which contains the metropolitan region of Belo Horizonte (Brazil's 3rd largest metropolitan region), makes up almost half of the basin's total
population (12,796,082 in the year 2000), and unlike the rest of the basin, 93 percent of residents in the Upper São Francisco live in an urban environment (CBHSF 2004a).

The Upper São Francisco has small pockets of *Mata Atlântica* (or Atlantic Forest), but only a fraction (estimates vary between seven and 27 percent) of the forest's historical area remains nationally and even then it is mostly in isolated, second-growth fragments of \(<1 \text{ km}^2\) (Ribeiro et al. 2009). The dominant biome in the Upper São Francisco (and a portion of the Middle São Francisco) is *cerrado* (savannah). Located in central Brazil, the *cerrado* once covered about 2 million \(\text{km}^2\). It has both high rates of endemism and habitat destruction, the latter of which -- at fifty percent -- outpaces that of the rainforest (Bond and Parr 2010; Malhado et al. 2010). It continues to be an area of agricultural expansion in a booming economy that relies on agribusiness for about a quarter of national gross domestic product (GDP) -- although, as illustrated by Barreiras, BA, the benefits have not been shared with those who have borne the socioenvironmental costs, especially as the export economy has come to dictate preferred crops (Martinelli et al. 2010).

The expansive Middle São Francisco, in contrast to the river's urban upper reaches, has a population density of only eight inhabitants per \(\text{km}^2\) (CBHSF 2004a). It runs from near Pirapora, MG, to the area of Juazeiro, BA, and Petrolina, PE, and straddles the Brazilian Northeast and the northernmost end of Brazil's Southeast (the state of Minas Gerais). The Middle São Francisco contributes 53 percent of the river's total flows, but much of the region is considered semi-arid (see Figure 1.1 on page 25). In fact, about 58 percent of the basin's total area falls within Brazil's "Drought Polygon" -- a section of the country with unpredictable and unevenly distributed precipitation and prone to cyclical, devastating droughts (CBHSF 2004a; Ioris 2001; Vadas 1999). Here, in the Middle São Francisco, the *cerrado* gives way to *caatinga* -- a uniquely Brazilian semi-arid biome with scrubby vegetation -- which also characterizes the
The caatinga biome is located almost exclusively in the Northeast and covers nearly ten percent of Brazil's territory (although an estimated fifty to sixty-five percent of the caatinga has been destroyed) (IHU 2012). The name caatinga means mata branca, or "white forest," in Tupi (derived from its sun-bleached appearance in the dry months); however, its plant life — evolved to cope with six to ten months of little or no precipitation — responds immediately with enthusiastic shoots, roots, leaves, fruits, and flowers when the rains finally come. Although the caatinga is woefully underappreciated — associated with barrenness and poverty — it is actually the most biodiverse semi-arid biome in the world and enjoys both high rates of endemism as well as incredible internal ecological heterogeneity based on localized conditions (IHU 2012). This stretch of river is also considered an area of extreme importance for biodiversity because of a large number of endemic fish species in the Rivulidae family. Few areas of the basin, however, are under any (official or actual) protective status and the caatinga lacks protection in general (CBHSF 2004a; IHU 2012). Although the caatinga is exceedingly delicate, researchers are coming to appreciate how small-scale extractivist and even agricultural practices coexist with the caatinga and protect it from destructive exploitation (IHU 2012).

The vast majority of irrigated agriculture takes place in the Middle and Lower-Middle São Francisco regions, even though the latter — which reaches from near Juazeiro, BA, and Petrolina, PE, to Belo Monte, AL — has no perennial tributaries (CBHSF 2004a). Precipitation in this region is also the lowest in the basin (see Figure 1.2); although the semi-arid region of Brazil is considered to be that which has an average annual rainfall of less than 800 mm, areas of the Middle and Lower-Middle São Francisco see an average of only 500 to 600 mm/year (CBHSF 2004a). This relative dehydration of the sertão (translated variously as "hinterland," "badlands,"

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17 A small area of caatinga grows in the northern-most part of Minas Gerais, contiguous with the Northeast.
or "outback") has been etched into the Brazilian imaginary as the cause of the bleak poverty that is also presented as a characteristic of the Northeastern interior (as explored in Chapter 3). It should be noted, however, that areas of the world receiving far less precipitation do not suffer the same socioeconomic or socioenvironmental stresses (Arons 2004). Surely the desperate and desolate imaginary of the sertão is due in part to the seasonality and uncooperativeness of precipitation, the high rates of evapotranspiration, and soil types with low water retention (CBHSF 2004a). It is also amplified by a history of devastating droughts that have resulted in flight and famine. But perhaps the "worst-kept secret" in the semi-arid region is that injustices embedded deep within management and governance of water are -- above all else -- responsible for this suffering. Put another way, as Arons (2004, p.3-5) writes:

There is a saying in the region, "O problema não é a seca, é a cerca." The clever play on words translates as: 'the problem is not the drought; it is the fence'... The primary factor causing starvation, death, and rural-to-urban migration throughout the northeastern interior is not a lack of water, but the political manipulation of that lack.
The São Francisco finally empties into the Atlantic between Alagoas and Sergipe, transecting a swathe of cane and coconut plantations dotted with touristy beach getaways, the road-side homes and gardens of landless workers, and rice fields laid fallow by (the politics of) the São Francisco’s diminishing and evermore engineered flows. This region, the Lower São Francisco, stretches from near Belo Monte, AL, to the river's terminus; although a sliver of the region is semi-arid, most of the delta is sub-humid with a longer rainy season (CBHSF 2004a). The socioeconomic indicators in the Lower São Francisco are nevertheless similar to those of the

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18 Created with Open Source software available at http://mapas.mma.gov.br/i3geo/mma/openlayers
Middle and Lower-Middle São Francisco (and are in some cases worse; despite having the greatest population density of the basin, the Lower São Francisco has the lowest water and sewage utility coverage) (CBHSF 2004a; Vadas 1999). In addition to "local" problems, the region suffers from the cumulative effects of the river's exploitation upstream. The upstream interventions that have had the greatest impacts are the Sobradinho and Xingó dams, which have left the Lower São Francisco with rapidly fluctuating, highly variable, nutrient-poor flows that have stranded once-productive floodplains; decimated fish stocks; damaged ocean habitat; destroyed livelihoods related to shrimping, fishing, and rice cultivation; and imperilled the Área de Proteção Ambiental (APA, or Environmental Protection Area) along the Coastal Zone (CBHSF 2004a; Vadas 1999).

Radical disparities occur, it is important to note, not just between regions but also within municipalities; for instance, Belo Horizonte tends to boost the basin's overall indicators of development but the city has a Gini coefficient value above 0.6 -- ranking it (and many others in Brazil) among the most unequal cities in the world, according to UN-HABITAT (2010). Throughout the basin, poverty and privilege exist cheek by jowl. For instance, while in Barreiras, BA, I bought food at a fairly average grocery store located on the city's main drag. Inside, the distribution and display of products belied the vast expanse of agricultural lands surrounding the city: cheese and meat were sold by the slice from a meagrely stocked case, protein and fresh produce were scarce, but dry staples were plentiful, and more than one third of the store was devoted to alcohol, cookies, crackers, and chips. The store provided a visual representation of nutritional poverty in a city in which forty percent of residents are considered poor (with a per person monthly income of less than half of minimum wage, or approximately CAN$150) or indigent (at one quarter minimum wage, or approximately CAN$75) (Cedro 2010). Only a few blocks further down the street, however, was a Land Rover dealership where
the starting price on a top-of-the-line model is about CAN$162,000 --well over 1000 times higher than the monthly income of individuals at the poverty line. In one (sur)real moment during my fieldwork, I saw a family of five -- very evidently food insecure and lacking access to adequate clothing or hygiene -- ride past the gleaming dealership in the back of a dilapidated cart drawn by a slab-sided horse. The only thing more devastating than these two stark realities -- separated by only a sidewalk -- is of course their utterly unexceptional co-occurrence.

In dwelling on injustices within the basin, however, I do not wish to diminish the river's charisma -- indeed, there are many stories that imbue it with a sort of intimate embodiment or populate it with supernatural beings -- or to occlude the dynamism of its people(s) and their practices, livelihoods, and cultural contributions\(^\text{19}\) that exist concomitantly with, draw from, and contest such harsh political and economic circumstances. Among the basin's "traditions" is an especially robust appreciation for poetry, which permeates the Northeast generally. The regional power of poetry stems from the \textit{literatura de cordel} (literally "poetry on a string")\(^\text{20}\); among the most interesting aspects of \textit{cordel} is that it often speaks to current events, which -- when read aloud or performed -- historically served as an important means of distributing news among a population in which illiteracy rates are still consistently the highest in Brazil (Naoe 2012; Arons 2004). Water, weather, and drought are recurring themes, and an abundance of verses have lamented and critiqued the degradation of the São Francisco. Many of them are noteworthy not merely artistically but for their socioenvironmental and technical details as well as calls to action. One example is \textit{A Morte do Velho Chico} ("The Death of Old Chico," written by Honorato Ribeiro dos Santos -- also known as Zé de Patricio), which spotlights climate, dams

\(^{19}\) It is difficult to overemphasize the region's cultural richness (from religion to music to art), but I cannot explore this topic at great length herein.

\(^{20}\) The name may come from the way in which pamphlets are displayed on strings or from the meagre budgets of their authors (Arons 2004).
and energy, deforestation, democracy and representation, ecology, employment, export policies and "globalization," fish stocks, geography, irrigation, navigability, organization, pesticides, political detachment and profiteering, poverty and economics, regional identity, religion, sedimentation, tourism, traditional agriculture and crops versus agribusiness, waste treatment, water quality -- and, above all, a crisis of management and governance. He ends the poem with a nod to the manufactured misery within the basin and the lack of relational respect for the São Francisco River:

\[
\text{Vou terminar meu cordel} \\
\text{Pedindo muita atenção:} \\
\text{"Se eu tivesse um rio desse} \\
\text{Aqui em minha Nação,} \\
\text{Eu acabaria com a fome} \\
\text{Do Mundo"...com este nome:} \\
\text{"Velho Chico", és um Pai e irmão.}
\]

I will finish my cordel
Asking much consideration:
"If I had a river such as this
Here in my Nation,
I would end the hunger
Of The World "...with this name:
"Old Chico," you are a Father and brother.

Traditional communities contribute further depth and dimensionality to the basin's knowledges, histories, and socio-natural ways of being. Presently, there are an estimated 80,000 indigenous persons from about 40 ethnic groups living in the basin as well as quilombola communities ("recognized" and otherwise) (CBHSF 2011a). Quilombola communities are commonly understood to be "remnants" of communities of escaped African slaves, but -- in terms of both subjectivities and rights -- this definition has been critiqued for its temporality, emphasis on seclusion and flight, and one-dimensional portrayal of complex intersections of race, history, identity, customs, beliefs, and land tenure as well as other relevant socioenvironmental questions (Silva 2000; Sá 2007; CBHSF 2011a); similar critiques have also been made about portrayals of indigeneity in Brazil (Arruti 1997; Silva 2011). Other traditional communities within the basin
include: *Fundo/Fecho de Pasto* communities, who are descendants of families who occupied riparian lands that were left vacant in the mid-1800s when cattle ranching shifted to the South of Brazil and who have since developed particular environmental practices and a system of communal ownership (Sabourin et al. 1997); *Ciganos*, or Romani, who arrived in Brazil through exile and deportation from Portugal during colonial times and are estimated to number upwards of 800,000 in Brazil (Teixeira 2008; CBHSF 2011a); and artisanal fisherpersons, of whom there are more than 34,000 in the basin (CBHSF 2011a).

1.5.2 The *Transposição* Project

There are many conflicts in the São Francisco River Basin, including water quality concerns stemming from mining and sewage in areas of the Upper São Francisco, quality and quantity disputes due to irrigation expansion in the Middle and Lower-Middle São Francisco, and tensions over the flow regimes of hydroelectric installations throughout the basin (CBHSF 2004a), but perhaps the most pronounced conflict is over the *Transposição* -- although it is not really an intrabasin conflict but a conflict over priorities within and beyond the basin. The *Transposição* is a project that has haunted the São Francisco River since it was first proposed to the emperor Dom Pedro II in 1847; it has been reanimated every few decades as a means to vanquish the omnipresent spectre of drought (Castro 2011). It was raised again in the mid-1990s during the administration of President Fernando Henrique Cardoso (often abbreviated Fernando Henrique, or FHC) and finally gained traction under President Luís Inácio Lula da Silva (Lula); the present *Transposição* is officially called the *Projeto de Integração do Rio São Francisco com as Bacias Hidrográficas do Nordeste Setentrional* and is a project of the *Ministério da Integração Nacional* (MI, the Ministry of National Integration) (Castro 2011). The MI proposed to transfer at least 26.4 m³/s of the São Francisco's flows to the states of Pernambuco, Paraíba, Rio Grande do Norte, and Ceará from two canals (the *Eixo Norte* and *Eixo Leste*) located in the
Lower-Middle São Francisco -- and as much as 127 m$^3$/s when the Sobradinho is full (Castro 2011). At the time of writing, the federal government has also proposed studies of a third canal, the Eixo Sul, into Bahia.

Proponents of the project (such as the federal government -- under a Partido dos Trabalhadores, or PT, administration -- and party-affiliated state and local governments, would-be recipients of the transfer,²¹ and, opponents allege, national and international agribusiness, aquaculture, and construction firms) suggest that (i) the project is necessary to guarantee water security in the receiving basins, which are often portrayed as suffering from water scarcity; (ii) that the São Francisco has sufficient water to support the project; (iii) that the project will diminish drought-related emergency disaster spending; (iv) and that impacts on the São Francisco River Basin have been overstated by opponents (Castro 2011). Opponents (such as water users, non-PT state and municipal governments, and socioenvironmental activists in the São Francisco basin) contend that (i) there is no proof of scarcity with respect to human and animal consumption in the receiving basins (or that there is proof to the contrary); (ii) that the water would be used for agriculture and aquaculture (such as shrimp farming) rather than human and animal consumption; (iii) that proponents have made exaggerated claims about socioeconomic benefits and ignored more likely socioeconomically regressive outcomes; (iv) that insufficient efforts have been made to address the unequal resource access that underpins socioeconomic problems in the region; (v) that there has been systematic disregard for the rights and lands of affected traditional communities; (vi) that proponents have been myopic in their engagement with the river in mere technical, commodity, and resource terms; (vii) that there will be considerable harm to the people, patrimony, flora, and fauna of the São Francisco; (viii) that disproportionate

²¹ This does include a few municipalities within the basin (in Pernambuco) and may now include areas of Bahia that would receive water from the Eixo Sul.
damage will be done to the Lower São Francisco; (ix) that the government failed to conduct the necessary assessments of impacts within the São Francisco River Basin; (x) that the project will lead to construction of multiple new dams on tributaries to further regulate flows; (xi) that the Transposição will trigger increased conflicts over use within the São Francisco basin; (xii) that the project has been marred by legal and political iniquities; (xiii) that the government has not serious explored alternatives; (xiv) that the means of transfer and storage will result in most of the water being lost through evaporation; (xv) and that the São Francisco River simply does not have enough allocable flow\textsuperscript{22} (CBHSF 2005; Rodrigues 2005; Andrade 2005; Almeida 2005; Machado 2005; Menezes 2005; Castro 2011).

Opponents have also called the Transposição both a white elephant -- constantly plagued with allegations of impropriety -- and a ploy to further restrict and concentrate access to water resources in the Northeast. It has also been said to ignore the needs of disadvantaged residents within the basin.\textsuperscript{23} Moreover, there is an environment of considerable suspicion because of inconsistencies in the government's words and deeds as well as the seemingly endless docket of large-scale interventions on a river less and less able to cope -- such as a proposed nuclear

\textsuperscript{22} This is a hotly contested point. Opponents say the river has already reached 93 percent of its potential allocation and that the Transposição would therefore not only effectively "close" the river but leave it at a deficit. ANA claims that there is sufficient allocable water based on both a larger estimated available amount and a difference between the amount that has been allocated and that which is actually withdrawn from the river (CBHSF 2005; Castro 2011).

\textsuperscript{23} In a publication unrelated to the Transposição, ANA lists annual per capita water availability of Brazilian states that regularly experience water stress (defined as less than 1700 m\textsuperscript{3}/person/year); although two of the six states are among those outside of the basin slated to benefit from the Transposição (Rio Grande do Norte and Paraíba), the remaining four are all within the São Francisco River Basin (Pernambuco, Sergipe, Alagoas, and the Federal District). Moreover, per capita water availabilities ranging from about 1200 to 1600 m\textsuperscript{3}/person/year places all of the states on par with areas of the world that do not exhibit similar socioeconomic and socioenvironmental hardship.
reactor in the Lower São Francisco, the recently announced study of a third spur of the Transposição, and occasional mentions of a potential project to transfer water from the Tocantins River Basin to the São Francisco River Basin (Berbert-Born 2006). The Transposição conflict became extremely potent within CBHSF, where the project is opposed by a majority of members. There is fervent frustration with the way in which the committee has been sidelined in decisions related to the Transposição despite it falling, at least in part, under the committee's legislated purview (CBHSF 2005).

1.5.3 The São Francisco River Basin Committee

Approaches akin to the current basin-centric model have a relatively longstanding presence in the region. To some extent, the river's historical importance allowed for the creation of its "identity" in the Brazilian imaginary, but it was in the postwar period that the waters and territories of the São Francisco began to coalesce into a policy unit with the implementation of the Comissão do Vale do São Francisco's (CVSF, or São Francisco Valley Commission) in 1948 -- along with 20 years of constitutionally mandated support though one percent of the federal taxes collected (Oliveira et al. 2005). CVSF was one of many Tennessee Valley Authority-like schemes being implemented in major river basins around the world with the encouragement of the United States Bureau of Reclamation (Klingensmith 2007; Sneddon and Fox 2011; IICA 1990). At this territorial scale, an already locally and nationally well-established developmentalist perspective on water resources (discussed in Chapter 3) came to be intertwined with development interventions by or with the assistance of international organizations and foreign governments; over the years, in addition to the US Bureau of Reclamation, entities such as the Organization of American States, the United Nations Environment Programme, the World Bank, and the Interamerican Development Bank have provided financing and technical

In 1967, CVSF became the Superintendência do Vale do São Francisco (SUVALE, or the São Francisco Valley Superintendence), which, in 1974, was turned into the present-day Companhia de Desenvolvimento dos Vales do São Francisco e do Parnaíba (CODEVASF, or the São Francisco and Parnaíba Valley Development Company). CODEVASF is a development-promoting entity linked to the MI, and, like its predecessors, emphasizes irrigation (although recent initiatives also include aquaculture and eucalyptus); about one quarter to one third of irrigated agriculture within the basin is within the public irrigation projects associated with CODEVASF (although, since the push for "emancipation" in 2006, their "publicness" is a matter of some debate) (Ioris 2001, CODEVASF 2006a; CBHSF 2004a).

With a somewhat different mandate, in 1982, the Comitê Executivo de Estudos Integrados do Vale do Rio São Francisco (CEEIVASF, or the Executive Committee for Integrated Study of the São Francisco Valley) was implemented as a result of the Comitê Especial de Estudos Integrados de Bacias Hidrográficas (CEEIBH, or the Special Committee for Integrated Study of River Basins), which the federal government created in 1978 (CBHSF 2011a). CEEIVASF began as a largely technical entity, but over the course of several decades it began to play a marginally greater role in facilitating more integrated public policy; it remained in place through the formation of CBHSF (CBHSF 2003; 2011).

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24 Since 2006, administration has moved away from a strictly public model, and private, large-scale irrigation also occurs in these projects. According to CODEVASF's website, new irrigation projects are implemented as "irrigation districts" administratively, which are "private-law entities of a collective character, legally established as not-for-profit civil associations in which participation of irrigators is compulsory. CODEVASF has a seat on the administrative council, with no vote but with veto power to safeguard public patrimony" (CODEVASF 2006b)
Following the passage of Law 9433, the São Francisco Basin Committee was formed in 2001 by presidential decree (CBHSF 2003; 2011) and was the third federal basin committee in Brazil. Under a provisional directorate, the committee was formed following 29 regional meetings with the participation of more than 3000 "entities, users, civil organizations, [and] governments" and 26 state meetings by sector to elect members (CBHSF 2003, p. 2). The committee's general membership, which gathers at least twice per year in public plenary meetings, has 62 voting members (each with an alternate) representing government, water users, civil society, and traditional communities. The sectors each make up roughly one third of membership -- when grouping civil society and traditional communities together -- with slightly more water users and slightly fewer civil society/traditional communities representatives (see Figure 1.3). Members may serve two terms, but this rule applies almost exclusively to civil society because representatives from government and business associations or trade federations are selected by their respective entity/employer (CBHSF 2007). Civil society representatives receive assistance to ease the financial burden of participation. It is important, however, not to over-simplify allegiances by sector or equate "government" with public interests, "water user" with private interests, or to paint "civil society and traditional communities" with an uncritical, democratic wholesomeness. For instance, NGO representatives may have political positions or ambitions; hydroelectric, water, and sewage utilities in the basin are rarely (exclusively) private ventures; and fishing communities often share more with traditional communities (which is itself a broad and varied category, despite having few representatives) than aquaculture or other Fishing, Tourism, and Leisure-related ventures.
Membership is divided among states in the basin, ranging from 18 members for the state of Minas Gerais, to six in each of the smaller downstream states of Alagoas and Sergipe, to one in Goiás (which has only a sliver of territory within the basin); other representatives, such as the federal government and traditional communities, are not allocated by state (see Figure 1.4) (CBHSF 2007); this distribution has caused some frustration, augmenting typical upstream-downstream conflicts and exacerbated by Brazilian regional imaginaries that privilege the Southeast of the country relative to the Northeast (or, in this case, strain the relationship between the Upper São Francisco and the Middle, Lower-Middle, and Lower São Francisco).
Administration of CBHSF is overseen by the Diretoria Colegiada (Directorate), comprised of the President, Vice President, and Secretary as well as four regional coordinators -- all of whom are elected from and by the general body every three years and may serve two terms. The presidency is a relatively powerful position in that he or she is able -- to a limited extent, given the history of a sometimes unwieldy committee -- to shape the terms of the debate through prioritizing committee business, guiding agenda-setting for meetings, and inviting presenters or public figures; he or she is also in a unique position of engaging regularly with all sectors and regions as well as being the primary representative of the committee in government meetings and other official venues. The regional coordinators serve a similar role and are also meant to promote integration with committees in sub-basins. When fieldwork was conducted for this thesis, the Directorate was comprised of four civil society representatives (the Vice President, Secretary, and the chairs of the Upper and Lower São Francisco regional councils), one representative of quilombola communities (the chair of the Middle São Francisco), one
municipal government representative (the chair of the Lower-Middle São Francisco), and one state government representative (the President); at the time of writing, however, the Directorate was in flux (discussed in Chapter 4). The regional chairs each head a Regional Consultative Council (Câmara Consultiva Regional), and there are also Technical Councils (Câmaras Técnicas) and affiliated working groups, which elaborate recommendations on a range of subjects such as water allocation (outorga) and the cobrança or plans, programs, and projects. In addition to the voting members that comprise the committee, there are a number of associated entities that do not vote but nevertheless monitor proceedings, such as the Ministério Público (MP, discussed in Chapter 4). Decisions within plenary meetings are taken by consensus or a two-thirds majority vote (CBHSF 2007).

Among its duties, CBHSF is charged with promoting debate on water resource issues and coordinating actors; approving, executing, supporting, and amending a Basin Water Resources Plan (Plano) and integrating it with those of its tributaries and the Conselho Nacional de Recursos Hídricos (CNRH, or National Water Resources Council); establishing the cobrança; establishing spending priorities; creating or choosing a basin agency and managing its budget; developing environmental education initiatives; and arbitrating water resource conflicts (CBHSF 2007). Since its inception, CBHSF has focused mostly on institutionalization: writing internal directives, approving its ten-year Plano, and choosing a basin agency; in 2010, CBHSF selected AGB Peixe Vivo, a non-profit based in Belo Horizonte that also serves as the agency for seven state committees of tributaries of the São Francisco.25 In 2006, the committee began working to

25 AGB Peixe Vivo was one of two entities to apply to be CBHSF’s basin agency. AGB Peixe Vivo was created in 2006 as the agency for the basin committee of the das Velhas River (a state-level tributary of the São Francisco River located in Minas Gerais). The (largely progressive) work of the das Velhas committee has been heavily influenced by Projeto Manuelzão -- an NGO based out of the Federal University of Minas Gerais Medical School -- which has held the presidency of the das Velhas committee
establish the *cobrança*, and in 2010 collection began -- although it was only in 2011 that charges for the *Transposição* were finalized between the CBHSF and CNRH (discussed in Chapter 5). Also in 2011, CBHSF collected the first proposals for the application of funds from the *cobrança*, and at the time of writing, in 2012, the bidding for projects had begun.

CBHSF has not historically been a "docile" committee in that it has contested (or has been employed as a space in which to contest) controversial proposals -- often those of the federal government; it played an active role in opposing the *Transposição* (discussed in Chapter 4) and debating "revitalization" and appears likely to engage with future "development" projects in the basin (such as a proposed nuclear power plant and small dam projects). Important issues in the basin such as these are, by the rules governing CBHSF, also supposed to trigger public audiences (however, a firsthand account during fieldwork and conversations with respondents suggest that such meetings may be organized with varying gusto or accessibility). In addition to such pressing political questions, CBHSF still has many logistical items on its docket including a compact with sub-basins; a water classification framework (*enquadramento*); negotiating in-stream flows as set forth in the *Plano*; and refining the *cobrança*. Future discussions related to the *cobrança* include: applying it to additional uses (such as small hydroelectric installations and aquaculture) and -- because CBHSF's *cobrança* can only be applied to uses of water in or diverted from the river's mainstem or federally financed infrastructure (like the reservoirs of hydroelectric dams) -- deciding the extent to which it will be integrated with the pricing, collection, and application of sub-basins' *cobrança* structures (Machado 2008; CBHSF 2004a; Brazil 1997; 2000).

since 2003. The president of CBHSF at the time the basin agency was selected, Dr. Thomaz, is also affiliated with Projeto Manuelzão. For a history of Projeto Manuelzão, see Abers and Keck 2009.
1.6 Methodology

This research took place over the course of three months from August to November of 2012, during which time I travelled approximately 7000 kilometres by bus throughout the São Francisco River Basin and to the capital cities of its constituent states. Taking a case study approach, my aim was to gain a grounded, networked, and process-oriented understanding of water governance -- or who makes decisions and how are they made -- in the São Francisco River Basin (including the recently instituted cobrança). This approach was informed by the recommendations of two groups of scholars engaging with re-scaled, decentralized, and participatory governance (albeit with a focus on putatively opposite ends of the ideological spectrum): those examining neoliberalization's variegated international incarnations as well as those researching innovations in the state-society relationship in Brazil. With respect to neoliberalization, Peck and Tickell (2002, p 383) suggest such a process-oriented approach in order to "take account of the ways in which ideologies of neoliberalism are themselves produced and reproduced through institutional forms and political action," and Keck and Abers (from the perspective of the state-society relationship) believe that highlighting process "provides a veritable map of the functioning -- and dysfunctions -- of state administration" and potentially allows us to understand "the seeds of building alternative forms of public political organization, or an alternative proposal for stateness" in Brazil (p. 32). Concentrating my analysis "less on 'best practices' than on the pathways the ideas for them traveled and the strategic moves of their carriers" (Keck and Abers 2006, p. 32), I therefore hoped to examine not merely the form of unquestionably altered modalities of governance but also their "moving parts" (the processes -- and outcomes -- of decision making and the balance of power therein) so as to understand whether decentralized, re-scaled, and participatory governance and/or the application of the cobrança might be consistent with (presumably regressive) neoliberalization or progressive
"alternative proposals for stateness." In either case, I believed my object of study to be "change... shifts in systems and logics, dominant patterns of restructuring, and so forth" (Peck and Tickell 2002, p. 383); rather, this process-oriented approach yielded another possibility: that "the more things 'change,' the more they stay the same!" Although there was evidence of the influences of both "alternative proposals for stateness" and neoliberalization (the former to a greater extent than the latter), "traditional" regressive governance patterns appeared to most consistently predict and explain decision-making processes and outcomes within and -- especially -- in spite of CBHSF.

I conducted 27 semi-structured interviews with 30 respondents; 26 of these interviews were in person and one was conducted via email (please see Appendices A and B for interview questions and an anonymized list of respondents). A preliminary list of respondents were identified with the assistance of CBHSF's former president, Dr. Antônio Thomaz Gonzaga da Matta Machado (Dr. Thomaz, herein), based on their engagement in and therefore likely knowledge of the process of defining the cobrança. Additional respondents were indentified through introductions and recommendations by other respondents and, due to my relatively short amount of time in the field, some respondents were chosen basin on their geographical accessibility. Of the 30 respondents, 24 were current or recent committee members or associated with an organization or agency represented on CBHSF; six respondents were non-members (albeit still knowledgeable about water governance in the basin and/or CBHSF). Of the respondents who were current or former committee members, six represented water users (agriculture, industry, energy, and fishing and aquaculture), nine represented civil society and traditional communities (NGOs, universities, and traditional communities), and ten represented government (municipal, state, and federal). The geographical distribution of respondents was: ten from Minas Gerais, eight from
Bahia, five from Brasília, three from Pernambuco, two from Alagoas, and two from Sergipe.\textsuperscript{26}

In addition to interviews, I also attended meetings and events, including a meeting of the lower-middle basin's Regional Consultative Council, a meeting to discuss a proposed nuclear reactor on the lower São Francisco, and a "birthday" celebration on the 510th anniversary of the (European) "discovery" of the river coordinated by the \textit{Ministério do Meio Ambiente} (MMA, or Ministry of the Environment), CODEVASF, (ostensibly) CBHSF,\textsuperscript{27} and others.

The basin's size, complexity, and diversity -- the same reasons why the São Francisco was chosen as a case study -- were also the reasons why the study was limited to a single basin; my greatest challenge eventually became doing justice to (without being overcome by) these three characteristics -- particularly size. The basins preceding the São Francisco in instituting the \textit{cobrança} were the PCJ basins (which covers 15,300 km\textsuperscript{2} and portions of only two Southeastern states) and the Paraíba do Sul basin (which covers 55,500 km\textsuperscript{2} in only three Southeastern states); the areas of these basins are respectively around two and eight percent the size of the São Francisco River Basin (COBRAPE 2010; COPPETEC 2007; CBHSF 2004a). I began to gain some appreciation for the basin's scale on the first of many overnight bus trips. Travelling from Belo Horizonte, MG, to Bom Jesus da Lapa, BA, I awoke at sunrise after a night of upright but surprisingly sound sleep wedged between my belongings and the seat in front of me (an unusual aptitude for which I became increasingly grateful during my travels).

The distant hills and sparse, low-slung clouds overhanging them were still a somnolent greyish-violet, but along the road, sun-gilt tufts of dry grass with ruddy, downward-curving tips radiated

\textsuperscript{26} I did not travel to the capital of Goiás or interview anyone representing interests within the state given its much more limited stake in this basin relative to other states.

\textsuperscript{27} Any participation in this event by CBHSF was in no way obvious. Moreover, the event -- \textit{São Francisco Vive}, or "the São Francisco lives" -- might raise some eyebrows for its proximity to and contradiction of the anti-\textit{Transposição} rallying cry "\textit{São Francisco Vivo!}" ("a living São Francisco").
out of the red dust. The vegetation was a nest of bare, shrubby branches, and the only swatches of green against the rufous landscape were occasional obscenely lush depressions, blue-green stands of milkweed, and cacti -- with one planate species cultivated in orderly rows alongside cinderblock- and mud-walled homes.

“This must be caatinga,” I thought, “How absolutely stunning: sunrise in Bahia!” We rumbled only minutes later into a small town where an enormous sign at the entrance -- chastising me for underestimating the size of the basin -- announced recent investments by the government of Minas Gerais; we had not even left the state yet. Another hour passed before we finally crossed into Bahia. I was soon lulled to sleep again but awoke abruptly at a loud shout of “ninguém tem coragem de descer aqui, não?!” -- "nobody is brave enough to get off here, huh?!" I was startled -- thinking that I had almost missed my stop -- but the bus was still a quarter full, everyone was laughing with the merry prankster as he disembarked in the lonesome town, and the quip became a running joke among the passengers during the rest of the trip. After well over 15 hours of travel, the bus finally arrived in Bom Jesus da Lapa; it was only the second of 17 total stops that I would make.

Compounding the challenge was my limited time in the field relative to the size of both task and territory; I was almost constantly "on the move" and therefore had little leeway to re-schedule missed interviews. I also found it difficult to get "remote responses" (such as email or phone) to

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28 This species of milkweed, Asclepias curassavica L., is called leiteira or oficial-de-sala in Portuguese. Agra et al. (2008, p. 478) list it among the traditional medicinal plants in the Northeast of Brazil -- although under "part used" and "indication and form of use" they ominously only write "entire plant -- as poisonous."

29 This species, Opuntia ficus-indica (L.) Mill, is called palma in Brazil with fruit known as tuna -- or what I, growing up in the US state of Colorado, knew as a prickly pear. It originated in Mexico (known there as nopalces) and is a nutritional, drought resistant crop that provides both food for humans and forage for livestock (Oliveira et al. 2011).
interview questions when the would-be respondent and I had incompatible schedules (which, no doubt, was in part because my own mobility often made me difficult to contact). Being quite mobile, however, did allow me to overlap with river-related events and meetings and to be introduced to additional respondents along the way.

Another challenge was achieving representation across sectors. Representatives from the federal government and civil society were among the most responsive, but requests yielded fewer interviews with water users; this trend became more pronounced as I traveled "downriver." It is interesting to note that in Minas Gerais -- where basin committees have marginally more power over the actual allocation of water resources -- water users appeared most amenable to being interviewed; however, I cannot say for sure whether this was merely bad timing or demonstrates a lack of (need for) engagement in committee decision making by water users elsewhere.

This research will be made available to all respondents, the entities that they represent, and CBHSF and AGB Peixe Vivo in the form of this thesis, a Portuguese-language summary of results, and, depending on the availability of funds, a Portuguese translation of the complete thesis. Preliminary results were presented at the annual meeting of the Association of American Geographers in February, 2012, and will be submitted to a forthcoming special issue of the journal *Geoforum*. This research may also provide the basis for future papers and presentations.

### 1.7 Organization and Overview of Chapters

In the following chapter of this thesis, I explore relevant water governance literature, presenting the conceptual basis for understanding the case studies presented in subsequent chapters. Specifically, Chapter 2 provides a brief overview of relevant aspects of river basin-level governance, with special attention to the social construction of scale. I consider theorizations of decentralized, re-scaled, and participatory governance as well as EIIs and then review literature
on neoliberalization. Ultimately, Chapter 2 aims to construct a theoretical base from which to investigate the articulations and disjuncture between these changing modalities of governance, "traditional" governance patterns (discussed in Chapter 3), the state-society relationship (discussed in Chapter 4), the application of the cobrança (discussed in Chapter 5), and neoliberalization (discussed in Chapter 6).

In Chapter 3, I discuss traditional governance patterns in the São Francisco River Basin as describing a robust set of practices that continue to be relevant and often dominant. I examine adherent practices such as patron-client relationships and violence and consider their historical and contemporary manifestations and the centrality of water in a region consumed with the politics of drought and development. I conclude that traditional governance patterns are strikingly iterative, exhibiting a dearth of ruptures despite multiple and sometimes radical economic, social, and environmental reorganizations.

Chapter 4 centres on the state-society relationship, which has been receiving increased attention in Latin America and especially in Brazil throughout the last two decades due to a proliferation of participatory governance spaces. Such research suggests that the long-held oppositional framing of these two "spheres" elides networks of actors sympathetic to socioenvironmental interests across this imagined boundary. CBHSF corroborates the existence of synergistic networks of state and civil society actors but also confirms the tenacity of a more regressive and exclusive state-society relationship -- which I explore through the terminology employed by interview respondents, who drew a distinction between "the state" and "the government." I conclude that the central conflict within CBHSF is an "existential" one to determine whether the committee will function with(in) "the state" or will serve the partisan and personalistic aims of "the government."
Chapter 5 engages with the form and function of the *cobrança*. I suggest that prices were largely set based on what was politically feasible and that it is an ineffectual EI in terms of the objectives set forth in legislation and economic theory. I go on to argue that the *cobrança* has been more successful as a "political instrument" rather than an EI as it appears to be used primarily as leverage in disputes (often between civil society and the government) in which payment concerns are sometimes inherent but rather marginal. I conclude with two examples of this dynamic -- the *Transposição* and the *Carta de Petrolina* -- that show the *cobrança* to be a relatively polyvalent political tool.

In Chapter 6, I document the complexities of neoliberalization "on the ground" as it engages with other processes and patterns in the São Francisco River Basin. I consider first how actors involved in water governance in the basin view the relevance of neoliberalization. Next, I examine regulation and the role of the state and draw attention especially to the ways in which the Brazilian context troubles analyses centred on regulatory change and institutional landscapes. Finally, I examine water governance in the basin through the lens of neoliberal natures literature and engage closely with a socio-natures approach, which I suggest allows us to also make sense of the concomitant processes and patterns affecting water-related decision making in the São Francisco River Basin.

In concluding this thesis in Chapter 7, I present a synopsis of the chapters herein and their central arguments as well as offer observations on the ways in which they inform one another and speak to the larger issues explored in this research. I then discuss the gaps and limitations of my findings and approach and go on next to offer thoughts on future research directions based upon the questions raised in the preceding chapters. Finally, I turn to the Lower São Francisco to attempt to address the calculus that ultimately determines the answer to "how much for Old Chico?"
2. Theory: Basin-Level Water Governance

2.1 Introduction

This thesis analyzes the governance patterns and power configurations that both shape and are shaped by basin-level water governance as it has been applied in Brazil. In particular, the analysis focuses on two policy processes -- the commercialization of water on the one hand and decentralized, re-scaled, participatory governance on the other -- in the context of neoliberalization, as well as ostensibly more autochthonous political projects in Brazil. In this theoretical chapter, I present the conceptual basis for understanding the case studies presented in subsequent chapters. Specifically, this chapter provides a brief overview of relevant aspects of river basin-level governance, with special attention to the social construction of scale. The chapter then reviews literature on neoliberalization and considers the articulation and disjuncture between basin-level governance processes and neoliberalization. The chapter concludes with a discussion of the relevance of these concepts to the case studies presented in Chapters 3, 4, 5, and 6 of this thesis.

2.2 Basin-Level Water Governance

2.2.1 The River Basin as a Physical and Social Scale

A river basin is defined as land area drained by a river and its tributaries, and is generally envisioned as comprised of nested sub- and micro-basins. Warner et al. (2008) write that its conceptualization as a "natural" scale is derived from related insights in three areas of study: epistemological units in hydrology, an "ordering principle" in physical geography, and -- more recently -- a means of delineating natural systems in ecology. Despite the utility of the river basin concept in understanding, ordering, and integrating the flows of surface water and interdependent biophysical characteristics, employing the river basin as an ecosystem proxy can present a number of problems: basins are not static; they are open systems that overlap and
interact with differently spatially and temporally scaled "natural" processes, including ground water; they can be substantially altered by damming, diversions, out-of-basin transfers, and other interventions; and they do not often correspond with "problem-sheds" because any given basin "rarely encompass[es] all of the physical, social, or economic factors impacting upon the area within its borders" (Warner et al. 2008; Cohen 2001; Cohen and Davidson 2011). Furthermore, automatic recourse to the basin scale may falsely standardize the organization of biotic and abiotic factors, as basins are not equally applicable across biomes -- such as in arid or tropical regions (Dombrowsky et al 2010; Aswani et al. 2012) -- due to interrelated "natural" as well as "social" factors.

Social theorizations of scale have played an especially important role in troubling representations of the river basin as a "natural scale;" as Sayre (2005, p. 287) writes, in order to "theorize and study processes that are simultaneously natural and social," we must recognize that "ecological scales are no less produced than geographical scales." In other words, as Molle (2009a, p.484; Warner et al. 2008) states, while the river basin functions as a distinct (albeit not at all discrete) hydrophysical unit, it "is also a political and ideological construct, with its discursive representations and justifications, closely linked with shifting scalar configurations..." This is because, as Swyngedouw (2008, p. 132) asserts, all scalar configurations "are the outcome of sociospatial processes that regulate and organize social power relations;" the "scaling of nature" is no different in that it "is deeply intertwined with the scaling of social life and of the power relations inscribed therein." These observations attest to the value in critically examining not only water governance processes at the scale of the river basin but also the processes underlying its relevance as a scale of management and governance.

Although the river basin -- in the form with which we are presently most familiar (Molle 2006; 2009a) -- emerged in the 1990s, the history of the basin concept demonstrates that it has actually
been mobilized to the benefit of rather varied political projects in the past. As early as the third century BC, the Chinese exploited a basin-like imagining of river systems (Molle 2009a). Its first applications in the European context centred on the waters within river systems in the 1600s and 1700s. In the 1800s, with an explosion in water-related discoveries and technologies, the basin concept experienced a corresponding rise in popularity -- and politicization, used to support a wide range of agendas (Molle 2006; 2009a). The underlying paradigm, however, tended associate the basin with "man's" domination of "nature" and instrumentalize it in pursuit of large-scale, colonial infrastructure projects (Molle 2009a); Warner et al. (2008) consider this to be the "first wave" of interest in the river basin.

The "second wave" began in the 1930s at a time of increased centralization as laissez-faire market failure played out across the United States and regional planning emerged as a popular means of promoting development; under these conditions, the river basin once again experienced a renaissance in the form of projects like the Tennessee Valley Authority (TVA) -- a federal project aimed at controlling flows and integrating multiple uses of water to engineer the rapid modernization and social transformation of the Tennessee Valley (Warner et al. 2008). Much has been written about the TVA's mixed legacy; it is said to have brought measurable social and economic improvements; however, the project was largely an elite endeavour, benefits were not evenly distributed, the increased standard of living still did not reach the national average, and many of the changes to the land and the river system have proven to be problematic in hindsight (Barrow 1998; Warner et al. 2008; Fox 2009; Molle 2009a). Subsequent, similar projects in the United States achieved even less (Molle 2009a).\footnote{Meanwhile, European countries were having considerably more success treating the basin as a unit of management for drainage, pollution, irrigation, and hydropower purposes, but the ultimate locus of decision making tended to be (or become ever more) centralized (Molle 2009a).} Despite the TVA's struggles and being
something of an anomaly even in its country of origin, its legacy emphasized its democratic intentions and economic strengths and over-determined the role of technology.31

This version of events fit the ethos of the Cold War and the United States' post-WWII geopolitical vision. Despite its highly political origins and intentions, the TVA model acquired a mythos as a rational, replicable, and apolitical project, which facilitated its international dissemination (Klingesmith 2007; Sneddon and Fox 2011). The resulting paradigm came to be characterized by three themes: "the construction of dams for multipurpose use...; the concept of basin-wide development, where the aim was to 'harness' the full flow of a drainage basin; and... comprehensive regional development through massive and coordinated public investment" (Molle 2009a, p. 489). Although the promise of democracy was an alleged benefit, "at the end of this phase, it became increasingly apparent that economic or political logics often unfold at spatial scales or units other than the river basin" (Fox 2009; Molle 2009, p. 489). As Fox (2009, p. 416) notes, the "TVA was an expression of the changing role of the federal government in American society" -- in this case, the role of the federal government signalled a centralized form of governance even though management was focused on the scale of the river basin.32

31 Invoking Latham (2000), Sneddon and Fox (2011) write that modernization is "a 'series of integrally related changes in economic organization, political structures, and systems of social values' modelled after the US experience." They suggest that "the TVA helped create the ideal of modern river basin development, wherein storing water and producing hydroelectricity -- largely through novel water infrastructure technologies that allowed a previously unknown level of flow manipulation -- could set in motion a set of highly integrated activities (e.g., agricultural production, resource extraction, industrialization) to produce economic growth and higher employment levels for a specific region and its inhabitants, all coordinated via a highly centralized yet ultimately democratic authority" (p. 453).

32 As Dr. Jamie Peck pointed out in comments on a draft of this thesis, the TVA has had a prominent place in federal liberalism in the United States as well as being a target for neoliberal attack (Russell 1949), and this is certainly an important point with respect to the role of the state in the alleviation of socioeconomic hardship. From the perspective of water management, however, the TVA model -- as it
One of the most important insights to emerge through examining the construction of the basin scale is that throughout history, the basin has been mobilized in defence of both centralizing and decentralizing intentions, although centralization appears to have characterized some of its most internationally influential manifestations. This may not be all that surprising given the colonial and Cold War backdrops against which the first and second waves, respectively, occurred. What is interesting, however, is that in its present incarnation the basin is said to lend itself to decentralization, as discussed below.

2.2.2 Contemporary River Basin Governance

The "third wave" of interest in the river basin swept the concept to prominence in water management circles in the 1990s (Warner et al. 2008). We are still in the midst of this "wave," but what is clear thus far is that the river basin's present popularity is part of a wider shift from "government" to "governance" that entails rescaling decision making with the intention of fostering participation and increased sensitivity to the multi-scalar complexities of contemporary environmental problems (Lemos and Agrawal 2006). Most accounts of the third wave highlight the influence of the 1992 International Conference on Water and the Environment in Dublin, Ireland. The meeting of mostly "experts" produced the Dublin Statement on Water and Sustainable Development, which was constructed around a discourse of water "scarcity." The

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was applied in the São Francisco River Basin -- has emphasized infrastructure, full exploitation of the river's flows, and irrigated agriculture, and these interventions have been carried out (under the auspices of "development") in socioenvironmentally destructive ways that have exacerbated rather than alleviated the region's socioeconomic problems (as discussed in Chapter 3). I do not intend, therefore, to argue that the "baby" of state intervention ought to be thrown out with the "bathwater" of pharaonic infrastructure projects; rather, my intention is to critically consider whose interests specific "state" interventions serve.

33 I therefore draw on both water-specific literature as well as relevant theory on environmental decision making generally.

34 The concept of scarcity is discussed in greater detail in the following sections and in Chapter 3.
Dublin Statement perhaps exhibits what Park et al. (2008, p. 5-8) call "the can-do optimism of enlightened self-interest that pervaded... the 'Rio model'" -- named for the 1992 Earth Summit in Rio de Janeiro, Brazil -- which they characterize as underestimating "the dynamics of industrial society and miss[ing] the significance of globalization, particularly its economic dimensions;" failing "to adequately conceptualize the scope and scale of global environmental problems;" and "miscasting the character of the state's eco-political authority" by overstating and simplifying the role of the state in relation to environmental problems (with a seemingly paradoxical emphasis on stakeholders). The Dublin Statement expresses a need for "fundamental new approaches to the assessment, development and management of freshwater resources" that might bring about "sustainable development and protection of the environment" and function from a point of "greater recognition of the interdependence of all peoples, and of their place in the natural world" (ICWE 1992). The statement proposes that "the most appropriate geographical entity for the planning and management of water resources is the river basin" and provides four "guiding principles" that have come to be known as the "Dublin Principles"(ICWE 1992), which make explicit many of the assumptions that have come to characterize the third wave, including:

1. "Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment," which necessitates "a holistic approach, linking social and economic development with protection of natural ecosystems."

2. "Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels," which "means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects."

3. "Women play a central part in the provision, management and safeguarding of water," so as to recognise their "pivotal role... as providers and users of water and guardians of the living environment," to "address women's specific needs," and to "equip and empower women to participate..."
"Water has an economic value in all its competing uses and should be recognized as an economic good" so as to "achieve efficient and equitable use," and encourage "conservation and protection of water resources;" however, it is also "vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price."

The Dublin Principles also provide much of the narrative basis of the Brazilian water governance reforms introduced in Chapter 1, and the Dublin Principles are often cited as forming the core of Integrated Water Resource Management (IWRM) (Warner et al. 2008; Sajor and Minh Thu 2009) -- although some scholars trace the IWRM to the 1977 United Nations meeting on water in Mar del Plata, Argentina (Biswas 2004a; 2004b; Rahaman and Varis 2005; Sajor and Minh Thu 2009). IWRM is highly relevant to this thesis as it is predicated on the river basin as the preferred scale of analysis and is arguably the dominant paradigm in water management circles today (Conca 2006). The Global Water Partnership provides the most frequently cited definition of IWRM: "a process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems and the environment" (GWP 2000). IWRM purports to support efficiency-, equity-, and environment-related goals in water management and planning (Molle 2008).

There is no disputing the impact of IWRM, but although most scholars take the GWP definition as their starting point, there is considerable divergence on what it actually means in practice. Many consider it "the dominant development normative discourse [internationally]... in addressing concerns and issues in the water sector" (Sajor and Minh Thu 2009; Lankford and Hepworth 2010; Conca 2006) and readily term IWRM recommendations "hegemonic" (Warner et al. 2008). Others, such as Biswas (2004b, p. 250), suggest that "even though the rhetoric of integrated water resources management has been very strong in the various international forums during the past decade, its actual use (irrespective of what it means) has been minimal, even

Two recent interventions helpfully re-frame and clarify the concept of IWRM. In the first, Cohen and Davidson (2011; Cohen 2011) argue that the river basin was initially conceived as a technical tool but has since been re-imagined as a policy framework. In the transition, they suggest, governance tools, hydrologic boundaries, and IWRM have been conflated "under the rubric of the 'watershed [or basin] approach'" (p. 11). The uncritical fusion of these distinct (albeit related in a scalar sense) incarnations of the basin explain how it has come to be considered more than a social or hydrological scale but is now also presented as a "natural" scale in a normative sense, imbued with an "inherent" capacity to enable dramatically different governance objectives.  

In a second helpful intervention, Molle (2008, p. 132) casts IWRM

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35 Such mobility, ambiguity, and limited functionality (despite being predicated on "what works") makes IWRM an example of "vehicular policy ideas," described by Peck (2012) through the lens of "creative cities" policies.

36 These include supporting a systemic and ecosystemic approach (Warner et al. 2008); integrating multiple scales and processes (Biswas 2004b); accommodating multiple uses (GWP 2000); efficiency and maximized use (Lee and Dinar 1996); and facilitating varying degrees of consultation, deliberation, and participation in governance (Sajor and Minh Thu 2009; Cohen 2011; Cohen and Davidson 2011).

37 The basin is also presented as normatively superior based on the assumption that the river basin provides better "spatial fit" (Moss 2004; Hammer et al. 2011). Many scholars have criticised this idea as naïve if only because basins rarely correspond with "problem-sheds" ("all of the physical, social, or economic factors impacting upon the area within its borders" (Cohen 2011; Cohen and Davidson 2011, p. 4) and because of a potential lack of "policy fit" in many countries and contexts (Dombrowsky et al 2010; Lankford and Hepworth 2010; Cohen 2011; Cohen and Davidson 2011). Moreover, rescaling water management and governance will "inevitably create new boundary problems and fresh mismatches" (Moss 2004, p. 4).
as an unattainable "nirvana concept," which is to say "an ideal image of what the world should tend to," usually in the "form of a 'photo-negative' of the real world." IWRM, as a "photo negative" "nirvana concept," responds to many of the shortcomings of previous paradigms (Molle 2009b, p. 490) -- especially the ecological and social consequences of "poor management or interventions that were too narrowly conceived..."; "administrative separatism," "topdownism," and "centralism" in government (Sajor and Minh Thu 2009); and the rule of "hydrocracies" (powerful state water bureaucracies charged with implementing the "hydraulic mission" of the second wave) (Molle et al. 2009). The "ontological" realignment that the basin underwent beginning in the 1990s might therefore also be considered another manifestation of "state failure" (as discussed in Bakker 2010a, in relation to the debate over water privatization).

"Nirvana concepts" like IWRM provide overarching frameworks that support related narratives (or causal beliefs; Molle offers the example of how paying for water is said to encourage conservation despite a lack of empirical evidence). He suggests that narratives go on to legitimize models (such as the most relevant model in the Brazilian case: France's *Agences de l'Eau*). Molle's intervention allows us to understand how IWRM came to represent such broad governance objectives, which have since been mapped onto the basin itself.

In short, the purported advantages of IWRM render it akin to a panacea (according to proponents), but despite IWRM's superficially impressive appearance, many scholars critique it as internally inconsistent, "unusable," and "un-implementable" (Biswas 2004b). As Warner et al. (2008, p. 125) write, "sustainability, development, participation, integrated water resources management, and integrated river basin management are all concepts that sound intuitively attractive and desirable -- they sound like Good Thing -- as they connote desirable collective goals such as equity, voice, self-realization and a healthy environment. However..." the present paradigm rationalizes "water use by applying optimization models that are based on
contradicting rationalities, such as those promoting economic development, environmental sustainability, and social equity" (Warner et al. 2008, p. 130). Contradictions in IWRM stemming from the fourth Dublin Principle in particular (water as an economic good) have been critiqued especially vigorously. Biswas (2004a, p. 84; 2004b) writes, "during the 1990s, it was 'politically correct' for certain international organizations to speak glowingly of the Dublin principles..." although though they "may even have been a retrogressive step compared to what were achieved at Mar del Plata..." where, 15 years earlier, participants had been urged to "adopt appropriate pricing policies with a view to encourage efficient water use, and finance operation cost with due regard to social objectives." The Dublin Principles, by contrast, render the economic value of water both a seeming ontological fact and normative result -- with one's guaranteed access to water extending only as far as affordability of basic drinking and sanitation needs (ICWE 1992; Biswas 2004b, p. 84).

The debate over the fourth Dublin Principle (Biswas 2004b; Rahaman and Varis 2005) is especially important with regard to the basin's re-conceptualization as a unit of governance. Participation is currently presented as the primary means of ensuring equity, minimizing the government's previously central role in social "development" (flawed though earlier conceptualizations may have been) while concomitantly placing greater emphasis on facilitating economic "development."38 This tension raises questions about the benefits and limits of participatory modes of governance in commercialized decision-making environments. In the following subsections, I consider these potentially contending rationalities: first, participation in basin-level governance and, subsequently, theories of the commercialization of water.

38Empirical work in Mexico and South Africa has already demonstrated how a basin-level approach may be compromised by "a concern not to disrupt the productive capacity of advanced sectors of the economy through the redistribution of resources" (Wester et al. 2003).
2.2.3 Participation in Basin-Level Governance

Basin-level water governance is variously conceived as an example of "participatory" (Smith et al. 1997; Oliver 2001; Koeler and Koontz 2008; Sajor and Minh Thu 2009), "collaborative" (Cheng and Daniels 2003; 2005; Imperial 2005; Ansell and Gash 2008; Koehler and Koontz 2008; Margerum 2008; Sabatier and Shaw 2009; Emerson et al. 2012), "deliberative" (Benson et al. 2011; Emerson et al. 2012), and "community-based" (Hibbard and Lurie 2006) governance -- terms that are often used interchangeably (Ansell and Gash 2008).\(^39\) Perhaps as a symptom of the trendiness of the concept, "the field has lurched from one buzzword to another without sufficient introspection or reconsideration of fundamental postulates. The literature has been dominated by descriptive prescriptions of techniques and procedures based on unanalyzed assumptions and premises" (Smith et al. 1997, p. 139). Its "untidy character" is also said to reflect the way recommended practices have "bubbled up from many local experiments, often in reaction to previous governance failures" (Ansell and Gash 2008, p. 544) with incredible variation in actors, implementation and management, definition of aims, spatial and temporal scope, etc... (Margerum 2008). Case studies thus tend to dominate this body of literature, compounding the difficulty of fashioning orderly theory or results in meta-analyses.\(^40\) As will become clear in the following chapter, the Brazilian context gives rise to its own rather peculiar

(39) These terms can, however, imply certain theoretical lineages, affiliated disciplines, and adherent scholars as well as functional emphases; for example, research on "collaboration" dwells on the concept of consensus more than -- for instance -- "deliberation" literature (which privileges communication, understanding, and exchange) or "participation" literature (which tends to take up issues of representation, democracy, and equity). For articles that attempt to wrangle typologies and frameworks across and within these concepts, please see Smith et al. 1997; Ansell and Gash 2008; Margerum 2008; Emerson et al 2012.

(40) Exasperated scholars appear to therefore resort to (almost-humorous) caveats such as one proclaiming that the cases analyzed were "highly heterogeneous and/or researchers have not detected the underlying patterns" (Leach and Pelkey 2001).
governance patterns; thus, at the risk of similarly conflating (inter)related-but-not-identical concepts, I will not dwell on the difference in approaches but will hereafter use the terms "participation" and "participatory governance" to embrace the central themes spanning these bodies of literature.

With respect to basin-level water governance, the crucial commonalities across these classifications are patterns of re-scaled decision making, decentralized authority, and the participation of non-governmental actors -- although the actors, depth of participation, breadth of mandate, and amount of power transitioned to and/or assumed through these new governance configurations vary widely in the empirical literature. This process is described by Reed and Bruyneel (2010, p. 648) as scaling governance "up and down," resulting in what they describe as "'multilevel' governance systems that are linked horizontally (across geographic space) as well as vertically (across levels of organization);" "out" to new networks and social actors; and "out" to encompass the scope of ecosystems and environmental problems.

Re-scaling, decentralization, and participation are often discussed as having additional resonance in terms of water governance because, as Biswas (2004a, p. 249) wryly writes, there is a perception that "water problems have become multi-dimensional, multi-sectoral, and multi-

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41 Oddly enough, this is the case even though Brazil is home to some of the internationally best-known examples of participation, such as participatory budgeting. The problem of applying inapposite imported theoretical assumptions to Brazilian empirical examples is discussed by Avritzer (2002), Keck and Abers (2006), and others.

42 I have chosen to use "participation" and "participatory management/governance" as the closest available translations from participação and gestão/governança participativa, the Brazilian Portuguese terms employed in Brazilian(ist) research on the subject; however, as noted by Analía Villagra (personal correspondence), the translation is not exact because what constitutes a "participant" in an organization, meeting, or governance process appears to have a less formal or institutionalized connotation in Brazil than in the international literature.
regional and filled with multi-interests, multi-agendas, and multi-causes, and which can be resolved only through a proper multi-institutional and multi-stakeholder coordination" at the "natural" scale of the basin. Decentralization, in this case, does not necessarily refer to an "act in which a central government formally cedes powers to actors and institutions at lower levels in a political, administrative and territorial hierarchy" (Agrawal and Ribot 1999), because when decision-making authority is vested at the basin level, power is often transferred from an established political sphere to a newly-created tier of government that cuts across jurisdictions (Abers and Keck 2006). Within this new realm, governmental actors continue to have a role, albeit shared -- if only because decisions within both new and established jurisdictions are inevitably interdependent. Rather than simple decentralization, therefore, the creation of basin committees may be thought of as multi-level governance -- a "sharing of responsibilities among agencies and organizations rather than a division of labour" -- that "requires multi-directional power transfers among a variety of policy arenas and actors and among national, state, municipal and river-basin institutions" (Abers and Keck 2006).

Although the triad of re-scaling, decentralization, and participation is ubiquitous in both literature and legislation, the interdependence of these three elements has been met with scepticism among geographers, who have critiqued the assumption underlying enthusiasm for re-scaled and decentralized governance that "local" is inherently "better" (in the words of Brown and Purcell (2005), there is "nothing inherent about scale"); however, other researchers have noted that if "local" may not necessarily be "better," governance at a smaller territorial scale may still have a greater potential for fostering tendencies that affect participatory governance

43 "Deconcentration" (sometimes called "devolution") is, by contrast, when decision-making powers are granted to appointees of the central government at lower scales. Agrawal and Ribot (1999) consider the determining factor to be the directionality of accountability of lower-level actors: "upward" to the central government (deconcentration) or "downward" to "the people" (decentralization).
processes. Cheng and Daniels (2003), for instance, note that scaling "up" or "down" often catalyzes different configurations of identity, framing, patterns of interaction, and ways of knowing among participants. Although it is important to remain attentive to the thrust of Cheng and Daniels's argument, we should take care not to analytically isolate actors or flatten scales; as Norman and Bakker (2008, p. 112) write, the "extent to which these scales are meaningful bases for social action rests on the shifting power geometries of actors at multiple overlapping scales." Furthermore, as Cohen (2011) suggests, discussion of the "local" may be outright misleading because re-scaling is subjective: basin-level governance may be "scaled down" from the standpoint of the nation, province, or state while actors at the municipal scale may consider the same process one of "scaling up."

In policy and practice, the desire for participation fostered through re-scaled and decentralized governance is supported by two political constituencies: in broad terms, they are pro-market neoliberals and socioenvironmentally minded reformers (Abers and Keck 2006; 2009; Cohen 2011). Neoliberal proponents generally laud decentralization as reducing transaction costs, increasing flexibility, enhancing stakeholder commitment to and ownership of policies, placing “decision-making in the hands of people with better knowledge of the problems being addressed,” and offering “an antidote to the inefficiency and waste of centralized, overly-bureaucratic states" (Hibbard and Lurie 2006; Abers and Keck 2009; Mesquita) (I will detail the theories associated with neoliberalism in Section 2.3 of this chapter). By contrast, the second constituency -- socioenvironmentally minded reformers, discussed below -- suggests that benefits of participation include: 1) greater inclusiveness in the decision making process, 2)

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44Cohen (2011) suggests that there are three primary proponent groups by including technical personnel. She writes that these three constituencies embrace the basin approach because the basin has become a "boundary object" that each constituency interprets differently.
better decisions, 3) greater government responsiveness and accountability, 4) citizen education and empowerment, and 5) greater conflict resolution potential.

First, there has been a recognition that the needs and contributions of generally marginalized groups -- such as racialized and indigenous communities, women, or the poor -- have long been excluded from conventional decision-making processes, which often reinforce political privilege and marginalization (Lemos and Agrawal 2006; Keck and Abers 2009). The result (and a central flaw) within the context of preceding water governance paradigms was that marginalized communities often lost access to natural resources on which they depended heavily -- when not outright displaced by dams and other water resource "development" projects (Pretty 2003).

Greater participation has been offered as a means to counter "the bureaucratic logic of the state and the aggregative method of reconciling diverse preferences" (Abers and Keck 2009). Rescaled and decentralized governance spaces thus give marginalized groups greater access and, it is assumed, increased influence in the decision-making process (Abers and Keck 2009; Mesquita).

Second, water related decisions must necessarily account for a high degree of complexity, and it is now more widely acknowledged that no one person or group has sufficient information to make such decisions unilaterally (Hibbard and Lurie 2006), thus participation in rescaled and decentralized governance spaces is also believed to ensure more relevant and holistic decisions. Although they may be further from the "powers-that-be," individuals with greater proximity to the quotidian manifestations of resource-related decisions presumably possess crucial environmental and socio-political knowledge (Cheng and Daniels 2003; Hibbard and Lurie 2006; Koehler and Koontz 2008), and adding their voices to the process “can help decision makers take advantage of more precise time- and place-specific knowledge about natural resources” (Lemos and Agrawal 2006). Moreover, participatory spaces allow actors to challenge
the authority of "experts" that has long held sway in water-related decision making (Ansell and Gash 2008), resulting in certain types of (usually inaccessible) knowledge -- often originating in the Global North -- being privileged over multiple and varied popular, traditional, cultural, or place-based water knowledges. In other words, participation allows a broader range of more and better data to be incorporated into decision making.

Third, according to Agrawal and Ribot (1999), participation in re-scaled and decentralized decision making may encourage government responsiveness and accountability and thereby ensure execution and through-put as well as countering waste and corruption; however, they stress, that this accountability must be "downward" (accountability of the process to the people) as opposed to "upward" (accountability to government superiors). It has also been argued that this approach promotes a certain amount of *de facto* government integrity "by invoking the Kantian 'publicity principle' -- showing that having to explain itself and knowing it is going to be monitored changes how governments acts..." (Abers and Keck 2009). Thus, participation is suggested to have positive effects on the process of decision making and the implementation of decisions rather than simply their quality, completeness, and equitability.

Fourth, with its roots in a literature closely linked to reimagining democracy since the 1960s, participation in re-scaled and decentralized venues is suggested to be beneficial for citizenship and civic engagement. Among its purported advantages are increased empowerment, problem-solving capacity, social learning, social capital, and "dignity and self-sufficiency" (Oliver 2001; Hibbard and Lurie 2006; Ison et al. 2007; Wagner and Fernandez-Gimenez 2008). Involvement in decision making is also suggested to give communities the tools to tackle "complexity," a familiar excuse for the perpetuation of elite and technocratic control (Avritzer 2002) that has long plagued water resource governance. Moreover, participants are believed to gain "respect for the rights and responsibilities of others, creating a strong network of trust and mutual
collaboration” (Mesquita), which is said also in support of the fifth putative benefit of re-scaled and decentralized participatory governance: the creation of space for less-adversarial conflict resolution. This suggestion is also founded on a belief that decision making at the basin scale counters adversarial tendencies in resource governance because interested parties must work on a "geographic and not programmatic scale" (Imperial 2005).

Despite the attractiveness of these benefits and the approach's resulting popularity, participation in re-scaled and decentralized water governance has also been critiqued as ineffective -- or at least inconsistent -- in delivering progressive governance outcomes and as potentially even harmful to social and environmental objectives. Concerns arising from the process of re-scaling and decentralization include the "direction" of reforms -- in part because past failures have been attributed to an overly centralized, top-down approach to water resources, which has consequentially produced the belief that "bottom up" governance will deliver better results; however, there are also a number of demonstrated problems when decentralization originates within and is carried out by higher governing bodies with no interest in devolving real power (Abers and Keck 2009). When traditionally powerful actors pursue re-scaling and decentralization, it may be a cynical decision -- such as governmental actors seeking the appearance of legitimacy or popular support or local and regional elites who are better able to monopolize a decentralized system of governance (Abers and Jorge 2005; Wampler 2009; Lemos and Agrawal 2006).45 By contrast, leaders who are "policy advocates" or "pro forma adopters" (as opposed to the "policy entrepreneurs") have often been pushed to adopt a particular governance approach by a party platform or international funding institution and may thus be similarly uninterested in the guaranteeing the functional "success" of governance reforms.

45In such cases, destructive patterns -- such as favouritism and corruption -- may thus dominate an internally focused, dysfunctional decision-making process (Abers 2003; Abers and Keck 2006).
Wampler 2009), which is unsurprising if only because "the attempt to transfer power to fora in which 'ordinary people' have influence usually means taking power away from those that both have it and also possess the ability to resist such changes…" (Abers 2001).

A number of rather onerous barriers to participation have also been identified in the literature, sounding a cautionary note about the limits of decentralization and re-scaling in producing effective and equitable participation. These challenges include insufficient technical or administrative capacity (Abers and Jorge 2005; Norman and Bakker 2008) and well as insufficient financial resources (Leach and Pelkey 2001; Wagenet and Pfeffer 2007), both of which can leave basin-level governance bodies vulnerable to capture (Brannstrom 2004). A liberal democratic frame, which assumes "that it is possible for water management stakeholders to bracket status differentials and power inequalities and to deliberate 'as if' they were equals," also conceals power imbalances, which can threaten outcomes as well as process because it can affect "whether emphasis is placed on protecting proven productive capacity and assuming that growth will lead to redistribution or whether real attempts are made to redistribute productive resources" (Wester et al. 2003; p. 799). Power imbalances can also undermine participatory spaces themselves if more powerful actors engage in "venue shopping" by seeking other avenues for achieving their desired ends (Ansell and Gash 2008). Lastly, simply recruiting participants and maintaining participation can be difficult, and the actors who do participate may not represent the larger community -- let alone marginalized groups (Koehler and Koontz 2008).

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46 Researchers have noted a "stickiness of institutions and legacies" (Sajor and Minh Thu 2009) that results in traditional actors retaining their centrality to the process rather than assuming a diminished role in decision making following re-scaling (Norman and Bakker 2008) -- although some disagree as to whether this dynamic hampers equitable representation of interests (Sabatier and Shaw 2009).
Pretty (2003, p. 1914) makes the further critique that the governance patterns purported to enable successful participation also merit critical attention and should not be readily accepted as amenable only to progressive forms of governance; addressing the "dark side" of social capital in particular, she writes that a "society may have strong institutions and embedded reciprocal mechanisms yet be based on fear and power... Formal rules and norms can also trap people within harmful social arrangements... Some associations may act as obstacles to the emergence of sustainability, encouraging conformity, perpetuating inequity, and allowing certain individuals to shape their institutions to suit only themselves."47 This warning takes on added importance when we consider that many of the aggregative studies of "what works" (such as Ansell and Gash 2008 and Leach and Pelkey 2001) review only empirical cases from English-speaking countries in the Global North but do not similarly bound their normative conclusions. That "what works" has primarily been studied within the context of the Global North does not mean that "nothing works" in the South (to the contrary, the South has produced exciting, autochthonous examples of participation, like participatory budgeting); rather that "what works" in one place may not work in another, and we should thus be sceptical of "copy/paste" policy recommendations that neglect crucial contextual factors.

A final critique applies scalar theories to the tendency in policy literature toward the "depoliticization" of basin-level governance (Warner et al. 2008; Molle 2009b; Graefe 2011). Warner et al. (2008, p. 205-206) write that "'governance' may mean 'rule without (clear) rulers', but it does not go without written and unwritten rules;' applying a discourse of "naturalness" to the basin" offloads responsibility and potential blame" and -- through shifting the focus instead to management and technocratic solutions -- "fails to confront the inequitable power relations that are so often at the root of unsustainable policies and practices" (Fox 2009, p. 420). By

47 Pretty's conclusion is quite relevant to the Brazil case discussed in Chapters 3, 4, and 7.
contrast, however, Mollinga (2008) suggests that a concomitant opportunity has arisen through the gradual paradigmatic shift from water infrastructure "operation" to water resources "management" to water "governance." He writes that from "a situation of denial and exclusion of 'politics' from the mainstream water resources discourse, the discussion seems to be moving towards consideration of the kind of politics that is found in, or desirable for, water resources management" (p. 9). Crozier (2010, p. 504, 509) offers that opening the "black box" on the "'politics' of a political system" may allow us to rethink the functional assumptions we apply to governance (usually the linear, input-output model of preceding paradigms); he proposes paying increased "attention to the emergent qualities of interactive policy processes and... how open generative modes of organization operate in fluid conditions while nonetheless exercising political authority." This iterative and non-linear conceptualization has been alluded to in some of the international literature (Sajor and Minh Thu 2009) and is especially crucial with respect to (water) governance trends in Brazil, as I discuss in Chapters 3, 4, and 6.

To properly ground this discussion, the following section presents a summary of debates over assigning an economic value to water, which -- as outlined in Section 2.2.2 -- has often accompanied re-scaling, decentralization, and participation in international recommendations promoting basin-level governance.

### 2.2.4 Water as an Economic Good

One of the more striking shifts to have occurred with third wave water governance is with respect to the economics of water: the 1977 Mar del Plata Conference recommended that pricing policies be attentive to social "objectives" while the 1992 Dublin Conference stated as a central, organizing principle that water has an "economic value" in its competing uses and is itself an "economic good" (Biswas 2004b). I consider first Economic Instruments, including Market-Based Instruments (EIs and MBIs, respectively), in the context of water's competing values; I
then present several critiques of EIs; and lastly I discuss water as an "economic good" in the context of bulk water charges (which is especially relevant to Brazilian reforms).

Prioritizing the economic value of water has opened up the possibility for new interactions with capital (such as markets) and the resurgence of formerly prevalent models (like privatized service delivery\textsuperscript{48}). This shift privileges economic reasoning throughout the regulatory decision-making process and encompasses a (theoretical) move from Command-and-Control (CAC) regulation to EIs (Perez 2009). Among the heterogeneous approaches classified as EIs in the literature are: pricing mechanisms (including -- but not limited to -- bulk and individual volumetric, block, tiered, two-part, consumption, emissions/effluent, per-area, fixed, quota, connection, minimum, variable, seasonal, priority, and peak-load pricing) (Adamowicz and Horbulyk 1996; Asad et al. 1999; O'Connor 1999; Johansson et al. 2002; Rogers et al. 2002; Renzetti 2005; Molle 2009c) and other taxes, fees, and royalties (O'Connor 1999; Hahn 2000; Zylicz 2003; Cantin et al. 2005; Renzetti 2005); markets, including rights and tradable permits (Adamowicz and Horbulyk 1996; Asad et al. 1999; Hahn 2000; Johansson et al. 2002; Zylicz 2003; Cantin et al. 2005; Renzetti 2005); deposit refund schemes (O'Connor 1999; Hahn 2000); and subsidies (Hahn 2000; Rogers et al. 2002)

There is some disagreement, however, in the economic literature as to what instruments should "count" as EIs. For example, Hahn (2000, p. 378) considers an EI to be "one that is expected to increase economic efficiency" whereas O'Connor (1999, p. 1) writes that the "defining feature [of EIs] is their reliance on markets and the price mechanism to internalize environmental externalities." Motta et al. (2004) note that any environmental regulation is to some extent an economic instrument in that initial costs are shifted from society-at-large to polluters and users; they therefore suggest an alternative conceptualization of EIs along a continuum from control-

\textsuperscript{48} For a more complete discussion, see Bakker 2010a.
oriented to market-oriented to litigation-oriented (arranged respectively, examples include: standards compliance, effluent or user charges, tradable permits and the creation of markets, labelling or performance rating, and liability legislation).

Despite this lack of consensus, the last twenty years have seen the general idea of EIs and MBIs become increasingly mainstream, to the point that the underlying theories are often simply "black boxed" in scholarly as well as policy publications. Assumptions about water "scarcity" along with a "Tragedy of the Commons"-like conceptualization of water users themselves provide the basis for the now-ubiquitous goal of "efficiency" as well as an accompanying epistemological devotion to cost-benefit analyses used to rationalize many EIs (Perez 2009), as examined below. A second set of justifications, discussed subsequently, rest on theorizations about cost-effective regulation derived from a "Pigouvian tax"-based principle "of polluter/user pays" (Andersen 2001; Perez 2009).

In popular discourse -- and especially in international development circles -- water is often referred to as a "scarce resource." Although "scarcity" has helped raise the profile of water management and governance, a disappointingly one-dimensional, neoclassical economics-informed, "supply-and-demand" conceptualization has become one of the most prevalent frames. This stems, to some extent, from an admirable desire to do "more with less:" some of the literature suggests that limiting demand is important because of the social and environmental harms often associated with perpetually increasing water supply (such as dams) while other research appears to simply accept "scarcity," in general, as axiomatic (following, perhaps, from Lionel Robbins famous suggestion that scarcity is the economic discipline's raison d'être)

49 Rogers et al. (2002, p. 2, 7) provide a number of characteristic examples of "black boxing," including "economic theory has long ago explained how correct pricing of private and public good can lead to gains in economic efficiency" in a discussion about appropriate pricing and "basic economics requires that the price of a service be at least as high as the cost of providing that service" to justify full cost recovery.
(Mehta 27/3/2012; Adamowicz and Horbulyk 1996; Grimble 1999; Johansson et al. 2002; Cantin et al. 2005; de Azevedo and Baltar 2005; Molle 2009c). This reductive supply-and-demand portrayal, however, occludes more complicated limits and variations in water use --for instance, supply and demand fluctuates greatly in agriculture (Molle 2009c), and both residential and agricultural demand is fairly inelastic compared to industrial use (Cantin et al. 2005) -- which suggests that this conceptualization may not provide an appropriate proxy.

In other areas of study, however, the notion of scarcity has received more critical inquiry, including the examination of its largely social causes and constructions as well as efforts to untangle more tractable issues like water shortage or stress that are often conflated with scarcity (Mehta 27/3/12). Understanding scarcity in more nuanced terms suggests that a demand-oriented approach (with or without EIs) might be an appropriate response to some of the heterogeneous causes of what Mehta (2003, p. 5071) calls "real scarcity," which is "highly dependent on resource availability and exogenous factors such as rainfall and climate" in addition to being the product of social inequality. An economic framing, however, clearly fails to account for or ameliorate (and may instead validate and exacerbate) what Mehta terms "manufactured scarcity" (also known as "socially constructed scarcity"): a "constructed' problem" through which scarcity is made natural, universal, and permanent; its anthropogenic dimensions are overlooked; and relief and drought industries as well as powerful stakeholders benefit. Manufactured scarcity can be completely severed from demand-reduction goals because it has, as Mehta notes, been mobilized in support of supply-oriented policies and projects. In the extent to which manufactured scarcity or the social aspects of real scarcity are considered in economic literature, they are mostly folded into allegations that governments misallocate and waste water resources (Asad et al. 1999). Rather than adding a layer of complexity and nuance, such "state failure" is often thus used to further justify economic approaches.
Paralleling assumed scarcity in much of the economic literature is a "Tragedy of the Commons"-like narrative that says that users will disregard the quality and quantity limits of shared resources in pursuit of their own self-interest (Johansson et al. 2002; Roberts 2008) (the Nobel Prize-winning work of Elinor Ostrom and other common pool-resource research that presents forceful challenges to this conceptualization of resource exploitation tends to be ignored). This cynically individualistic behaviour is presumed throughout neoclassical economics to be the simultaneously mundane and desirable actions of rational, "economic men" [sic] (Grimble 1999); much like the uncritical acceptance of scarcity, the actions of "economic men" tend to be treated as both justifying the economic frame and guaranteeing (tautologically) the responsiveness of "economic men" to (and thus the self-evident effectiveness of) economic solutions.

These assumptions are often applied to efficiency-focused, institutional, resource management reforms (such as privatization, deregulation, and corporatization) and governance (such as the marketization of allocation and the commercialization of performance incentives and sanctions, which are classified in the economic literature as EIs and MBIs), as outlined by Bakker (2010b). Achieving "efficiency" is presented as a matter of adequate pricing, which is said to provide an indication of water's value (Asad et al. 1999; Grimble 1999; Johansson et al. 2002; de Azevedo and Baltar 2005; Bakker 2010a). The two unwritten assumptions herein, of course, are that this "value" (i) can and should be determined in economically conceptualizable terms and (ii) would presumably prioritize certain economic configurations over others with the result of privileging certain beneficiaries over others.

Although pricing appears to be the unequivocal solution, the literature is much less clear on the nature of the efficiency problem(s) that pricing is said to address; the term appears to span at least four potential water management goals -- including efficiency of allocation based on
opportunity cost (Adamowicz and Horbulyk 1996; Asad et al. 1999; Grimble 1999; Johansson et al. 2002; Rogers et al. 2002; de Azevedo and Baltar 2005; Renzetti 2005), efficiency of use with marginal productivity goals (Asad et al. 1999; Grimble 1999; de Azevedo and Baltar 2005; Molle 2009c), efficiency of use with conservation goals (Hahn 2000; Rogers et al. 2002; Renzetti 2005; Loehman 2008; Molle 2009c), and efficiency of operation with cost recovery goals (Asad et al. 1999; Grimble 1999; Rogers et al. 2002; de Azevedo and Baltar 2005; Renzetti 2005; Loehman 2008) -- in addition to efficiency of government/governance functioning and process (as respectively determined through and with deference to economic epistemologies) (O'Connor 1999; Hahn 2000; Rogers et al. 2002; de Azevedo and Baltar 2005). The literature rarely differentiates between these various types of efficiency and sometimes employs them interchangeably (for an exception, see Cantin et al. 2005). Although many individual academic analyses do specify efficiency objectives and bound the applicability of recommended ELIs and MBIs accordingly, caveats (when present) tend to disappear by the time such recommendations transition into policy literature.50 There is also a tendency to generalize potential outcomes of prioritizing efficiency -- such as assuming that efficient use with a focus on marginal cost will yield conservation (Cantin et al. 2005) -- when two or more goals are uncritically conflated under the rubric of efficiency, giving ELIs and MBIs a suspiciously nostrum-like quality (similar to IWRM, as discussed above).51

50 As Andersen (2001, p. 6) notes, "environmental economists are probably the single group of researchers most inclined to make recommendations to policy-makers on the basis of their findings." Hahn (2000, p. 395) is among those encouraging more environmental economists to become "lobbyists for efficiency," proclaiming that "now economists have a voice."

51 Another example is that of the "state failure" often cited in economic literature; many proponents of greater privatization and marketization contend that government misallocation and waste of water resources arises from pricing water below economic value -- or not at all (Asad et al 1999). In this case -- leaving aside the reductionist problems with the argument -- efficiency of allocation and efficiency of use
Another justification for EIs and MBIs still relies on pricing but focuses on cost-effectiveness rather than efficiency (Andersen 2001; Perez 2009). This approach has its roots in the pollution-inspired work of the welfare economist Pigou, who sought to address negative environmental externalities (Andersen 2001). Pigou's work provides the basis for a number of contemporary economic approaches, such as the "polluter pays principle" and the related "user pays principle," which are suggested to provide economic restitution (either improved cost effectiveness, so as to achieve the "lowest social cost," or generation of revenue for mitigation -- since Pigouvian pricing equal to full social costs is suggested to be incalculable) (Motta 2004). The polluter/user pays principle is also supposed to incentivize behavioural changes because (in somewhat more cynical, "economic men" terms) "if the cost of maintaining clean water is not incorporated into prices charged to relevant users, then there is little incentive to reduce water pollution" (Asad et al. 1999, p. 3). The focus of more recently proposed instruments has changed, however, from viewing such externalities as an example of market failure to viewing them as a manifestation of policy failure; this shift has allowed for discussion of yet another type of efficiency: that which critiques the CAC approach for standardizing regulation across firms rather than on the basis of the lowest marginal abatement costs; as a result, even Pigouvian-inspired EIs have come to be seen as a substitute for rather than a complement to other regulations (Andersen 2001).

Bulk water charges -- the instrument mandated in Brazilian water reforms (discussed in Chapter 1 and referred to throughout this research as the "cobrança") -- are supported by both arguments: the World Bank suggests that the cobrança in Brazil can bring about (several types of) economic efficiency but that full-cost recovery for extraction and transport of the resource should be the primary goal in charging (Asad et al. 1999) while Motta (2004) outlines a user/polluter pays for productivity goals are being both conflated with and offered as a solution to governance efficiency problems.
principle-based scenario for Brazil with both revenue-generation and behaviour-modification goals.\textsuperscript{52} Bulk water charges are also interesting in that they may be justified not only by the economic value of water but through re-imagining water as an economic good, referring \textit{not to a price for water provision as a service but to the price of water itself in strictly resource terms}; Asad et al. (1999) present this distinction as "retail" versus "wholesale" water.\textsuperscript{53} As was discussed in Chapter 1 and will be detailed in Chapters 5 and 6, however, water is not considered an economic good in Brazilian legislation, which classifies it as a public good with economic value.

We should take care, therefore, not to conflate all EIs under the same normative rubric -- just as Bakker (2010a) suggests avoiding imprecise application of the word "privatization" -- and not to make assumptions about the conventions on which any given EI might be based. A pricing mechanism, for instance, may not change the proprietary status of water but markets probably would -- although, even then, rights may be usufructuary rather than strict property rights (Mariño and Kemper 1999); however, the World Bank does suggest that some pricing mechanisms can be used to pave the way for markets (Asad et al. 1999, p. xi). Thus, recognizing the value of water uses does not appear to achieve unequivocal and predictable social, environmental, and/or economic alterations \textit{ipso facto}; as discussed above, how these changed occur is the outcome of highly heterogeneous and geographically contingent patterns, processes, and relationships (Bakker 2010a).

The resulting (sometimes enormous) gulf between EI theory and practice is indeed one of several important critiques. Even among supporters, there is a recognition that EIs rarely function in the

\textsuperscript{52}As discussed in Chapter 1, the Brazilian reforms also provide for effluent charges within the bulk water charges framework.

\textsuperscript{53}A Polanyian critique of this classification would be, however, that so-called "wholesale" water is a "fictitious commodity."
ways that economists anticipate and economic models predict (Asad et al. 1999; Bressers and Huitema 1999; O'Connor 1999; Andersen 2001; Rittberger and Richardson 2003; Motta 2004; Molle 2009c). For instance, where bulk water charges have been implemented around the world, charges are rarely sufficient to change behaviours when stakeholders participate in setting prices (which tends to be an associated policy recommendation in order to incentivize "buy-in") (Motta 2004). Moreover, a host of other motivations and concerns, including revenue generation, tend to take precedence over efficiency (Asad et al. 1999; Motta 2004; Molle 2009). Motta (2004, p. 6) also found that "despite the fact that the primary goal of water charges has been in principle to assign an economic value for water, in all cases [reviewed (Brazil, Mexico, and France)] charges were in place mainly to support the achievement of CAC instruments." It appears that if the appeal of economic instruments is their clean calculability "on paper," an equally substantial drawback is that their equations evidently lack certain variables encountered "in the real world."

The economic literature sometimes acknowledges in passing that the economic lens is insufficient in isolation because EIs may "underestimate distortions arising from mis-specifications of relationships (institutional structure and power) among individuals and organizations" (Dinar 2000, p. 6). Much of the literature also states that context (often portrayed flatly as "institutions") will have bearing on how EIs are implemented (yet continue to treat context as a caveat rather than a powerful variable) (Grimble 1999; Hahn 2000; Johansson et al. 2002). Others shift the blame to policy makers; Hahn (2000, p. 376, 391) suggests that the "apparent inconsistency" of inefficient environmental policy in spite of a more prominent role for economics in policy making has to do with "the political economy of environmental policy," but his solution hinges on understanding politics so as to increase the influence of economic thought rather than the other way around; he writes, "in terms of getting policies implemented effectively, it is generally not sufficient to simply develop a good idea. Some kind of marketing
is necessary before the seedling can grow into a tree." Only recently have more mainstream environment/development economists begun to reflexively note that "the challenges and complexity of implementing such reforms especially under the vast physical, climatic, historic, legal, cultural, institutional, etc. conditions around the world" have been routinely underestimated (de Azevedo and Baltar 2005).

This is not considered an especially profound insight among scholars whose disciplines do not automatically privileged the economic frame in evaluating the implementation and functionality of EIs. Bressers and Huitema (1999, p. 175, 178-179) deride the political naïveté of the acontextual and apolitical economic frame: "it seems fair to say that in most studies or recommendations, policy-making is seen mainly as the 'address' where recommendations are sent, and not as a necessary element in the field of study." They outline several additional assumptions that hogtie EIs in the policy realm, including the belief that "economic agents are 'utility maximizes'" and that EIs can even be compared to direct regulation in the first place; however, the most urgent assumption is that EIs are even "feasible in the policy-making process, once their attractiveness in terms of cost-effectiveness has been demonstrated." "In the real world," they conclude, "it is not a question of 'good science' versus 'bad politics,' but a recognition that politics has a rationality of its own." Andersen (2001, p. 2-4, 22) also agrees that "too little attention has been paid to the importance of basic institutions of policy-making -- whether formal or informal." He writes that "the sphere of regulatory reform dealing with economic instruments has inherited some serious fallacies from neo-classical analysis," including that EIs "are considered as complete alternatives to so-called command-and-control regulations" and that "institutional issues are more or less ignored... [or] are regarded mainly as barriers to the functioning of market forces." The problem, he notes, is that "economic instruments are treated in a vacuum that offers little opportunity to understand how the market
and its institutions actually function," which is a mammoth oversight given that "de-regulation means re-regulation." He suggests that additional problems arise with the comparatively marginal implementation of EIs, meaning that they are often "simply added to existing structures and policies in the hope that everything will work smoothly together," but, he admonishes, "this approach clearly does not produce an appropriate understanding of the incentives at work at the level of implementation."

The "state failure" justification for EIs is perhaps one reason why the economic literature has tended to trivialize politics. Perez (2009, p. 291, 305), pushing for exploration of "regulation as the art of intuitive judgment," writes that the "crude message" of state failure "seems to be that the 'cure' to the trans-systemic distortions depicted by political economy lies in the subjugation of the political, administrative, and legal systems to economic logic." He suggests that this idea "underestimates the possibility that politics and law will permeate and undermine the new institutional structures which will be erected to implement the new economic order." Assuming that economic logic does prevail, however, Perez warns that subjugating political, administrative, and legal systems could undercut their ability to serve the social functions for which they were intended. Brazilian economist Motta (2004) also rejects the idea that EIs can provide an autonomous, agovernmental remedy for state failure; he warns that if CACs are failing because of weak institutional capacity, EIs will fair no better. He dismisses, furthermore, simplistic and apolitical portrayals of EIs, noting that EIs are not only extraordinarily complex but very controversial -- and even more so in regions like Latin America where equity issues are especially acute. In short, EIs neither exist outside of a political system nor do they substitute meaningful changes to it; in fact, they are themselves the subject of political contestation and may additionally exacerbate existing issues.
Such equity concerns are raised frequently in debates over water commodification (although EIs generally and bulk water charges in particular appear to have received less in-depth, critical research or popular attention than commodification of service and delivery). A major, overarching equity concern is that conceptualizing water as an economic good and prioritizing its economic value "shifts the public perception away from a sense of water as a common good, and from a shared duty and responsibility," thereby imperilling vulnerable populations further because "lack of access to safe drinking water, sanitation, and irrigation is directly related to poverty and poor health" (Rahaman and Varis 2005, p. 19). Moreover, water commodification without robust interventions can produce patterns of access predicated on an ability to pay (Biswas 2004a; 2004b; Page 2005; Bakker 2010a), and EIs are not an effective means of (progressive) income redistribution (Johansson et al. 2002). Critical geographers often critique the commodification of water as "accumulation by dispossession," and argue that it is neither materially nor discursively pro-poor nor environmentally sound (Liverman 2004; Ioris 2007; Roberts 2008). Accompanying governance changes often include participatory elements that are meant to guarantee equity, but the success of this model (as discussed in the preceding subsection) is far from assured -- especially when "'greater participation of the poor' means making service providers more accountable based on an idealized account of a market transaction;" such an approach suggests furthermore that "empowerment" is a matter of fostering equal opportunities for market participation (Liverman 2004; Roberts 2008, p. 553).54

54 The World Bank (seemingly missing the thrust of these arguments and confusing bulk charges with payment for water services) disputes the idea that bulk water pricing might harm the poor, stating that it can combat the high prices paid for private sources and vendors in areas without service (Asad et al. 1999). Rogers et al. (2002, p. 2) take the argument one step further by suggesting that "increasing prices can improve equity" in addition to achieving environmental objectives. They state that "the 'poor' are willing to pay more" and that there would be more water left in a networked system for the poor to use if prices were higher, precluding the need to purchase costly water from vendors (quotes original, p. 14);
Beyond changing patterns of access, commodification may also occlude cultural and religious values (Liverman 2004) and alter norms of use; however, it is important to be wary of romanticizing or ascribing atemporal properties to customary resource allocation -- or even to presume that it takes certain forms in the Global South. Page (2005, p. 298, 303) notes that there is a tendency to presume a "vestigial belief that water ought to be free" but notes that it is not always the case and, moreover, that "free water" does not guarantee political or economic progressiveness if coupled with regressive agendas. Finally, paralleling critiques applied to the neoclassical economic frame for its oversights and omissions, Page also suggests that critical scholars should be wary of "an overly tight focus on the commodity status of water;" rather, he writes, "water is a part of a wide set of stories and its commodity narrative cannot be understood in isolation... as it weaves its way through history, water has added to its meanings." While still critical, Page is thus also sceptical of automatic recourse to a normative view of commodification that instinctively valorizes community and demonizes capital; he writes "in an age of flexible governance arrangements, this is too simple." While scholars may approach governance arrangements in the Global South with a healthy cynicism of policies associated with "development" agendas from the Global North, it is important not to be dogmatic about privileging Northern interventions at the expense of analytical nuance, geographical relevance, and Southern agency and history; rather, we should recognize that Northern influence intrudes upon (and regularly exacerbates) already-complicated political questions with already-sophisticated methods of governing often already-stratified societies (that are also globally already connected). This conclusion speaks to but also challenges some implicit assumptions they are reluctant, however, to use equitable pricing structures ("if water must be provided to the poor at low rates," p. 15) and silent on meeting the needs of the poor without networked access, addressing insufficient political/corporate will for expanding networked access to reach the poorer areas, or how their argument applies when it is not actually a physical water shortage keeping the poor from accessing networked water.
prevalent within research on the neoliberalization of nature (discussed in the following section), one of the central bodies of work through which many critical scholars of political ecology investigate increasing and increasingly novel interactions of capital and the biophysical world.

2.3 Basin-Level Governance and the Neoliberalization of Nature

2.3.1 Neoliberalization

As I noted in Section 2.2 of this chapter, basin-level water governance has gained considerable support from neoliberal actors and organizations (such as the World Bank). Both re-scaled, decentralized participatory governance and (more overtly) EIs have been associated with neoliberalizing processes in political ecology and political economy literature. Basin-level water governance is also often associated with the neoliberalization of nature from an international political economy perspective, and related literature in Geography certainly appears to describe governance and economic apparatuses implemented in Brazil -- at least in form -- as I discuss below (I will address function in Chapter 6 in the context of the São Francisco so as to assess the articulation of neoliberalizing processes with transformations in water governance in the basin.

"Neoliberalism" emerged in response to the economic and governmental crises of the 1970s as neoclassically informed economic policies devised by Chicago-school profits like Friedrich Hayek and Milton Friedman. Among its enthusiasts were US President Ronald Reagan and British Prime Minister Margaret Thatcher. It formed the basis of the "Washington Consensus" of the late-1970s to mid-1990s (encompassing development policies that included "fiscal discipline; refocusing public spending on education, health, and infrastructure; tax reform; interest and exchange at market rates; reduced or uniform trade tariffs; openness to foreign investment; privatization of state enterprises; deregulation; and securing of property rights" (Liverman and Vilas 2006, p. 329; Brenner et al. 2010; Peck 2010; Peck and Tickell 2002; McCarthy and Prudham 2004; Bakker 2010b). Neoliberalization in this early, structural
adjustment manifestation was introduced to Latin American countries by international interests like the Bretton Woods Institutions and regional adherents such as Chilean dictator General Augusto Pinochet.

In the intervening decades, neoliberalism has exhibited near-viral mutability such that its far-flung and vastly divergent present-day manifestations make it something of a “rascal” concept (Brenner et al. 2010). These attributes have only become more apparent through various waves of what Peck and Tickell (2002) term "roll-back" (the rapacious disassembly of the Keynesian-welfarist state) and "roll-out:" restructuring, re-regulation, and rescaling that reinforces neoliberal "gains" (see also Brenner and Theodore, 2002). Geddes (2010) alternatively terms these moments "expansive" and "consolidatory," by which he means to highlight neoliberalism’s "destructive creation rather than creative destruction" in its "roll-back" moments. As Peck (2010) notes, therefore, neoliberalism "is not what it used to be (and it can never be what it used to be)." Rather, neoliberalism has become simultaneously hegemonic and entrenched but fluid and unsettled; sited in, through, and across multiple scales; and a master of disguise (Brenner et al. 2010). In this "variegated" conceptualization, neoliberalism does not exist in its ideal type but rather as mutable, graphically contingent variants. It is thus a difficult concept to bound and therefore to identify in actually existing forms; however, focusing on processes of "neoliberalization" allows one to grapple with the many manifestations of this project, the unifying hallmark of which is that "across all contexts in which they have been mobilized, neoliberalization processes have facilitated marketization and commodification while
simultaneously *intensifying* the uneven development of regulatory forms across places, territories and scales" (Brenner et al. 2010; p. 184).\(^5\)

2.3.2 Neoliberalization in Latin America

Some scholars have questioned the limits of neoliberalization in Latin America, which has created a wealth of post- and anti-neoliberalization literature. At the very least, it is well established is that -- although Latin America was a neoliberal "laboratory" for many years -- the region's governance "tendencies cannot be entirely reduced to neoliberalism, but must take account of other movements... which, while shaped by neoliberalism, cannot be reduced to it" (Geddes 2010, p. 163) -- or perhaps, more appropriately, *attributed* to it in the sense of privileging neoliberalizing processes in predicting or explaining governance. Approaching governance trends with greater autochthonous emphasis calls into question many of the normative and causative assumptions that accompany accusations of neoliberalism. For instance, Avritzer (2009) notes that Latin American "traditions within democratic theory that stress the importance of participation at the public level" have their roots in the transition to democracy and the end of the military dictatorship in Brazil in particular, which is a divergent historical and political narrative from that which views participation as part of the neoliberal project.\(^5\)

Abers and Keck (2009) offer another cautionary example of how overbroad and ahistorical analyses obfuscate important and perhaps contradictory details: they note that applying the notion of "state retreat" to emerging, differently scaled governance configurations presumes that the state at some point had sufficient capacity to address a population’s quotidian needs; the Brazilian state, however, has long fostered the capacity for large and irregular actions

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5\(^5\) Some scholars have noted, however, that neoliberalization may yield significantly more ambivalent results (Bakker 2005; Ferguson 2009; Lewis 2009; Lewis et al. 2009).

5\(^6\) Almost without fail, Brazilian(ist) accounts of participatory governance begin with the transition to democracy and not a discussion about neoliberalism.
rather than sustained and reliable service provision. Neoliberalization, of course, is more than mere "state retreat," but the central thrust of Abers and Keck's observation with respect to this research is that one should not take for granted the historical existence of certain forms of "stateness" or presume that a state did (or could) behave in certain ways -- let alone ascribe normative values to without careful analysis. The region's concomitant narratives and patterns underscore, as Blakeley (2010) and Geddes (2010, p.165) suggest, "that practices relating to both neoliberal and contestatory agendas can co-exist in the same place and time" – a crucial adjustment to the assertion of Radcliffe (2005) and others that pre-neoliberal conditions in Latin America are responsible for neoliberalism's fettered form in the region.

2.3.3 Neoliberal Natures

Discussing neoliberal natures, Heynen et al. (2007) suggest that the central imperative of neoliberalization is to "expand opportunities for capital investment and accumulation by re-working state-market-civil society relations to allow for the stretching and deepening of commodity production, circulation, and exchange," and in recent years, the biophysical world has presented a new arena of "expanded" opportunity and "stretching" commodification. Scholars of "neoliberal natures" have thus worked to understand the market's perceived extension into new socio-natural "frontiers;" contributions have spanned an enormous range of topics from carbon (Bumpus and Liverman 2008) to biotechnology products (McAfee 2003) to pets (Nast 2006) to -- of course -- water (Bakker 2005; Mansfield 2004).

The larger project has been harder to synthesize, however. McCarthy and Prudham (2004, p. 275-276) insist that "despite its polyvalence, neoliberalism may be understood as a set of coherent ideologies, discourses, and material practices" to which nature is inextricably linked through liberal thought and through the emergence of neoliberalism and modern environmentalism "as the most serious political and ideological foundations of post-Fordist
social regulation." Himley (2008, p. 437, 445) additionally observes how neoliberalism prompts "radical reconfigurations of the organizational and institutional arrangements that mediate our relations with the natural world," and he enticingly hints at the variation of "local and regional modes of social regulation grounded in the histories and socio-political dynamics of particular places." But neither he nor McCarthy and Prudham articulate a coherent ontology of "neoliberal natures" per se, concerned mostly with potentially relevant but ultimately piecemeal epistemologies.

Castree (2008a; 2008b; 2009) relied heavily on Marxist interpretations in his further attempt to unite the broad array of neoliberal natures-associated case studies under a coherent theoretical framework; however, it is ultimately Bakker (2009; 2010b) who more concisely and precisely takes up the task. Bakker's first intervention comes through several typologies designed to assist scholars in thinking about the targets and tactics (or strategies) of the neoliberalization of nature. From these typologies, Brazilian water reforms appear (legislatively) to share similarities with neoliberal natures, including de-/re-regulation, re-scaling, commercialization, devolution of decision making, and corporatization. Bakker (2010b, p. 717, 726) provides a second, surgical intervention by placing the emerging field in conversation with recent ontological discussions about nature: recognizing that limiting "nature" to "resources" -- although it makes the neoliberal connection starkly obvious -- hamstrings the depth and breadth of potential inquiry, she calls for a closer engagement with (broadly defined) "socio-natures," which "invoke the necessity of dispensing with the humanist model of the subject, and associated nature-society dualism so central to modern thought." Only then does Bakker turn her attention to neoliberalism, tapping variegated neoliberalization as being both theoretically consistent and ample enough to support sustained inquiry while still being responsive to neoliberalism's distinct and diverse "actually existing" expressions; however, she expands the notion, writing that "strategies of
neoliberalization are modulated by different kinds of socio-natures – not only because of their different biophysical characteristics, but also because of their articulation with labour practices, consumption processes, and affective relationships." These socio-natures, as I discuss in Chapter 6, provide a useful way for accessing manifestations of neoliberalization in the São Francisco River Basin but also for conceptualizing entrenched concomitant patterns and politics in the basin.

2.4 Conclusion

Brazilian water reforms bear many of the hallmarks of third wave water governance recommendations, including decentralized, participatory governance at the basin scale and the commercialization of water. These policy recommendations are relevant to largely autochthonous political projects in Brazil but also correspond and coincide with a global trend toward the neoliberalization of nature as the market extends into new socio-natural "frontiers." Indeed, the situation in the São Francisco Basin closely parallels Bakker's (2009) targets and tactics of neoliberalization, demonstrating commercialization in the form of the cobrança; governance processes bearing the marks of deregulation and reregulation, private sector participation, and devolution to nongovernmental actors; corporatization of governmental agencies; and ecological fixes for environmental pollution.

In the following four chapters, however, I draw on my empirical research in the São Francisco River Basin to destabilize this characterization, suggesting that autochthonous governance patterns better describe and predict decision making and -- while there is evidence of neoliberalization's omnipresence -- that accounts privileging neoliberalizing processes risk analytical imprecision. Rather, Bakker's socio-natures approach offers insight into the contradictory and convoluted manifestations of neoliberalization in the basin as well as its limits vis-à-vis traditional governance patterns.
3. Traditional Governance Patterns

3.1 Introduction:

In this chapter, I discuss traditional governance patterns in the São Francisco River Basin; these patterns offer more than historical or political context but describe a very robust set of practices that continue to be relevant and often dominant in water-related decision making. I begin by defining traditional governance patterns and examining inherent practices of clientelism, "development" interventions, and the use of force. I consider their historical and contemporary manifestations and the centrality of water in a region consumed with the politics of drought and development. I conclude that traditional governance patterns are strikingly iterative, exhibiting a dearth of ruptures despite multiple and sometimes radical economic, social, and environmental reorganizations.

3.2 Traditional Governance Patterns

3.2.1 Introduction

Residents in a city of around 15,000 in the interior of Mato Grosso,57 tell a story about an aspiring local politician who -- pandering to the population of the city's cohab, or low-income housing project -- famously declared, "Meu povo! If I am elected, I will construct a bridge in the cohab!" An astute observer among his gathered would-be constituents remarked, "But there's no river in the cohab--" and the politician is said to have replied, "Calma, meu povo. One thing at a time." Whether or not this politician and his asinine promise actually existed, the story stands as a parable for what Hagopian (1996) and others call "traditional" Brazilian politics, and it offers a succinct synopsis of the governance patterns that I suggest, based on interview responses, describe and predict water-related decision making in the São Francisco basin.

57Mato Grosso is a state in Brazil's Centre-West region (where my in-laws live) that lies outside of the São Francisco basin.
The water governance patterns on which this chapter focuses (for which "traditional" is used as an imperfect descriptor, for reasons I explore below) include patron-client relationships, the politics of "development," and the use of force. The phrase "traditional Brazilian politics" applied to such practices carries considerable baggage when written by a North American researcher like me and -- left unexamined -- does little more than confirm a problematic imaginary in the minds of a North American audience. It may connote a "cultural" or "customary" practice, invoke demeaning atemporality, and collapse and essentialize complex histories. I must therefore emphasize that I am using the term in a limited but conventional sense: referring to a number of long-established regressive patterns that have been employed to dominate Brazilian political culture and that continue to have explanatory relevance. I am not arguing that governance in Brazil is inherently or culturally corrupt, personalistic, or oligarchic as I do wish to honour rather than dismiss individuals and institutions who have engaged in resistance to -- or "mere" perseverance in spite of -- such regressive patterns. I suggest, however, that it is important to emphasize the entrenched quality of these patterns so as to achieve greater analytical precision when examining concomitant -- progressive or regressive -- political projects and the ways in which these patterns and projects interact. Furthermore, I do not describe "a Brazilian problem" in the following chapter; it is an "elite problem" that intersects frequently with other nations' "elite problems" ranging from consumption habits to geopolitical evangelism to oppressive interventionism to cultural imperialism, which implicates the Global North to a great extent (although not always in predictable ways). The elite in any country or context employ strategies to maintain and expand power and privilege, and Brazil is no different in this regard. What I remark upon below, however, is the iterative quality of elite domination in Brazil with adjustments rather than ruptures such that these patterns demonstrate impressive, reproductive persistence -- sometimes in tension with but nevertheless surviving and
superseding multiple changing social, economic, and environmental re-framings (the politically "useful" elements of which endure).

Hagopian (1996, p. 16-18) focuses on this striking endurance of traditional politics through two seemingly transitionary moments -- both of which had been cited as heralding the end of "traditional" elite rule in Brazil; she suggests first that the military regime was "constrained by the political systems they set out to conquer" and, next, that the "resources and strategies of the agents of political continuity" similarly shaped the transition to democracy (p. xi-xii). She defines "traditional politics" as "a system of political organization that is authoritarian in the sense that political power is narrowly concentrated, access to decision making is restricted, channels of political representation are arranged hierarchically, and political competition is strictly regulated," and while related practices do vary, it is generally "based on the three pillars of clientelism, regionalism, and personalism." Cruz (2010, p. 3) offers four other hallmarks of "authoritarian and conservative" politics in Brazil, two of which are especially relevant to this research: first, "the practice of repressive paternalism and assistentialism" and, second, "the valorization of force in the resolution of social problems." Hagopian also defines the "traditional political elite" themselves as "a dominant class that does not occupy a single position in the productive structure, whose members' economic resources may be quite heterogeneous, and whose power derives from the exercise of politics itself;" she suggests that they tend to rely upon family networks, but my primary interest is in the second identifying characteristic she presents: "the manner in which they exercise domination," including its territorial dimension and the
mediation of state-society relations (or as interview respondents said: "occupying" or "taking up space" in the state).58

To see these patterns on display, one need only to read media reports about the head of a single ministry -- the Ministério da Integração Nacional (MI) -- during a single month in 2012. The MI is perhaps the ministry that has the most direct involvement in water governance in the São Francisco basin; it is responsible for large infrastructure projects and oversees two other "hydrocracies:" DNOCS and CODEVASF. In January 2012,59 it came to light that the Minister's60,61 subordinates included several of his family members,62 such as his daughter-in-law's father (as coordinator of DNOCS for the state of Pernambuco), her uncle (as a "representative" of the Ministry with "undefined tasks"), his own brother (as President of CODEVASF), and his own uncle (as a member of an irrigation committee) (Estadão 11/01/2012; 58 It is incorrect, however, to imagine the elite as provincial lords of local fiefdoms; their interests in some cases extend well beyond the borders of Brazil (Chilcote 1990), but their power has been consistently scaled to territories of government decision making.

59 During the same month, DNOCS was exposed as paying out R$312 million over the preceding ten years through overbilling and other irregularities -- clustered in the regional stronghold of its Director-General and his political mentor (Cândido 2012).

60 The Minister is a member of Pernambuco's powerful Coelho "clan" (for a discussion of the family's influence, see Chilcote 1990). Other states have similarly dominant families, including the Magalhães in Bahia.

61 Another example of malfeasance involving the Minister came to light during this same period but dates back to his time as mayor of Petrolina, PE, where he is alleged to have used public funds totalling R$200,000 to buy the same property twice from the same businessman for use as a landfill. After the end of his term, he was succeeded by his cousin (on whose administration he blamed the "error" of the second purchase) (Folha 09/01/21).

62 One respondent from civil society described this pattern in the following way: "this is called nepotism: employ family or friends--You create a structure, a network of power, that ensures that these people will work... for you to be re-elected because you will continue to maintain their job or salary..." (N.2). Although nepotism and cronyism were absolutely discussed by respondents, most did so "off the record," and there is therefore insufficient material to explore this topic in-depth.
Mendes 2012). The same month, the Minister was also accused of privileging funding requests from his son, a Congressman, through CODEVASF's budget (Colon and Credendio 2012). Still in January, the Minister was exposed as giving ninety percent of MI's disaster prevention and preparedness funds to Pernambuco, his family's political stronghold (Salomon 2012a). The Minister weathered these accusations, and less than six months later, in June 2012, he again came under fire for trying to transfer R$50 million to a dam project in his state from the budget of the Transposição (Veja 01/06/12) -- a project that itself is already 71 percent over budget, having ballooned to R$8.2 billion from the R$4.8 initially proposed (even though average construction costs nationwide jumped a mere 6.9 percent during the same period) (Salomon 2012b). As of the time of writing, the Minister remains in his post.

One civil society respondent spoke of patterns such as this as being part of "Brazil since colonization; not much has changed... The party that was going to change this was the PT. It has ended up hostage to this as well. Today it's the retroalimentador ['feedback loop'] of this disgrace" (N.2). Examples such as these -- together with the observations below -- leave room

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63 The Congressman received all R$9.1 million requested from MI -- the only one among 219 other members of Congress to receive 100 percent of their requested funds.

64 An interview respondent based in MI told me that the Ministry struggles to spend its entire budget because there simply are not a sufficient number of worthy requests. I asked how requests are made to the Ministry and (after some "hemming and hawing") he told me that they come through members of Congress -- that the Ministry would be overjoyed to have more projects worthy of funding.

65 These fund include spending on landslide and flooding prevention and preparedness; another news outlet calculated that 95.5 percent of the Ministry's flood prevention funds were allocated to Pernambuco -- a leap from the mere 8.1 percent earmarked for Pernambuco before the Minister's appointment (Matais and Costa 2012).
for little optimism; however, I do see reasons to be hopeful about the future of water governance in the São Francisco basin, as I argue in Chapter 4.66

3.2.2 Clientelism, Violence, and Development

Brazilian political history is replete with behaviours that fall into a pattern of patron-client relationships (Hagopian 1996; Nichter 2011; Graham 1990; Lyne 2008; Taylor-Robinson 2010; Chilcote 1990). Even though this pattern comprises a "'competing' informal institution" -- one that "often lies in tension with formal rules" (Nichter 2011, p. 2) -- it has persisted from the colonial era, through the coronelismo67 of the Old Republic, at the level of the states under the military dictatorship, and into political practices that today include vote buying and public works projects like that of the "clever" politician mentioned at the beginning of this chapter. This iteration is likely why Graham (1990, p.271) concludes his research on patronage in nineteenth-century Brazil -- one hundred years later -- in the present tense: "the system of patrons and clients did not represent a 'stage' in Brazil's history except in the sense that it served the interests of a class whose life is not, one hopes, eternal."

When it manifests as vote buying, patron-client relationships entail the provision of "particularistic benefits during campaigns in direct exchange for vote choices" (Nichter 2011, p. 3); these benefits range from food to prescription medication to construction materials.68

66 In fact, I very much expected to focus my thesis on the strength of progressive politics based on prior participant observation I conducted in 2010 in a socioenvironmental NGO based in the das Velhas sub-basin of the São Francisco. My (reluctant) acknowledgement of the persistence of traditional politics is the result of the topic's overwhelming prevalence among interview responses.

67 The term coronelismo was coined in the Old Republic with reference to National Guard coronels and is used to refer to a system of patron-client political machines generally (especially in the rural Northeast).

68 Despite its illegality, politicians could previously expect impunity when buying votes; however, civil society groups and allies in the judiciary have overcome enormous institutional and legal hurdles
Although illegal, vote buying continues throughout Brazil and is believed to be especially prevalent in the Northeast. Furthermore, the most enforceable penalties against vote buying are limited to the election period and therefore do not address the "relational clientelism" -- the ongoing distribution of benefits and services -- that characterizes the practice in Brazil (Nichter 2011). Such *quid pro quo* relationships alter the expected outcomes from the electoral process and therefore influence more explicitly representative political institutions than the shared governance space of CBHSF; however, this dynamic does affect water governance -- albeit primarily through actions *not* taken.

Perhaps fittingly, therefore, an example I observed in the field resulted from an interview *not* conducted: a contact had coordinated a meeting with the leader of a fishing community on the lower São Francisco River, suggesting that it would be useful for me to hear from someone who was likely to focus on CBHSF's *irrelevance* to many people who depend upon the São Francisco; however, the interview did not take place because, I was informed later, the leader had instead attended a candidate's ceremonial "donation" of boat motors to the fishing community. My contact suggested that boat motors are a popular way to secure these communities' votes *en bloc*. The candidate is thus guaranteed a base of electoral support without confronting the more powerful interests directly responsible for the problems affecting his or her constituents (such as diminishing fish stocks, which are in large part the result of altered and reduced flows from upstream uses and hydroelectric installations).

Viewed in the most cynical light, recipient communities are thus enrolled in maintaining their state of dependence by forfeiting the (potentially) robust democratic representation necessary to (possibly) achieve systemic changes leading (perhaps) to improved quality of life (or, in this

(including elements of the judiciary itself) to ensure that vote buying be not merely illegal but a potentially enforceable punishable offense (Nichter 2011).
case, merely the continued viability of local livelihoods). Such numerous caveats on representation have led scholars like Lyne (2008) and Taylor-Robinson (2010) to view clientelistic relationships -- including but not limited to vote buying -- in a somewhat affirming (albeit fatalistic) light. Lyne suggests that accountability is not always a straightforward concept but that voters face a "prisoner's dilemma" scenario whereby individual voters sometimes stand to gain more (or lose less) by voting for a clientelistic candidate -- independent of the outcome of the election. Taylor-Robinson applies a similar understanding of clientelism to "the poor," she writes that politicians in Brazil have few incentives to represent the poor -- or may in fact be punished for doing so -- and that the "limited capacity of poor people to monitor policy activity by their elected officials, especially when paired with negative past experiences with politicians making policy promises and not delivering" is likely to prompt poor people to place greater value on personalistic benefits and local development projects they can easily monitor (p. 193-194). Through these analyses, one can grasp both the seeming intractability of clientelism as well as the problems with shaming recipients of clientelistic representation for securing what may be the only benefits available to them. Lyne and Taylor-Robinson, however, focus on the structural and institutional aspects (respectively) of the Brazilian political system and exhibit some distance from conditions that would complement the calculus of clientelistic relationships -- such as the consequences of not cooperating and as well as the "material conditions of the sertão" (Kenny 2002, p. 128).

First, while these analyses focus on the distribution of "benefits" that the traditional elite use to maintain their position of privilege and control, it is critical to remember that they also often wield force with impunity. A sunny afternoon walk along the waterfront in Penedo, AL, yielded an unexpected reminder of the omnipresence of violence; I stumbled upon a craft booth, and

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69 Broken political promises were a prominent theme in interviews.
soon found myself engaged in conversation with the spirited older woman inside as well an ebullient young woman who had stopped to buy a piggybank as a friend's birthday present. Both were enthusiastic ambassadors for their city, discussing everything from the large-footed clay figurines on display (like the people of the sertão, the craft seller said, who are so hardworking that by night time, they are too tired to dig thorns from the caatinga brush out of the soles of their feet) to the river a few meters away (the young woman, not yet aware of my research project, watched a plastic bag float into the water and passionately declared that if she were rich, she would spend every last centavo to resuscitate the São Francisco). As I was leaving, the craft seller handed me a tiny replica of a knife known as a peixeiro. It was about eight centimetres from the blunt tip to the end of its wooden handle and slid into a stiff, yellow, leather sheath that dangled from a keychain loop. She had plucked it from among displayed keychains with more benign regional symbols like the cashew fruit. As she gave me the knife, she told me that the story of the Northeast is written in violence. The warm gesture seemed incongruous with the belligerent imagery of the gift itself (not to mention its ominous bequeathing); however, I came to view it as representing the region's story as not mere subjugation but struggle.

Despite (and in resistance to) the patterns of elite domination discussed above, Nordestinos\textsuperscript{70} -- as Kenny (2002, p. 130) writes -- are not "culturally fatalistic, mystical, matutos" (invoking a pejorative term meaning a rural, unsophisticated person) "who are either on the move as migrants or who wait for handouts because of their blunted political consciousness;" rather, "they have historically demanded social and economic justice through popular mobilization, uprising and rebellion." She is (rightly) adamant about the importance of making visible "the vital history and political struggles of sertanejos,\textsuperscript{71} retirantes,\textsuperscript{72} and other impoverished

\textsuperscript{70} This is a term meaning people from the Northeast.

\textsuperscript{71} This is a term for those who live in the sertão.
Nordestinos as a counter to imagery of passive, silent fallouts from ecological calamity," but she also writes that "countering fatalism by taking fate into their own hands -- personally, collectively and institutionally -- is met with violence by threatened potentates" and that "it is fear... not culture, that silences demands for social and economic equality" (p. 130-131). Cruz (2010) suggests that the valorization of force in the resolution of social problems is one of the defining features of "authoritarian" and "conservative" traditional politics across Brazil -- not merely in the Northeast.

With only a handful of exceptions, nearly all interview respondents representing socioenvironmental interests and traditional communities echoed the ubiquitous potential for violence as a result of their work: one had survived an assassination attempt, barely escaping three blasts from a 12-gauge shotgun; another is careful not to use certain modes of transportation or tell anyone where he is going; another learned that a local politician had asked a fazendeiro73 with a reputation for violence to "make her be quiet;" and some shied away from certain topics in our interviews by making it clear that they felt insecure without specifying the precise nature of the threat. Their statements revealed that intimidation comes from both economic interests as well as political actors, and one respondent explicitly stressed the conflation of the two:

...pistoleiros [hired guns], police from the region, judicial powers, political powers are all connected to these big landholders; in fact, most of the time, they are the "powers-that-be" -- they are the judges; they are the prosecutors; they are the chief of police, both military and civil; they are the politicians who write the laws; they are the bosses of all of this infrastructure that guarantees municipal, state, and federal regularity. So when they are unable to persuade through dialogue... they exterminate. (Mc.v.3)

72 This term means someone who migrates to escape drought.
73 This term refers to the owner of a large, rural plantation.
Zhouri and Oliveira (2007, p. 120) see "the globalization of capital" as intensifying this violence, and no doubt the commodities boom is a motivating factor; however, a respondent representing traditional communities was quick to point out the historical continuity and suggested that spatial constraints play an increasingly important role in the intensification of conflict. Moreover, consistent with Kenny's observations, threats and acts of violence are not only a means of gaining access to land or capital but also a means of silencing dissent (although that dissent may be a barrier to accumulation).74,75 Finally, violence can be used as a "flanking mechanism" to guarantee the perpetuation of clientelistic political patterns; one respondent told a story of how he had hoped to start a tree-planting project but was threatened by a political leader who viewed it as undermining his total control of municipal affairs. In spite of such threats -- and consistent with the call to recognize and respect the "vital history" of these political struggles -- it is worth honouring the sentiment expressed in one interview: "I live with the perspective that anything could happen [to me], but the fight continues" (Mc.v.3).

Second, traditional governance patterns are heavily bound up in the "material conditions of the sertão," such as "unequal land distribution, unemployment, lack of access to credit, irrigation and indemnity," which all "contribute to vulnerability and require situational adaptations or coping strategies" (Kenny 2002, p. 128). Evident in the literature as well as interviews is how the politics of "state-led development" -- especially in the Northeast -- exploits and exacerbates these "material conditions" to the benefit of the traditional elite. The Northeast has an extensive history of both "development" intervention and socioeconomic hardship. According to

74 As one respondent stated, "they kill this community, destroy the leadership, because then the community will submit; they will be afraid" (Mc.vii.3).

75 This dynamic renders governance an especially perverse Catch-22: dissidents are either excluded from traditional spaces of decision making or, included in participatory spaces, they may feel unable to engage fully and freely.
"development indicators," the region continues to struggle and has been considered "the single largest concentration of poverty in Latin America" (van Zyl et al. 1995, p. 3). As introduced in Chapter 1, this history of adversity is usually portrayed as closely intertwined with the region's climate and the availability of its water resources. Rainfall is unpredictable, poorly distributed, and concentrated into only a few months per year, thus water management since imperial times has centred on canals, dams, reservoirs and other infrastructure to facilitate accumulation (Pontes 2011). Periodically, the Northeast also suffers cyclical droughts, infamous for their past morbidity -- killing five percent of the nation's total population in the 1877-79 drought alone (Alves Filho 2008) -- and for provoking mass internal migration in more recent times (Davis 2002; Kenny 2002; Pontes 2011; Greenfield 1992). Water management has thus long been a strategic area for intervention, which has given rise to the Indústria da Seca (or the Drought Industry), a term that refers to actors who turn material profits from and consolidate political authority through government efforts to mitigate the effects of drought and marshal water supplies in intervening years.

There is an extensive and well-established body of literature on the "Drought Industry." Kenny writes that this cynical exploitation of drought "occurred as far back as 1889, when a senator from Ceará referred to the 'invention of drought' as a means to profit from relief efforts" (italics mine, p.128; Greenfield 1992); such abuse has ranged from controlling access to material assistance (like the cesta básica, or food aid) to exploitation for national projects (such as providing a source of reserve labour) to development schemes (often in the form of infrastructure, which presents additional opportunities for over-billing and kickbacks as well as manipulation of the resource itself) (Kenny 2002; Davis 2002; Alves Filho2008). Suffice it to say that much of the literature on the Drought Industry concludes (as did several interview respondents) that even in the Northeast, the dangers of the drought are not climatologically
produced -- consistent with the work of Mehta discussed Chapter 2 and others who focus attention on social and systemic factors that turn drought into disaster elsewhere in the world.

Historically, the elite attempted to frame the region's problem as anything but related to their methods of accumulation and control. In the mid- to late-1800s, culpability was heaped upon *sertanejos* and their traditional practices, which were viewed as holding the country back from greatness: in writings from that time, "the constant theme... was that to achieve its destiny, Brazil must adopt the practices and procedures used by the more advanced nations of the world. In a word, Brazil needed to become 'modern'" (Greenfield 1992, p.391; Davis 2002); consistent with contemporary practices in Europe, irrigation thus became (and continues to be) the preferred "remedy." Around the turn of the century, the overwhelming need to "modernize" (and later "to progress" and "to develop") persisted along with a preference for infrastructure-based interventions, but aridity itself became "the reason" for the Northeast's socioeconomic struggles, intensifying the logic of "more water means more development" that persists in many circles today. The government began framing the problem in terms of "drought combat" -- even inaugurating DNOCS (the *Departamento Nacional de Obras Contra as Secas*, or National Department of "Works to Combat Drought"). Pontes (2011, p. 6) suggests that this frame effectively erases the social and political roots of the drought while exacerbating underlying inequalities related to the project of "economic modernization based on irrigated agriculture" and the tendency to plan and execute "hydraulic infrastructure projects without regard for the integrity of the environment and, principally, the interests of *sertanejos*, being linked to economically powerful irrigated agricultural production."  

76 Preliminary research (Toni and Holanda 2008) suggests that families engaged in common property pastureland farming have a higher protein intake and are actually better able to weather drought conditions than small-scale producers on private pasturelands. Traditional means of weathering drought such as this in addition to small-scale water-collection projects and (judicious) use of groundwater are all
in why, how, and where the projects are carried out as well as in the resulting distribution of resources: Kenny (2002, p. 127) suggests that "75% of water reservoirs are private or serve private interests," and Ribeiro (2008) states that the 37,000 m³ of stored water in the region is housed in 960 public reservoirs and 70,000 private reservoirs (by conservative estimates).\(^7^7\)

Arons (2004, p. 6) recounts an emblematic example:\(^7^9\)

Lagoa do Serrote... is named after a large lagoon that once rested in the middle of the community. The water was deep and wide and was always sufficient... even during periods of drought. During the 1976 drought, however, Lagoa do Serrote lost its lagoon. The lagoon did not dry up. It was drained and transported via canals to a private fazenda (large rural plantation) by the government agency responsible for irrigation measures... The inhabitants of Lagoa do Serrote are not highly educated, nor can many read, but they understand the factors that have put them on the margins of society... [Outside of the local school house] is an advertisement for a public-works project that will build a new reservoir only fifty miles away, from which the town may gather water. The careful planners of this progressive project must have forgotten that no one in this community owns a car. Outside the schoolhouse is a graveyard filled with children who died from malnutrition and hunger, causes of death traditionally attributed to drought.

Quoting Rego (1993, p. 25), Araújo (2000, p. 6) views the approach to agricultural "development" in the region as a "process of modernization without rupture, meaning a modernization that occurs without any significant alterations in the arcane structure of rural property distribution."

The São Francisco River itself -- not simply the territory of the basin -- is heavily implicated in these patterns (most explosively, in the dispute over the Transposição, discussed in Chapters 1 )

\(^7^7\) Of those 960 public reservoirs, 531 are "mega-reservoirs."

\(^7^8\) Aside from the socioeconomic implications of this approach, the resulting surface area of stored water is also ill-suited to the region's high evaporation rate, which can reach fifty percent (Ribeiro 2008). Castro (2011) suggests that -- because of evaporation -- less than 25 percent of reserved water may be available for human consumption.

\(^7^9\) This Northeastern town falls outside of the São Francisco basin in the state of Rio Grande do Norte, but it nevertheless illustrates the simultaneous tragedy and absurdity of these governance patterns.
and 5). As one respondent noted, the São Francisco is "a river" in its more humid upstream reaches in Minas Gerais, but in the sertão downstream the São Francisco becomes "The River" and is thus the subject of both extensive demand as well as incredible attachment and symbolism in its basin and in the Northeast as a whole. Indeed, since the devastating drought of 1877-79, a belief has persisted in the Brazilian imaginary that "only the waters of the São Francisco will save the suffering people of the semiárido" (Alves Filho 2008, p. 29).

The São Francisco's role in the "development" imaginary extends beyond agriculture to include energy -- both in terms of material demand and rhetorical justification. The river is punctuated by the Paulo Afonso, Três Marias, Moxotó, Sobradinho, Itaparica, and Xingó dams, all of which were inaugurated over the span of 40 years (between 1954 and 1994). Brazil's hydroelectric sector long dominated water policy in the country as a whole, and related technological perspectives remain prominent. The dams are operated by the powerful Companhia Energética de Minas Gerais (CEMIG) and Companhia Hidrelétrica do Rio São Francisco (CHESF), the latter having been created in 1945 by the Vargas government against strong regional opposition. The government "justified this measure as fundamental because without energy, there would be no development;" opponents, organizing against CHESF and the construction of Paulo Afonso installation "considered it an absurd undertaking that was nothing more than a white elephant that would generate energy to illuminate butterflies on summer nights..." (Filho-Zuza 2008, p. 72). These arguments and their associated patterns persist, although the most recent proposal is not another hydroelectric installation but a nuclear reactor. It is indeed unlikely that the river's mainstem could support another large dam; at several points in recent years, the mouth of the São Francisco has been reduced to a shallow sheet of salinated water. Two now-famous photos show, in 2006, a group of individuals on horseback crossing the river at its mouth with the water level lapping at the hocks of their mounts, and in 2008, a man calmly riding his motorbike across
a riverbed of more sand than water *underneath* an enormous bridge spanning the São Francisco's former girth. This drive to push consumption and exploitation to its absolute limits is more characteristic of second-than third-wave projects, as discussed in Chapter 2.

Government intervention in both agriculture and energy "development," according to one civil society respondent based in the semi-arid region of the São Francisco, is therefore often viewed with dread: "people would say that CODEVASF was the besta-fera of the earth and CHESF was the besta-fera of water -- the besta-fera with two heads" (N.2). The besta-fera is a creature with several associated incarnations in Brazilian culture ranging from a folkloric centaur-like being that runs through the countryside during the full moon to the devil incarnate to satanic beasts from the Book of Revelations; the context of this quote referenced Revelations' (13:1, 13:11) apocalyptic beasts from the waters and from the earth as well as the multiple heads associated with the former.

These development interventions play a very important role in the perpetuation of traditional governance patterns. One manifestation is a tendency toward *foto-voto* "pork barrel" spending on exaggerated infrastructure projects, which parallels a clientelistic mentality.80 A (Brazilian) political maxim is that *fotos* ("photos") yeild *votos* ("votes"), meaning that large or visible projects are preferable to small or discrete ones (irrespective of cost or efficacy); furthermore, this perspective privileges certain areas of intervention over addressing potentially more pressing needs. Of course, large projects are often also associated with opportunities for kickbacks and corruption. As an example of this political preference for "megalomaniacal" infrastructure

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80 ...in addition to a multitude of related political and economic "perks" on a sliding scale of lawfulness that includes blatantly illegal, corrupt practices; however, the latter practices are not the focus of this thesis.
projects, a former mayor of Sergipe's capital, Aracaju, tells the story of a visiting governor who pooh-poohed his administration's initiative to improve the city's storm water drainage system, saying "underground projects are for armadillos... during its execution, this sort of project annoys people... and worse, after it's finished the people it truly benefits forget about it because it's buried" (Alves Filho 2008, p. 43-44). Alves Filho and others suggest that this mentality explains the government's preference for pharaonic projects such as the Transposição over small-scale and diffuse initiatives based on (potentially) alternatives principles, like convivência com a seca/o semi-árido (or "coexistence with the drought/semi-arid region"); this movement rejects "drought combat" and instead embraces "a different manner of structuring knowledge" on surviving and thriving in (conjunction with) the sertão (Cavalcanti 2003, p. 46). Although the terminology has begun appearing in "mainstream" political culture, one respondent's observation suggests that convivência is unlikely to appeal to the political elite in practice: "Brazilian politicians are very targeted... the environment won't win him any votes. Sometimes he prefers to destroy -- so as to construct something to show off -- rather than construct the environment" (Mc.v.3).

The "foto-voto" pattern is not always directed at the (sometimes unwilling) recipients of intervention, however; there is also a pattern of appropriating the hardships of sertanejos and exploiting regional imaginaries to invent "photo-op" remedies with high socioenvironmental costs that "export" benefits to other areas of Brazil and accrue greater money and power to a handful of elites -- generating accusations of "internal colonialism;" among respondents, the

81 He considers this "Brazilian addiction" related to "the hypnotic fascination for the solutions of the American way of life" (Alves Filho 2008, p. 43).
82 João Alves Filho, in addition to being the mayor of Aracaju, was a three-term governor of the State of Sergipe.
83 Translated from "quem faz obras debaixo do chão é tatu."
Transposição was generally perceived to be one such project as is the proposed nuclear reactor. This sort of development seems to fuel a self-perpetuating system of (water-related) infrastructure projects whereby the destruction of place-based subsistence strategies in the name of "development" leaves impacted communities in an increasingly precarious state that facilitates their portrayal as requiring intervention. Furthermore, it normalizes a "paternalistic," "assistantial," and "compensatory" politics (to borrow the terms from Araújo 2000 and Cruz 2010). Even some "development"-minded Nordestinos critique this form of intervention because, as Alves Filho (2008, p. 54) points out, the region's "poverty does not occur because the region is not viable but because it has been maintained, in practice, separate from successive national development projects for more than a century" including through lopsided federal government spending (in quality and quantity) on the South and Southeast relative to the Northeast.

This tension replayed itself during a "public" meeting I attended in Maceió, AL, about the recently proposed nuclear plant. I excused myself briefly during the presentation of a nuclear scientist, but shortly after I returned, it became clear that in my absence the scientist's presentation had confirmed that the "technical" is never apolitical; an organizer from the Comissão Pastoral da Terra stood to express his deep offense at a film clip the speaker had

84 Zhouri and Oliveira (2007) offer an interesting example of the discursive construction of "poverty" and salvation-via-infrastructure.

85 The meeting was held at a luxury hotel in Maceió, the beach-front capital city of Alagoas. Among respondents, there was some frustration about the choice of venue (as it was neither in the basin itself nor did it seem particularly welcoming to potential participants from all socioeconomic backgrounds). Moreover, there were complaints about the way that the meeting itself was organized as much more of a CBHSF-sponsored government presentation than an honest solicitation of popular input.

86 The Comissão Pastoral da Terra (CPT) is a church-affiliated civil society group that, initially Catholic, has come to incorporate a variety of denominations within their ranks. According to their site, "the true
shown, which the organizer derided as paternalistic and prejudicial in its portrayal of *sertanejos*. Throughout the question period, other participants followed the organizer's lead, demanding to know why the government insisted on delivering "development" where it was not wanted. The scientist, visibly taken aback, defended the clip by asking how could he deny energy to the poor people of the *sertão*?

I worried that I had missed a critical "ethnographic moment" in my research, but I soon discovered that the film clip was anything but exceptional in its depiction of a well-worn stereotype. Arons (2004, p. 33, 35) traces this imaginary to Euclides da Cunha's *Os Sertões*, a (pseudo-)journalistic account of the Brazilian military's extermination of the messianic community of Canudos, BA, in 1897; da Cunha's depictions of "the region as a metaphysical space of war and peace where humanity and nature were in constant combat, reflecting not just the state of humanity in nature, but the inevitable conflict between civilization and barbarism" are as arresting as they are jaundiced. More than a century later, da Cunha's vision remains superincumbent; as Arons writes, "he invented a region that could not be redefined, for he drew reality for the people, and so it became their reality."

The nuclear scientist's presentation was thus one of countless examples of the calculated exploitation of a potent imaginary of *sertanejos* and the Northeast. Reflecting on the discussion later, an NGO representative said simply that "the state provokes actions that it judges -- by itself -- are fundamental for development" (Mc.v.6). Another respondent affirmed:

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mothers and fathers of the CPT are the rural workers, the *posseiros* [people who work the land but do not have ownership rights], the indigenous people, the migrants, the men and women who fight for their liberty and dignity on earth free from the domination of capitalist dominion."
Politicians aren't very concerned about people; they're much more concerned about capital than about people. This need to augment energy supplies has much more to do with industry -- with big capitalists -- than probably with the poor there in the cerrado... It was the same thing when they wanted to do the Transposição... They toss the poor into an unrealistic scenario as if it were the reason for that action so as to hide that it's actually political and economic interests. (Mc.v.4)

Some respondents, however, perceived these conflicts over "development" as a nothing more than "NIMBY-ism:"

They're going to have to stop it with this "poor little things" idea, of being beneficiaries for free. They have to pay something -- not pay financially... -- because, and this is a personal opinion, that type of society wants to have electricity... but the moment that you say "there needs to be a dam in order to have electricity," they don't want a dam. (Mw.i.1)

Others were deeply frustrated with the presentation of false choices and insisted that the discussion needed to be about what kind of development Brazil wants rather than assuming that the proper course for "development" is that which has been proposed by the government and the elite. "What kind of development?" is an especially salient question in the Northeast because the costs of development are often socially and territorially disconnected from the benefits. As one respondent suggested:

We [in the Northeast] pay a very high price for... the benefit of a lifestyle that isn't ours -- it's everyone's in the capitals with their air conditioners and who knows what other craziness. This here will never be the United States. It will never be Europe... It never will be, and it shouldn't be... It is what we have here in our country... Our hope when there was a change in government [to the PT] was to participate in an alternative model of living... This hasn't happened. (Mc.v.2)

Another respondent concurred:

87 This was also a question that I heard much more often during my fieldwork for another project in the basin in 2010; at that time, there appeared to be genuine interest -- among state actors especially -- in the need to "develop differently" or to be "the world's first green superpower." By the time I returned in 2011 to conduct this research, I heard the question asked much more infrequently -- replaced by the need to develop at any cost.

88 The movement toward convivência com a seca/o semi-árido is one such example of this debate.
This is another recurring thing: development discussions are always like this, right? Along comes this very modern thing for this super traditional region -- "poor, miserable" -- they construct an image of backward people who live in misery and need to be rescued from this "under-development" through public investment. (N.2)

A handful of respondents (including in Minas Gerais) also challenged the presumed desirability of "development" in the first place, suggesting that perhaps they would prefer not to "be developed" (in a transitive sense of the term). One respondent stated:

If it were up to me,... and I know I'll lose because it's "development above all else!," I would still like to have a little lamp at home -- none of this electric lighting, computer, television, and who knows what else. It's silliness, but I would still prefer a little lamp there or a candle instead of a monstrous hydroelectric [dam] like that -- destroying everything. (Mc.v.5)

Government officials, however, tended to suggest that the role of civil society and CBHSF should not be to oppose projects (or presumably offer alternatives) but to find ways to improve upon government proposals (a perspective that speaks to the central "existential" struggle in which the committee appears to be engaged, as I discuss in Chapter 4).

Despite the river's continual construction as central to regional and national development, however, several riparian areas have the lowest HDI in the Northeast (Alves Filho 2008) -- yet this model of "development" persists! My argument with respect to traditional governance patterns and this cycle of development is not a cleanly causal one, but I do suggest that the way "development" is carried out perpetuates socio-natural relationships through which the elite reiterate their dominant position (discussed in Chapter 6 and Bakker 2010b). It would seem that "development" as it has been practiced (and "development" by any other name, including "modernization" and "progress") is not a stepping stone to a "developed" end state (and the linear development imaginary itself is, of course, the subject of well-warranted critique); this model of

89 Again, Zhouri and Oliveira (2007) offer an interesting discussion of this point.

90 In this case, the regional elite relative to the regional "poor" and the South/Southeast relative to the Northeast.
"development" is rather a cynical and cyclical tactic of elite control of/via socio-natures in the São Francisco River Basin.

Interviews in the Lower São Francisco, for instance, focused on the difficulties communities faced following the construction of the Xingó dam, viewed as the final blow against local livelihoods based on fishing and rice cultivation near the river's mouth. Even from my hotel room in Piaçabuçu, AL, I watched fishermen return home nightly with empty nets, and across the river in Brejo Grande, SE, rice fields that once flooded and drained according to the rhythms of the river lie fallow as the São Francisco flows by in fits and starts, fluctuating constantly with the tides of energy demands on the upstream dam and the encroaching ocean downstream. Yet, a study conducted on the human geography of the Lower São Francisco exactly 30 years prior to the inauguration of the Xingó dam -- when rice cultivation was still viable -- states that at the root of most problems in the region are "powerful factors of social organization that are sensitively reflected in the economic structure," that the elite agenda dominates the work of government organs charged with introducing putative improvements, and that technical interventions "as of yet have only brought real and direct benefits to large landholders" (Monteiro 1962, p. 91-92).

In the intervening years since the study was published, the geopolitics of the Cold War -- which brought CVSF and the planning-centric TVA model to the São Francisco "Valley" -- has given way to a neoliberalizing global economic context and to CODEVASF, CBHSF, and "participatory" governance in the São Francisco River "Basin." The rice fields are gone, but the patterns persist, and I find myself drawing an eerily similar conclusion to those of my predecessors exactly 50 years ago. Although these patterns are frustratingly enduring, however, we should not make the mistake of considering them timeless; rather than being repetitive, traditional governance patterns are iterative: the elite, it seems, are quite adept at exploiting and
dominating new models even as they maintain the useful elements of past models, like the infrastructure focused, full-exploitation aspects of "second-wave" water governance.

3.3 Conclusion

Traditional politics remain not only relevant but extremely robust in the São Francisco basin. The major expressions of these patterns, according to respondents, are through patron-client relationships, threats and acts of violence, and a "development" agenda that marginalizes its putative beneficiaries, privileges the elite and other regions, and re-produces socio-natural conditions favourable to the iterative perpetuation of traditional politics. If, as Hagopian and others suggest, the traditional practices outlined above tend to be territorially based and function through mitigating state-society relations (or, as respondents said, through the occupation of space within the state apparatus), then perhaps it is no surprise that Brazilians of diverse political ideologies believe -- in the words of one civil society respondent -- that "here in Brazil, less state is the democratic path" (N.2) (which explains why decentralized, re-scaled, and participatory water governance might be seen as an enticing alternative).

If nothing else, this chapter suggests that we should avoid the tendency to normatively construct government as the progressive remedy is this neoliberal age; however, the situation is more nuanced than a (persistent) case of state failure: the traditional elite have proven adept at re-producing their dominance in varied circumstances. Some authors, like Scardua and Bursztyn (2003, p. 311), thus remain sceptical about the potential for meaningful change through new environmental governance configurations:
Recent Brazilian experiences with public policy decentralization do not yet permit a glimpse of a rupture with the historical pattern of State capture at the local level by traditional practices characterizing national political life since its colonial beginnings. In the same way that the most varied faces of coronelismo... always found space to enjoy,\textsuperscript{91} \textit{de facto}, the benefits\textsuperscript{92} provided by centralized power, there are no convincing indicators that the old culture has been substantially reversed. It is in this sense that the current decentralization drive could be just another episode of an old practice.

But if a rupture is not visible, many scholars have detected evidence of fissures chiselled out during the transition to democracy and subsequent decades, leading them to re-theorize the oppositional relationship between the state and civil society in Brazil. There is evidence of this sort of \textit{progressive} and productive state-society collaboration in the São Francisco River Basin, as I explore in detail in Chapter 4; however, given the concomitant robustness and tenacity of traditional governance patterns, I also employ a distinction offered by interview respondents between "the state" and "the government" in order to conceptualize this \textit{regressive} partisan and personalistic "occupation" of the state apparatus. Such differentiation clarifies CBHSF's central conflict as an "existential" struggle to determine whether the committee will govern with(in) "the state" or will serve "the government."

\textsuperscript{91} Translated from \textit{usufruir}, "to enjoy something belonging to someone else."
\textsuperscript{92} Translated from \textit{benesses}, translations of which range from "profits" to "handouts" to "blessings."
4. The State-(Government?!)-Society Relationship

4.1 Introduction

In this chapter, I explore the relationship between (broadly termed) "the state" and (equally broadly termed) "civil society" in the context of CBHSF. The state-society relationship has been receiving increased attention in Latin America -- and especially Brazil -- throughout the last two decades due to the proliferation of participatory governance spaces. Such research suggests that the long-held oppositional framing of these two "spheres" elides networks of actors sympathetic to socioenvironmental tenets across this imagined boundary. I begin this chapter by examining the ways in which the scenario I encountered in the São Francisco River Basin sustains both cooperative and adversarial framings of the state-society relationship. To better understand this concord, discord, and CBHSF's role therein, I rely on a distinction between "the state" and "the government" used by interview respondents in order to conceptualize regressive occupation of the state apparatus (which is an important feature of the patterns discussed in the preceding chapter). Based on this "state-government-society" reframing, I conclude that the central conflict within CBHSF is an "existential" struggle to determine whether the committee will function with(in) the state or will serve the partisan and personalistic aims of the government.

4.2 Civil Society, The Government, and Making Space

4.2.1 Making Space

In July 2011, shortly before I began my fieldwork, CBHSF met in its nineteenth plenary session and held its ten-year anniversary celebration. The official agenda lays out a rather quiet first day: at 8:30 AM, the official opening of the meeting; from 9:00 to 11:00, the *ato comemorativo dos 10 anos com o pronunciamento das autoridades* (or the "ten-year commemoration with addresses from public officials"); from 11:00 to noon, the release of the ten-year commemorative
CHBSF book;\textsuperscript{93} from 1:00 PM to 3:00, lunch; and from 3:00 until 9:00, a "cultural moment." The agenda dedicates the following day (9:00 AM to 7:00 PM, with two hours for lunch) to the meeting itself and the final day (8:00 AM to 4:00 PM) to a "knowing the river" visit to the Sobradinho dam. The schedule appears a bit sparse for a governance body that many respondents classified as prone to lively conflicts of ideas and that is charged with deliberating over a politically fraught, socioenvironmentally troubled, and socioeconomically disparate 2,700 km of river.

There was certainly no debate on the \textit{Carta de Petrolina} even though its unveiling was the first order of business and a central reason for the government officials' presence. The \textit{Carta de Petrolina} (literally the "Letter of Petrolina," named for the city in which the meeting was being held and the political stronghold of the Minister of Integration's family) is akin to a "memorandum of understanding" between CBHSF, federal ministries, state governments, ANA, and ABG Peixe Vivo; I discuss the contents of the \textit{Carta} in greater detail in Chapter 5. It commits its signatories to actions and investments that intersect with federal government programs, projects, and deadlines. Federal government representatives offered conflicting motivations for the \textit{Carta}, framing it as variously good for the government, which was presented as struggling to find appropriate investments; done for the committee's benefit because, it was suggested, the committee was unsure how to spend \textit{cobrança} revenues; and (for lack of a better characterization) a solution in search of a problem:

\textsuperscript{93} Conspicuously absent from the book are photos of the two more reliable voices of dissent among the Directorate at the time.
Generally, at these [plenary meeting] events, it's good to leave with a product -- a result. There wasn't anything, so as a result, as a concrete result -- and even trying to commit the diverse actors, diverse sectors, diverse governments -- we made this Carta de Petrolina. Or in other words, we said we don't have projects, so I have a little money, and with this money I'll develop a project, and give you the project, and you'll release the money to execute the project. This was the objective of the Carta de Petrolina. And everyone agreed with the instrument... I think it was something very much agreed to, discussed, and approved by everyone within the committee...

(Mg.ix.4)

Although it was negotiated with the participation of CBHSF's then-President (Sr. Geraldo José dos Santos -- Sr. Geraldo, herein -- who, representing of the government of Minas Gerais, occupied the position from 2010 to June 2012), it is clear from conversations with respondents outside of government that the Carta de Petrolina did not originate in plain view of CBHSF's membership. It was introduced with much fanfare and no debate, as one civil society representative remembered: "next comes our president... who read that Carta as if it had been constructed collectively. It's was not constructed collectively. It was not" (Mc.v.2). Another respondent from civil society agreed:

It wasn't very well studied. It could have been discussed better. "Let's sign the Carta de Petrolina. Let's sign the Carta de Petrolina. Everyone sign the Carta de Petrolina." They didn't talk to me. They didn't talk to anyone. It could have been discussed more... it arrived there already all finished... I didn't sign it; I only saw it. I couldn't give my opinion. There wasn't space... If I could, I would revise the Carta de Petrolina -- totally -- so I could see what type of projects really were agreed to. Going to what? Going to the revitalization of what? (Mc.v.5)

Thus -- on the first morning of the meeting commemorating CBHSF's ten-year anniversary and marking the beginning of its next ten years -- the assembled committee members and citizenry might have provided little more than an audience for proclamations and pronouncements were it not for the residents of the Salitre River Basin, a tributary of the São Francisco and a rare perennial river in the semi-árido. The Salitre has been mired in conflict over water since the 1980s as overconsumption has produced increasingly desperate circumstances among many residents; the river itself "flows backward" out of the São Francisco as pumps and dams
upstream draw water for irrigated agribusiness, and affected communities have responded by
cutting energy supply to pumps (Malvezzi and Siqueira 2010). Government interventions
discursively aimed at providing assistance (such as more public irrigation projects) ignore the
problem of overexploitation and are poised to exacerbate the conflict through further emphasis
on agribusiness (Malvezzi and Siqueira 2010).

An interview respondent representing universities remembered arriving at the meeting and
seeing a group of people carrying clay pots; he recalled "these people arrived at the committee
meeting like everybody else -- calm, no protest signs -- with potted plants in bloom. I figured
that there would be some sort of tribute" (Mc.vi.1). A video of the meeting shows what
happened. It begins with the entire auditorium on their feet as the Brazilian national anthem
plays. At the front of the room is a long table. Behind it, a banner displays photos of the river
and the name, date, and location of the meeting. At the foot of the table, is an enormous spray of
boldly coloured tropical flowers. Behind it are ten men, a majority wearing dark suits, who have
turned to face the Brazilian flag. The image pans to the right as the anthem plays:

Do que a terra mais garrida
Teus risonhos, lindos campos tem mais flores;
"Nossos bosques têm mais vida."
"Nossa vida" no teu seio "mais amores."
Ó pátria amada, idolatrada, salve! salve!

Your cheerful, lovely fields have more flowers
Than the fanciest lands;
"Our forests have more life,"
"Our life" in your bosom "more loves."
O beloved, adored homeland, hail! Hail!

The camera settles on a group of men and women dressed in tidy jeans, t-shirts, and tank tops.
They are standing toward the back, singing along; at their feet are clay pots of daisy-like flowers.
The filming cuts out and later cuts back in as the PA system declares, "to sign the Carta, we
invite the following institutions--" The men in suits are seated now. A line of more than two
dozen people file to the front of the auditorium; seven are carrying the potted flowers, and they come to a stop in front of the long table as the invitation to sign the Carta continues ("--the São Francisco Basin Committee, the Ministry of National Integration, the Environment Ministry--"). Facing the officials, the group casts their flowers on the ground, and raises their pots over their heads. They heave the pots at the floor -- shattering each with firecracker like "pop!" and spraying parched ochre-coloured earth of the Salitre across the ground. The video again cuts out, but an interview respondent narrated: "they started to shout 'Salve o Rio Salitre! Salve o Rio Salitre!'" -- save the Salitre River -- "...things like that" (Mc.vi.1). The filming cuts back in and shows the Salitreiros with their own banners unfurled: "the Salitre River is asking for help" and "São Francisco Vivo: Land, Water, River, and People." A woman from the group has been given a microphone and admonishes the government for its handling of the plight of Salitreiros.

A respondent representing universities reflected excitedly on the protest:

It wasn't really a characteristic protest, so it caught everyone off-guard. It was, as we say here in Brazil, a saia justa [an embarrassing situation]... It was a bit awkward -- for him, the Minister [of Integration]...The Minister was wondering "what is going on? This wasn't on the program!" He was very startled... It caused a lot of commotion... So that was the protest, and when it was over, the meeting continued normally -- but with the dry ground of the Salitre there at the front. The symbolism was very strong. It was more than a protest due to the earth from the river being there -- present. The protest wasn't violent. The protest wasn't aggressive... As we say in "Brazilianese," eles mandaram muito bem [they did a good job]... The moment it happened there was a shower of photos. Everyone took photos -- including me! (Mc.vi.1)

According to another civil society respondent, the Salitreiros had asked to be put on the agenda.

They were not.

I encountered many suggestions and examples of how Sr. Geraldo did not appear to prioritize creating space for vigorous participation as President of CBHSF, which led to frustration but (evidently) not foreclosure. Much of the critical literature's dismissive portrayal of the power of civil society suggests through its silences on contestation that civil society must necessarily
succumb to obstinate authority; this tendency does not reflect or appreciate the creative, dynamic, and robust efforts that are made to tip the balance of power. There is a propensity to conflate individuals and groups with the difficult circumstances in which they live rather than honouring both the people and the *luta*\(^{94}\) in which they are engaged. This can no doubt be accomplished without romanticising injustices or forgoing critical examination of both conscious actions to restrict participation as well as omissions that produce a similar effect.

The protest of the *Salitreiros* is instructive of some of the ways that socioenvironmental actors have found ways to turn CBHSF into a stage for theatrical and even playful (but wholly serious) protests. Although the scope and impact of the *Salitreiros*’ protest is thus far unique on the committee, other actors have used similarly theatrical tactics in CBHSF and affiliated spaces (like unleashing a bag of flies in a waste management meeting and offering cupfuls of one city’s brown, flecked "drinking water" as refreshment). Drawing on Lefebvre (1991), Springer (2011, p. 537) considers theatricality vital to claiming space:

> While visibility is central to public space, theatricality is also required because wherever people gather, the space of appearance is not just "there"... Theatricality recognizes that space is produced... In Lefebvre’s (1991) terms, public space that is controlled by government or other institutions, or whose use is regulated, is referred to as "representation of space", whereas public space as it is actually used by social groups is called "representational space". This distinction draws attention to the difference between the "official" status of a space, and the ability of various individuals and groups to use it (Arefi and Meyers 2003). The power to deem particular spaces "official" runs concomitant to the power to exclude certain groups from such sites on the basis of this very ascription.

The notion of public space is especially important in a "shared governance" setting that is putatively participatory. Although voting is restricted to representatives, plenary sessions are public. While there is a basin committee for the Salitre River, the *Salitreiros* at the meeting were not members of CBHSF, and they were assisted by an organization that also refuses to seek membership, yet the *Salitreiros* re-affirmed the *publicness* of the space that they had been denied

\(^{94}\) A term meaning "struggle."
(no doubt additionally amplifying their message by doing so). They furthermore re-oriented the focus of the meeting from docile cooperation with the government's agenda to pointing out the ways in which the government had persistently failed to protect them -- let alone to provoke systemic improvements. Moreover, they also re-introduced the interconnectedness of rivers and *riberinhos*\(^{95}\) -- not just infrastructure, enterprise, and "development" -- by actually bringing their river with them to the meeting. Finally, they re-affirmed the participatory element of CBHSF's official decision making process by transgressing a (paradoxically) restricted "celebration" of ten years of *participatory* governance; according to one respondent:

> We found that plenary session to be a plainly political situation when -- including in the opening of the committee -- the table was completely occupied by the federal government... You had the Minister of Integration; the Minister's son, who is a congressman; Congressman What's-his-name; Congressman So-and-so-- What is this?! It has never happened in the history of the committee! ...Ok, fine: it's a symbolic issue, but it's an important symbol... In that space, it's the committee that receives people. The committee is the host. It invites people to participate, and this was completely the opposite. What saved that meeting was the protest by the folks from the Salitre... There was a ten-minute ovation because they saved us in that plenary. (Mc.v.2)

Perhaps one of the cleverest elements of the *Salitreiros* protest was their exploitation and re-direction of well-worn governance patterns (discussed in Chapter 3): the opening of the plenary had the familiar trappings of a ceremonial bestowal of massive spending on government-defined interventions (never mind whether the selected interventions were those that the committee might have chosen, in accordance with the committee's stated purpose).\(^{96,97}\) At ease with such

\(^{95}\) A term referring to those who live in riparian communities, usually connoting a degree of conscious connection to the river.

\(^{96}\) The amount of the spending, moreover, hinted at compensation for the *Transposição* rather than mediation or even melioration -- just as funds destined for "revitalization" also did; indeed, a federal government representative suggested in our interview that rather than fighting the *Transposição* on its face, CBHSF should have demanded "for every *real* that you spend on the *Transposição*, you have to spend [one *real*] on revitalization" (Mg.xii.3).
"traditional" governance patterns, perhaps the officials and some members of the Directorate did not expect their "gift horse" to be "looked in the mouth" and may thus have viewed the flowerpot-wielding protestors as carrying tokens of appreciation, as did the university-affiliated respondent mentioned above. Everything that followed from the moment when the pots were shattered, however, interrupted those embedded patterns: a Trojan horse in their own right, the pots did not contain thanks but had rather been used to smuggle the river itself into the meeting; the official banner was momentarily obscured by those of the protestors; and the agenda was subverted as government speeches were temporarily supplanted by that of the protest leader.

4.2.2 The State-(Government?!)-Society Relationship

The Salitreiros' "jujitsu-like" tactics conform to what Hochstetler and Keck (2007) consider a fundamental approach employed by socioenvironmental activists in Brazil: advances are often achieved through identifying or creating and then exploiting and enlarging openings in the decision-making process. Some Brazilian(ist) scholars have begun to re-examine the state-society relationship for insight into the nature of these openings. Although the state and society have long been viewed in oppositional terms in literature on Brazil, these researchers see a substantial "grey area" often characterized by liminal actors or institutions, bureaucratic marginalization, and governance improvisation.

Liminal actors include qualified civil servants within the bureaucracy who are neither partisans per se nor apolitical; these state workers can also be activists -- or at least are sympathetic to certain causes -- and incorporate these values into their "9-to-5" (Abers and Keck 2009; Hochstetler and Keck 2007; Baiocchi 2005). Liminal institutions include those like the Ministério Público. The MP exists both at the federal level and in the states and is something of

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97 The only real change was that the committee would assist in execution (in both senses of the word, some might say).
a public prosecutor's office. It was endowed under the 1988 Constitution with the powers to defend socioenvironmental and other "diffuse and collective" interests -- a task that its promotores (or "prosecutors") undertakes with considerable integrity and zeal in a judicial environment in which justice is sometimes elusive. The MP has since grown into a formidable tool for society to hold the state itself accountable for fulfilling its regulatory duties -- especially with regard to the environment (McAllister 2008). These patterns also play out in the context of CBHSF. Respondents mentioned state agencies and actors whose engagement had allowed them to diminish the power differential relative to other representatives on the committee and other water-related agendas. One respondent lauded the work of the Ouvidoria Agrária Nacional, an office within the Ministério do Desenvolvimento Agrário (Ministry of Agrarian Development) that mediates agrarian conflicts in rural Brazil. Another respondent works closely with the Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN, or Institute of National Historical and Artistic Patrimony), which is part of the Ministério de Cultura (Ministry of Culture).98 The MP has also played an interesting role in the basin, having organized a group of its state and federal promotores dedicated entirely to socioenvironmental justice in the São Francisco basin itself. It has also carried out an integrated, basin-wide monitoring effort and filed suit against the Transposição (which, unfortunately, demonstrates the limits to the power of the MP in that they have not received satisfactory review within the justice system). Lastly, several respondents mentioned that the government and large-scale water users

98 The NGO has restored one of the oldest examples of a traditional canoa de tolda, a boat once used to transport people and goods up and down the river. IPHAN has declared their canoa to be historical patrimony, and they are now engaged in a fascinating effort to protect the landscape along the lower São Francisco as patrimony linked to the canoa by virtue of its traditional route! Of course, protecting "natural heritage" is nothing new (see Rio 2011), but what is interesting is how this NGO has found a sympathetic state agency and "backdoor" access to environmental protection through material patrimony when more direct efforts did not appear promising.
have a tendency to show up to meetings with "associates" in tow; whether or not this is meant to be intimidating, the consensus among several civil society respondents is, as one said, "it intimidates me!" (Mc.v.2). Alliances with sympathetic agencies allow civil society and traditional communities to have greater numerical parity in these situations and can offer important legal, technical, or other informational support.

There are limits to action, however, for civil servants in organs of the state with greater economic or political importance (thus state-society cooperation is often achieved in the less conventionally strategic areas of the bureaucracy) or when the state has the power to act unilaterally and lacks the will to collaborate with civil society. The relative importance of a given sector, a federal government respondent suggested, can be determined from the penetrability of the related national council (such as CNRH, the National Water Resources Council); "each one," he said, "has a different composition as a function of whether it is more or less strategic" (Mg.ix.3). He gave the example of the Conselho Nacional de Política Energética (the National Energy Policy Council) as essentially impenetrable. In certain policy areas, therefore, genuine participation is more difficult and change is more dependent on whether or not the government is amenable. Comparing two state-level basin committees within São Paulo, Abers and Keck (2009, p. 302) note that in the case of the Alto Tietê, high levels of state capacity could be wielded to impede (as well as enable) collaboration and that in the Litoral Norte case, marginalized state workers, "had the autonomy to use their time and limited resources to try to bring governments and other institutions together to resolve concrete problems." In her study of land reform, Wolford (2010, p. 94) also suggests that:

It is precisely the weakness and variability of the federal government’s commitment to agrarian reform that has provided space for civil society actors to participate in the selection of properties for distribution and beneficiaries as well as in the day-to-day running of life on the settlements. In other words, land reform in Brazil is not participatory in theory or in policy but it has become so in practice because claims to land and public services on the settlements tend to be mediated by social movements.
Finally, civil society itself is often active in troubling the state-society distinction by shaping governance. Abers and Keck (2009) cite the example of how a university-affiliated NGO, Projeto Manuelzão, "co-opted" the das Velhas River Basin Committee and mobilized the state; however, Wolford's (2010, p. 95) case exhibits less "deliberate innovation" and emphasizes "transgression" that results in "default participation;" she writes:

...civil society actors transgress the boundaries of legal, accepted behaviour and state employees spend most of their time responding to these transgressions because their bureaucratic capacity is only sufficient to "put out fires" rather than to address structural deficiencies over the long term. As transgressions become more widespread, responding becomes more "banal" or common until it is so commonplace that it earns a place in political culture and institutional process.

Whether through transgressions (as detailed by Wolford and demonstrated by the Salitreiros) or "institutionalized" participation (in the case of the Projeto Manuelzão), conflict as well as collaboration appear to be necessary for robust participation, as has been noted by Wampler (2008, p. 62), who writes: "citizens must be willing to engage in intense cooperation with government officials... Yet close cooperation can quickly lead to cooptation. The presence of contentious politics provides a means for citizens to place pressure on the government that allows citizen participants to avoid cooptation."

The importance of strategic and constructive conflict in the state-society relationship was echoed by several respondents. A representative from the hydroelectric sector offered simply: "the future of the committee is to keep having disagreements between states, between regions, [and] between users -- this is how the committee functions, how it moves forward..." (Mw.iv.1). Dr. Thomaz, the President of CBHSF from 2007 to 2010 as a representative from civil society, suggested that negotiating between conflict and cooperation had been central to his leadership style. On the one hand, he suggested, "because it's very difficult to obligate a ministry of the state... to do something that civil society wants... you have to build consensus. It's a process of building a progressive consensus" (Fc.v.1). On the other hand, however, he said:
The committee has to force the agenda so that conflict emerges -- not the other way around... "You can't argue about the Transposição; it's tiresome." It's tiresome for them; I never got tired of talking about the Transposição... The São Francisco River is very charismatic, so if you construct this [conflict] well, I think it triggers political space, technical space... (Fc.v.1)

Despite the close parallels between the interview responses in the São Francisco basin and literature on changing state-society relations, there are ways in which the binary -- no matter how mixed or muddled its middle -- does not describe CBHSF. Participatory budgeting, for instance, is billed as "the public" participating in setting spending priorities that the government is then expected to allocate accordingly. In Brazilian water governance, by contrast, the government is yet another set of interests involved in setting such priorities -- especially in a basin like the São Francisco that has long been the site of ongoing and intensive government intervention. Moreover, the division of labour between basin committees, basin agencies, and both new and existing bureaucracies was to some extent left unresolved in legislation; the form and function of reforms has been decided concomitantly with their implementation (Abers and Jorge 2005).

Currently, on federal rivers, the federal government has mandated control over certain elements of management like granting and monitoring concessions but with an expectation that concessions conform to committees' priorities; it has other responsibilities that committees are not precluded from sharing or undertaking on their own, such as conducting studies and soliciting comment; it has de facto control over CNRH (discussed in greater detail in Chapter 5) as well as holding positions within basins committees; and it encompasses the interests of governmental organs with varying clout and strategic importance, assorted allegiances, and diverse relationships to water and its uses. It is difficult to see how conflicts of interest between "branded" political agendas and quotidian bureaucratic functionality might not be created. The work of ANA, for instance, bookends that of basin committees -- meant to support the creation and functioning of basin committees and agencies as well as to carry out management duties in a
way that reflects committees' deliberations -- yet it also sits on CBHSF, advises CNRH, and accommodates political appointees among its ranks. These tensions are summed up in the words of one federal government respondent who suggested that if a project is a goal of the federal government, "the federal government will go 'all in.' ...[So if] the committee says 'no, we're against this,' will the president of ANA refrain from authorizing the allocation? Maybe. Maybe not." (Mg.ix.5)

One way in which respondents made sense of these circumstances was to reframe the state-society relationship as a tripartite distinction: the state, the government, and civil society. They did not appear to be suggesting that "the state" might be "apolitical" but rather that "the government" is too political (in both personalistic and partisan senses of the term) at the expense of an egalitarian and responsive state. One respondent made the distinction, based on federal agencies that have been supportive of civil society, as follows:

[The state is] good workers who provide adequate services to citizens like us. When I arrive, I will be well received, I present the problem, and there's a search for solutions -- not because I'm better than anyone else but because I'm a citizen, and they, as civil servants of the state, provide service... The government is a thing of party politics -- a group of people who occupy that space and use it inappropriately, in most cases... I don't want to talk to the government; I want to talk to the state... with the more ample thing... If I see that it's not possible, a gente já parte logo para quebrar o pau [we start fighting right away]... Unfortunately, what we have here in Brazil is an occupation of space... (Mc.vii.2)

As with the state-society binary, however, boundaries are not terribly firm. Certain organs of the state are quite autonomous (like the Ministerio Público), but "state" and "government" actors may also be part of the same bureaucracies (as discussed further in Chapter 6); skilled civil servants (hired through gruelling examinations) work shoulder-to-shoulder with political appointees -- including those who are "occupying" space (Hochstetler and Keck 2007; Abers and Keck 2006; Avritzer 2002) -- although their relative control and concentration tends to be different depending on the ministry, department, or institute. One respondent noted, for instance,
that ANA should represent the state -- as it was indeed intended to be somewhat insulated from personalistic and partisan politics (Abers and Jorge 2005) -- but that it ends up representing the government (and by extension, the elite interests discussed in Chapter 3).

Civil society can also traverse this "division" in interesting and troubling ways. State-society literature takes a somewhat restricted view of civil society within the state (despite the nuanced portrayal of state actors with multiple "hats"); it seems as though explanations for civil society actors' behaviours in the liminal space between state and society are condensed into either synonyms for "participation" or flat-out "co-optation." CBHSF's recent experiences raise important questions about these classifications, including a situation involving the former Regional Coordinator of the Upper São Francisco. Although she was the head of a socioenvironmental NGO and a representative of civil society on CBHSF, it was also an open secret within the committee that she had municipal political ambitions and was heavily involved in local party politics⁹⁹ (which -- from an analytical standpoint -- makes it difficult to categorize even her initial participation on CBHSF). In June 2012, she was accused of misusing committee money and abusing her position. The nature of the allegations were that the company contracted to clean the facilities of the Upper São Francisco Regional Consultative Council was asked to pay kickbacks to the Regional Coordinator in order to fund her electoral campaign and the employees of the company were made to work for the campaign on the weekends.¹⁰⁰ Moreover,

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⁹⁹ Her electoral ambitions are not totally unique among CBHSF members, and respondents have expressed concerns that the situation will not be an isolated event.

¹⁰⁰ The term used was *cabos eletorais*, and translations include "precinct captain," "political brokers," and "canvassers." Mainwaring (1999, p. 186) explains: "the *cabos eletorais* are key figures in the clientele networks. They can be poor or wealthy, professionals or blue-collar workers, educated or not, professional politicians or not. In rural regions, local Funrural (social-security) agents are excellent *cabos eletorais* because they control access to retirement and other state benefits... In return for their support,
it was alleged that these facilities were located on private property belonging to the Regional Coordinator, which -- already inappropriate -- becomes an even more serious matter if rent was paid. There are accusations that these behaviours were facilitated by the now ex-President, Sr. Geraldo, (as discussed in Section 4.2.4) and that they were part of a pattern of favouritism he is said to have shown toward her region.

Is this a case of co-optation or, as one respondent suggested prior to these allegations surfacing, that "crafty"\textsuperscript{101} individuals are looking to "occupy" the committee? It may be evidence of both, but it merits noting that in my interview with the Regional Coordinator several months prior, she expressed opinions on socioenvironmental issues that were not at all ideologically divergent from those of other civil society respondents. I would therefore suggest that we take care not to conflate political ideology and governance patterns when discussing civil society. In fact, CBHSF's civil society contingent appeared united in adhering to a socioenvironmental frame and eschewing a developmentalist lens, which may account for the generally sympathetic portrayal in participation literature and the use of terms like "co-optation." Governance patterns, however, reveal a different picture of civil society: a continuum from those willing to engage in behaviours associated with traditional governance patterns -- especially by assuming roles as patrons and/or clients -- to those critical of traditional governance patterns as playing a part in exacerbating socioenvironmental ills. It is difficult to judge the motivations of those in the former group (such as whether they believe that "the ends justify the means" or are simply seeking personal gain),\textsuperscript{102} but it is clear that the latter group is in a better position to re-imagine

\textit{cabos ele\'orais} expect some favor from a politician: a job, a subsidized loan from a state bank, public works," etc...

\textsuperscript{101} Translated from \textit{esperto}.

\textsuperscript{102} This question is extremely complex. Throughout my travels, I encountered frequent allusions to -- and outright allegations of -- unsavoury dealings by NGOs and traditional communities (as I did about other
governance patterns and -- as a result -- to potentially deliver on the participatory promises of CBHSF. In any case, the governance patterns embraced by civil society are one very important piece of the "existential" struggle, discussed below, presently taking place within the committee: is CBHSF a creature of the government, which is defined by personalistic and partisan political motivations, or the state, which is defined by its attention to civil service (albeit without ideological guarantees -- although the state may facilitate the creation of space for progressive and inclusive socioeconomic and socioenvironmental beliefs that challenge the elitist and developmentalist conduct often perpetrated by the government)?

4.2.3 CBHSF's "Existential Crisis"

CBHSF has been engaged in more than ten years of self-construction and self-definition, and the role of the committee has appeared wanting for clarity and direction (the reasons for which I discuss in Chapter 6); is it the central authority on water-related decisions in its basin? A coordinator? A supplement? An impediment? At the base of many conflicts have been two crucial existential questions: what is CBHSF and what is the nature of its relationship with the state (and/or the government)? Respondents from the government tended to view CBHSF as part of the government (and to imply a certain need for obedience):

sectors, like the government and water users); however, some of the same actors who were said to engage in corrupt or clientelistic behaviour, as respondents, expressed the belief that their activism made them the targets of threats and acts of violence. If this is accurate, "co-optation" does not appear to appropriately describe the paradoxical circumstances in which activists would hold such strong beliefs as to put themselves in harm's way while potentially sacrificing autonomy in untoward allegiances. I do not know how to reconcile these beliefs, although some of the literature of clientelism in Chapter 3 may be relevant.
The committee does its work through deliberations. It's not -- and never should be -- the function of the committee to argue this, that, or the other thing in the town square\textsuperscript{103} because our actions aren't the actions of an NGO. We [the committee] are a federal institution. Governmental. And thus, as a governmental institution, we have to have a governmental profile. (Sr. Geraldo; Mg.viii.1)

It makes no sense for the committee to be out in the middle of the street with a flag having this sort of protest. The committee has to take advantage of its privileged position of being able to sit at the table and discuss, to be a protagonist, to be a commander of actions that can influence even the government to the benefit of the population. (Mg.vii.2)

What the committee needs to do isn't audit the federal government. They have to follow along. They have to stop playing politics\textsuperscript{105} and start making public policy. (Mg.ix.1)

The committee is an arm of the state, it's just the civil society arm -- so much so that the government bankrolls it. (Mg.ix.3)

Socioenvironmental actors, however, tended to view the committee as a (potential) check on the government and a means of working with(in) the state. One respondent saw an opportunity to engage in statecraft through CBHSF -- conforming perhaps to Abers and Keck's (2009) "mobilizing the state" thesis; he complained that in the basin "there's little management by the state; there's a lot of management by the government," and he suggested that by contrast "with the committee, we can escape a bit from the governments and plan long term" (Mc.vi.1). Another stated boldly, "The committee is an organ of resistance" (N.6). And a third lamented, "even though the committee didn't approve the Transposição, it happened -- total disrespect by the federal government resisting the basin committee, which is an organ of the state created to manage water" (Mc.v.1).

Two very telling responses were offered on the Carta de Petrolina specifically; they demonstrated an eerie-but-elegant symmetry between entirely divergent opinions on the nature of a partnership between CBHSF and "the government." A federal government representative

\footnotesize{\textsuperscript{103} Translated from \textit{praça publica}.}  
\footnotesize{\textsuperscript{104} Translated from \textit{acompanhar}.}  
\footnotesize{\textsuperscript{105} Translated from \textit{fazer politicagem}.}
explained the origins of the *Carta de Petrolina* by saying that "there was a perception of the necessity to work together, which I hope the committee is also beginning to understand" (Mg.ix.3). (The wording begs the question, of course, of how the *Carta* could have arisen from the joint "perception of the necessity to work together" if it could not be confirmed that the committee indeed had such a "perception" through broad-based discussion on the subject.) A university representative concurred in part, however, when he offered the corresponding-yet-contrasting view that:

> The best option is for the committee and the government to work together -- but with the federal government accepting and abiding by the committee's decisions. Isn't the committee the collegiate organ, formed of various representatives from society? Yes. Isn't it there, seeing the problems in the basin daily? Yes. Isn't it interesting to listen to these people's [on the committee] proposals for improvements? Yes. (Mc.vi.1)

For the time being, the resulting "frontlines" appear to be, in the words of Dr. Thomaz, between a "consultative" committee that facilitates "the delayed scenario of the last century [in which] the environmental question exists, but we have to develop at any cost," and a "committee that gains increasing deliberative power... [with] an agency that builds up technical expertise to be able to act as a counter-weight to the hegemonic vision of hydrologic and hydroelectric management in Brazil" (Fc.v.1).

Nevertheless, there was also an understanding that even though CBHSF might not have lived up to expectations, there are still capable actors who can use it as one method for achieving change. One non-member from civil society said that "[five years ago], the committee had more teeth... people had more of a war cry... Today I see the committee as a little bit 'lite'... but I believe in the people who are part of the committee... I think the committee is still one way" (N.1). Another respondent suggested that "the committee obviously has a lot of political interests within it, but there's also a lot of goodwill" (Mc.vi.1). Moreover, merely having a space like the committee
was acknowledged by some respondents as being -- while far from perfect -- a marked improvement over the past:

I would say that the legislation allowed, in the case of the committees, for a very large democratization. With this, society started to have much more influence on the question of environmental management... things that in the past weren't even considered -- today private enterprise and the government have to sit at the table and converse with society. (Mc.v.6)

Another respondent summarized these sentiments bluntly: "it's bad inside [CBHSF] but it would be worse outside" (Mc.v.3). He noted that socioenvironmental actors and traditional communities had been able to secure victories in and through the committee including, for instance, financial support to cover the costs of their participation (thereby removing a major stumbling block identified throughout the literature on participation) and greater representation for traditional communities. He framed these victories in the following way: "you have to have voice and opportunity. Sometimes you have voice but no opportunity... Despite being in the minority, we're in there. This isn't in the interest of the elite; this is popular pressure... Before, we spoke; today we vote" (Mc.v.3).

All but a handful of socioenvironmental actors with whom I spoke expressed similarly guarded optimism about the future of CBHSF. They viewed their work as extremely dynamic; disappointments were not losses but setbacks because -- as one respondent stated -- "it's possible to advance in everything, but we had to start [somewhere]" (Fc.v.1). A representative of the Ministério Público agreed:

...the committee was the best idea. Now, we will construct with errors and participation will invert this sort of thing. But look, the Transposição wasn't approved in the committee; it was approved in CNRH where the government has a majority. Not in the committee. So this shows the committee's independence. (N.6)

Respondents expressed considerable hesitation, however, about putting all of their "eggs" in the CBHSF "basket." Socioenvironmental actors' mobilization extends well beyond the bounds of

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106 Translated from voz and vez.
CBHSF (likely because actors brought their ongoing engagement into the committee and not the other way around); as one respondent said, "we fight through the politics there [on CBHSF]... We fight for the movement. We fight individually. We see that nothing comes of its decisions, but I'm still there in the meetings... We fight through all of this" (Mw.iii.2). In this sense, CBHSF represents a means to an end, and several respondents confirmed their willingness to leave the committee if their membership eventually did nothing more than legitimize the government's agenda (as occurred in the Alto Tietê basin, according to Abers and Keck 2009):

> At every moment, we're always re-evaluating whether it's worth it to continue on the committee. For us, we have no problem [leaving]. We don't need the committee... We know the region better than the committee. We have a greater presence in the region than the committee. We spend money... [and] personal and collective physical effort much more than the committee. Today, we have, in effect, a much greater awareness in the region -- and nationally -- without being [on] the committee. (Mc.v.2)

Dr. Thomaz considered this a problem of process as well as policy, as deliberation and voting often reproduces rather than disrupts patterns of privilege and disadvantages:

> The participatory process is interesting. It's participatory and it's exhausting... If you think for instance in the American process... it's much more agile: there's a law that establishes that it has to be like this, with these deadlines, and that's how it is -- more or less... The participatory process is very slow. You have to make many agreements for it to be viable -- that way, everybody participates. If you were to have a process with more confrontation -- more deliberation and votes -- I think a lot of people would stop participating. (Fc.v.1)

The other major stumbling block continues to be the selective uptake of committee decisions by the government proper, as one respondent noted:

> We have a lot of policies in place on paper but in reality we don't because those who should implement these policies are those in the basin, and sometimes people are put [in charge of implementation] who don't have anything to do with these policies, so things change. Theoretically, there are many things, many advances. Ideologically, there are many things, many advances. But practically, there needs to be this advance. (Mc.v.3)

Putting those changes on paper in the process of institutionalization of the committee -- with the expectation that they would provide a progressive basis for future decision making -- was the
work in which Dr. Thomaz believed he had been engaged; looking back on the vulnerability of
his hard won compromises, he mused: "it's still very fragile... more fragile than I imagined. I
knew it would be, but I never imagined that it would be so fragile" (Fc.v.1).

As they shape process, policy, and forum, socioenvironmental actors are engaged in an
extremely dynamic, multi-faceted struggle -- which includes the struggle to remain independent
of the government's agenda while still working with(in) the state. It is telling that CBHSF has
gone from supporting protests to being the site of one. During my fieldwork, the only
conclusion that I could draw was that such independence appeared to be at risk, or at the very
least, there were serious questions circulating about the allegiances and behaviour of the then-
President, Sr. Geraldo, as discussed below.

4.2.4 Reclaiming Space

According to a broad range of interview responses, the President of CBHSF during my
fieldwork, Sr. Geraldo, was elected to the position in large part because he had been the "right-
hand man" to Former Minister of the Environment, José Carlos Carvalho,\textsuperscript{107} while the minister
had served as President of CBHSF from 2003 to 2005. Thus, when Sr. Geraldo ran for President
of CBHSF in 2010, he had the advantage of being familiar to many actors in the basin. His
opponent was the Secretary of the Environment from the State of Bahia, who was seen as the
choice of both large-scale water users and the federal government. Sr. Geraldo, on the other
hand, was elected with the support of small water users, civil society, and representatives in both
Minas Gerais and the Lower São Francisco. When elected, Sr. Geraldo was representing the
government of Minas Gerais, but as a new administration entered (albeit of the same party,

\textsuperscript{107} In addition to serving as the federal Minister of the Environment under Fernando Henrique (2002 to
2003), Sr. José Carlos Carvalho served as Secretary of the Environment and Sustainable Development for
the state of Minas Gerais (1995 to 1998 and 2007 to 2010).
PSDB), he was relieved of his job in state government but allowed to continue representing the state on CBHSF (although this led to questions about who or what he was representing, especially given the increasing proximity of CBHSF to the federal government, especially MI, during his leadership).

Although his election initially marked a victory for socioenvironmental actors over large-scale water users as well as proponents of the Transposição, there grew to be a strong sense of disillusionment among his former supporters following what they perceived as his increasing centralization of control of the committee. This included decisions like the Carta de Petrolina that excluded the general body, marginalization of members of the Directorate who expressed dissent, and enfeebled Technical Councils. Some respondents suggested that they might be better off abandoning the committee, and I felt compelled to draw the conclusions that traditional governance patterns were trumping participation -- and that the future looked bleak. Frankly, it was a conclusion at which I arrived "kicking and screaming" because I had been repeatedly awed by the ingenuity, innovation, and determination with which socioenvironmental actors -- both in the context of basin-level governance and wider Brazilian politics -- pursued their agendas against steep odds; it seemed hard to imagine that they had given up on a once-promising space for change.

In late June 2012, mere weeks from finishing a draft of this thesis, however, I stumbled across a news item on a website dedicated to socioenvironmental justice in the São Francisco basin; it read that, as of a few days prior, Sr. Geraldo -- accused of corruption -- was no longer President of CBHSF. Now with the former Vice President serving as interim President, the Directorate released a statement that the government of Minas Gerais had changed its representative on June 6th and that CBHSF's Technical Council on Legal and Institutional Matters unanimously understood the decision to mean that the Presidency had also been vacated as of that time.
(CBHSF 2012a). Subsequently, it was difficult to find respondents who would consent to be interviewed about these events; even when Sr. Geraldo was president and there were no open allegations of misconduct, some respondents were unwilling to discuss his leadership "on the record." Respondents who felt comfortable sharing information on this matter described growing policy disagreements between Sr. Geraldo and the state of Minas Gerais; allegations of receiving stipends and paid travel expenses that Sr. Geraldo was not permitted to collect as a government representative; accusations of facilitating the (also alleged) misuse of funds by the Regional Coordinator of the Upper São Francisco; and (ultimately unsuccessful) efforts to remain in the position (respondents mentioned legal challenges and accepting an offer to represent an NGO on the committee). These events took place shortly before a regularly scheduled plenary meeting in early July at which the general contours of the situation were discussed. Since then, the Upper São Francisco has been briefed about the accusations its former Regional Coordinator faces, and the committee appears to be reviewing its internal regulations once again. At the time of writing, the situation remains unresolved.

On August 1st, 2012, a new President of CBHSF -- Former Secretary of the Environment and Natural Resources (SEMARH) of Alagoas, Anivaldo de Miranda Pinto108 -- was unanimously elected to complete the remaining year of Sr. Geraldo's term. Unfortunately, university program deadlines made it impossible to learn more about Sr. Anivaldo before completing this research, but a cursory look at his biography shows a professional and organizational history replete with the liminality that provokes intense curiosity about the state-(government)-society relationship following Brazil's transition to democracy: he was among the founding members, in 1986, of one of Alagoas's oldest environmental NGOs; he has represented socioenvironmental interests in participatory governance spaces, including as the Executive Secretary of CBHSF from 2005 to

108 He is the first CBHSF President to hail from the Lower São Francisco.
2007; he has also represented the state of Alagoas in participatory governance spaces, including CBHSF's provisional Directorate in 2002 (as the Coordinator of the Lower São Francisco Regional Consultative Council) and CNRH; he has held governmental positions including as the Secretary of SEMARH; and he is currently Superintendent for the Environment at SEMARH but represents civil society (with the Fórum de Defesa Ambiental) on CBHSF (Pinto 2005).

Respondents have taken different views of the future of the committee in light of recent events with Sr. Geraldo. One representative mournfully noted the effect on pressing water management issues, suggesting that the many important decisions on the horizon (such as reauthorization of existing hydroelectric installations and proposals for small-scale hydroelectric dams) are receiving only perfunctory treatment for the time being. Another respondent focused instead on the vigilance of civil society in putting a stop to the alleged abuses, and when I manifested surprise at how quickly Sr. Geraldo lost control (that he seemed to have been accumulating at the expense of broad-based participation), the respondent replied:

> Publicly, it was quick, [but] it wasn't [unexpected] for those of us who follow the committee day-to-day and who were at that "bender"\(^{109}\) of a ten-year anniversary party in Petrolina... It will oxygenate the membership because now the people have found out that the President of the committee can't centralize decision making. (N.4)

If this second interpretation holds, it reveals a struggle that is not merely dynamic -- but vigorous! -- over CBHSF's existential core as either a participatory space for decision making with(in) "the state" or one that protects the personalistic and partisan interests of "the government." Moreover, it suggests that traditional governance patterns -- while still strong on CBHSF, as indeed they are throughout the basin -- are possibly less robust in this forum than in other areas of Brazilian political life wherein it would be very difficult to imagine such a categorical conclusion across a substantial power differential (and over fairly "standard" -- although no less iniquitous -- allegations of impropriety).

\(^{109}\) Translated from farra da festa.
4.3 Conclusion

Several respondents expressed the state-society relationship with respect to CBHSF as tripartite -- involving the state, the government, and civil society; although these "categories" are far from discrete, this differentiation permits a clearer conceptualization of the interests motivating the state (civil service) and the government (personalistic and partisan politics) as well as civil society's opportunities for progressive engagement -- be it collaboration with the former or more confrontational (perhaps "theatrical") acts to (re)claim space from the latter. Through this distinction, it becomes clear that CBHSF is engaged in a robust, dynamic, and unpredictable "existential" struggle that is consistent both with the traditional governance patterns discussed in Chapter 3 as well as the creative exploitation of political openings that often characterizes socioenvironmental activism in Brazil.

As explored in this chapter, civil society has demonstrated that it is able to use or create space within CBHSF, opening up potential avenues for action. In general, this has meant establishing checks on prejudicial government decisions while attempting to foster more responsive water governance with(in) the state. CBHSF, however, also demonstrates that this re-scaled, decentralized, and participatory system of water governance is by no means inherently favourable to civil society, either; if anything, this case affirms the ambivalence of basin-level governance fora and emphasizes the importance of politics and process. This ambivalence is also evident with respect to the cobrança, discussed in the next chapter, which proves to be a surprisingly polyvalent political tool despite being a rather weak EI.
5. The *Cobrança*: Economic Instrument or Political Tool?

5.1 Introduction

In this chapter, I explore the form and function of the *cobrança pelo uso de água* (*cobrança*), the bulk water charges mandated in Brazil's 1997 water reform legislation. As mentioned in earlier chapters, basin-level committees are tasked with setting prices and defining mechanisms for valuing water diversion, capture, and extraction as well as the discharge of effluents (Brazil 1997), and associated basin agencies are responsible for managing and distributing the funds according to committee-defined objectives. I begin by examining the form and function of the *cobrança* in the São Francisco River Basin and suggest that it is an ineffected economic instrument in terms of the objectives set forth in legislation and economic theory as prices were largely set based on what was politically feasible. I suggest that the *cobrança* has been more successful as a "political instrument;" at least in these early stages, it appears to have been used primarily as leverage in disputes in which payment concerns are sometimes inherent but relatively marginal. I conclude with two examples of this dynamic -- the *Transposição* and the *Carta de Petrolina* -- that demonstrate the *cobrança* to be a relatively polyvalent political tool.

5.2 Economic Instrument or Political Tool?

5.2.1 Introduction

In 2010, after four years of negotiation and debate, the *cobrança* went into effect in the São Francisco River Basin with a baseline price for the capture of more than four litres per second of R$ 0.01 per m³/s, R$ 0.02 m³/s for consumption, and R$ 0.07 per kilogram of organic load in effluents (based on Biochemical Oxygen Demand, or BOD)(CBHSF 2008a, 2008b)\(^\text{110}\). The basic equation for in-basin uses as well as the prices themselves were modeled on those of the

\(^{110}\) In Canadian dollars, these prices are the equivalent of approximately CAD$0.005, CAD$0.01, and CAD$0.034 (respectively).
PCJ and Paraíba do Sul basins. Users were billed based on their permitted capture, consumption, and discharge (according to allotments granted by ANA), and AGB Peixe Vivo received about R$20 million (approximately CAD$9.6 million) to be spent on "the programs and interventions set forth" in the Plano (Brazil 1997). It was a notable accomplishment after nearly ten years since the committee's inception -- and no small feat for then-CBHSF President Dr. Thomaz, who represented civil society (and estimated that he had held more than 100 meetings to negotiate the specifics). Nevertheless, two concerns have been immediately evident from the start: the first is the (over)simplicity of the charging mechanism, and the second is that, for a basin with the São Francisco's size and socioenvironmental needs, R$20 million is a pittance.

5.2.2 Agricultural producers

Agricultural producers -- who make up the largest share of water users in the basin -- negotiated the lowest sectoral price with coefficients in the funding formula that allow them to pay 40 times less than the baseline price. One respondent explained:

Do you know what we pay?... It's 40 times cheaper than the other sectors. 40 times. How did that happen? There's a consensus in Brazil for the cobrança that the agriculture sector... is different from industry, different from water utilities... so we arrived at this price -- which isn't very much? (Mw.ii.1)

CBHSF's own impact studies revealed that a reductive coefficient would in fact be necessary for agriculture to remain viable in the region; and increase as low as two percent could have had calamitous outcomes for small farms. Respondents cited the climate, thin profit margins, and relatively inflexible prices for agricultural products as the central reasons why prices from the PCJ and Paraíba do Sul basins could not be transferred to the São Francisco basin. The sector also made the argument to the technical committee charged with studying the cobrança that agriculture is "at the same time a consumer and a producer of water;" an agriculture

111 Dr. Thomaz, who was President of CBHSF while the cobrança was being negotiated, observed that "it was difficult to get away from [the established prices]" (Fc.v.1).
representative recalled, "we didn't expect to win... My price is low -- the price of irrigators -- and I show up with some baloney\textsuperscript{112} that we use water but produce water?!... It's no fun, is it?" (Mw.ii.1).\textsuperscript{113}

Some socioenvrionmental respondents noted the difficulty that smaller-scale producers likely face with the cobrança -- especially those on government irrigation plots, should CODEVASF pass along the cobrança's cost to them -- but it is hard to know what smaller-scale producers might have wanted from the cobrança because, as respondents who spoke on the subject recalled, smaller-scale producers were not especially involved in the decision-making process; however, respondents from associations and federations (which tend to represent the sector on the committee) suggested that they found the price to be low: "what we pay won't impoverish producers" (Mw.ii.2). They were, nevertheless, active throughout the process and -- and were not shy about their mobilization potential: "the moment we perceive something to be bothering us,\textsuperscript{114} we speak out," one agriculture representative explained (Mw.ii.2); "when we know that a certain subject is very important to us, we're very persistent," another agreed (Mw.ii.1).

5.2.3 Industry and Water Utilities

Both industry and water and sewage utilities are charged according to the regular, in-basin equation, and neither have a reductive coefficient like agriculture. Although industry is mostly concentrated in the Upper São Francisco, it varies widely in terms of size, profitability, and water use; the potential effects of the cobrança therefore are also quite varied, but the current price structure does not appear to be especially burdensome; as one respondent from industry suggested, "I even find it low, but I can't say that in the assembly" (Mw.i.1). As a sector, utilities

\textsuperscript{112} Translated from bobajada.
\textsuperscript{113} Translated from \textit{não tem graça nenhum, né?}
\textsuperscript{114} Translated from \textit{pegando no pé}. 

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are among the most affected by the *cobrança*. I was unable to arrange an interview with a representative from any utilities within the basin, but many respondents (including from municipal government) believed that utilities, which are mostly government controlled, were likely to pass along the increased costs to the communities they serve.

One respondent suggested that utilities could lower the amount they were expected to pay by tackling mismanagement and unaccounted-for water (as a byproduct of clientelistic politics):

> Companies in the Northeast have a loss of sixty percent... the loss isn't a loss of physical water -- puncture -- but of management that doesn't function. When it's a physical loss of water, it's under twenty percent. This is management: not charging, poorly done *tarifa social*... They transfer everything to user fees -- of those who pay. Those who don't, continue not to pay. (Fc.v.1)

The *tarifa social*, at its base, is an income-dependent user fee applied by many utilities in Brazil. Its design and application varies. One representative of municipal government with whom I spoke referred to the city's entire fee structure as *tarifa social* because he found it to be relatively cheap. He said that the *cobrança* has had very little impact "because the costs are transferred to consumers," but even then "it doesn't interfere much with consumers' pocketbooks" (Mg.vii.1).

5.2.4 Hydroelectric sector

Another important group of water users in the basin is the hydroelectric sector, which includes CEMIG, CHESF, and a number of small hydroelectric producers. The challenges with defining the *cobrança* for this sector include that the sector does not capture or consume water in quite the same way as other users as well as scalar incompatibilities between basin-level reforms and Brazil's integrated and centralized model of energy production (the *Sistema Interligado Nacional*). Moreover, the sector has historically enjoyed a measure of exceptionalism in Brazil's water governance landscape. It is no surprise, therefore, that they do not pay the *cobrança per se*. 
With the passage of Law 9984, it was decided that the six percent fee on the price of energy that the sector pays to the *Agência Nacional de Energia Elétrica* (ANEEL or the National Electric Energy Agency) would be raised to 6.75 percent, and the difference would be redirected to MMA and ANA to support the implementation of integrated water management reforms (Brazil 2000). This charge, it should be noted, also makes its way to consumers' bills. The hydroelectric sector, with the support of ANA, argued against a separate *cobrança* destined for the committee based on the belief that the sector was already paying and that the committee was already benefiting through the assistance of ANA. As a result, there has been tension between ANA and CBHSF over whether ANA should transfer a portion of this payment to the committee.

The second point of tension is with regard to small hydroelectric installations (PCHs), which were exempt from the original six percent payment to ANEEL (Brazil 1989); as PCHs lacked, therefore, the charging mechanism applied to large hydroelectric installations, they are not yet -- as of writing -- paying the 0.75 percent or a *cobrança* defined by CBHSF. According to a respondent representing the sector, although basin committees have been defining charging mechanisms for small hydroelectric producers, they have not yet been implemented because attendant legal questions remain unresolved at the federal level.

### 5.2.5 Effectiveness of the *Cobrança* in Encouraging Water Conservation

One of the major stated goals of the *cobranca* was to incentivize water conservation on the part of users; however, interview respondents suggested that most sectors believe that they can transfer costs to consumers,\(^{115}\) which calls into question some of the theoretical and legislative underpinnings of the *cobrança*. No respondents indicated that the *cobrança* incentivized "rational use," as outlined in Law 9433. Even respondents from the agriculture sector, which

\(^{115}\) In fact, agriculture was the only sector that suggested costs would not be -- because they could not be, given the universe in which agricultural producers operate -- transferred to consumers.
was most vocal about the impact of the *cobrança*, disagreed that it encouraged "efficiency of use with marginal productivity goals" (which is to say, moving toward "less-is-more" water-to-goods approaches): "No, no, it's not that path, no... This [the *cobrança*] isn't what interferes... I'll do something to improve my *fazenda*, [or] to comply with environmental laws... So, I don't see it this way, no" (Mw.ii.1). ANA's own research in the PCJ and Paraíba do Sul basins confirmed a similar pattern:

The majority of users weren't even reducing their use in spite of the *cobrança* -- there was a reduction in the size of allotments at the beginning, but from then until now, their allotments stayed the same... The users for whom there was a reduction in their allotments or actual use from 2003 until now, [also] responded "no," [that it was] because they already had a use reduction program or because of the market... or to reduce energy consumption... or for marketing. No one responded--very few responded that the *cobrança* influenced their decision... (Mg.ix.5)

In other words, users asked ANA for adjustments in the amount of water allotted to them as a result of the *cobrança* being introduced -- suggesting that their original allotments had included a "reserve" -- but after the initial re-adjustment they did not adopt water-saving approaches that were motivated by the *cobrança* itself. Diminished allotment sizes, however, prompted one respondent from the federal government to suggest:

The *cobrança* is an instrument, in my opinion, that democratizes water use. What happens here in Brazil is that users still have a certain tradition today: allocation is a bit of a "formality."

Allocation isn't being utilized to its full potential as a regulatory instrument... Allocation is being done a little bit like this: whoever asks for it, gets it... But allocation has a very great potential. ANA is beginning to try to change this approach to allocation... (Mg.ix.3)

While democratizing water use is a noble aim -- especially in a basin with a history of very stratified access -- it is unclear how more equitable access is being encouraged or, moreover, what the implications of these adjustments may be in terms of "efficiency of use with conservation goals." CBHSF has indicated the necessity to protect minimum stream flows and has been at odds with ANA in the past over the amount of water actually available for

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116 Translated from *cartorial*. 
allocation.\textsuperscript{117} If formerly unused "reserves" are reincorporated into ANA's calculation of allocable water resources, these conflicts may become more materially and ideologically acute.

5.2.6 Revenues from the\textit{ Cobrança}

Alternatively conceptualized in polluter/user pays terms, the unchanged behaviour of water users as well as the relatively modest revenue obtained through the \textit{cobrança} also flout theory and legislative intent. While some respondents expressed the belief that the R$20 million per year collected through the \textit{cobrança} could be creatively utilized, no one stated that it was anywhere near sufficient in terms of mediating the basin's challenges; without additional sources of funding, the \textit{cobrança} cannot possibly be enough to execute "the programs and interventions set forth in the \textit{Plano}," as mandated in Law 9433 (Brazil 1997). Moreover, respondents remained at odds about its application, although they were nearly unanimous in their belief that it should not go toward infrastructure projects (discussed below). As Dr. Thomaz explained:

Sanitation is the government's responsibility... If the money is directed to this, it runs out, which is more or less what happened in the Paraíba do Sul [basin]:... The resources go for sanitation in little cities, little districts, that the sanitation company wants nothing to do with\textsuperscript{118} because it's more difficult, or people don't pay, or management is more difficult. (Fc.v.1)

Patterns of application within the São Francisco basin (at this early date) have also undermined arguments for bulk water charges as a means of encouraging efficiency in governance. Multiple respondents expressed frustration over the slow and cautious spending habits of AGB Peixe Vivo; the agency, respondents complained, "prefers to pay high prices to specialized agencies so as not to take any risks, so it ends up absorbing much of the money that could be used to more directly benefit the river." Basin agencies, in legislation, were intended to be public but are now

\textsuperscript{117} Dr. Thomaz suggested in our interview that what it missing -- and will be crucial in the near future -- is for the committee to begin discussions of a pact that would definitively delineate available resources in the entire basin (including sub-basins).

\textsuperscript{118} Translated from \textit{não quer meter a cara}.
private non-profits (as discussed in Chapter 6); however, agencies spend public funds and must thus abide by the related rules and procedures. As a respondent from AGB Peixe Vivo explained, "we want to be and should be agile, but at the same time, we have the public bureaucracy because the money is public" (N.5). As a result, "the staff is afraid of spending, afraid to err, afraid to be arrested" (Fc.v.1).\(^{119}\) An additional weight on action is the committee itself, which holds plenary meetings only twice per year; after all, "the role of AGB is to propose the plan for application [of the cobrança]... but the committee approves [it], defines [parameters], and makes the final judgment" (N.5).\(^{120}\) It is difficult to say definitively whether spending will continue to be slow and contracts expensive in the years to come; the cobrança is less than two years old (as of writing) and still very much a "work in progress."

Lastly, the legislated aim of "recognizing water as an economic good and giving users an indication of its real value" (Brazil 1997) is a complicated (not to mention analytically troublesome) issue. If water's "real value" is understood in the more ample sense of "not necessarily associated with its price or cost, but what it does to enhance the environment, economy, and quality of life of the general population" (NWRI 2005, emphasis original, p. 0), then it is difficult to suggest much headway has been made given the sectors and interests that continue to enjoy well-established patterns of privilege (discussed in Chapters 3 and 4). Moreover, what is meant by water's recognition "as an economic good" is somewhat unclear. As a representative of agricultural interests pointed out, irrigators have always understood water in economic terms because they must invest in water-related technology and supplies, electricity for pumps, etc... He concluded, "I know that it has this idea of being an educational process, rational, and things like that, but it's pura bobagem, isso [pure silliness]! Pura bobagem!"

\(^{119}\) Recent events outlined in Chapter 4 suggest that this fear is not mere paranoia.

\(^{120}\) Translated from bate martela.
(Mw.ii.2). Furthermore, water was not "free" or "common" (as discussed in Chapter 6) to disadvantaged residents in the basin before reforms -- extending from the 1988 Constitution through Law 9433 -- classified it as a "public good with economic value."

With respect to the ideological and intellectual processes of "recognition," it was clear from interview responses that water users overwhelmingly accepted the idea of the cobrança and that socioenvironmental actors favoured a charging mechanism of some sort being applied to water users deriving a large profit. Nearly all socioenvironmental actors favoured higher prices, as well;\(^{121}\) as one respondent noted: "this cobrança -- although it has been a legislative win, a win for the movement, a win for society -- it's not necessarily proportional to the impact" (Mc.v.6). Socioenvironmental respondents also tended not to see the cobrança or its monetary "educational" aims as the ultimate goal; their support for the cobrança was often expressed in terms of the charges being one way to foster "commitment" from water users. As one respondent stated, "the larger objective isn't the cobrança in and of itself but a change in attitudes... and that users increasingly commit themselves to water quality more than with the value charged to de-pollute the river; I think that this is a logic that we have to try to invert" (Mc.v.6). Another agreed, "the cobrança will be an aspect of commitment -- not just of the members, not just of the community, but it commits everyone. Anyone who benefits will have to have commitments," although he also emphasized that "to resolve the problems of the São Francisco basin, do you have to invest money? No. I think that guaranteeing social and

\(^{121}\)Although some saw the cobrança as a potential Trojan horse -- depending on how it might be implemented -- likely to be perpetuate regressive elite politics rather than enhance socioenvironmental outcomes; once again, the events discussed below as well as those outlined in Chapters 3 and 4 demonstrate that such concerns are not unfounded and perhaps are more grounded in governance realities than the apolitical optimism enshrined in Law 9433.
environmental harmony is one of the greatest mechanisms to guarantee the survival of this river" (Mc.v.3).

5.2.7 The Politics of Negotiating the Cobrança

If, as suggested above, the goals of economic theory are not reflected in the cobrança, it is because economic concerns ("efficiency," polluter/user pays, or those outlined in legislation) were subordinate to political concerns. Dr. Thomaz, for instance, stated that "the predominate logic" of the cobrança is not economic but that "the predominate logic is the possible value, and that which is possible is that which is politically constructed" (Fc.v.1). He acknowledged that the price "wasn't the best or the most just... it was the most possible." The predominant belief among other respondents that CHBSF needed to define a simple and inexpensive charging mechanism certainly conforms to Dr. Thomaz's perceptions. The alternative would have been many more years of inaction as disgruntled water users, unwilling to pay, embarked on a lengthy court battle; one agricultural representative confirmed, "if this cobrança doesn't have the support of producers, it won't work... I won't pay. I'll go to the courts" (Mw.ii.2). It is no surprise therefore that the element most often identified by respondents as the cobrança's greatest success was "merely" that water users were paying.122 This was a conscious strategy rather than a pessimistic appraisal of weaknesses in the system, as a respondent from state government explained: "after being consented to, it [the cobrança] become an obligation" and, therefore, "it's better to accept what they [water users] want and to bring them along than for them not to pay" (Mg.viii.2).

122An important success identified by one respondent within the federal government is also that the cobrança has led to water users being registered: "the registering of users is fundamental to any system of water management in any basin in any country. This is universal wherever there is cobrança... Where there isn't cobrança, registration and permitting aren't universal... -- this is absurd. This is something than never should have happened... The first thing that any water resources organ has to do is register everyone" (Mg.ix.5).
5.2.8 The Future of the Cobrança

That the cobrança, as it stands, is a first step (and not an end state) accounts for the mostly positive outlooks on the potential of the cobrança among socioenvironmental respondents. As one suggested, "we can already see that companies are worried because they know that this [the cobrança] is dynamic... [It's an adjustment] for companies in the sense of perceiving that society is increasingly attentive to this process and consequently will charge more for it" (Mc.v.6). In addition to raising prices, respondents expressed interest in tiered rates,\textsuperscript{123} introducing charges for other types of pollution, expanding charges to other activities, and mandating that utilities not transfer the cobrança to user fees. Past deliberations have also paved the way for applying the cobrança to mining and net cage aquaculture as well as modifying prices based on geographic variations and "environmentally friendly" technologies and approaches (CBHSF 2008a; 2008b). As a result, an agriculture representative qualified his contentment with current prices by saying, "we'll see if four years from now we're able to maintain [these prices]" (Mw.ii.1).

Reflecting on the cobrança, Dr. Thomaz noted that, "the French charge for 18 items. We charge for 3," but he also viewed that as liable to change in the future, stating that "it's possible to advance in everything, but we had to start somewhere" (Fc.v.1). Contemplating the ultimate legacy of an instrument created during his tenure as President of CBHSF, he mused:

\textsuperscript{123} Some water users rejected these ideas in interviews, suggesting that -- although many expected prices to rise -- the process will continue to be contentious.
The alternative would have been not to charge. The alternative of not charging—"I am very unsure about this currently. Which is better, which is more correct? If it's [the] Clear Water [Act model]? If it's Command and Control? I am currently very unsure about this… Within this Brazilian idea, this sort-of-French thing, this Franco-Brazilian [model] -- of water use charges, doing management, and understanding more and more -- well, I think it was for the best because, with the alternative of not charging, you would have a committee in a constant state of conflict, and it would empty out -- empty out entirely. Having the cobrança, having the agency, having autonomy, you have a chance. The biggest difference with France is the price of water. There, it's three euros per m³/second [~CAD$3.75]. Here it's one centavo [~CAD$0.005], one real [~CAD$0.50]... There are questions like this yet to be resolved: this issue of sanitation companies transferring the cost to user fees--what for?... Another contradiction is agriculture paying less because they use more. ... [But] we were able to make the Transposição cost more... (Fc.v.1)

He concluded: "But this is what came out. We planned for a horse and got a camel."

5.3 A Tool of Political Resistance: the Cobrança and the Transposição

Although the decision-making process for the cobrança was mostly aimed at coaxing payment -- insufficient though it may be -- from water users so as to establish precedent, there were other significant political concerns: one of the major motivations for pushing ahead was, as noted by Dr. Thomas and a varied cross section of committee respondents, to secure a measure of autonomy from the federal government and to frustrate the Transposição (introduced in Chapter 1). CBHSF and the federal government have been locked in conflict over the Transposição since the earliest days of the committee, and the dispute came to a head under Dr. Thomaz's leadership as the cobrança was being established and the government prepared to break ground on the Transposição. When direct and established channels failed to yield results in the committee's struggle against the enormous infrastructure project, the cobrança became an alternative means for CBHSF to affect government decision making. This approach revealed that the most contentious cleavage to result from the conflict over the Transposição was not, as one might expect, between "developmentalists" and socioenvironmentalists or along free market/CAC lines but between the federal government and CBHSF. In this incarnation, the cobrança was creatively employed as a tool of political resistance.
The two- (perhaps soon to be three-) pronged canal project\textsuperscript{124} currently under construction is intended to transfer 26.4 m\textsuperscript{3}/s of the São Francisco's waters (although opponents dispute the veracity of the official amount)\textsuperscript{125} to the Northeastern states of Paraíba, Ceará, Rio Grande do Norte, and Pernambuco (all of which are non-riparian, with the exception of Pernambuco). For its part, the government justified the project as necessary to address scarcity and guarantee water security in the receiving basins. It has said that the water will be used for human and animal consumption -- contrary to the arguments of opponents, who suspect that the project is meant to benefit private interests like aquaculture and agriculture. Arguments against the Transposição include what opponents maintain are harmful social, environmental, and economic impacts; socially regressive, limited benefits; legal, political, and financial irregularities; and unproven need in receiving basins as well as unmet needs within the São Francisco: as one respondent stated, "we see that people on the banks of the river don't have clean water to drink -- let alone irrigate... and the government is taking the water" (N.2). Excluding a handful of state and municipal political interests, CBHSF's membership has been highly critical of the proposal; according to one respondent, "the government always participated to justify the Transposição, and with that, it had a conflict with the basin as a whole -- not just civil society" (Fc.v.1). Several federal government respondents instead viewed opposition to the Transposição as opposition to the government; reflecting on the committee's position, one suggested that CBHSF was "setting the population against the government. They said that the river would dry up; people got scared... they didn't even listen to us; everyone was anti-government" (Mg.ix.1).

\textsuperscript{124} As discussed in Chapter 1, the MI recently announced plans to study a third canal reaching into the state of Bahia.

\textsuperscript{125} As discussed in Chapter 1, under certain conditions, about 127 m\textsuperscript{3}/s may be diverted. Opponents suggest that the amount transferred is unlikely to stay modest for long.
In 2004, prompted by impact studies on the Transposição undertaken by the Lula administration, CBHSF moved to define priority uses for the São Francisco River as those internal to the basin (exempting, as required by law, human and animal consumption in situations of scarcity -- adding a number of additional verifications and restrictions) (CBHSF 2004b). CBHSF’s reasoning was that -- according to Law 9433 -- water allocations were to be made (or, presumably, withheld) based on committee-defined priorities; however, in 2005, ANA approved a renewable, 20-year allocation for the project (ANA 2005). Although the allocation was made for human and animal consumption, it allows for other uses should demand for approved uses be less than 26.4 m³/s. According to a broad range of respondents, ANA’s actions demonstrated that "the role of the committee is relative," perhaps as a function of political appointees among its ranks. A federal government respondent evaluated what happened as follows:

When projects are important, the committee has the prerogative to try to interfere, to act, because they -- the basin committee -- approve the [ten-year] Plano, and there's an item there in the Plano that is priorities for allocation... If it's a goal of the federal government... it would be difficult for the committee to be strong enough. It could be, but the federal government will go "all in." ...[So if] the committee says "no, we're against this," will the president of ANA refrain from authorizing the allocation? Maybe. Maybe not. (Mg.ix.5)

In 2007, the conflict with the federal government became even more acute: IBAMA, the country's environmental licensing authority, approved the Transposição; a popular member of the clergy, dom Luís Flávio Cappio, initiated a hunger strike; and the then-president of the committee took part in a "caravan" made up of members of civil society organizations, state officials, traditional communities, and university researchers that toured the basin as well as the receiving states, São Paulo, and Rio de Janeiro. They held public events and distributed literature, receiving considerable attention in the media and from officials throughout their

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126 The Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, or the Brazilian Institute of the Environment and Renewable Natural Resources, is known almost exclusively by its acronym: IBAMA (for obvious reasons).
journey. The organizer of the Caravan, a coordinator at the same NGO as the committee's then-president, Dr. Thomaz, summarized their protest in the following way:

The Caravan had strong repercussions in all 11 states through which it traveled, leading on its last day to Minister Geddel Vieira Lima occupying the national television network to counter-attack our movement. We put the government on the defensive and expanded the horizons of thousands of people. On the other hand, the government hardened its line against dialogue. It did not respond to our letter proposing a meeting between the Caravan and President Lula to bring the president an alternative proposal for negotiation. The government silenced various governors, as the federal system in Brazil is maintained with absolute centralization of the Union's budget, and the states are subordinate, even when their best interests are thwarted. This is one of the reasons why the opposition went silent, forming a mass of shapeless adherence in the country, a serious disease for democracy. (Lisboa 2008)

The committee also supported legal challenges to the Transposição that were brought by federal and state Ministério Públicos. Although a lower court ruled in favour of suspending construction, the Supremo Tribunal Federal128 overruled the suspension and construction began in earnest, according to a respondent from the Ministério Público.129

The cobrança gave CBHSF what might have been its final opportunity to halt the Transposição. After more than two years of study, CBHSF's Technical Council for the Cobrança finalized equations and prices for in- and out-of-basin uses, while the Directorate -- headed by Dr. Thomaz -- drew up a proposal that would increase the cost of the cobrança for the Transposição. At this point, retellings of what occurred next vary widely, with respondents from various organs of the federal government offering explanations ranging from committee politics to greed to the committee's tacit "approval" of the project via its approval of cobrança values for the project:

127 One respondent within state government mentioned in our interview that the speed with which federal projects in his state were completed did indeed appear to be inversely proportional to the state's opposition to the Transposição.
128 The Brazilian equivalent of the Supreme Court.
129 Many of the challenges, including those brought by the states, are still awaiting their day in court as of the time of writing.
[Dr. Thomaz] cannot be the director of the committee that approved the *cobrança* for the São Francisco -- because this is politically bad for him in the ambit of the committee\textsuperscript{130} -- but he also cannot be the director during whose mandate the committee did not advance at all... So what's the way out? "Ok, we'll charge more [for the *Transposição*]." (Mg.ix.5)

The only way that [the basin agency, ABG Peixe Vivo.] would be viable would be to charge for the *Transposição*... They approved it because they wanted the money. [But] when they approved it, they didn't do anything wrong; what was wrong was to say that it [the *Transposição*] would dry up the river. (Mg.ix.1)

The *Transposição* debate was decided by the committee. The committee approved the *Transposição* for human and animal consumption, and when we have water supply exceeding certain levels, then you can think about other uses; this was the meaning of the committee's decision, and it is how the Ministry of Integration is acting. So we are in perfect unison with that which the committee decided... Logically, there can be other uses depending on the supply... (Mg.ix.6)

Within CBHSF, respondents remembered the choice in far more fatalistic terms, suggesting that, "in the end, the committee ended up charging for the *Transposição* because it already existed" (Mc.v.2). For his part, however, Dr. Thomaz -- unable to stop the construction -- hoped to at least keep water from flowing through the canals to agribusiness and aquaculture ventures by making it prohibitively expensive:

> The proposal of the committee is a good one because it says the following: water for human consumption has a reduced price. It lowers the price of what it would be in the receiving basin... so that water for human consumption is the same price as what it would be here... inside the basin. Now if the water isn't for human consumption, it will be more expensive... an impact of more than thirty percent [for agriculture]. (Fc.v.1)

Because the government's public campaign in favour of the *Transposição* had presented recipients of the water as "poor, thirsty *Nordestinos*" (a dynamic discussed in Chapter 3), the government did not make a public case for lowering the price for other uses, which Dr. Thomaz framed as "a big victory" in itself.

When the *cobrança* proposals were introduced in the plenary, however, there were technical concerns about the Directorate's proposal. The general *cobrança* passed, and the Directorate

\textsuperscript{130} Respondents' statements did not indicate that this was politically harmful to the former president.
opted to re-write their proposal with the intention of sending the two deliberations to CNRH for approval once both had been passed by the committee, reasoning that they necessarily should be implemented together. This turned out to be the first of many re-writes and delays; although the Directorate's second proposal passed in the subsequent plenary, it was twice rejected by CNRH's Technical Council and twice re-worked by CBHSF's Directorate (CNRH's Technical Council disapproved, for instance, of two separate prices for the two different canals, which the government maintained was "without any technical basis") (CBHSF 2008a; 2008b; 2009; 2010a). Dr. Thomaz, however, suggested that the situation represented more than a mere technical problem:

[The proposal was not put to a vote] because of the government. The government is pushing it, because they could lose there. They could. There's a chance. And then they would have to do what it did last time: steamroll\textsuperscript{131} everyone. They have a majority -- the Conselho Nacional de Recursos Hídricos has a majority of ministries -- but it's unappealing to steamroll everyone. (Fc.v.1)

A respondent from the federal government -- although he was careful to point out that CNRH has only the power to approve, reject, or suggest changes to a basin committee's decision but cannot change it unilaterally -- explained the balance of power on CNRH in somewhat more confident terms: "The Conselho Nacional de Recursos Hídricos is very passive... Really, the government has a large number of representatives there, so it, in a way, has the strength to approve that which the organs of the federal government together with ANA decide" (Mg.ix.4). Dr. Thomaz was pleased, however, that the prices for cobrança of the Transposição being discussed at the end of his term -- both on the committee and within the government -- were burdensome for the government; he suggested that the government "had to negotiate and ended up wearing out... it would be very difficult for the government to subsidize this" (Fc.v.1).

\textsuperscript{131} Translated from atropelar.
Dr. Thomaz's strategy was interrupted and, eventually, somewhat subverted when his term came to an end with the Transposição-specific cobrança proposal still lacking approval from CNRH. The Transposição played an important role in the election of the next President, Sr. Geraldo: according to respondents, Sr. Geraldo -- as the representative of the government of the state of Minas Gerais -- opposed the Transposição; however, his opponent -- representing the PT state government of Bahia -- was expected to be sympathetic to the federal government's plans. In the end, Sr. Geraldo's opposition proved to be lukewarm compared to that of Dr. Thomaz. The new President referred yet another proposal for the cobrança of the Transposição to CNRH in 2010 (CBHSF 2010b), which was slated to go before the full Council when it was tabled by Sr. Geraldo. The specifics of the decision are unclear from interviews, but one federal government respondent recalled the events in the following way:

The committee was going to present a deliberation charging more for the Transposição, but there was a negotiation beforehand between the Ministry of Integration (which is doing the project and would pay until the project is inaugurated) and the São Francisco committee -- and the São Francisco committee decided to table it [the proposal]. (Mg.ix.5)

A representative from the MI said that the committee president "took it off the table at our request,132 but it will be back... It's a debate: at the meeting, if you don't reach a consensus, [you say] 'let's table it and bring it back for the next meeting'... It's just altering, let's say, an item -- just a valorzinho [little price] there..." (Mg.ix.4) The sticking point for the MI was human consumption versus "multiple use" -- "how will this use be defined? Who will define this use?" (Mg.ix.4). The deliberation was ultimately brought back before CNRH in September 2011 and approved -- with the caveat that the committee's proposal did not apply to animal consumption and would require another deliberation specifically addressing it (CNRH 2011); two months

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132 Translated from tirou ao pedido nosso.
later, CBHSF passed a deliberation defining the same price for animal consumption as for human consumption (CBHSF 2011b).

Exactly what this means in political terms also remains unclear. Dr. Thomaz suggested that if the government insists on using water from the Transposição for uses not associated with human and animal consumption, it would be forced into the position of implementing cross-subsidies and thereby raising the price of water in the major cities of the receiving states: prices, he suggested, "would go up more than fifteen percent. It would be difficult for them [the government] to make it viable" (Fc.v.1). The logistics governing the future of the Transposição also remain uncertain; according to one respondent, the World Bank had pushed for the implementation of a water market during the debate over the Transposição under former-President Fernando Henrique, but once the PT was elected, the plan was abandoned. Nevertheless, it is not known whether the government or a private entity will be have operational duties and how the higher price of water might affect its administration (or whether water ever flows at all, which Dr. Thomaz had sought to avoid). In any case, one respondent had little doubt that the Transposição would nevertheless eventually be operational and that citizens would ultimately pay: "the fact is that it always ends up with the population [paying]... Whoever has a little faucet at home will pay for the project" (N.1).

Meanwhile, the fervour over the Transposição has lessened as the committee turned its attention to another cobrança-related issue: spending priorities for the collected funds, including the Carta de Petrolina. The Carta de Petrolina, discussed in the following section and in Chapter 4, is emblematic of Sr. Geraldo's more conciliatory approach toward the federal government, of which his interview responses on the Transposição were similarly characteristic:
The federal government is developing two canals to bring water to the Northeast. By the dimensions of the open canals, much more than [the allotted] 24.6 m3/s will pass through these canals, but I shouldn't say that. What the government has told me is that it's water for drinking. The allotment that exists is for drinking water, so this isn't the moment for me to debate anything more... When the water starts flowing, if, by chance, it is not for human and animal consumption, then it's wrong. (Mg.viii.1)

Several other respondents found the diminished focus on the Transposição vexing as it continues to be viewed as a serious threat to the basin, but others suggested that the committee's efforts to halt the Transposição were a losing battle with the inevitable and that it was time for CBHSF to cut its losses: "our committee lost half of its life fighting against the Transposição -- we lost so much time! -- because there was no turning back with the Transposição.\textsuperscript{133} They [the government] will do the Transposição" (Mw.ii.1).

These opposing perspectives, offered in hindsight, highlight an important question. Dr. Thomaz's leadership on water use charges inside the basin was characterized by pragmatism; the goal was to bring water users "to the table" and initiate a practice of paying. What is less clear is whether the Directorate under Dr. Thomaz was engaged in a quixotic battle against the Transposição or whether, alternatively, the cobrança might have proven to be a robust tool of resistance had there been sufficient throughput by Dr. Thomaz's successor, Sr. Geraldo. This issue goes well beyond individual leadership styles. The first possibility would reveal very troubling limits to the participatory nature of CBHSF should it contradict the will of the government. The second scenario, on the other hand, would indicate that CBHSF may indeed be a potential space of robust participation and resistance (albeit one that is both prone to and vulnerable to delays); it would imply that CBHSF can be a space in which actors traditionally outside of formal decision-making processes -- like civil society -- are able to innovate solutions beyond those of the committee's legislated mandate.

\textsuperscript{133}Translated from negócio que não tinha volta.
5.4 A Tool of Compliance: the Cobrança and the Carta de Petrolina

The cobrança again revealed its malleability and political utility through the Carta de Petrolina (introduced in Chapter 4), which is intended to be like a "memorandum of understanding" between CBHSF, federal ministries, state governments, ANA, and ABG Peixe Vivo that commits its signatories to specific actions and investments in the São Francisco River Basin. The Carta states that it is based on the "tacit recognition of the following premises: ...promoting the integration of all of the plans, programs, projects and actions -- planned and in progress -- so that efforts are not fragmented in the pursuit of dreams and desires of diverse communities that live in the São Francisco River Basin;" the need for revitalization to ensure water quality and quantity; the need for conservation; and management centering on "improved quality of life... and sustainable development" (CBHSF 2011c, p. 2). It obliges signatories to pursue investments supporting three goals: the federal government's "Água para Todos" (Water for All) project, which aims for universal water provision -- including cisterns, small dams, and simplified irrigation systems; universal sewage, waste, and stormwater collection and treatment (with the government's 2030 timeline); and (also by 2030) protection and conservation of recharge areas and springs, restoration of riparian vegetation, and "supporting financial conservationist best practices." These actions are to be based on the government's 2012-2015 Plano Plurianual (CBHSF 2011c, p. 3) (which, not merely a budget, outlines detailed actions and programs that are defined in the federal government and do not originate within or with the input of the committee).

The Carta merits special attention because it appears, in many ways, to challenge the participatory and decentralized nature of Brazil's water governance reforms. Most strikingly, as discussed in Chapter 4, CBHSF as a body was not given the opportunity to discuss the contents of the Carta, which was negotiated under the leadership of Sr. Geraldo. Secondly, the Carta
redefines, to some extent, the priorities ratified in the committee's ten-year *Plano* (introduced in Chapter 1) for investments and interventions in the basin. Lastly, although the *Carta* does not make it explicit, it was designed to function in tandem with CBHSF's *cobrança*; the justification for the *Carta*, as it was explained by respondents representing its signatories, was that the R$20 million collected through the *cobrança* could be used to "leverage" R$6 to 8 billion (CAD$2.9 to 3.9 billion) from signatories. This third point suggests a rapprochement with the government via the *cobrança* -- albeit a fairly unilateral one that bears a similarly one-sided agenda; it is thus important to ask whether the *cobrança* is such an ambiguous political tool that it may also serve to undermine the autonomy that many respondents from CBHSF considered among its more appealing features.

Examples offered in interviews of how the *Carta* might work included the following: in the first, the municipal government of a(n imaginary) town might lack the technical capacity to develop an acceptable proposal for a water-related infrastructure project, whereupon the committee could invest a portion of the *cobrança* to assist with crafting such a proposal; in the second, a(n equally imaginary) water-related infrastructure project funded by the federal government might come to a halt, and the committee, given its familiarity with the basin, would come to learn that the completion of the project was dependent upon the municipality acquiring a parcel of land that it could not afford and would use funds from the *cobrança* to purchase the land, thereby facilitating the project's completion.\(^{134,135}\) Perhaps the most optimistic explanation -- and the most appropriate from the perspective of the 1997 reforms -- was that:

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\(^{134}\) Representatives from the government were open about the lack of throughput on government investments.

\(^{135}\) It is worth mentioning here that common perceptions within Brazil about local politics belie such naïve mayors and innocent excuses for troubled projects. Although accountability theoretically follows from participatory governance, it is difficult to imagine that the committee could, would, or should act as
It will make it possible for sectoral investments, which are from state organs and the ministries at the federal level, to be done in a more integrated, strategic way in river basins -- to make it so that the investments are applied in a more perennial and structured way, with a more systemic and less sporadic approach. [Currently,] the mayor "here"... through a contact from his party, which is the same as the minister, was able to obtain an investment... but the guy who... doesn't have the same contact can't obtain an investment. (Mg.ix.5)

Federal government representatives offered conflicting motivations for and beneficiaries of the Carta; it was framed as variously good for the government (which was presented as struggling to find appropriate investments), potentially threatening to the government because the committee might seek greater control, and done for the committee's benefit because "the committee needed to define what it was going to do with the money from the cobrança because it doesn't know what to do" (Mg.ix.4); however, it is difficult not to scrutinize the government's motivations for the Carta given its somewhat ill-defined nature, its considerable tie-in to predetermined government projects (as opposed to those that might be mutually created through more broad-based dialogue), and its timing (coinciding with postponing CNRH's approval of the cobrança for the Transposição). (Although one respondent from ANA seemed rather nonplussed about the Carta, suggesting that a similar document existed in the Paraíba do Sul basin.) Signatories were generally evasive when asked by whom and under what circumstances the Carta was proposed -- responding, for instance, that "this came up in conversation between colegas" (Mg.ix.4)." The most explicit explanation of the Carta's origins from a federal government respondent was that "it was actually a goal of the Ministry of Integration to call the committee "water infrastructure police" on behalf of the federal government when the reasons for halted investments include perpetual resubmissions of road paving proposals for the same stretch of ground, the same parcels of land acquired multiple times over for "municipal use," and the bank accounts of powerful individuals within a community growing in inverse proportion to slipshod infrastructure projects, etc...  

136 The term colegas is somewhat amorphous and the context for this quote -- offered in a similarly elusive way -- did not lend itself to a more explicit translation; I have therefore left it without translation so as to avoid misattributing meaning, which ranges from "friend" to "teammate" to "colleague" to "co-worker."
for a dialogue together with Geraldo... and make peace\textsuperscript{137} instead of always fighting, like in the past..." (Mg.ix.1).

While greater cooperation is an admirable objective, the decision-making processes around the Carta raises the question whether it should come at the expense of open debate, as discussed in Chapter 4, or committee-defined priorities and perhaps committee autonomy, as discussed below. What is perhaps most unfortunate about the situation surrounding the Carta is that there was actually interest in something like the Carta de Petrolina among respondents; however, there was consternation about its genesis, scepticism about its design, and outright disbelief about its functionality. One reason why CBHSF respondents expressed interest in the concept of the Carta is that it might elevate both the power and (paltry) spending potential of the committee. As one agriculture representative stated, "98 to 99 percent of the money is in the government," and with the Carta, "we won't administer just two to three percent. We can suggest that 'this here' goes to 'that there'" (Mw.ii.1). Moreover, committee members hoped to have some oversight of government interventions in the basin. Most respondents from the federal government balked, however, at the notion of the committee determining how or where their budgets might be spent (or, for that matter, engaging in oversight; "the committee doesn't have to keep an eye on the government" I was told, because the government already has agencies to do that) (Mg.ix.1). Respondents from outside of the government tended to express considerable scepticism about whether such oversight might be realistic -- making statements like "I don't know how functional it will be... As it has been proposed, it won't work" (Mc.v.4), and "it's a good idea, but I don't think it'll happen like that... There are a lot of things between a letter of intent and practice" (Mc.v.3).

\textsuperscript{137} Translated from fazer harmonia.
One concern respondents expressed was the nature of the committee's relationship to the government; would, for instance, the committee be enrolled in the often-dubious politics of development (discussed in Chapter 3)? A respondent suggested that to function, the *Carta* "has to address [the needs of the] basin and not the interests of the government, a committee president, a coordinator" -- but also that those interests often prevail; he said:

A big worry of ours is that these resources [contained in the *Carta de Petrolina*] will serve the interests of a mayor, of a city councillor, of a congressman, of a governor, of a state secretary, of a minister... These interests destroy many of the development policies of Brazil. (Mc.v.3)

Another respondent also warned:

In this country, only political interests function. When you put a quantity of resources on the table -- closed in the sense that the committee has to evaluate these expenditures -- and here come the politicians with their interests, and the committee says "no"... It won't work... The moment that political interests start knocking on the door -- when the political question comes through -- it's always stronger. There's no way around it. (Mc.v.4)

Others expressed a concern that the discursive emphasis on collaboration might conceal more coercive aims given CBHSF's past feistiness. Some respondents appeared to fear precisely the supporting role proposed by a federal government representative who said that "[using the funds from the cobrança,] the committee can contract a study to see if it [a project] is viable -- not to contest the policies of the government but to request more things" (Mg.ix.1).138 Others were anxious about the possibility that the government could use the promise of increased resources to ensure that CBHSF be more docile in its future interactions with the government. When I posed

138 The official also suggested "a government elected by the people has decided to do this -- you can't continue debating! What should be debated is how to do it... [For example:] Belo Monte. Everyone is against it, including that guy Sting and Vice [President Al Gore]... They came here and these guys have nothing to do with this. They should * cuidar da vida deles lá* (mind their own business). There was a government decision. No. How to do it? Ok, sure. Then you have to look at the technical aspects. There will be environmental compensation... You can't deforest everything. There are norms that need to be respected, but you can't contest a government decision unless the government isn't legitimate. In a dictatorship, it's different" (Mg.ix.1).
this question to government officials, however, they tended to discount strongly the possibility that such a scenario could come to pass, frequently explaining its impossibility through the lens of "democracy" and "dictatorship." Nevertheless, one respondent from the federal government candidly acknowledged that the necessary structure for coercive spending is in place: "it could happen because the release of ministry resources always depends on the minister;" however, he also said:

I believe that if committees, together with agencies, were able to present good projects, if at some point, for some political reason, they were rejected, I believe that after, at the end of the year or the end of the government, due to the interest of the ministries in spending more money, especially if they went to the media -- that they made, helped, [or] supported a project who-knows-where... I think it minimizes this type of problem. (Mg.ix.5)

The suggestion that a highly functional committee would not be denied funds places the committee in a bit of a Catch-22; a track record of well-crafted projects is necessary for the committee to overcome political agendas and articulate a more independent vision for the basin, but through the Carta, the committee is induced to produce projects that adhere to political agendas!

Perhaps the strongest reactions that respondents had was to the perception that CBHSF and AGB Peixe Vivo were being put in the position of doing the government's job. As an agricultural representative admonished: "basic sanitation has to come from the resources from taxes that you pay for this. The money from the cobrança has to be for riparian vegetation, [etc...]" (Mw.ii.2). Similar sentiments were echoed by a civil society respondent who suggested that the government is trying to pass off unfulfilled responsibilities on CBHSF, giving the example of the

139 The same official drew a gentle but pointed parallel with the actions of the United States: "No. Only if it were a dictatorship. Let's suppose that we decide to attack Iraq. It would be debated at the UN, but I won't listen to the UN-- We don't have this power here yet, understood?" (Mg.ix.1).

140 The argument has been made by Avritzer (2002) that participatory forms of governance may not be easily theorized within models of elite representative democracy.
government's own upcoming deadlines for waste management: parroting naysayers, he said, "but no one obeys this law!" and then retorted, "Throw everyone in jail then! The federal government made a law but can't carry it out? Of course it can! How many billions is it spending on the World Cup?!!" (Mc.v.2). The same representative also demanded to know "how is it that the committee is going to establish -- or rather re-establish -- an action plan if we have our ten-year Plano?!" Interestingly, very few respondents even mentioned the ten-year Plano de Recursos Hídricos (detailed in Chapter 1) in interviews even though it is supposed to form the basis for water management and governance objectives in the basin (suggesting that institutionalization is a much more difficult process than establishing goals, priorities, and procedures on paper, and I discuss further in Chapter 6).

Contrasting the Plano and the Carta de Petrolina offers an instructive perspective on the role of the government vis-à-vis CBHSF (and vice versa). The Plano takes a "kitchen sink" approach to potential actions in the basin and thus does include the types of interventions outlined in the Carta de Petrolina, but the tone is quite different; while it also embraces collaboration between CBHSF and the federal government proper, the Plano is presented as "representing a political pact between all of the institutional actors present in the Basin, particularly those represented on CBHSF" and "a roadmap to be followed by CBHSF, organs of the government, users, and diverse representatives of civil society" (CBHSF 2004a, p. 17, italics mine). The focus of the Plano appears to be on integrating efforts rather than subsuming organs or actors. By contrast, the Carta de Petrolina (despite paying lip service to the Plano) commits the actions and resources of CBHSF to advancing an agenda defined and elaborated within the federal

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141 The 2014 World Cup will take place in Brazil.
government (despite being presented as the "objectives of all")\(^{142}\) (CBHSF 2011c; 2011d). There is, of course, nothing inherently wrong with the outlined interventions; providing cisterns, treating sewage, and protecting springs are important aims, but the *Carta* necessarily calls into question the respective roles and responsibilities of the government and CBHSF -- not to mention the extent to which CBHSF can continue to be considered "participatory."

The balance that Sr. Geraldo saw himself as striking during his presidency weighs these concerns against what he presented as collaboration with the federal government. He justified the *Carta* by saying:

> We have left the era for confrontation and are now in the era of collaboration. So, to do what we have to do for a positive agenda, we only see the possibility of doing this through joining forces... -- whatever it takes.\(^{143}\) If a sacrifice is necessary, we will make the sacrifice to be able to reach that which the basin indeed demands. I think that this is our responsibility. (Mg.viii.1)

Responses from other members of CBHSF suggest, by contrast, that they believe that the wider committee ought to be part of the conversation and that they might not be willing to make such sweeping sacrifices in order to collaborate with the government. It remains to be seen how the *Carta de Petrolina* will function in practice, but it speaks to the central problematic of this chapter: the *cobrança* as a primarily political tool -- in this case, drawing the committee into the orbit of government agendas; however, the *cobrança* played a very different role in the debate over the *Transposição*, in which it provided a means for CBHSF to contest the project when all official and established paths were blocked. These oscillations\(^{144}\) speak not merely to the

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142 Both the *Plano* and the *Carta* use the language of unity and both were sketched originally by a predominately governmental group of actors; however, the *Plano* was elaborated over a considerably longer amount of time and enjoyed the input of over 1000 actors in public meetings across the basin (CBHSF 2004a).

143 Translated from *custe o que custar*.

144 Another example of the difficulties of institutionalization comes from CBHSF’s plenary in mid-November 2011 at which the *Carta* came before the committee a second time, but once again it was not
mutability of the tool itself but also to the difficulties of institutionalization in the political context of Brazil, which becomes important in discussions about neoliberalization in Chapter 6.

5.5 Conclusion

That an economic instrument might behave as a political tool is not a particularly original observation, but what is interesting about the *cobrança* is its potential polyvalence as it troubles normative assumptions about civil society in relation to both EIs (that EIs will necessarily privilege economic logics or foster a market mentality) and decentralized, re-scaled, participatory decision-making space (the state abdicating its responsibility to deliver services and to protect the rights of civil society *vis-à-vis* private capital) fail to describe or explain the nuanced in the experiences in the São Francisco basin. The *cobrança* also reveals that -- while economic concerns are relevant, they are not dominant -- and, moreover, that they are perhaps best understood in relation to the government as well. These observations both parallel and comprise an important part of discussions about how the functionality of Brazil's water governance reforms elide easy classification under the rubric of neoliberalization, as I discuss in the next chapter.

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treated as an item for debate; rather, it was presented as a foregone conclusion underpinning spending priorities. The plenary was presented with (and passed) deliberations further cementing the *Carta's* goals within the spending priorities of the committee despite widespread dissatisfaction with priorities like sanitation (CBHSF 2011d; 2011e; 2011f); interestingly, however, as CBHSF's first investments in the basin were made -- close to the time of Sr. Geraldo's exit -- AGB Peixe Vivo posted a press release that included a line saying that the projects were "generally not included under the macropolitics of sanitation but fulfill the objectives of protecting springs and controlling erosion..." (CBHSF 2012b).
6. Neoliberalization, Institutions, and Socio-Natures

6.1 Introduction

As discussed in earlier chapters, recent reforms in Brazilian water governance seem to parallel broader trends of neoliberalization including governance changes such as re-scaled, decentralized, and participatory decision making as well as the incorporation of economic instruments. This chapter documents the complexities of neoliberalization "on the ground" as it engages with other processes and patterns in the São Francisco River Basin. I examine neoliberalization's relevance to the reforms described in this research and next consider how actors engaged in water governance in the basin view the relevance of neoliberalization. I then examine the state, regulation, and institutions and draw attention especially to the ways in which the Brazilian context troubles analyses centred on regulatory change and institutional landscapes. Finally, I examine water governance in the basin through the lens of neoliberal natures literature and engage closely with a socio-natures approach, which I suggests allows us to make sense of the concomitant processes and patterns affecting water-related decision making in the São Francisco River Basin.

6.2 Neoliberalization as a Relevant Frame

6.2.1 Neoliberalization and Concomitant Patterns and Processes

It is important to begin this chapter by discussing whether or not -- or in what ways -- neoliberalization provides a useful analytical frame for water governance in the São Francisco River Basin. By definition, according to Brenner et al. (2010, p. 183), "neoliberalization denotes a politically guided intensification of market rule and commodification," and even across geographical contexts, its consistent imperative is to "expand opportunities for capital investment and accumulation by re-working state-market-civil society relations to allow for the stretching and deepening of commodity production, circulation, and exchange" (Heynen et al. 2007). As
noted in Chapter 2, the governance changes accompanying basin-level reforms such as rescaling, decentralization, and participation are considered to be neoliberalizing strategies in many cases (Bakker 2009). Moreover, the cobrança -- as an EI introduced with the intention of facilitating these governance changes, encouraging "efficiency," and altering the logics implicit in water-related decision making -- appears to be an even more apparent manifestation of neoliberalization. As examined in Chapters 3, 4, and 5, however, the São Francisco -- from the persistence of traditional governance patterns and related modes of control and intervention, to characterizations of the state-society relationship, to the political ambivalence of the cobrança -- troubles some of the assumptions inherent in accusations of neoliberalization.

The ways in which these reforms relate to "neoliberalization" are therefore complicated. Because "neoliberalism" does not exist in an ideal form but rather as mutable, contradictory, graphically contingent and uneven variants (Brenner et al. 2010), it is a notoriously difficult concept to bound and therefore to identify in its "actually existing" forms (Brenner and Theodore 2002). With both spatial and temporal nuances to this variability, we cannot expect to find “Washington Consensus” neoliberalism today nor, for that matter, can we presume that neoliberalization in Brazil ever did duplicate Margaret Thatcher's England or Augusto Pinochet's Chile; however -- given that nowhere remains "untouched" by neoliberalization (Peck and Tickell 2002) but that it is always co-constituted and contested (Heynen et al. 2007; Springer 2010; Ong 2007) -- this raises important questions about how concomitant agendas in Brazil generally and the São Francisco basin specifically engage with neoliberalization. For instance, it seems spatially and temporally limited to imagine that progressive contestation of its logics, strategies, and effects worldwide would reproduce earlier modes of regulation,\footnote{It merits remembering not to conflate all pre-neoliberal modes of environmental regulation across space nor, as Page (2005) points out, to romanticize "traditional" resource governance in the context of} and indeed
Brenner et al. (2010, p. 218-219) suggest that "alternatives" to "market-disciplinary regulation" may have similarly "intensely variegated, unevenly developed forms, derived from their contexts of emergence and their distinctive, politico-institutional targets."\textsuperscript{146} Moreover, they are sceptical of the possibility for crisis and regulatory failure to herald neoliberalization's downfall; as Peck (2010, p. 109) writes, "exploiting crisis conditions... has been a hallmark of neoliberal governance." Given such presumed variegation, contradiction, unevenness, and context-dependence as well as an assumed absence of abrupt ruptures, how are scholars to identify -- let alone celebrate -- the emergence of "alternatives" (for lack of a more appropriate, less "othering" term) or merely "limits" when engaging with concomitant processes and patterns? Are neoliberalization's limits and "alternatives" to be deduced through apophetic means alone, or are normative criteria necessary as well? What differentiates limits and potential "alternatives" from mere manifestations of the unevenness and contradiction that defines neoliberalizing processes, and when can such "thinning" -- in the context of certain places, territories, or scales -- be attributed to the effects of concomitant processes and patterns (and, similarly, when can limits, if not "alternatives," be identified)?

I do not profess to answer these questions in this chapter or this thesis, but I pose them as the backdrop against which I engage with neoliberalization in the context of the São Francisco River Basin. The scope and scale of my analysis makes it difficult to determine whether this case is an outlier, an exception, or an example, and I therefore offer the subsequent discussion -- with a hearty appreciation for empirical "messiness" -- in the spirit of critical engagement with the Global South. Internationally, when discussing influential paradigms preceding neoliberalization -- such as second-wave planning projects -- one also quickly encounters a very mixed legacy, as discussed in Chapter 2.

\textsuperscript{146} They also write, however, that "it is essential to analyse putative alternatives to neoliberalization not only in terms of their agenda for reorganizing local and national regulatory arrangements, but also in terms of their capacity to challenge or supersede the neoliberalized global rule regime..." (p. 219-220).
theoretical debates around neoliberalization. Some of the ways researchers have grappled with these questions include by framing neoliberalization's normative nuances in terms of contradiction and hybridity, by speculating that putatively neoliberal governance mechanisms are "fundamentally polyvalent" with progressive potential (e.g. Ferguson 2009; Lewis 2009; Lewis et al. 2009), or by suggesting that the neoliberalization of nature may have "outcomes that are not necessarily negative for what we conventionally delimit as the environment" (Bakker 2005, p. 542). Another body of critical empirical research on Latin America in particular has challenged the dominance of neoliberalizing processes despite the region's long history of such interventions (Geddes 2010; Liverman and Vilas 2006; Radcliffe 2005; Escobar 2010).

The preceding chapters offer a basis for the ways in which the São Francisco basin complements both of these framings in addition to raising further questions. With respect to the former, the São Francisco's ambivalent and dynamic governance reforms challenge the normative assumptions frequently attached to the supposed strategies of neoliberalization enshrined in Law 9433 (as well as those associated with its "alternatives," in the case of participation's putatively progressive "alter-ego"). With regard to neoliberalization's disputed dominance in Latin America, the traditional governance patterns (discussed in Chapter 3) and their manifestations in and through the state-society relationship and the cobrança (elaborated upon in Chapters 4 and 5) raise questions about how to account for such concomitant patterns. Traditional governance patterns -- much like neoliberalization -- are predicated on mediating the state-society relationship but are grounded in national and sub-national territory and loci of decision making (despite international market connectivity that has been altered by but also preceded neoliberalization). Moreover, although traditional governance patterns are regressive, the emphasis is different from that of neoliberalization in that the primary interest is the accumulation of power (in which financial concerns are often inherent but differently
conceptualized), which articulates in interesting ways within the Brazilian regulatory context (discussed in Section 6.2.3). Up to the present at least, traditional governance patterns have demonstrated impressive adaptability to as well as staying power beyond multiple shifting national as well as sub- and supra-national social, economic, and environmental shifts; in other words, traditional governance patterns appear to comprise more than merely an "inherited institutional landscape" (Brenner et al. 2010, p. 184) and resist being understood primarily in terms of co-constitution (as both framings -- perhaps inadvertently -- may be taken to temporally privilege neoliberalization or reify neoliberalizing change). I suggest in this chapter that traditional governance patterns’ iterative entrenchment and endurance challenges their neoliberal excavation or transmutation; if neoliberalization is predicated on change, indeed traditional governance patterns seem to present a situation in which "the more things change, the more they stay the same." The São Francisco River Basin, as I discuss in the remainder of this chapter, therefore offers a fascinating context in which to explore neoliberalizing processes and concomitant patterns through their spaces of dissonance and resonance; engagement and entanglement; and confrontation and (re)iteration.

6.2.2 Respondents' Perspectives on Neoliberalization

One place to begin examining the relationship between neoliberalization and water governance is by discussing how actors involved in water governance in the São Francisco River Basin presented this intersection in interviews. As my focus was on finding out which processes and patterns characterize water-related decision making in the basin, I did not make a point of asking most respondents about neoliberalization (or other governance processes) directly. I made an exception, however, for federal government representatives because I was interested to know what the term meant to them (and how they did -- or did not -- see it as related to their work) given that the PT administrations of Lula and the current President, Dilma Rousseff (Dilma),
have been discussed popularly as contesting "neoliberalism" (a term often associated with their predecessor, Fernando Henrique) and pursuing a "moderate alternative." I should note, however, that neoliberalization was not a conceptual framework commonly deployed by respondents to describe governance patterns, the reforms, or the functionality of reforms; indeed, only two respondents -- one from civil society and one from the federal government -- discussed it directly without prompting.

One spontaneous mention came from an NGO representative who justified his organization's decision not to seek a seat on CBHSF (despite participating in other ways when important issues came before the committee); he said that CBHSF is "an artefact generated within this neoliberal ideal of co-opting the increasing participation of civil society... You start off knowing that you've lost, so why go there? Just to legitimize it?" (N.2). The only other respondent from civil society/traditional communities to address neoliberalization did so in response to a question about policy disagreements between the administrations of the former Governor of Minas Gerais (and a current Senator), Aécio Neves da Cunha (known as Aécio Neves), and that of his successor, Governor Antonio Augusto Junho Anastasia (known as Anastasia). The respondent recalled that when Law 9433 was passed, it was during the administration of Fernando Henrique, with José Carlos Carvalho as Minister of the Environment; at the end of Fernando Henrique's government, José Carlos Carvalho became Secretary of the Environment and Sustainable Development in Aécio Neves's administration and:

...founded IGAM -- the Instituto de Gestão das Águas Minerias [the Institute for Management of the Waters of Minas Gerais] (and that would complete the cycle of giving $ to water as a commodity). Because a state management organ like the Secretariat of Water Resources is supervised\textsuperscript{147} by the State Assembly, and as an institute it can receive donations and things like that. Nowadays these institutes generally receive [financial] resources from the largest polluters and exploiters of water resources. (N.4, emphasis original)

\textsuperscript{147} Translated from \textit{fiscalizado}. 
He continued, "when Anastasia took office," his administration "started to flexibilize water resource laws in Minas..." Given that he contrasted Anastasia's administration's flexibilization against Aécio Neves's administration's commodification, I suggested that I understood both the commodification of water and flexibilization of water laws in terms of neoliberalization and asked whether he could explain what he meant by "flexibilization" and how these ideas might be at odds. He responded that he views both terms as neoliberal -- the former as a "neoliberalism-invented term to say that they're not tearing up the earlier law but adapting something" and the latter because it was passed under Fernando Henrique, framed water in resource terms ("and with 'resource' comes the idea that because you have it, you have to spend it"), and implemented the cobrança.

These two responses suggest that at least some socioenvironmental activists consider neoliberalization a useful concept through which to analyse these reforms. For the first respondent, the reforms' associations with neoliberalization resulted in the decision not to seek a seat on CBHSF (although this same respondent is the one who stated that "here in Brazil, less state is the democratic path," suggesting that a geographically relevant analysis of neoliberalization would nevertheless require critical engagement with the state as not necessarily a bulwark against regressive politics). The second respondent is not a member of CBHSF but is an active member of a tributary committee, which might imply that if he viewed some elements of the reforms as neoliberal, he nevertheless did not view this as foreclosing on the potential to use basin committees to pursue progressive change. The idea that water is a resource in terms of "spending it because you have it" also demonstrates overlap with tenets of second- rather than

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148 Finally, flexibilization is a recent phenomenon in the Brazilian regulatory landscape (which has always demonstrated "flexibility" in spite of strong laws, as I discuss in the next section); I mention it here simply as a policy trend to remain attentive to in the future (as no other respondents remarked on flexibilization with respect to subject of this thesis).
third-wave water governance (and many elements of the former endure thanks to their usefulness to traditional governance patterns); whether this overlap is neoliberal variegation, mere ideological compatibility, or the influence of traditional governance patterns is not clear, but the primacy of traditional governance pattern-supporting second-wave exploitation in other respects (such as infrastructure projects like the *Transposição*) lends credence to the third option.

Contrary to these two socioenvironmentalist respondents, however, representatives of the federal government were adamant that they were not propagating neoliberalization. One respondent argued:

> I don't see it that way, no. We know that, in nature, everything has a limit... It's very logical that there should be a balance between supply and demand -- that there should be a disciplining of use... If I need to drink two litres of water per day, I won't buy three litres of water... I prefer to look at it from a physical and natural perspective. (Mg.ix.4)

On the one hand, this quote -- despite refuting a neoliberal connection -- conforms to the naturalization and neoliberal "creep" of *"Homo economicus"* into resource governance; however, the same official then went on to justify water reforms by saying that neither public nor private "extremes" are desirable in Brazil because the public is associated with corruption and delay whereas the private is similarly objectionable because "only one person benefits" and that person "only has one interest: profit." He hoped that CBHSF and AGB Peixe Vivo would "fill a function to which the extremes -- the public and the private -- are unable to attend."¹⁴⁹ This conceptualization of re-scaled, decentralized, participatory water governance might be considered an example of the backdoor, "Third Way" neoliberalization critiqued by Peck and Tickell (2002; Peck 2010) although some might argue that it is rather the result of the Latin

¹⁴⁹ The public/private binary is a bit misleading, however, as discussed in Chapter 3. Moreover, according to respondents, "only one person benefits" can also be a cynically appropriate way to describe the behaviour of government officials.
American "new left" come to power. Unsurprisingly, federal government respondents -- working within a PT administration -- viewed it in terms of the latter.

In fact, nearly all government respondents who discussed neoliberalization put forth a (sometimes-conflicted) rebuttal of its applicability that conformed to the view that the neoliberal policies of Fernando Henrique gave way to a market-tolerant yet state-centric leftist approach under Lula and now Dilma that was most certainly "not neoliberal" (although scholars of neoliberalization would be quick to point out that a "market-tolerant yet state-centric" approach may still describe neoliberalization). For instance, one official who made spontaneous mention of neoliberalization said:

[Fernando Henrique] toed the global governance line of neoliberalism. This line is very important; we do not dispute that. But a large part of the population of Brazil is still dependent upon the state... There are regions here in Brazil that today are not prepared for this [neoliberal approach] yet. You need the state... [Lula wanted to] use the state to improve people's lives -- not diminish in any way the part of private initiatives (Mg.ix.1).

Another official, seemingly exasperated by my questions about neoliberalization, responded with conviction that "the country passed through this process of neoliberalization [under Fernando Henrique] and entered into a new administration... a more leftist administration that centres on the role of the state. They are two different things" -- before admonishing me: "you can't say 'neoliberalism' in the Worker's Party. It's not that" (Mg.ix.3).

The case could be made these responses are little more than strategic parsing of political rhetoric or, conversely, that they exhibit varying levels of nuanced veracity; however, the insistence that water governance reforms should not be thought of as neoliberalization is perhaps most interesting in that respondents viewed neoliberalization as something that might be "passed through" with a change in government (even with the reforms themselves still in place!) -- very much contrary to the way that neoliberalization is theorized in economic geography literature.
This is an important pivot for engaging with neoliberalization in the São Francisco basin and the larger context of Brazilian governance, as discussed below.

6.3 The Role of the State, De-/Re-regulation, and Institutions

According to Springer (2010), a robust body of literature on neoliberalization has focused on its patterns of regulatory institutionalization. This includes engagement with identified "waves" of destructive "roll-back" and subsequent, constructive "roll-out," which consolidates "neoliberalized state forms, modes of governance, and regulatory relations" (Peck and Tickell 2002, p. 383) -- cycles alternatively characterized as de- and re-regulation (Bakker 2009). In a nuanced perspective on the "variegation" of these processes, Brenner et al. (2010, p. 184-185, emphasis original) conceptualize neoliberalization as unfolding, since the 1970s, "in a sporadic, yet wave-like, non-linear sequence, generating important cumulative impacts or sedimented patternings upon the uneven institutional landscapes of world capitalism" and posit therefore that "the problematic of neoliberalization encompasses two foundational aspects of contemporary regulatory transformation: (a) the uneven development of neoliberalization... and (b) the neoliberalization of regulatory uneven development..." (p. 207, emphasis original) -- the latter, they suggest, has resulted in a shift "during the course of the 1990s, from disarticulated to deep(ening) neoliberalization" at the macro level (p. 215). Analytically, this body of work is concerned with "...patterned and patterning processes – the consequence of continuous, path-dependent collisions between inherited institutional landscapes and emergent, path-(re)shaping programmes of regulatory reorganization at both micro and macro scales" (Brenner et al. 2010, p. 203, emphasis original; Peck and Tickell 2002).

If we are to understand "micro scales" to mean national and sub-national scales, however, I suggest that government respondents' dismissiveness of neoliberalization's ideological "stickiness" -- discussed in the preceding section -- is more than mere political rhetoric but also
hints at the ways in which the Brazilian regulatory context (especially long-standing patterns of "politicized" rather than "institutionalized" decision making, as discussed below) troubles "path-dependent" analyses centered on "sedimented patterning." In this section, I therefore examine the context-specific challenges to analyzing neoliberal processes through regulatory reorganization and institutional landscapes as well as exploring articulations of the Brazilian regulatory context with patterns generally associated with neoliberalization. I first examine perceptions of the state among respondents and then explore themes of regulation and regulatory transformation more broadly before engaging with politicized decision making and the Brazilian institutional landscape itself.

As discussed in Chapters 3 and 4, those who "occupy" space within the Brazilian state are frequent targets for allegations of misdeeds and mismanagement, and while the resulting resentment and scepticism may become entangled with neoliberal justifications, respondents usually offered much more nuanced -- and generally positive -- views on the role of the state. Nevertheless, disparaging conceptualizations of "the government" did appear to dominate interviews; as summarized by a representative of agricultural interests, respondents overwhelmingly believed that "the government misappropriates its resources" (Mw.ii.1). Although there was much discussion about public sector "inefficiencies" (especially in the context of the need for -- and subsequent frustration with -- a not-for-profit, rather than governmental, AGB Peixe Vivo), representatives of a wide range of interests described the misappropriation of public funds in terms of corruption, clientelism, and other acts of deliberate malfeasance; responses included "we have an addicted democracy -- a democracy that isn't very

150 The term used in the interview was desviar, which can be as harmless as "diverting" and as accusatory as "embezzlement," the context of this comment led me to use a translation between the two that still acknowledges wrongdoing.
well" (Mg.viii.1) and "CODEVASF throws around money -- where they throw it, nobody knows" (Mw.ii.1).

The narrative that the government -- especially in the Global South -- cannot be trusted to spend public funds on public services does parallel justifications for the "good governance" agenda, which is often associated with the same international institutions, isomorphic "reforms," and linear development mindset as neoliberalization (in addition to imposing a "model of government that 'kicks away the ladder' that today’s effective governments climbed") (Andrews 2008, p.380). Yet, those who cited malfeasance also tended to advocate for a conceptualization of the state in which it dutifully fulfilled its obligations rather than supporting actions that could contribute to "hollowing out" the state -- a notion that Abers and Keck (2006, p. 30) suggest is not particularly apposite in the Brazilian context: even though Latin American states have long been considered "strong states," they have actually been "strong on the ability to act irregularly -- repressive actions with excessive force, big development projects -- but rather weak, with pockets of capacity, on the everyday qualities of stateness." Interview responses supported this view, with representatives of economic also interests expressing frustration about a lack of state capacity,\textsuperscript{151} such as an agriculture representative who complained that "environmental organs in Brazil... are very unequipped... to be able to give guidance when it's needed to do things right... When you ask [for a license] and two or three years go by without a license, you do it yourself. You'll break the law because you have to do it" (Mw.ii.2). Unsurprisingly, representatives from civil society were most insistent about the need for greater state capacity (but, as discussed in Chapter 4, they were also paradoxically the most wary of the power of government); however, across sectors, the interest in a more active and engaged state was presented as heavily contingent on greater government integrity. One federal official even waxed poetic about the

\textsuperscript{151} Although they also tended to note improvements in recent years.
popularity of taxation as he perceived it in countries where, he suggested, there is more reliable provision of better quality government services. In his view, some Brazilians resist the idea of paying for government-provided services because they already do so twice: a public system provided by the government and financed through taxes and a parallel system of private services available only to those who can afford to access it. In other words, he appeared to be describing the stratifying effects that critical scholars suggest characterizes the neoliberal project -- but in a context in which such inequality and exclusive, means-dependent service provision are not a recent phenomenon.

Respondents also tended to affirm a state-centric view of regulation despite decentralization. These responses included the desire to see better enforcement -- such as an industry representative who expressed frustration over the government's tendency to craft ambitious laws without confirming whether or not they were enforceable, thereby allowing non-compliant businesses to gain an advantage over compliant businesses -- and conceptualizing regulation as a check on business's inability to self-regulate. An agriculture representative stated, for example:

In truth, what we follow is legislation. We're not goody-goodies\textsuperscript{152} but we also aren't against laws... Agriculture is a business like any other. You can't cede your business\textsuperscript{153}... that is why laws exist: to regulate everything... You go get your license the right way\textsuperscript{154} -- today that's the way you do it... (Mw.ii.2)

This respondent, however, made several contradictory statements that appeared to demonstrate inconsistencies in the functioning of the system, including that producers would break the law by undertaking unlicensed actions when the government was too slow in issuing approval in addition to stating, "we had staff from the Ministry of the Environment here recently... They understand perfectly that there is no way to diminish deforestation if you still have an area that is...

\textsuperscript{152} Translated from bonzinhos.
\textsuperscript{153} Translated from abrir mão do seu negócio.
\textsuperscript{154} Translated from direitinho.
an agricultural frontier. They understand that there is a necessity for the country to develop, to grow." These statements would appear to affirm neoliberal roll-back and roll-out if producers were "following the rules" that had been re-written to facilitate business interests, but the common understanding of Brazilian environmental legislation is that it is quite strong. Another way to understand these statements might therefore be the uneven application of the law in practice (Hochstetler and Keck 2007; McAllister 2004), which could explain why regulation has not become a salient target for business interests in Brazil relative to countries like the United States. One response from a representative of industrial water users contradicted this pattern, however, in an interesting way; he said:

Big mining companies -- both national capital and international capital -- are coming here to invest. They don't want any problems. Think about it: various state and federal organs ask for this or that license and when they get up and running -- hold on! -- this type of enterprise has to go to the [basin] committee. This has already happened with state [basin] committees. (Mw.i.1)

This response conforms to a "regulations are bad for business/competition" narrative, but it also challenges the belief among critical scholars that re-scaled, decentralized, participatory governance cannot provide a robust (albeit different) form of regulation. The state-level basin committees to which this respondent was referring are those of Minas Gerais, which resemble the federal committees in most respects except that they have additional powers over larger water allocations (whereas, at the federal level, allocation is the purview of the ANA; supposedly, ANA grants allocations in a way that is sensitive to the priorities defined by basin committees, but experience with the Transposição suggests that allocation functions differently in practice).

155 This is indeed why an eye toward recent "flexibilization" trends, raised earlier in the chapter, may become very important in the Brazilian context.

156 We may be seeing this changing currently, if the recent revisions to the Forest Code under Dilma's administration are any indication.
By way of context, it is also important to note that economic growth, resource privatization, and international economic considerations are not recent fixtures of Brazilian environmental policy. Many scholars trace the roots of Brazil's present environmental policies to the 1930s; the Forest Code and the Water (and Mines) Code were created in 1934 and divided water bodies into those that were public (with usufructuary concessions), common (among riparian landowners), and private (contained within private property); only in 1988 was water re-classified as a public good (Cavalcanti 2004; Farias 2009). Cavalcanti (2004) presents reforms from the 1930s as the basis for the (enduring) developmentalist mentality that places economic concerns above all else, but Farias (2009, p. 83) notes -- as discussed in Chapter 3 -- that "since 1500 in Brazil, water resources have been allocated on the basis of economic exploitation. The Brazilian government has continued to elaborate statutes, such as the 1934 Water Code, that promote capital infrastructure and seek to maintain the allocation of water for the production of goods for the international market."

Next, it is important to remember that the Brazilian regulatory landscape is also no stranger to reorganization with its own fluctuations in levels of (de)centralization over more than a century: the Old Republic (1889-1930) offered an example of regional control by rural oligarchies; the Vargas dictatorship (1930-1945) was highly centralized with an urban and industrial focus; the democratic period from 1945 to 1964 demonstrated a return to greater federative control, albeit without a formal policy of decentralization; the military dictatorship from 1964 to 1985 once again re-centralized power and privileged technocrats and the industrial bourgeoisie (although the traditional elites bided their time at state and local levels); and, since the transition to democracy, there has been a greater emphasis on decentralization once again157 as both a

157 Despite these changes, federalism has remained a continuous feature of the Brazilian political landscape.
reaction to the centralization and control experienced under the military dictatorship in addition to the neoliberal zeitgeist at the time (Scardua and Bursztyn 2003; Ferreira 1995; Abers and Keck 2006; 2009).

The emergence of contemporary environmental politics and regulation began in the 1970s. Following the Stockholm Conference in 1972, the military dictatorship created the country's first environmental secretariat -- albeit after having also asserted the primacy of economic development over emerging environmental concerns throughout the conference itself, creating the basis for framing environmentalism as foreign and subversive, which persists in certain circles (Hochstetler and Keck 2007; Lima 2011). Under the military regime, environmental advances were therefore necessarily made via "environmental guerrilla activities," in the words of the country's first environmental secretary (Hochstetler and Keck 2007). These activities were based around informal networks and often disguised formal policies in the technocratic and security-oriented palaver of the dictatorship; Hochstetler and Keck (2007) consider these actions to be consistent with a pattern in Brazilian socioenvironmental activism of exploiting and enlarging (even the most inauspicious) political openings, as discussed in Chapter 4. A consultative approach to environmental regulation, proposed since the 1970s, finally gained traction during the transition to democracy in the 1980s, and a decentralized and participatory approach was mandated by the 1988 Constitution (Hochstetler and Keck 2007; Farias 2009; Lima 2011). During the subsequent decade, federal environmental entities were reshuffled an average of every two years (not including re-arrangements stemming from reforms targeted at specific resources like water) due to "profound uncertainty about the definition of environmental issues" (Hochstetler and Keck 2007, p. 39).

Underneath formal re-arrangements lies a highly politicized institutional landscape; the capture of bureaucracies by regional elites and economic sectors has been common, political
appointments abound, and "formalism coexists with informality, and patronage-based standards of authority with meritocratic ones" -- thus creating conditions for power based on networks of relationships; "the actions and reach of these networks is what determines whether decisions, once made, actually take root in the social world" (Abers and Keck 2006, p. 605; Avritzer 2002; Hochstetler and Keck 2007). The personalized nature of elected politics contributes to this pattern, as Frey (2000, p. 245) points out: "contrary to more politically and institutionally consolidated countries, Brazilian governments should be considered much less the result of the ideological-programmatic orientation of the population or parties than a consequence of constellations of individuals." The outcome can be "changes, often sudden and radical, in the political course of national as well as state and municipal governments that manifest not just in political-administrative discontinuity in the transition from one government to the next" (p. 245) (this pattern also appears to account for some of the dramatic swings in CBHSF's ideological and strategic orientation depending on its leadership, as discussed in Chapters 4 and 5).

The legislative process also supports these politicized conditions by leaving the more contentious elements of legislation unresolved or requiring complementary or enabling legislation (Hochstetler and Keck 2007). Abers and Keck (2006, p. 612) suggest that Law 9433 is itself "a perfect expression of the tension between fragmentation and executive power in Brazilian politics: the key to resolving the tension was to make the rules so vague that it was difficult to tell which side had won." As a result of these patterns, many Brazilian laws não pega (do not stick) or are só para inglês ver (meaning they are "just for show" -- sometimes to mollify foreign interests)\(^\text{158}\) -- although these "institutional ambiguities" sometimes give "entrepreneurial actors

\(^{158}\) Só para inglês ver literally means "for the English to see" -- a term that derives from an 1831 law promulgated at England's request to formally abolish the slave trade; the law was intended to be ignored in Brazil while placating an empire upon which the young nation was economically dependent (Gurgel 2008).

Beginning with the Vargas administration after WWII, the government has periodically engaged in efforts to create entities within the bureaucracy that might be isolated from political interests -- a pattern of reform that, in Brazil, precedes efforts to "depoliticize" decision making that are usually associated with neoliberalization; the creation of national agencies such as ANA at the time engendered accusations of neoliberalization within Brazil but was also consistent with this pre-existing pattern (as is ANA's subsequent politicization). Because "the creation of such protected spaces in Brazil has usually occurred without dismantling pre-existing institutions" (Abers and Keck 2006, p. 605; Sikkink 1991; Geddes 1994) -- under the auspices of avoiding conflict with proponents of the status quo -- bureaucratic entities compete for control (Abers and Keck 2006) and thus create additional politicization and flux in the bureaucratic landscape.

As Hochstetler and Keck (2007) point out, the highly politicized (rather than institutionalized) nature of decision making in Brazil thus challenges path-dependent governance explanations and by extension, I would suggest, analyses of neoliberalization predicated on path dependence and wave-like regulatory transformation resulting in sedimented changes to institutional landscapes. Institutionalization is simply not that "sticky" (Hochstetler and Keck 2007); rather, it is characterized by "multiplicity, volatility, and inconsistence of institutional arrangements, political processes, and positioning attitudes" (Frey 2000, p. 246). As Hochstetler and Keck (2007, p. 18) write, "when we say that power often trumps institutional rules, we do not mean that institutions *never* work... However, because one can never be certain that they will, other kinds of political agency become crucial in examining a policy process... we must examine them
all the way through, from conception to enforcement, because the completion of one stage does not guarantee progression to the next." In this scenario, the continued presence of an amenable foundation for successive "rounds" of neoliberalization is thus far from guaranteed and is more dependent on the ongoing dedication of a "constellation" of adherents within the system than it might be in other regulatory contexts. Meanwhile, returning to the state-government-society triptych introduced in Chapter 4, "the government" occupation of "the state" as well as "liminal" state-society collaborations both articulate complementarily with and are more easily understood through this politicized context.

This context reveals that analytical approaches centred on path-dependent variegation -- while avoiding other approaches' pitfalls of excess analytical "noise," diminished salience of patterns, and reduced normativity -- are perhaps too quick to privilege certain conduits of neoliberalization and (despite being aimed at engaging with similarities across differences) may be more cross-contextually relevant than they are applicable to all governance configurations and types of "stateness." In the next section, therefore, I present another frame (neoliberal natures) that offers different means of accessing neoliberalizing patterns and processes in the São Francisco River Basin and that illuminates additional insight into the limits of neoliberalization with respect to the endurance of traditional governance patterns.

6.4 Targets and Tactics, (Socio)Environmental Fixes, and Socio-Natures

Neoliberalization of nature literature has focused on understanding neoliberalization in relation to the biophysical world, often in the context of the market's perceived extension into new socio-natural "frontiers." This research is united primarily by its subject rather than a coherent theorization of processes and patterns, and has therefore been critiqued as being comprised of

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159 It is not uncommon, thus, for a wide range of reforms to be só para inglês ver (Silva et al. 2011) or "lost in translation" -- as was the case, Tankha (2009) suggests, with efforts to privatize energy.
mostly non-contiguous case studies (Castree 2008a, 2008b). In this section, I consider first the São Francisco River Basin in relation to attempts to identify crosscutting patterns in neoliberal natures literature and examine spaces of dissonance and resonance through my empirical findings. I then consider an important intervention from Bakker (2010b) that reorients the study of neoliberal natures toward a socio-natural understanding of variegation, which clarifies processes of neoliberalization in the São Francisco basin as well as providing insight into the endurance of traditional governance patterns in the region and the ways in which they may even limit neoliberalizing processes.

There has been considerable debate over the patterns that characterize the neoliberalization of nature (Heynen et al. 2007; Bakker 2009; Castree 2008a; 2008b; 2009). Bakker (2009) proposes one of the more coherent approaches to patterning across neoliberalizing sites and materialities by considering targets of neoliberalization -- such as institutions (rules, norms, and laws), governance (decision-making practices), and socio-natural actors -- and tactics of neoliberalizing processes (e.g. the marketization of property rights, private sector participation in resource management, ecological fixes for environmental pollution, etc...). Used simply as a prompt, as Bakker intended,160 these tactics offer a starting point for rich discussion about areas of dissonance and resonance in governance in the São Francisco River Basin with patterns of neoliberalization observed across contexts; one example is the notion of (socio)environmental fixes, which Bakker (2009, p. 1782) -- contrary to the formulations of Castree (2008a; 2008b) --

160 This is a very useful approach because it offers concrete but not exhaustive examples, and Bakker intends it as a suggestion for how a conceptual framework might be constructed. Indeed, there is a danger in embracing this framework as orthodoxy rather than a prompt: many of the "tactics" exhibit a problematic potential to privilege associations with neoliberalizing processes by occluding concomitant influences and complex causality. Embedded in a given political context, cause and effect becomes much less clear; there are social and political movements that cannot be reduced to mere examples of Polanyian "double movement" (despite being interrelated with economic processes).
defines as "strategies of externalization and internalization of socioenvironmental conditions, in
search of profit..." Other authors have also strongly associated neoliberalization with specific
(socio)environmental fixes -- such as "sustainable development" and other types of
"greenwashing" that validate voracious consumption through "clean" versions of dirty business
and "fair" versions of exploitation. While the opportunity to turn a profit once appeared to be
limited by environmental destruction, such fixes reframe the mitigation of destruction as an
additional source of profit (Warhurst and Bridge 2003; McAfee and Shapiro 2010; Bakker
2009). Despite being presented as "win-win" solutions, such approaches can end up
exacerbating uneven development (While et al. 2010). Moreover, (feel-good) consumption
regularly occurs far from its (socio)environmental consequences, thereby creating the conditions
for a sort of predatory paternalism. 161 This occurs not only because of the increasingly global
scope of socioenvironmental problems but also because, as Robertson (2007, p. 117, italics
original) suggests, neoliberalization frames the environment as "that which is common to all of
us... [and] Hence, global environmental management emerges as a main trope of neoliberal
globalization" -- along with its "authorless, actorless, and free of history" market solutions.

Although related narratives in the São Francisco basin demonstrated incredible contradiction, I
did encounter a few examples of the "kinder, gentler neoliberalism" to which
(socio)environmental fixes presently aspire; as one agricultural representative opined:

We work to feed everyone. We give employment. Everything. That is why you
need to sacrifice the environment -- or rather modify it, right? Mod-i-fy the
environment... Environmentalists say when you deforest an area for production that
you are "destroying" the cerrado. We say that we are "incorporating new areas into
the productive process." (Mw.ii.2)

I was presented with another example in an interview with a university-based respondent who
recalled federal minister's speech during the 2011 plenary session in Petrolina, PE, in which the

161 This is a dynamic that, thanks to the international politics of the Amazon, Brazil knows all too well.
minister declared that the government was "revitalizing the basin" by planting eucalyptus. Appearing flabbergasted by the use of the word "revitalize" to describe the government's plans, the respondent posed the rhetorical question, "do we want to conserve the basin... or foster development--no, economic growth?" (Mc.vi.1).

On the whole, however, it appeared as though "sustainable development" as a (socio)environmental fix had little traction; socioenvironmental respondents tended to associate "development" with (stratified and stratifying) growth schemes that they viewed as inherently antithetical to social and environmental objectives while respondents representing economic interests maintained an oppositional framing of "development" versus "environmentalism." One agricultural representative even began our interview by placing a book in my hands entitled "Environmentalism: New Colonialism" (the second in a series called "Green Mafia"). It opens with the claim that environmentalism was "artificially created by 'social engineers' of the oligarchic Establishment" in the wake of the elimination of the gold standard and financialization of the global economy, the popularization of a Limits to Growth-inspired concept of the "post-industrial society," professionalization-oriented education reforms, and a Frankfurt school-based "rock, drugs, and 'sexual liberation'" counterculture. It goes on to state that the environmental movement's "...primary proposal is to impose the fallacious idea of the physical impossibility of every country in the world being able to enjoy high levels of development and social justice...", which is "a colonialism of a new sort... [that] forces subjugated individuals to organize themselves against the interests of their own nation..." (Lino et al. 2005, p. 13). Although this motley collection of grievances and their conspiratorial presentation perhaps lie outside of the mainstream, resentment over the Global North's paternalistic approach to resources and the environment is broad based in Brazil and across the South (Najam 2005); this resentment bucks efforts to enrol "the environment" (as a nationally scaled space) into the neoliberalizing vision of
environment-as-global-market (however, this rejection may have more to do with the colonial arrogance of rhetorically appropriating and administrating other nations' "resources" than with internalizing (socio)environmental externalities vis-à-vis neoliberalization per se). Moreover, as in the aforementioned book,\(^{162}\) this perspective can be employed to delegitimize the concerns that give rise to a (socio)environmental fix ethos. The "twist" in this narrative, however, is that the respondent who gave me the book represents large-scale producers of soy, cotton, and other commodities -- producers that, for the time being, are quite sympathetic to "the market" despite some apparent ideological incompatibility: "if the price is good," the respondent told me, "[producers] will plant" (Mw.ii.2).

Asked about actively courting so-called socially or environmentally conscious consumers, there was some acknowledgement of the "PR" benefits that might accrue to multinational behemoths such as mining giant Companhia Vale do Rio Doce (Vale), but when it came to consumer choices, a representative of industrial interests dismissively mocked the rhetoric: "'Oh, but society these days won't buy environmentally unfriendly products!' It's a lie -- a lie" (Mw.i.1). Well aware of the irony of the Global North pressuring Brazil to reduce export-driven deforestation (Schwartzman et al. 2010; Banerjee et al. 2009), another respondent declared that initiatives such as labelling Amazonian beef were "silliness:"

> It is nothing more than propaganda because those countries in the First World -- the United States and Europe, principally -- don't want us to have the same development that they do. Not China. Not India. Not anyone. Because it is a very simple fact: we do not have enough natural resources for all of these billions of people to consume the way that people in the United States consume. I have not seen a single movement with respect to Americans not consuming as much. (Mw.ii.2)

\(^{162}\) The delegitimization of environmental concerns and valorization of capitalist exploitation by reframing social inequities in a nationalist light rather than recognizing poverty as interlinked with environmental destruction exhibits echoes of the "poverty is the worst pollution" mentality that prevailed during the dictatorship (Duarte 2005; Zhouri 2007).
The representative pointed out furthermore the futility of such sanctimonious, self-important consumption:

India eats it, China eats it, Africa eats it. So the United States doesn't eat it? Europe doesn't eat it? Not a problem; the others do... You don't want it? Well, China wants everything! ...It's money that's in control... [For a good price, a producer] will do it. (Mw.ii.2)

These comments are indicative of beliefs supporting an unbridled capitalism with respect to environmental exploitation, but -- despite favourable feelings toward the market at present -- they do not appear to conform to neoliberalization via (socio)environmental fixes (or appear to acknowledge externalities at all, for that matter). The extent to which these statements address North-South patterns of predatory paternalism and resentment, they may also be taken as a critique of deepening uneven development under neoliberalization. Despite running ideologically contrary to neoliberalization in many ways, however, these statements are being used to justify processes that are complementary to neoliberalization processes. Nevertheless, there is evidence -- even among some of the basin's dyed-in-the-wool capitalists, including the agriculture representative mentioned above -- that Command-and-Control conceptualizations endure:

What I think people are losing focus of, which is a tremendous mistake, is establishing the preservation foreseen in law and working within that. That's fine. I agree completely. Legal reserve? Sure. APA? Ok. (Mw.ii.2)

In order to make sense of these spaces of dissonance and resonance with patterns of neoliberalization, I turn to Bakker's (2010b) rather surgical intervention in discussions of neoliberal natures, which entirely reframes the debate by first engaging with recent scholarship on the ontology of "nature." Recognizing that limiting "nature" to traditional "resources" alone (despite making the neoliberal connection starkly obvious) limits the depth and breadth of potential inquiry, she calls for a closer engagement with the idea of "socio-natures," which she uses "to invoke the necessity of dispensing with the humanist model of the subject, and
associated nature-society dualism so central to modern thought," and by thus going "beyond nature," she is able to access a glut of under-examined ways "scholars might engage more comprehensively with the multiple entanglements between socio-natures and capital under neoliberal modes of governance, while accounting more fully for the co-presence of the non-human – both animate ‘nature’ and inanimate ‘things’ – within conventional human worlds" (p. 717). Only then does she turn her attention to neoliberalization, tapping Brenner et al.’s (2010) notion of "variegation" -- but substituting path dependence for socio-natures; she argues that:

...strategies of neoliberalization are modulated by different kinds of socio-natures – not only because of their different biophysical characteristics, but also because of their articulation with labour practices, consumption processes, and affective relationships... The neoliberalization of socio-nature must thus be understood as, simultaneously, a disciplinary mode of regulation, and an emergent regime of accumulation that redefines and co-constitutes socio-natures. (p. 726; italics mine)

Bakker's socio-natures conceptualization of neoliberalization offers a useful means of engaging with some of the patterns that are underappreciated by a more institution-centred approach. Through this lens, we can access some of the conflicting socio-natural relationships that have contributed to conflicts between uses in the basin and the way those relationships are partially or totally amenable to or contrasting with neoliberalization. A respondent from the agriculture sector, for instance, characterized his constituency's socio-natural relationship with the basin and juxtaposed it with what he perceived to be that of traditional communities, explaining the alleged irreconcilability (in menacing terms):

Understand: me, here, in my agricultural federation, in many moments, I think that the "índio" is making things difficult\textsuperscript{163}... Folks here have a [belief] that the Americans resolved this standstill\textsuperscript{164} well before us. They killed everyone -- left just a few people... -- and there's no one to bother them... in these processes of expansion... We [in agriculture] have a way of seeing such that our world is agricultural production... [But] there are other things that need to be cared for in the lives of "índios." (Mw.ii.1)

\textsuperscript{163} Translated from atrapalhando.

\textsuperscript{164} Translated from parada.
The socio-natural relationship associated with the type of agriculture being expanded within the basin is presented as validating the destruction of incompatible ways of being and worldviews (as well as the communities themselves) so as to facilitate capitalist accumulation. Once again, this perspective is amenable to neoliberalization, but missing from this socio-natural formulation is the expanded accumulation horizon provided by neoliberalizing processes simultaneous symbolic inclusion and material exclusion (Miraftab 2004) -- which, of course, are no less violent but are much less transparent.

Evident from these statements is what a representative of traditional communities (using the Portuguese word *explorar*, meaning both "to explore" and "to exploit") called this the continuation of "exploration that says you have to exploit... The death of the river. The death of the forests... Exploitation of the soil... Exploitation of people, of animals..." (Mc.v.3). He called attention to the grim absurdity of such practices: "if someone is an agroindustrialist, if someone is a large-scale producer -- even destroying everything -- it's valorized... But the people who, in fact, produce this nature and guarantee the survival of this river, have no value." This observation that "the people... have no value" is an important one as it highlights the role of the economy in shaping socio-natures and strengthening destructive and exploitative socio-natural relationships that otherwise make little sense. Responding to a question about how many individuals who might claim traditional identities resist doing so, the respondent also reflected on how values intimately connected to economically oriented socio-natures (in this instance, agricultural expansion) reverberate through the subjectivities of traditional communities:
The capitalist economy is something that sustains this politics [of not wanting to claim traditional identities]... If I were to find all of the means that I need in my quilombola community to live tranquilly I would be proud to be quilombola, but when I go to my quilombola community and everyone tries to destroy me, to finish me off, I have two alternatives: either I fight so that this destruction does not destroy me, or I adapt to this way of thinking [of inferiority]... so as to live harmoniously.

This socio-natures frame also helps us to understand how international and economic influences have contributed to increasingly technical relationships with the river. This dimension of socio-natures seems to parallel the view in governmentality-oriented framings of neoliberalization that neoliberalization's influence is "owing to the significance of the ‘rule of experts’ and technocratic knowledge-elites...,which follows from a Foucauldian contention that knowledge and power are inseparable" (Springer 2010, p. 1033; Mitchell 2002). The São Francisco River Basin, as observed by one respondent, has long been constructed from the outside. The recent history of international involvement began in the Vargas administration, as ties between the US and Brazil became stronger -- causing Brazilian society to be "contaminated" by "the American Way of Life," according to DNOCS's website on the department's history (DNOCS 2010). In the post-war era, the São Francisco was among multiple TVA-inspired interventions to crop up in large river basins worldwide, and the US Bureau of Reclamation was central to elaborating the first integrated "development" plans of SUVALE (IICA 1990). Although CODEVASF does not trumpet their links to the US Government any longer (despite ongoing projects with, for instance, the Army Corps of Engineers), older publications offer evidence of their relationship -- with the Bureau of Reclamation logo alongside that of CODEVASF. The World Bank was also

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165 Translated from acabar com a vida.

166 Even the book, O Homem no Vale do Rio São Francisco -- published by SUVALE in 1971, considered the "definitive" work on the São Francisco basin, and used by CODEVASF -- was written by an American sociologist, Donald Pierson (Bomfim 2006). To his credit, Pierson did was not an "expert" in the geographically disconnected sense; although he received his PhD in the US, he spent his academic life in Brazil (Oliveira and Damasceno 2008).
involved with agricultural programs as well as several dam projects in the river (Redwood 1993), the execution of which shows a pathological disregard for the vast majority of the 160,000 people displaced by three major projects. The São Francisco River Basin continues to be a focal point of planning, studies, and other assistance from development agencies such as UNEP and OAS. And while -- as introduced in Chapter 1 -- Brazil's recent water governance reforms also resulted from a number of autochthonous motivations, international influences were certainly brought to bear in terms of pressures from abroad and proponents from within (such as Jerson Kelman, the first head of ANA, who was also a World Bank consultant; he is now the head of ANEEL). One federal government respondent made it clear that such international considerations must necessarily factor into the government's decisions.

If the institutional manifestations of these interventions have not always delivered predictable outcomes (as discussed in the preceding section), however, the effect of these interventions on moderating socio-natures within the basin have been substantial. This "technicalized" relationship to the river has strongly impacted which knowledges are valued in the decision making process -- a dynamic that has infiltrated CBHSF as well. Water users were more comfortable employing the technical frame to their economic ends in interviews -- and using it to delegitimize other knowledges and socio-natural relationships:

[Traditional communities] don't have a technical means of analysis. They have an emotional and relational analysis with the river... And we, the users, become exasperated because they don't make decisions rationally. (Mw.i.1)

167 Translated from ficar numa da nada da vida.

168 Some respondents also disparaged individuals from traditional communities who did not behave in ways those respondents considered "traditional;" "there are 'índios' and there are 'índios,'" one respondent said -- although the latter "índio" was not embraced as a fellow capitalist but was presented in the context of gaming the system and, paradoxically, of "proving" the illegitimacy of other traditional communities' claims.
Respondents from civil society and traditional and fishing communities confirmed their difficulties asserting non-technical understandings of the river. One respondent -- who had spent nearly his entire life in, on, and near the river -- suggested that he nevertheless hesitates to share his observations:

None of the decisions that we contest are technical. Generally the technical wins out because the técnico talks with me only when he wants to talk with me. Suddenly, he starts using technical language, and I have no way of debating him. (Mc.v.5)

The belittling attitude toward the very participants that participatory water reforms sought to engage was also viewed by several socioenvironmental and traditional communities' representatives as a missed opportunity in terms of making good public policy. A representative of fishing communities (paralleling the famous statement on "Western civilization" attributed to Ghandi), turned "the gaze" back on water users, stating that he would like to see more "environmental education because this area is full of agricultural producers that use agrotoxins..." (Mw.iii.2). Another respondent elaborated on the narrowness of technical understandings:

I, speaking as a quilombola, am sometimes not as listened to as a scientist. He is educated perhaps in hydrology but not in biology. He is educated in biology but not in agronomy... I can tell you without reservation, that quilombolas and indígenas are educated in all of that... There's no point in the personnel of the other organizations who know the reality technically or theoretically not taking popular knowledge into consideration... Practical knowledge is surely superior to theoretical [knowledge] because it's attained throughout the life history of the people... Theoretical knowledge often times diverges from reality... [or is] based on a region... There may be contradictions when you apply theory in diverse regions. (Mc.v.3)

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169 Because self-identification is a central criteria for recognition of traditional communities in Brazil, some respondents also suggested that there were complicated politics surrounding the decision -- sometimes by a sub-section of a community -- to claim an identity; this is a topic to which I cannot do justice here, unfortunately.

170 Translated from na maior tranquilidade.

171 Translated from saber.

172 Translated from conhecimento.
Although the tensions between these knowledges are not strictly confined to neoliberalizing circumstances -- and indeed reach well into colonial history -- water user and government respondents did tend to frame deliberation and decision making on CBHSF in liberal democratic terms -- emphasizing "equal" opportunities to speak and vote and ignoring the need to accommodate multiple knowledges -- which is a common critique associated with neoliberalization and participatory spaces. A respondent representing agricultural interests jokingly observed, for instance, "nobody says 'hey, what do you think?' No, no. Those who want to, speak; those with good sense, obey... Which is absolutely democracy, right?" (Mw.ii.1).

This response (fala quem quer, obedece quem tem juízo in Portuguese) is a play on the popular saying manda quem pode, obedece quem tem juízo,173 which can be understood loosely as "might makes right;" it offers an interesting insight into the intersection of a (neo)liberal democratic frame with traditional governance patterns. Mota (2009, p. 121) suggests the original phrase illustrates how "Brazilian public space is dominated by an exclusive, hierarchical logic in which conflict is represented as an expression of opinions of unequal people." Ricci (2008) also invokes the adage in describing the incompatibilities between the Brazilian bureaucratic structure and participatory spaces. Scholars of discourse would no doubt understand the interchange of falar (to speak) and mandar (to command/to order) as an honest reflection of power relations in addition to being a play on words. Whether understood in terms of (neo)liberal democracy174 or traditional governance patterns, however, (over-)statements like

173 Literally, it means "[he/she] who can, commands; [he/she] with good sense, obeys."

174 Despite the maintenance of inequality through a (neo)liberal democratic discourse, however, most actors viewed CBHSF not as depoliticized like some scholars might expect (Vázquez-Arroyo 2008) but as a space of considerable conflict. As a representative of state government said, "a meeting without debate is no longer the São Francisco committee... If there are some committees on which everything is agreeable (bacana) -- all 'flowers,' everyone getting along -- ...[they aren't] defining or debating their interests" (Mg.viii.2)
that of a federal government official who insisted that his ministry "is a member [of the committee] in the way that a fisherman is a member" (Mg.ix.4) exhibit compounded absurdity. Another respondent offered the necessary rejoinder:

The power to vote is the same, but the power of argumentation [of certain groups]... isn't as important as that of a state minister or the representative of an export-producing institution... [and, in] the decision process of voting, [it's not as important as] that which the elite still believes. (Mc.v.3)

In an unexpected twist, however, CBHSF appeared to foster a changed socio-natural outlook among some water users that undermines the socio-natural order and associated knowledges attributable to the interests of their sectors. Paralleling arguments in favour of "deliberative democracy," an agriculture representative stated: "the 'índio' talks more than I do there, and out of the blue,\(^{175}\) brings up a concern that never would have entered my head!" (Mw.ii.1).\(^{176}\) A representative of industrial interests expressed similar sentiments:

After a while, you start to have some limitations [as a stakeholder]... You start to confuse your values with... those which society or the participants on the committee would like you to have... I haven't left [the committee] yet because I adore the São Francisco. I like that environment, that confusion. That's why I'm actually hoping that the company will remove me -- precisely because I'm already liking it, and, liking it, I start working with emotion instead of working with reason. (Mw.i.1)

A representative of traditional communities also acknowledged that "society's critiques sometimes modify the thoughts of those who just think about destruction" (Mc.v.3). Such deliberative gains quickly reach their limits, however, because business representatives or government appointees are constrained by their institutional affiliations and professional considerations, and -- as a respondent from the agriculture sector noted -- members' altered perspectives do not extend to the administration of the institutions they represent.

\(^{175}\) Translated from de repente.

\(^{176}\) Asked whether these heretofore unconsidered contributions could change his mind, the representative responded "Without a doubt! That's why it's great (legal)!"] The respondent also complained at another point, however, that "when you're in the process of negotiating and everyone has a right to speak, it's f***ed up (foda)" (Mw.ii.1).
Bakker's approach also offers us a way to think about concomitant patterns in the basin that exist in relation to, but cannot be attributed in large part to, neoliberalization -- such as traditional governance patterns. Bakker suggests we approach questions of resistance "as creative engagement with processes of neoliberalization in which socio-natures reshape and reframe -- in positive as well as negative ways -- the conditions of their own reproduction" (p. 729). I read this suggestion in a slightly broader way, going beyond resistance per se and understanding it as an invitation to investigate how certain socio-natures (re)produce -- and shape the conditions of their own (re)production -- in (or in spite of) a neoliberalizing world. This gives us a powerful means of conceptualizing the perpetuation of traditional governance patterns that I suggest continue to dominate water governance in the São Francisco basin; as discussed in Chapter 3, the status of the basin's elite is heavily intertwined with water resource governance -- be it the drought industry, domination of land and agriculture, large-scale water infrastructure projects, the politics of hydroelectricity, or manipulation of the public's access to water and moderation of their relationship to the river. These socio-natural manifestations offer key insights into the processes (like moderation of the state-society relationship and occupation of the state), territorial and political scalar attributes, and tactics (like clientelism, violence, and "development" strategies) that maintain the robustness of traditional governance patterns in the basin.

A socio-natures approach thus illuminates both why and how neoliberalization's geographically relevant manifestations cleave to spaces of overlap with more "conservative" capitalism and state intervention as well as resisting the government to governance shift on CBHSF, and it also helps to explain the continued dominance of traditional governance patterns in predicting or explaining water-related decision making in the São Francisco River Basin. The question is whether the "thinness" of neoliberalization and its moderation through traditional governance patterns simply
stand as tributes to the variegated and uneven character of neoliberalization or (while not quite "contestation") demonstrate limits to neoliberalizing processes in the basin given the different (often compatible but not conflatable) emphases of neoliberalization versus traditional governance patterns. The iterative quality of traditional governance patterns suggests a tendency to penetrate paradigmatic shifts and apply politically useful changes while maintaining those that have served to perpetuate such patterns in the past. An excellent example, of course, is how international interventions and partnerships have encouraged and exacerbated types of regressive development that were (made) compatible with and incorporated into traditional governance patterns. Another example is the concomitant existence of second- and third-wave water governance in the basin -- although third-wave governance (which is less compatible with the territorial and governmental aspects of traditional governance patterns) may be subsumed by second wave projects, as is evident from the Transposição. At the very least, I wish to highlight that traditional governance patterns preceded neoliberalization; have co-existed with and then superseded multiple and varied economic, social, and environmental shifts; and thrive through (re)iterating the "status quo;" Bakker (2010b) suggests that neoliberalization and socio-natures are co-constituted, but I would therefore argue against a flat or agnostic conceptualization of co-constitution in light of traditional governance patterns continued dominance.

6.5 Conclusion

The São Francisco River Basin affirms Peck's (2010) observation that neoliberalization is omnipresent. It exists in the basin in predictably contradictory, contested, and convoluted forms; water governance is sometimes ideologically at odds with neoliberalization yet supports, at least in part, neoliberalizing processes; sometimes sympathetic to neoliberal objectives but functioning in ways that undermine neoliberalizing processes; and sometimes able to reinforce the aims of multiple sectors or groups. Seeking analytical precision in this maelstrom of patterns
and processes is often well served by analyses that focus on regulatory reorganization and institutional landscapes in order to understand and engage with manifestations of neoliberalization across sites and scales, but this approach encounters challenges in the Brazilian context as high levels of politicization relative to institutional consolidation make it difficult to ascertain the "stickiness" or sedimentation of reforms at the national and sub-national levels.177 Framing neoliberalization in the basin in terms of socio-natures on the other hand illuminates both why and how neoliberalization's geographically relevant manifestations cleave to spaces of overlap with past paradigms (that make it difficult to differentiate between neoliberalization and other capitalist projects) and additionally helps to demonstrate the continued dominance of traditional governance patterns in predicting or explaining water-related decision making in the São Francisco River Basin. The iterative quality of traditional governance patterns suggests a tendency to penetrate paradigmatic shifts and apply politically useful changes while maintaining those that have served to perpetuate such patterns in the past, leading to a central conclusion of this research: the more things change -- quite literally -- the more they stay the same.

177 At the very least, this suggests the need for greater attentiveness to a wider range of conceptualizations of stateness and hints at the ways in which the prospects of neoliberalizing processes are themselves affected by questions of stateness.
7. Conclusion

7.1 Introduction

In concluding this thesis, I present a synopsis of the chapters herein and their central arguments as well as offer observations on the ways in which they inform one another and speak to the larger issues explored in this research. I then discuss the gaps and limitations of my findings and approach and go on next to offer thoughts on future research directions based upon the questions raised in the preceding chapters. Finally, I turn to the Lower São Francisco to attempt to address the calculus that ultimately determines the answer to the question: "how much for Old Chico?"

7.2 Thesis Synopsis

Through this research, I sought to understand the governance patterns and power configurations that both shape and are shaped by basin-level water governance as it has been applied in Brazil. I focused explicitly on CBHSF as a decentralized, re-scaled, and participatory governance space and probed the role of the cobrança in water-related decision making. I chose to examine the São Francisco River Basin for its diversity, disparity, historical importance, and political complexity and mobilization, although I was also limited to the São Francisco basin for the same reasons (in addition to its size). Based on optimistic accounts of participatory governance in Brazil as well as my own participant observation in a sub-basin of the river in 2010, I expected to find an active and engaged civil society exercising increased influence on the decision-making process and drawing greater attention to the needs of often-marginalized groups. If the process were to exhibit regressive governance patterns, I assumed that it would result from giving increased weight to economic logics and interests through the use of EI that would simultaneously disadvantage the state and the public vis-à-vis a national and international business elite. If the latter came to pass, I could perhaps discuss the effects of the neoliberalization of nature in Brazil. If it did not, however, I expected that I would be able to
draw conclusions about differentiating neoliberal participation-as-cooptation versus progressive expansion of decision making processes through participation and -- hopefully -- shed light on how it was achieved.

I drew these "hypotheses" from the literature discussed in Chapter 2, which I opened with an examination of the scalar dimensions and history of the river basin concept -- including its three "waves:" the first, associated with large colonial infrastructure projects; the second, based in an enthusiasm for planning and associated with TVA-like development schemes that became a Cold War-era export to basins around the world, including the São Francisco; and the third, based in the Dublin Principles, that underlies Brazil's 1997 basin-level water governance reforms. I then considered two related policy processes: decentralized, re-scaled, participatory governance on the one hand and the application of EIs on the other. In the case of the former, I presented purported advantages of and barriers to decentralized, re-scaled, participatory governance as well as critiques of apolitical and acontextual conceptualizations of such reforms including Pretty's (2003) warning that participation should not be readily accepted as amenable only to progressive forms of governance and Crozier's (2010, p. 509) observation that opening the "black box" on the "'politics' of a political system" may allow us to perceive iterative and non-linear conceptualizations of governance. With respect to EIs, I explored efficiency- and externality-centered theorizations as well as the tendency of bulk water charges -- such as the cobrança -- to buck conceptual premises. One reason why EIs are a bit unpredictable is that they do not function in a vacuum but in complex political systems (and allegations of economic myopia are already well-established in critiques from disciplines that do not automatically privileged the economic frame). EIs have also been critiqued from the perspective of equity concerns related to the commodification of water resources, although Page (2005) rightly points out that scholars may occlude already-complicated political questions with already-sophisticated methods of
governing often already-stratified societies (that are also globally already connected) if they romanticize or ascribe atemporal properties to customary resource allocation (or presume that it takes certain forms) in the Global South. Lastly, I concluded Chapter 2 by examining the articulation and disjuncture between basin-level governance processes and neoliberalization, including neoliberalization in Latin America and the neoliberalization of nature.

I did not expect -- nor particularly desire -- to conclude that traditional governance patterns continue to dominate decision making in the São Francisco River Basin, as I argued in Chapter 3. Pretty, Crozier, and Page's observations portend the non-linear, regressive governance patterns I encountered, which -- although dramatically exacerbated by international socioeconomic and socioenvironmental injustices -- have long characterized water governance in the São Francisco basin. I engaged primarily with the manner in which the elite exercise domination -- including components dependent upon territoriality and mediating state-society relations -- through patron-client relationships, the politics of "development," and the use of force. Specifically, I attempted to supplement structural and institutional explanations of patron-client relationships with discussions of the violent consequences of non-compliance as well as the "material conditions of the sertão" (Kenny 2002, p. 128) that the elite exacerbate and exploit to their benefit; the most relevant examples with regards to water governance in the São Francisco basin are "development" interventions with high local socioenvironmental costs that "export" benefits to other areas of Brazil and accrue greater money and power to a handful of elites. I concluded the chapter by remarking upon the iterative quality of elite domination in the basin with adjustments rather than ruptures such that these patterns demonstrate impressive, reproductive persistence -- sometimes in tension with but nevertheless surviving and superseding multiple changing social, economic, and environmental re-framings (the politically "useful" elements of which -- including many markers of second-wave water governance -- endure).
The patterns outlined in Chapter 3 help to explain why there is a perception among many socioenvironmental activists that, as one civil society respondent stated, "here in Brazil, less state is the democratic path" (N.2) and why decentralized, re-scaled, and participatory water governance might be seen as an enticing alternative. I therefore turned to CBHSF in order to explore this fraught state-society relationship in Chapter 4. First, I detailed one example of how participatory space was initially denied but ultimately produced within CBHSF that is characteristic of a pattern, proposed by Hochstetler and Keck (2007), of civil society identifying or creating and then exploiting and enlarging openings in the decision-making process. Next, I engaged with recent scholarship on the state-society relationship that speaks to politically progressive advances that belie its traditionally oppositional conceptualization; instead, some Brazilianist scholars see a substantial "grey area" often characterized by liminal actors or institutions, bureaucratic marginalization, and governance improvisation. Several respondents, however, relied on a tripartite distinction of "the state," "the government," and "civil society;" while both "the state" and "the government" can be understood in political terms, "the government" pursues personalistic and partisan politics through the occupation of "the state" and at the expense of responsive and egalitarian state actions. This distinction reveals that the central conflict within CBHSF is an "existential" one: will "the government" determine the committee's decisions or is it capable of articulation with(in) the state? I concluded the chapter by presenting a troubling recent episode in which two members of the committee's Directorate were implicated in unsavoury and allegedly corrupt behaviour (which presents an example of the persistence of the traditional governance patterns discussed in Chapter 3 and their relationship to the tripartite state-government-society distinction); despite the upsetting circumstances outlined therein, I also cited reasons for cautious optimism: while CBHSF is by no means inherently favourable to progressive governance outcomes, it might in fact provide (hard-fought) space in which
traditional governance patterns may be made less robust than in other areas of Brazilian political life. If nothing else, CBHSF affirms the ambivalence of basin-level governance fora and emphasizes the importance of politics and process.

This ambivalence is also evident with respect to the *cobrança*, which has proven to be a surprisingly polyvalent political tool despite being a rather weak EI, as I detailed in Chapter 5. I presented first the form and function of the *cobrança*, which I compared to its stated goals in legislation and economic theory. It has not achieved its advertized ends, which economists might explain as a matter of pricing; however, echoing critiques of EIs presented in Chapter 2, I suggested that the process of determining *cobrança* prices indicated that the "right" price (if such a thing exists outside of the axes of a graph) to achieve the theoretical goals of the *cobrança* was simply not an option. Rather, I argue that prices were the result of a strategy to ensure merely that water users pay *something* in a political system in which compliance has been a perpetual problem and the judiciary has often served to prolong rather than resolve disputes. I also suggest -- using the examples of the *Transposição* and the *Carta de Petrolina* -- that while economic logics are peripheral to the form and function of the *cobrança*, it merits attention for its role in the ongoing existential struggle within the committee (presented in Chapter 4); in this incarnation, it has been wielded by both "the government" and so as to contest prejudicial government decisions.

Chapter 6 explores the complexities of neoliberalization "on the ground" as it engages with other processes and patterns in the São Francisco River Basin -- and, like Chapter 5, it attempts to account for neoliberalization's comparative marginality in predicting or explaining decision making on CBHSF and (to a lesser extent) in the basin generally. I argue that although neoliberalization offers a relevant lens through which to understand some elements of and motivations for water reforms in Brazil, empirical evidence from the São Francisco River Basin
demonstrates analytical challenges. Although crucial for constructing a coherent critique of neoliberalization, literature centred on analyses of regulatory change and institutional landscapes encounters difficulties because the highly politicized (rather than institutionalized) nature of decision making in Brazil challenges analyses of neoliberalization predicated on path dependence and wave-like regulatory transformation resulting in sedimented changes to institutional landscapes. Literature on the neoliberalization of nature -- which is united primarily by its subject matter rather than a coherent theorization of what is "neoliberalized" or how -- provides another vehicle through which to engage with examine spaces of dissonance and resonance between crosscutting patterns in neoliberalization-related literature and governance in the São Francisco basin. Finally, Bakker's (2010b) engagement with socio-natures offers illuminating insight into the articulation of neoliberalization with concomitant patterns and processes as well as the endurance of traditional governance patterns in the region and the ways in which they may even limit neoliberalizing processes.

Taken together, these chapters suggest a collection of complicated calculations that are not merely economic and, in some cases, do not necessarily favour economic interests outright. This may be because, in a politicized rather than institutionalized state such as Brazil, as Hochstetler and Keck (2007) note, being in power gains increased importance. Power (while not divorced from money) is thus among the most valuable assets the elite possess; as Hagopian (1996) points out, the Brazilian elite -- perhaps more a club than a class -- are not united by their means (or even means of production) so much as their means of accessing and maintaining control (especially through moderating the state-society relationship, often with attendant territorial and familial components). The elite are creative in fostering the conditions for and (re)establishing iterations of this status quo, but socioenvironmental activists are also innovative and attentive in identifying and exploiting opportunities to interrupt such patterns and re-direct actions.
throughout a governance process that extends well beyond formalizing a decision on paper (Hochstetler and Keck, 2007; Keck and Abers 2006); CBHSF is meanwhile situated along this fault line, offering the potential for both occupation and contestation -- as indeed does the cobrança, which has provided a means of (federal government) control and (socioenvironmental) resistance -- as well as catching the attention of sub-national political opportunists. These circumstances suggest strongly that we should avoid the tendency, on the one hand, to normatively construct government as the progressive remedy is this neoliberal age -- at least not without carefully considering the function as well as the form of the state apparatus -- but that we must also recognize, on the other hand, that this situation is more situated and nuanced than a (persistent) case of state failure.

7.3 Gaps and Limitations

Many of the gaps and limitations in this thesis stem from choices made with respect to bounding the research. Like the river basin, this study is awkwardly scaled, and like water within a basin system, the subject matter is interconnected but not discrete. Moreover, as discussed in Chapter 1, the São Francisco River Basin itself offers a challenge simply because of its size. These choices with respect to scales of analysis versus scales of related systems and processes, furthermore, influenced the intellectual debates (and their related scales) with which I was able to engage.

First, the broad governance questions that guided this thesis can create the conditions for conducting research as "a jack of all trades and a master of none." Water is an (in)famous connector of -- for lack of a better descriptor -- "everything," and try as anyone might, it is simply not possible to be sufficiently versed in any and all aspects of the hydrosocial cycle (let alone the multiple perspectives that exist with reference to a given area thereof). By working at the basin scale -- across uses, loci of decision making, categories of "stakeholders," etc... -- I
made the choice to go "wide" rather than "deep" (although I did attempt to gain a deeper understanding of the cobrança, but the empirical evidence referred me back to the same set of governance patterns). I made the decision to (critically, I hope) represent respondents' perceptions of process rather than risking a more "siloed" account, but there are areas of this research that would have benefitted a different approach. I also made this choice based on the desire to be as inclusive as possible of diverse knowledges, but I recognize that some individuals may be dismissive of the findings herein for that very reason.

I found that conducting a basin-level study also created conflicting analytical scalar loyalties -- thanks, in large part -- to the "problem shed" critique and the issue of "multi-level governance;" compared to scales of influential processes or patterns, of projects, or of government, the basin scale appeared downright arbitrary on many occasions. For instance, the discussion of traditional governance patterns engaged heavily with patterns of water access and exploitation in the sertão, which is a term used (with varying degrees of accuracy and specificity) in relation to differently scaled biomes (cerrado and, primarily, caatinga), climate (semi-árido), sub-national region (the Northeast), and geographical imaginary; indeed the São Francisco is often discussed as a river (or The River) associated with all of these scales even though none of them are scaled to the basin. As Chapter 3 discusses, these patterns are also intertwined with patterns and processes at other scales of influence or decision making that encompass the basin (such as the nation itself), (have) impact(ed) it without being geographically contiguous (such as the Tennessee Valley), and do not manifest physically or evenly despite being territorially scaled (like "the global marketplace").

I opted, in the end, to try to make the São Francisco River Basin my scalar priority and tie relevant discussions into it through empirical findings. Although this study would have benefitted from a more multidirectional analytical approach, I was constrained by the timelines
associated with Master's research. Out of a sense of fidelity to the basin as more than a "setting" or a "prompt," I certainly preferred my chosen directionality over attempting to insert this research into potentially inapposite theorizations that might occlude the idiosyncratic nature, as noted by Abers and Keck (2009), of basin committees in Brazil. The downside of taking such idiosyncrasies for granted is that larger patterns outside of its immediate geographical milieu may be less evident and therefore what is or is not idiosyncratic may also become less apparent. Such a critique, paralleling those made by Castree (2008a; 2008b) and Brenner et al. (2010), is not to be dismissed lightly; although governance patterns in the São Francisco River Basin do make a case for "the devil" being "in the [frequently overlooked] details," it is necessary to then ask "so what?"

Unpacking the "so what?" question requires additional engagement with that which Peck and Theodore (2012) call "fast policy," which is to say the emerging conversations around international policy transfer in the context of neoliberalization (of which basin-level governance is a part -- at least superficially, in the case of Brazil). Therefore, this thesis is perhaps only half of what should be written on governance patterns and power relations in the São Francisco River Basin; whether or not it is an outlier, an exception, or an example is unclear without more robust comparative discussion in any number of directions (including basin committees, participatory spaces, bulk water charges, "not-quite-neoliberal" governance arrangements, etc...).

7.4 Questions Raised and Future Research Directions

In addition to necessary comparative work discussed above, this research raised a handful of other questions about the nature of participatory space(s) and the meanings of poverty and development. With regard to the former, the fervour over participatory spaces appears to have cooled over the last decade -- perhaps as they have been revealed to be anything but essentially utopian; however, such disillusionment misses the point, at least in the Brazilian context.
Although some Brazilian(ist) scholars, like Avrtizer (2002, 2009), have engaged in the crucial work of building a geographically apposite theory of these bodies, an overly tight focus on their institutionalization ignores what appeared in my mind to be among the most interesting-yet-frustrating aspects of CBHSF: its dynamism, its political ambivalence, and -- as Abers and Keck (2006, p. 605) suggest -- "opportunities for creative bricolage." While an institutional focus is interesting from the perspective of the "exportability" of participatory "models," CBHSF illustrates an example of the need to continue to think through this type of governance -- which is actually comprised of an extremely varied array of institutional forms, to say nothing of their idiosyncratic functioning -- in a way that engages with the creation or foreclosure of (different types of) political space within, through, and in relation to (broadly termed) "participation;" however, this analysis risks limitation through failure of imagination without engaging with the "shapes" and circuitry of governance processes that do not conform to linear, "input-output" archetypes (Crozier 2010). It is somewhat baffling that participatory space should be expected to render "decisions" and "regulations" akin to those produced via other government space (and held normatively accountable for doing -- or not doing -- so); we should thus resist the temptation to declare such space alternatively deficient or superior when compared with idealized (and possibly provincial) government forms. Rather than ask "what is it and does it do x?" we should enquire "what does it do and how?"

Another compelling issue that respondents raised was with respect to socio-natural dimensions of "development" and "poverty" (including how and by whom they are defined, represented, and addressed). Although these are not novel questions within areas of research such as Critical Development Studies, respondents presented their own interesting perspectives on the drive to "develop" (or the pursuit of "growth"), the acceptability and viability of more socioenvironmentally just approaches, and even made the case for not "being developed" (in the
transitive sense of the verb). Without forcing the country into the othering position of being an "alternative" to development models in the Global North, is it worth remaining attentive to this debate -- which is quite robust within Brazil -- as the country is in the unique position of grappling with these questions "in real time."

7.5 How Much for Old Chico?

I reached the Lower São Francisco in the waning days of my fieldwork. There I often heard the phrase "a river dies starting at its mouth." The implication is that all of the accumulated violence done to the São Francisco and its people is reflected in the circumstances of its downstream reaches. To an outsider like myself, the river's slow demise was not immediately obvious: the individuals I met were welcoming, dignified, and extremely helpful -- for which I was grateful as a (frequently misplaced) traveler; the river itself -- from Penedo or Piaçabuçu, AL, and Brejo Grande, SE -- remains captivating, with colourful boats moored along the shore and palm trees and brightly painted architecture lining its banks. The setting appears nothing if not idyllic but belies a fraught landscape of exploitation and resistance.

Concluding my own travels, I wanted to bid farewell to "Old Chico" where the river's course also comes to an end. The estuarine portion of the São Francisco is located in an APA, the boundary of which is demarcated by a line of widely spaced, partially buried, upright, unmarked posts of varying heights that livestock on the dunes admire from both sides. There are many tours offering to take visitors to the river's mouth, but most are unlicensed. One licensed operator in Alagoas runs buggy tours along the beach -- with the option of being hoisted high above the speeding vehicle by a parasail latched to the back -- so I joined a family of four from south of Brazil in zipping across the broad, flat sands toward the river (not especially fond of heights, however, I declined the flight). The operator referred to his company as "ecotourism," but his narration made it readily apparent that we were actually engaged in disaster tourism;
without rubble and rescuers it was difficult to make out the extent of the calamity, but he pointed out the signs.

Flanked by dunes, the São Francisco River seems to conclude its journey gently and deliberately -- parting the broad beach to glide into the embrace of the Atlantic Ocean. A corroded lighthouse lists in the river's center, and the tour operator told us that it had once stood on the river's far bank where there had also been a village -- long since displaced as ocean currents bent the enfeebled São Francisco toward the south. Here, for the first time, I waded into the waters of the river, which were clear if ever so slightly tawny at the margins, shallow, and considerably warmer than the shower at my hotel. Submerging myself in the water, I reflected with mixed emotions on the words of a former fisherman who recalled how piranhas used to patrol this part of the river; now, he said, they had been replaced far inland by small ocean-going species. I hoped he was right, for the sake of my wiggling fingers and toes, but it was a somewhat hollow relief as the family that lived next to my hotel never seemed to net fish of any kind (although their clowder of cats and kittens appeared perpetually hopeful when welcoming their boat home every night). As I stepped out of the water, the tour operator's assistant handed me my camera, which he had taken aloft when parasailing. While I was walking along the beach, he had snapped a picture of me down below; I appeared as a dot on an expanse of sand jutting out into the confluence of river and sea. The vastness of land, water, and waves was humbling but misleading. The river -- evermore engineered and now with less than two thirds of its flows compared to only a half century ago (Cedraz et al. 2011) -- seemed to be meeting a merciful rather than dignified end.

When our sanctioned hour-long visit was over, we climbed into the buggy once again and sped back across the sand toward the coconut plantation-lined road to Piaçabuçu. We stopped to pick
up beached plastic bottles and inspect a tiny, dehydrating Portuguese man o' war, all of which had no doubt been blown ashore while riding atop the waves. We also dislodged a couple of tourists who had decided to drive to the river in a new silver compact car that was kicking up pinwheels of sand but making no progress. They were rude and dismissive of the advice of the tour operator as he freed them. Watching them trundle onward, he shook his head and remarked that it was not unheard of for stranded cars to be carried away by the sea.

Scattering vultures and flies, he also pulled alongside dark little mounds marooned by the retreating tide and suggested that I snap pictures. There were half a dozen of these hunched, lifeless sea turtles along the beach; the tour operator said that on some expeditions he had counted twice that many. A few corpses were sun-baked with their skin peeled back from their skulls and shells like loose shingles on the rooftop of a vacant house; others were still plump and ostensibly "cute" except for the grisly gaze of vacant eye sockets, which the scavenging birds had picked hollow. He explained that five sea turtle species -- ranging from threatened to critically endangered -- could be found in these waters and that the olive ridley sea turtle nests in the APA.

He also explained that the turtles usually died by drowning in the nets of shrimp boats. Once a thriving industry, shrimping has become an increasingly desperate enterprise as the diminished flows from the river and sediment trapped in upstream reservoirs impoverish the waters. The boats are left to scour the waves for their quarry, gleaning from a sea as fallow as the nearby rice fields that the São Francisco no longer floods. Meanwhile, upstream, the canals of the Transposição threaten to further modify the river, according to opponents, in order to water

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178 The Portuguese man o' war (Physalia physalis) is known as caravela-portuguesa or barco-de-guerra-português in Portuguese.

179 The olive ridley sea turtle Lepidochelys olivacea is known as tartaruga oliva in Portuguese.

180 For a discussion of additional context, see Coelho Dias da Silva et al. (2010).
shrimp farming ventures several states away. The absurdity of the proposal is stark when looking across the estuarine São Francisco to the lighthouse, angling out of the water like a sinking ship; or kneeling in a swarm flies on sand abraded by dozens of jostling vultures to photograph a turtle carcass; or from beside the pungent, slatted wooden building in Piaçabuçu where women and children of all ages process the netted shrimp. The _Transposição_ made so little sense even to the World Bank -- which has not shied away from investing in extraordinarily destructive water-related infrastructure and "development" projects -- that the Bank at one point declined to be involved out of "distrust of its aims and because more efficient and less expensive alternatives exist" (Siqueira 2007, p. 6).

This situation on the Lower São Francisco is emblematic of the state of the river and governance of the basin, and it makes explicit responses to the question: "how much for Old Chico?" On the one hand, obviously, the river may be measured in _reais_ and _centavos_ (or dollars and cents, EU euros, Chinese yuan, etc...). On the other, of course, it is priceless. But these conceptualizations are far too narrow -- insufficient for understanding balance sheets also calculated in votes, kickbacks, family legacies, constituencies, appointments, alliances, and control. Other acceptable "currencies" include megawatts, bales of cotton, or tonnes of tilapia. The price may be weighed against traditions, cultures, and world views. It may be paid in integrity or quite literally "an arm and a leg." It may be measured in subsistence, livelihoods, or profits -- with varying spatial and temporal horizons. It might get put on a long "tab" of a region's representational and material indignities and reaped in the growth rates of a nation that longs to leave behind the label of "emerging power." The "right" price could be that which foreign consumers are willing to pay for soy or mangos, the price of avoiding a drawn-out court battle, or the price that the government is unwilling to pay for the _Transposição_. There is also a thriving barter economy of swapping power for participation, the state for the government, and
agendas for agency. If indeed a river dies starting at its mouth, the mouth of the São Francisco -- from the other side of the equation -- speaks volumes.
Bibliography


CBHSF (2012a). Ref: Comunicado Cargo da Presidência do CBHSF. DIREC. Penedo, AL, CBHSF DIREC.


IHU (2012). *Caatinga: um bioma exclusivamente brasileiro... e o mais frágil*. IHU ON-LINE: Revista do Instituto Humanitas Unisinos. São Leopoldo, Instituto Humanitas Unisinos. XII


Appendices

Appendix A: Interview Schedule181

1. To begin, can you please give me a brief history of [respondent's affiliation] and its mission with respect to water management?

2. When and how did you and [respondent's affiliation] begin participating in CBHSF?

3. How would you describe your relationship with other representatives on CBHSF?

4. How would you describe the relationships between other representatives on CBHSF? (For instance, are there coalitions, disagreements, stronger or weaker interests, etc...?)

5. How would you describe the decision-making process on CBHSF? (For instance, are there representatives or sectors that propose initiatives, direct the process, impede the process, etc...?)

6. Do you find that the opinions of all representatives are solicited in the decision-making process?

7. How has [respondent's affiliation] influenced the decision-making process or contested undesirable decisions? (Could you give some examples?)

8. How would you describe the decision-making process with respect to the cobrança pelo uso de água?

9. What were the priorities of [respondent's affiliation] for the cobrança during negotiations and how did [respondent's affiliation] influence the decision-making process?

10. In your opinion, what interests are privileged or harmed by the cobrança?

11. In your opinion, what are the priorities for the application of the revenue of the cobrança?

12. How has the cobrança affected [respondent's affiliation and related sectoral interests]?

13. At present, what has been the greatest success and the greatest challenge with respect to the cobrança?

14. In your opinion, what is missing with respect to the cobrança?

15. What do you foresee for the future of CBHSF and the cobrança?

181 These questions provide an English-language translation of the outline followed in semi-structured interviews; all interviews were conducted in Brazilian Portuguese.
## Appendix B: Key to Interview Respondents

List of Respondents:

<table>
<thead>
<tr>
<th>Code</th>
<th>Affiliation</th>
<th>Notes</th>
</tr>
</thead>
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<tr>
<td>Fc.v.1</td>
<td>Civil Society/Traditional Communities-affiliated, NGO-based former member #1 (Dr. Thomaz)</td>
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<tr>
<td>Mc.v.1</td>
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<td>Municipal Government-affiliated member #1</td>
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<td>Municipal Government-affiliated member #2</td>
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<tr>
<td>Mw.ii.1</td>
<td>Water Users-affiliated, Irrigation and Agriculture-based member #1</td>
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</tbody>
</table>

182 I deeply appreciate respondents' willingness to share their thoughts and experiences. Although nearly all respondents agreed to be identified by name, I made the choice to withhold names after reviewing the aggregated interview responses and drawing the conclusions set forth in this thesis. The two respondents identified by name in this research (due to the public nature of the position and the centrality of these actors to events discussed herein) are former CBHSF Presidents: Sr. Geraldo José dos Santos (Sr. Geraldo, Mg.viii.1) and Dr. Antônio Thomaz Gonzaga da Matta Machado (Dr. Thomaz, Fc.v.1).

183 Please refer to the preceding footnote.

184 Please refer to the preceding footnote.
Mw.ii.2 Water Users-affiliated, Irrigation and Agriculture-based member #2
Mw.iii.1 Water Users-affiliated, Fishing, Tourism, and Leisure-based member #1
Mw.iii.2 Water Users-affiliated, Fishing, Tourism, and Leisure-based member #2
Mw.iv.1 Water Users-affiliated, Hydroelectric-based member #1
N.1 Civil Society/Traditional Communities-affiliated non-member and former tributary committee member #1
N.2 Civil Society/Traditional Communities-affiliated non-member #2
N.3 Civil Society/Traditional Communities-affiliated non-member #3
N.4 Civil Society/Traditional Communities-affiliated CBHSF non-member and current tributary committee member #4
N.5 AGB Peixe Vivo Staff
N.6 State *Ministério Público* Representative

Committee Membership:
M = CBHSF Member\(^{185}\)\(^{186}\)\(^{187}\)
F = Former CBHSF Member
N = Non-Member of CBHSF

Sector (Current and Former CBHSF Members):
c = Civil Society/Traditional Communities\(^{188}\)
g = Government
w = Water Users

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\(^{185}\) This category includes both titular members and alternates.

\(^{186}\) This category includes both individuals listed as official CBHSF members and their associates or other representatives from the members' organization when appropriate.

\(^{187}\) This identification is based on respondents' membership status in August through November 2011 when most interviews were conducted.

\(^{188}\) I have merged these categories of representation for the purposes of identification in this thesis. In doing so, I do not wish to render unique interests of respondents opaque but have made this choice the interest of protecting respondents' identities.
Affiliation (Current and Former CBHSF Members): 189

i = Industry and Mining
ii = Irrigation and Agricultural Use
iii = Fishing, Tourism, and Leisure
iv = Hydroelectricity
v = NGOs and Quilombola and Indigenous Communities 190
vi = Technical Teaching and Research Organizations
vii = Municipal Government
viii = State Government
ix = Federal Government

189 Affiliations not represented among respondents include: Water Utilities; Transportation; and
Consortiums, Inter-Municipal Associations, and User Associations.
190 As previously stated, I have merged these categories of representation for the purposes of
identification in this thesis so as to better protect respondents' identities.