PRIVATIZING WATER

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GOVERNANCE FAILURE AND THE WORLD'S URBAN WATER CRISIS

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PREFACE

My interest in water privatization and its links to questions of social and environmental justice began with the British drought of 1995. My arrival at the University of Oxford coincided with one of the most severe droughts Britain had experienced during the twentieth century, straining the ability of recently privatized water companies to meet demand. One private water company was particularly vulnerable to the dramatic reduction in rainfall. In an attempt to stave off water rationing and cutoffs, the company embarked on a large-scale tanker-truck operation, moving hundreds of millions of liters of water from lowland streams to its dry upland reservoirs in a round-the-clock operation—lasting several months—that journalists compared to filling an Olympic-size swimming pool with a thimble. Managers called on customers to conserve water, and even encouraged businesses to move operations out of the drought-stricken area. But customers were incensed to learn of leakage rates, and public outcry intensified when—at the height of the drought—the company's CEO was caught "sneaking" baths (despite asking consumers to refrain from bathing while water supplies were threatened).

Meanwhile, the same private water company was reporting record profits. Water prices—and company profits—had risen sharply since the privatization of the British and Welsh water supply in 1989. Company managers defended their expenditures, remuneration, and management strategies: not a single consumer had their water supply cut off during the drought. But environmentalists and consumer groups criticized the impact on local rivers and water bills, protested "fat cat" profits, and called for the industry to be taken back under public control.

In the aftermath, the British government stepped in and tightened up regulations on drought response, leakage rates, and water prices. As the drought—and the furor over the government's response—subsided, water privatization faded from the public eye. But I remained intrigued, for two reasons. First, I was curious about the impacts of privatization: How did

private ownership change the management practices of water supply utilities, and with what economic, social, and environmental implications? Second, water privatization was suggestive of the political, economic, and environmental challenges that arise when governments attempt to deploy private companies to manage resources—a trend increasingly widespread by the mid-1990s. Proponents of privatization portrayed water as a final frontier: water privatization symbolized the unprecedented degree to which private companies and markets had penetrated the public domain.

The politics of protest surrounding water privatization were equally compelling. The broad-based coalitions that sprang up—uniting organized labor, consumer groups, environmental organizations, and religious groups, to name just a few—prefigured the red-green alliances that emerged a few years later at the 1999 World Trade Organization Conference (the street protests labeled by journalists as "the Battle of Seattle"). Contradictory though their viewpoints sometimes were, protestors married issues of social and ecological justice in ways that usefully paralleled academic debates about ecological governance. They provided an intriguing set of responses to the prevailing wisdom in policy and academic debates about the appropriate roles of governments and markets in managing the environment. They also evoked a set of suggestive possibilities for dealing with some of the seemingly irreconcilable tensions inherent in our relationship with nature under modernity.

Initially, I focused my research on the impact of water privatization in England and Wales on consumers and the environment. This led to a full-length book, published in 2004 as *An Uncooperative Commodity: Privatizing Water in England and Wales*. I do not refer directly to this research in the present book, although it has helped frame my thinking on privatization. In particular, it encouraged me to situate water privatization in historical and cultural context. It also reinforced my view that the political, economic, and environmental dimensions of privatization are interrelated (and that they are often inappropriately divorced in both policy and academic research).

As the private British water companies internationalized their operations in the 1990s, my research naturally followed. I grew interested in the effects of water privatization in so-called developing countries, albeit in a very different and varied set of political, economic, and ecological circumstances. I spent over a decade conducting research on the activities of private water supply companies, in Latin America, Southeast Asia, and Southern Africa. The present book synthesizes the results of this research. It should interest the wide range of individuals and organizations actively involved in

the debate over water privatization in lower- and middle-income countries: bilateral aid agencies, government departments and water supply agencies, unions, private companies and the corporate "watchdogs" that monitor them, multilateral financial organizations, religious groups, environmental groups, consumer groups, and "alter-globalization" activists.

These groups are engaged in intensely fought campaigns for and against water privatization. Many, though not all, are frustrated with the stale standoff between "government" and "private" that has characterized the debate for more than a decade. My book is written with this broad audience in mind; and it is directed equally toward scholars and students with an interest in the conceptual, practical, and political possibilities opened up by a move beyond privatization—the focus of the latter half of the book.

Water privatization is subject to fierce debate, and so a comment on my personal stance is appropriate. It is impossible to remain truly neutral, although I have tried to be objective. My perspective has evolved over the past fifteen years. During my travels, I saw many poorly run government systems *and* poorly run private systems (as well as, sadly, a smaller number of well-run systems of both sorts). These experiences aroused my suspicions about simplistic arguments in favor of government or of private provision, and about generic solutions to the very complex, varied water problems often unhelpfully lumped together under the label of the global water "crisis." I do not think private provision is necessary or appropriate in many circumstances, but I do agree that our conventional approach to government provision is unsatisfactory. In part, this has arisen because of the inaccurate and imprecise definitions of what "public" and "private" actors are, and do, in supplying water.

Rethinking these terms, I decided, had to be central to an analysis of the privatization debate. And this had to be done in a concrete, specific fashion, focusing on those areas where privatization had been most advanced: the world's cities. Accordingly, I narrowed my focus to an analysis of the causes of urban water supply crises, the role of privatization, and potential responses. The analysis attempts to look "beyond privatization": to unsettle the entrenched, stale positions so often evident in the "public versus private" debate; to rethink the causes of the global water supply crisis; and to expand the terms of debates about potential responses.

I have been fortunate to receive a great deal of assistance and support over the past two decades. Numerous individuals (water company employees, consumers, government officials, private water company employees, NGO representatives) gave generously of their time. Several organizations

deserve special mention: the Alternative Information and Development Center, the Council of Canadians, Friends of the Earth (Canada), the Forum on Privatization and the Public Domain, Mvula Trust, the Public Services International Research Unit, the Water Dialogues, the Municipal Services Project, the Peter Wall Institute for Advanced Studies, Thames Water, and the Urban Poor Consortium.

Michelle Kooy merits special mention and thanks as coauthor of an article on Jakarta's water supply system, aspects of which were revised and incorporated into chapter 5, of which she is also coauthor. This work drew significantly, in turn, on elements of her doctoral thesis.

Much of the research in this volume has been presented in various forms at academic conferences and workshops over the past decade. It has benefited from comments from numerous individuals (some of whom I may have inadvertently overlooked): Luis Babiano, David Barkin, Bernard Barraqué, Rutgerd Boelens, Patrick Bond, David Boys, Oliver Brandes, Gavin Bridge, David Brooks, Rocío Bustamante, Noel Castree, Gordon Clark, Alice Cohen, Christina Cook, Olivier Coutard, Adam Davidson-Harden, Leandro del Moral, Bill Dorman, Rohyn d'Souza, Gemma Dunn, Jody Emel, Melanie Feakins, Philip Fletcher, Kathryn Furlong, Mary Galvin, Matthew Gandy, Consuelo Giansante, David Hall, Leila Harris, David Hemson, Sylvy Jaglin, Jen Karmona, Roger Keil, Brewster Kneen, Tom Kruse, Nina Laurie, Andrew Leyshon, Emanuele Lobina, Alex Loftus, Bronwen Morgan, Emma Norman, Marcela Olivera, Oscar Olivera, David Lloyd Owen, Dominique Lorrain, Graciela Madanes-Schneier, Becky Mansfield, David McDonald, Leandro del Moral, Anil Naidoo, Ben Page, Jamie Peck, Laila Smith, Susan Spronk, Neil Summerton, and Erik Swyngedouw.

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Several chapters in the book contain or draw from material in previously published articles. Permission to reproduce this material from the following sources is gratefully acknowledged: K. Bakker, "From Archipelago to Network: Urbanization and Water Privatization in the South," *Geographical Journal* 169, no. 4 (2003): 328–341; K. Bakker, "The Commons versus the Commodity: 'Alter'-Globalization, Privatization, and the Human Right to Water in the Global South," *Antipode* 39, no. 3 (2007): 430–455; K. Bakker, "Trickle Down? Private Sector Participation and the Pro-Poor Water Supply Debate in Jakarta, Indonesia," *Geoforum* 38, no. 5 (2007): 855–868; K. Bakker, "The Ambiguity of Community: Debating Alternatives to Water Supply Privatization," *Water Alternatives* 1, no. 2 (2008): 236–252; K. Bakker, M. Kooy, E. Shofiani, and E.J. Martijn, "Governance Failure: Rethinking the Institutional Dimensions of Urban Water Supply to Poor Households," *World Development* 36, no. 10 (2008): 1891–1915; M. Kooy and K. Bakker, "Splintered Networks? Urban Water Governance in Jakarta," *Geoforum* 39, no. 6 (2008): 1843–1858; M. Kooy and K. Bakker, "Technologies of Government: Constituting Subjectivities, Spaces, and Infrastructures in Colonial and Contemporary Jakarta," *International Journal of Urban and Regional Research* 32, no. 2 (2008): 375–391.

This book is dedicated to my husband Philippe, who was there throughout the entire project, from beginning to end, as my harshest editorial critic and best friend. I need not say more, for he already knows.

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
BOO	build-own-operate
BOT	build-operate/own-transfer
BPD	Building Partnerships in Development (for Water & Sanitation)
CESCR	Committee on Economic, Social, and Cultural Rights
CPR	common-pool resource
CSD	Commission on Sustainable Development (UN)
DAC	Development Assistance Committee
DfID	Department for International Development (UK)
DKI	*Jakarta Daerah Khusus Ibukota* (Special Capital District of Jakarta)
DWAF	Department of Water Affairs and Forestry (South Africa)
ECOSOC	Economic and Social Council (UN)
ESP	Environmental Services Program (USAID)
GATS	General Agreement on Trade in Services
IBRD	International Bank for Reconstruction and Development
ICSID	International Centre for Settlement of Investment Disputes
IDA	International Development Association (or Assistance)
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IFI	international financial institution
IMF	International Monetary Fund
IWRM	Integrated Water Resources Management
JBIC	Japan Bank for International Cooperation
KIP	Kampung (or Kampong) Improvement Program
LDC	less developed country
MDB	multilateral development bank
NRC	National Research Council (U.S.)
ODA	Overseas (or official) development assistance

OECD	Organization for Economic Cooperation and Development
OHCHR	Office of UN High Commissioner for Human Rights
PDAM	public water utility (Indonesia)
PPCP	public-private-community partnership
PPP	public-private partnership
PSD	private sector development
PSIRU	Public Services International Research Unit
PSP	private sector participation
PUP	public-public partnership
SEMAPA	water supply utility (Cochabamba)
SRI	social responsibility investment
TNI	Transnational Institute
UFW	unaccounted-for water
UNCITRAL	UN Commission on International Trade Law
(UN)CSD	UN Commission on Sustainable Development
UNDP	UN Development Programme
UNHCR	UN High Commissioner for Refugees
UNICEF	UN Children's Fund
UNSGAB	UN Secretary-General's Advisory Board on Water and Sanitation
UNWWAP	UN World Water Assessment Program
USAID	U.S. Agency for International Development
WB	World Bank
WCD	World Commission on Dams
WDM	World Development Movement
WHO	World Health Organization
WRI	World Resources Institute
WTO	World Trade Organization
WWC	World Water Council

DEFINING "PRIVATIZATION": A NOTE ON TERMINOLOGY

The correct terms to use when discussing water privatization are a matter of dispute. Terminology signals allegiances and thus is rarely neutral. The dispute over definitions reflects the slippery analytical terrain of water privatization debates and the inadequacy of conventional terminology to convey the complexities of urban water. In subsequent chapters, these ideas are developed in greater detail. Here, I simply clarify my use of terms.

How should we define *privatization*? Some (more frequently the proponents of private involvement) use a relatively constrained definition, reserving the term "privatization" for the sale of assets to the private sector—in other words, the private ownership of water-related infrastructure. In this case, the terms "private sector participation" and "public-private partnerships" are used to refer to a range of contracts whereby private companies build, manage, and/or operate infrastructure on behalf of governments. These contracts include concessions, management and service contracts, consulting services, and public-private partnerships with NGOs.

Others (usually opponents) use the word "privatization" as an umbrella term, to include the entire range of activities just mentioned. Although imprecise, this has the advantage of ease of reference. It also has the advantage of emphasizing the continuity between different types of private sector involvement, which all involve both the redistribution of governance to nonstate actors and the application of market-based norms, values, and practices in management and regulation. With a more general audience in mind, I use the term in this latter, inclusive sense; although I do not use the term to refer to broader trends of commercialization of water resources and services. But readers should bear in mind that, in most cases, the involvement of private sector companies in the infrastructure for drinking-water supply in urban areas—the focus of this book—involves what is technically termed "private sector participation" (and not full privatization).

The term "private" is also sometimes expanded to include the broad range of private entrepreneurs who run small-scale water businesses—a mainstay

of water supply access in most cities around the world. These include, for example, water vendors in slums and developers who build stand-alone microtreatment systems for private, typically high-end residential developments. Here, I prefer the term "small-scale private entrepreneurs."

Some also use the word *private* to refer to community groups, religious associations, cooperatives, and nongovernmental organizations that are also extremely active in water supply, particularly to the poor. I think that this is unhelpful, as it extends the term "private" to cover all non-state actors. It is equally unhelpful, in my opinion, to characterize these groups as *public* in such a manner that we conflate their activities with that of the state. These groups (almost always not-for-profit) are more accurately characterized as community or non-governmental organizations of various sorts, and it is these terms that I have used throughout the book.

Introduction

Privatization and the Urban Water Crisis

The Hague: March 2000

The World Water Forum—a global gathering held every three years to debate the world's most urgent water issues—is intended to be a solemn affair. But protests invariably disrupt the proceedings. The meeting in the Dutch city of The Hague was no exception: as Egypt's minister of Public Works and Water Resources began his inaugural speech, two audience members—one male, one female—suddenly appeared on stage. In full view of the gathered dignitaries and government ministers, the protesters approached the presidential table, removed their clothes, and handcuffed themselves together. Strategically scrawled on their bodies were the words "No to Water Privatization" and "Yes to Water as a Human Right."

Meanwhile, protesters in the audience (discreetly chained to their seats) shouted slogans accusing governments of colluding with private water companies to profit from the world's water resources. Some of their concerns related to the support given by conference organizers to private water companies and to their links with development organizations in favor of water privatization, including the World Bank. But protestors' slogans also targeted governments accused of environmentally destructive and socially inequitable water management.

The security guards were quickly overwhelmed, and the meeting ground to a halt. The protesters' message, captured by bemused journalists, was clear: water privatization had to be stopped, and government management of the world's water had to be dramatically reformed. But the Ministerial Declaration issued a few days later ignored these demands: the world's governments voiced support for private water management, making no mention of the human right to water or of the protesters' demands for environmental and social justice.

The events in The Hague are an example of the issues at stake in debates over water privatization and the world's urban water crisis. These debates

have been heated, in part, because of the dramatic increase over the past two decades in private sector control and management of urban water-supply systems. During the 1990s, some of the world's largest multinationals (Bechtel, Enron, Vivendi) began expanding operation and ownership of water supply systems on a global scale: the largest private water company now has over 100 million customers worldwide. Although the vast majority of water supply systems around the world were (and still remain) government owned and operated, private sector activity increased at rapid rates. At the same time, many governments embarked on a series of market-based water sector reforms: the best solution, some argue, to the world's looming water crisis. This ethos has become increasingly widespread: water markets (and associated private water rights), private sector management, and commercial principles and practices have been introduced in the water sector worldwide over the past two decades.[1]

This has generated fierce controversy. Proponents of privatization assert that private companies will perform better: they will be more efficient, provide more finance, and mobilize higher-quality expertise than their government counterparts. Supporters also often argue that private involvement will facilitate broader reforms—such as the treatment of water as an economic good—that are required in order to ensure environmentally friendly outcomes such as water conservation and the reduction of pollution. These arguments rest on the claim that government management of urban water supply is beset by several interrelated problems: low coverage rates, low rates of cost recovery, low tariffs, underinvestment, deteriorating infrastructure, overstaffing, inefficient management, and unresponsiveness to the needs of the poor. This hotly disputed litany of government woes has dominated the discourse used by advocates of water supply privatization over the past decade, and is often summed up by the label "government failure."[2] From this perspective, it is unethical *not* to involve private companies if they can perform better than governments at providing water, particularly to the poor.

In contrast, opponents of privatization argue that government-run water supply systems, when properly supported and resourced, are more effective, equitable, and responsive; have access to cheaper forms of finance (and thus lower tariffs); and perform just as well as their private sector counterparts.[3] Those who reject privatization also warn of the negative effects—both social and environmental—of private ownership and management of water resources and water supply systems. Often they argue that it is unethical to profit from water, a substance essential for life and human dignity. David Harvey, for example, characterizes privatization of water supply as one example of "accumulation by dispossession"—the enclosure of public assets by

private interests for profit—which invariably deepens social and environmental inequities.[4] Some go further, arguing that environmental protection and water conservation should be fostered through an ethic of water use, whether based on solidarity, scientifically determined limits to water use, traditional (often indigenous) water-use practices, or various forms of ecospirituality.[5]

This has obvious parallels with debates over public services—from health care to housing—and over the management of natural resources—from forests and fisheries to the global climate. From this perspective, water privatization is one example of a series of neoliberal-type reforms that have reworked the roles of welfare governments (and, in the global South, developmental states) in the provision of public services.[6] But water privatization inspires particularly fierce protest and, by the end of the 1990s, had become one of the most controversial issues debated in international-development and environmental-management circles.[7] Why would this be the case? One reason is that water fulfills multiple functions and is imbued with many meanings. Water is simultaneously an economic input, an aesthetic reference, a religious symbol, a public service, a private good, a cornerstone of public health, and a biophysical necessity for humans and ecosystems alike. It should thus come as no surprise that protests against water privatization have united a strikingly diverse range of movements: unions, environmentalists, women's groups, fair-trade networks, alternative-technology advocates, religious organizations, indigenous communities, human-rights organizations, antipoverty and antiglobalization activists. United in politically suggestive coalitions, these groups protest both privatization and the market-led water-governance reforms with which it is associated.

Another reason for the fierceness of protests is the fact that water is, in some sense, a final frontier for capitalism. Essential for life and (at least in the case of drinking water) nonsubstitutable, water throws up challenging barriers—technical, ethical, and political—to private ownership and management. The water privatization debate is thus a microcosm of contemporary struggles over the roles of states and markets, and over the acceptability and efficacy of markets and private ownership as mechanisms for public services delivery and as solutions to the world's putative environmental crisis.[8]

Urban Water: A Global Crisis?

Why, then, does this book focus on *urban* water supply? The answer is simple: the vast majority of formal private sector activity in water supply

has taken place in urban areas, and the central promise made in the 1990s by proponents was that private companies would solve the world's urban water supply "crisis." The main features of this putative crisis are well known. Between 1950 and 1985 the proportion of the world's population living in urban areas doubled. But as cities have grown, urban services have not kept pace. The most recent estimate suggests that 970 million urban dwellers are without access to "adequate" water supply.[9] And the number of people without access to safe water continues to grow as rapid rates of urbanization continue in many parts of the world. The world's water crisis is thus, at least in part, an urban issue.[10]

Rural areas and outlying (or "peri-urban") settlements attracted little interest from private companies, as their small scale and low densities reduced profitability potential. Large urban centers were the focus of attention; since the prospect of profitability generally increases with the size of the urban area (because of important economies of scale), the urban bias of private sector participation is unsurprising. By the late 1990s, many capital cities of developing countries had committed to "private sector participation" contracts[11]—from Buenos Aires to Jakarta, Manila to Casablanca. The "global opportunity" offered to water companies by the world's water crisis (at least as depicted in industry rhetoric) was, in other words, largely to be found in cities: in managing, rebuilding, extending, and supplying urban water supply networks.

The bias of private investors and companies toward urban areas is borne out by the evidence. Of the world's total population, estimates suggest that only 3 percent are supplied via private operators, although this figure is much higher in some countries.[12] But when we look at cities, and particularly large cities, the picture changes: perhaps 20 percent of the world's urban population are supplied by the private sector, amounting to hundreds of millions of customers, most of whom became clients of private companies in the past two decades.[13] Urban water supply—the focus of the specific examples provided in this book—is thus the primary battleground over which water supply privatization is fought.

Debating Privatization

Debates over privatization conventionally pit partisans of classic forms of government intervention against "neoliberals," whose reformulation of the role of the government emphasizes the need for selective regulation by the state, rather than direct state provision of public services.[14] Much of the

debate between opponents and proponents of water supply privatization hinges on differing views about the role and extent of state versus market activity (or the "public" versus the "private" sphere). A range of political-economic arguments thus typically dominates water privatization debates, as with debates over privatization more generally.

But debates over water privatization also have an environmental dimension. Indeed, the arguments of water privatization proponents are perhaps best captured by the term "free-market environmentalism," a mode of resource regulation that offers hope of a virtuous fusion of economic growth, efficiency, and environmental conservation.[15] Supporters of "free-market environmentalism" argue that environmental goods will be more efficiently allocated and environmental degradation reduced or eliminated through establishing private-property rights, employing markets as allocation mechanisms, and incorporating environmental externalities through pricing. In short, markets will be deployed as the solution to (rather than being the cause of) environmental problems. Water services are sold on a commercial basis to customers, rather than supplied on an often-subsidized basis to citizens. Accordingly, the calculus of profit maximization—which at times leads to the prioritization of efficiency over other goals—becomes central to water governance.

In response, opponents of water supply privatization often frame free-market environmentalism as a form of "green imperialism" or "green neoliberalism." They point to studies that have demonstrated the limits, unexpected consequences, and impacts of neoliberalizing nature in a broad range of historical and geographical contexts.[16] They argue that while environmental degradation (an inevitable by-product of capitalism) may be mobilized as an opportunity for continued profit,[17] the involvement of private companies will not necessarily ensure an overall improvement in environmental quality; on the contrary, companies are likely to engage in cost-cutting measures detrimental to environmental health, dignity, and well-being.

As explored in later chapters, views from developing countries offer different perspectives. In rural areas, often rooted in indigenous water-use practices, communities offer cultural as well as political-economic critiques of *both* private and government provision of water. These critiques are echoed in urban slums and unserviced city outskirts ("peri-urban" areas), where communities and small-scale, unregulated private businesses (rather than government or large-scale private companies) play the lead role in supplying water on a daily basis. The public-versus-private debate plays out, here, on a complex terrain.

Reframing Privatization

The preceding discussion implies that we need to reframe the question of privatization in two ways: to examine privatization as an environmental as well as a socioeconomic phenomenon; and to integrate an analysis of privatization with an understanding of the simultaneous and often overlapping roles played by government, private companies, and community actors. This is the central analytical task of part I of the book.

But before I continue, there is a caveat. Although much of the literature begins from a strongly pro- or antiprivatization stance, this book begins from a different starting point. I argue that conventional models of both government and private provision have serious flaws: as I mentioned in the preface, examples of well-run public and private water supply systems, as well as examples (sadly, more abundant) of poorly run public and private water supply systems, can be found around the world.[18] Accordingly, we cannot categorically refute private sector involvement in water supply, nor simplistically defend government provision. Rather, I suggest that we need to expand our focus beyond formal water supply networks, develop an understanding of the roles that both public and private actors play in governance of urban water supply for the poor, and pay closer attention to the practices of urban water use in developing countries (particularly those of the "urban unconnected"). This requires rethinking some of the concepts on which the water supply debate is conventionally predicated, particularly the terms "public," "private," and "community."

Why is it helpful to rethink these terms? In subsequent chapters, I argue that the debate over privatization is not well served by concepts derived from what Charles Taylor terms our "modern social imaginary," which assumes a clear division between a public (governmental) and private sphere, adjudicated by mechanisms of popular sovereignty.[19] In successive chapters, I will provide examples of why conventional concepts of public and private are inadequate for describing the complex interrelationships between communities and water use. Further, I argue that the debate is predicated on a concept of popular sovereignty that fails to account for the ways in which many communities actually manage water access.[20]

My analysis also emphasizes the environmental dimension of water supply privatization—an issue often glossed over in contemporary debates. Environmental issues are both a driver and a source of critique of privatization: for example, the poor quality of drinking water serves as a justification for privatization, and concern over the impacts of privatization on fresh water is often a central concern of privatization opponents.

Urban water supply is, in other words, an environmental issue as well as a social and economic one. This is rarely recognized in the literature on privatization, or indeed on urbanization. And where urban nature does receive attention, it tends to be framed in terms of environmental conflicts or green enclaves (such as parks). In contrast, I approach urbanization as simultaneously natural and social: constituted by (and constitutive of) political ecological processes. This implies a rather unorthodox view of urbanization (and here I rely heavily on the work of David Harvey, Roger Keil, and Erik Swyngedouw), which does not circumscribe urban nature to "green spaces," but rather focuses on the material flows—such as excreta, water, wastes—that move through the city, and the different governance processes, power relations, infrastructures, and subjectivities via which these are mediated.[21]

Urban nature is, in other words, visceral, embodied, and woven through the fabric of the city. This occurs, of course, in highly differentiated patterns: the urban poor, who live within the interstices of the city (in floodplains and along riverbanks, on steeply eroded slopes and marshy land) often experience water as a threat to physical safety, both in terms of flooding and poor water quality. Better water governance—addressing ecological concerns across urban watersheds—would tackle these issues. Environment-related water concerns are thus an imperative, and not a luxury, for the urban poor; but much of the debate about water supply privatization has not adequately captured these broader concerns.

These arguments are developed throughout the book, as I attempt to rethink the terms "public," "private," and "community," and explore how these terms might be inflected with an ecological sensibility to refine our understanding of the contributions and limits of communities, states, and markets (as conventionally understood) in achieving social and ecological justice. The arguments that flow from this perspective, although focused on drinking water in urban areas in developing countries, are intended to speak to broader debates over the respective roles of states, markets, and communities in economic life; our collective response to environmental crises; and the role of civil society (or the "public sphere") in adjudicating questions of social and ecological justice.

The focus of my arguments is thus on conceptual rather than practical aspects of the water privatization debate. Of course, the broad range of practical issues (such as labor and environmental standards, tariffs, financing, regulation, technologies, and social policies) is important. But these issues are already well addressed in the literature, and I make reference to key sources as appropriate. My task, rather, is conceptual: to sketch out the

ideological arena in which the debate over water supply privatization takes place, to provide historical context for the emergence of privatization, and to reframe our understanding of the involvement of governments, communities, and private actors in water supply as a means of suggesting new ways of thinking about—and eventually formulating solutions for—the world's urban water crisis. The concept of "governance failure," which I introduce in part 1, is central to this latter task.

Let me summarize my approach by outlining three questions that successively structure my analysis. First, why has privatization emerged as an increasingly widespread mode of water supply management, and what are the arguments made by its proponents and opponents? Second, can privatization fulfill proponents' expectations—particularly with respect to water supply for the urban poor in developing countries? Third, given the limits to privatization, what are the alternatives? How, in other words, might we move "beyond privatization" both conceptually and practically? The first two questions are the focus of part 1, and the third question is dealt with in part 2 of the book.

Part 1: Development, Urbanization, and the Governance of Thirst

The polarization of the water privatization debate rests on widespread yet often implicit assumptions about the failings of governments and markets. Proponents of the "market failure" argument, for example, argue that private companies' drive for profit necessarily compromises their management capacities. Proponents of the "state failure" argument, in contrast, tend to argue that governments are inevitably unaccountable and unresponsive to the demands of citizens for public services. My analysis begins from a different starting point, through focusing on issues of governance, many of which are common to both government and private companies. Governance, here, is defined as a practice of coordination and decision making between different actors, which is invariably inflected with political culture and power. This definition of governance is not the norm in the literature on water management, which tends to constrain the definition of governance to a narrowly technical decision-making process. Defined in this broad way—as an expression of social power—I argue that the concept of governance can help us understand some of the persistent failures of government and private models, and the emergence and persistence of fragmented patterns of urban water supply.

Reframing the Urban Water-Supply Crisis

Chapter 1 explores the multiple modes of water supply access in contemporary cities, and cautions against focusing solely on formal networks, which reach only a small portion of urban residents. To frame this discussion, I present three urban water supply models—government, private, and community—each associated with a range of different technologies and delivery methods (from on-foot water vendors to bottled water, private wells to public standpipes). Each of these three models has its flaws, which I explore through the concepts of governance failure, state failure, and market failure. The latter two concepts are widely discussed in the water privatization literature: proponents of privatization generally articulate "state failure" arguments, and proponents of public water usually espouse "market failure" arguments. Here, I introduce a third concept, "governance failure." Subsequent chapters develop the interplay between models of water supply (government, private, and community) and these three "failures" (state, market, and governance) as a means of explaining the roots of the urban water supply crisis, and thereby the origins of water supply privatization and its impacts.

Constructing "Public" Water

Chapter 2 provides historical context for the analytical arguments presented in chapter 1. Supplying water to urban areas has been high on the agenda of the international community since the United Nations Water and Sanitation Decade (1981–90), during which bilateral aid and multilateral finance were directed toward water supply projects in unprecedented amounts.[22] At the end of the decade, more people (in absolute terms) enjoyed "improved water supplies" than ever before, yet in many countries supply failed to keep pace with population growth and with accelerating rates of urbanization over the latter half of the twentieth century.[23] Today, the scale of the problem is seemingly beyond our best efforts: even the ambitious Millennium Development Goals call for a reduction of only 50 percent in the number of those without sustainable access to safe drinking water.

In order to explain how this situation arose, chapter 2 explores the evolution of water-related development policies in the post–World War II period. In the 1950s and 1960s, development agencies advanced a specific vision of water management: a "modern integrated ideal" predicated on large-scale hydraulic works, particularly large dams. Water-supply delivery systems were marginal to this approach, and gained attention only from

the 1970s onward. When water supply did become the object of significant lending efforts, development finance tended to focus on urban areas, and a "municipal hydraulic" model emerged: large-scale water production facilities, linked to integrated water networks targeted at economically productive, high-value urban neighborhoods, governed by centralized water-supply-services providers—either municipal departments or (more rarely) public corporations.

The urban water-supply crisis is in part the result, I argue, of the ways in which this "municipal hydraulic" paradigm has been applied (and mishandled). Chapter 2 analyzes the involvement of the World Bank in lending to government-run water projects as a means of illustrating this point. This assessment explains, in part, the drivers for water sector policy reforms within the World Bank's water policy, which set the stage for the privatization agenda. The Bank's experience is, I argue, emblematic of broader trends as a whole; by the end of the century, many bilateral aid donors and international financial agencies were engaging in a range of activities designed to facilitate—or even impose via "conditionalities"—private sector management of urban water-supply systems.[24]

Debating Private Sector Involvement in Urban Water Supply

Chapter 3 traces the expansion of private sector activity in the water sector in the late twentieth century. It, too, begins with a historical discussion and demonstrates that although government management has dominated the water sector, private companies have long been active in water supply—although their legitimacy and impacts have been hotly contested. The chapter explores why private sector activity increased so rapidly in developing countries in the 1990s. Throughout this period, private companies (usually multinational water-services firms based in a few developed countries, notably France and the United Kingdom) sought to sign long-term contracts with (usually municipal) governments for the maintenance and extension of urban water supply networks. But some private companies—most importantly the large multinationals—have recently strategically retreated from certain regions of the world and have significantly reoriented their investment and growth strategies. The chapter summarizes recent evidence that suggests that the mainstream "private sector participation" (PSP) model—of large water multinationals engaged in long-term concession contracts—is likely to be more limited in scope than previously thought. Indeed, over the past few years, an increasing consensus has developed that private sector participation in water supply will not be able, as some proponents had hoped, to succeed

where governments had failed in providing "water for all." The chapter suggests that private companies encountered many of the same barriers—and displayed many of the same management patterns—as their public counterparts, and concludes by exploring the debates that this has engendered.

Citizens Without a City

In chapter 4, I illustrate the arguments made in previous chapters through a case study of Jakarta, Indonesia. I explore how urban water management entails the "production of thirst," and document the ways in which cultural norms, political commitments, and the seemingly mundane practices of water managers combine to exclude the poor from accessing water. The analysis emphasizes the political rationalities that underpin the creation of differentiated infrastructure systems. Simply put, access to services such as water is the subject of political negotiation, mediated through identity, urban infrastructure, and the differentiation of urban space. The involvement of the public water-supply company in creating a highly fragmented water-supply system, and the troubled track record of the private companies invited into Jakarta in the late 1990s, illustrate the point that both public and private companies encounter significant "governance failures" in attempting to extend urban water supply to low-income households and neighborhoods.

The case of Jakarta is not unique: fragmentation of access to water supply infrastructure is common in cities around the world. I argue that these failures to provide universal water supply are not mere lapses, but are systemic and structural (although not always deliberate or planned) outcomes. In those cities, as in Jakarta, absolute water scarcity is rarely (if ever) the reason why people in cities are without access to safe water. My intent here is not to deny the reality of the world's urban water crisis, but rather to question its causes, and to encourage skepticism about the rhetorical uses to which the specter of "crisis" can be put (particularly when it serves as a justification for privatization).

Part 2: Beyond Privatization: Debating Alternatives

Part 2 turns to the debate over alternatives to privatization, and to our conventional models of public services provision. The partial retreat of private companies from the business of water supply in the past five years has intensified debate over the appropriate role of the private sector in supplying water. Even ardent proponents of privatization admit that the private

sector will not supply "water for all." Meanwhile, opponents of privatization have taken an increasingly critical look at conventional models of government provision and regulation of water. Conceptually, the current period is thus ripe with possibility, as the debate is more nuanced. Politically, as with more general debates over postneoliberalism, the situation is subtler but also more confused, with few truly progressive alternatives in sight. The financial crisis of deepening severity had, by late 2008, lent greater urgency to this situation.

Practically, this has led to a resurgence of interest in alternatives to water privatization, which is the subject of part 2. Successive chapters critically examine the most politically popular alternatives in contemporary debate. Chapter 5 discusses the transnational struggle over the human right to water and points to some of the potential limits of this approach, while suggesting that other notions of rights (such as the "right to the city"), predicated on political struggle, will provide more traction in obtaining "water for all." Chapter 6 interrogates notions of commons and community water supply often proposed as alternatives to both public and private provision. Chapter 7 speaks to ecological issues and the (often overlooked) environmental dimensions of water privatization.

Some of these alternatives represent only modest modifications of government or private models (such as small-scale private water companies, or so-called government–private community partnerships). Others, such as proposals for a human right to water or legal reform to create water commons, represent more radical change, and reorient the conceptual terrain and practical focus of debates over solutions to the global water crisis. It is because of their radical nature that I have chosen to focus on this (not necessarily compatible) triad of concepts: human rights, community, and ecological governance.

The Human Right to Water

Chapter 5 documents the emergence of a global campaign for a human right to drinking water and points to the significant conceptual and practical limitations of this concept. There exist, as the chapter explores, considerable technical difficulties related to the implementation of the human right to water. And there are also more profound criticisms to be made. First, a potentially irreconcilable tension arises between the human right to water and traditional (communal) water rights—which are particularly important in places with indigenous populations. The chapter also raises the issue of the anthropocentrism of human rights, which excludes ecological

rights (the rights of nonhumans). Providing a human right to water may, ironically, enable justifications for the further degradation of hydrological systems on which ecosystems (and, of course, human beings) depend. A third criticism is that the framework of human rights is individualistic and legalistic, and hence cannot address the collective governance issues that constrain access to water on the urban scale. The equitable provision of water supply necessarily implies a degree of solidarity (both physical and material). Yet I argue that it is precisely this notion of solidarity that human rights, in isolation, cannot provide.

Nonetheless, the chapter also recognizes that the human right to water is a necessary and useful (although perhaps not sufficient) strategy for solving the world's urban water crisis. The importance of the aspirational dimension of a human right to water should not be underestimated: it raises expectations and places responsibility for those expectations on both public and private actors. As a simple example, the burden of government regulatory oversight of private actors would likely be higher in a context where the human right to water was legally recognized. Moreover, a human right to water shifts the focus from the putative advantages of public versus private providers to the responsibilities and accountability of all actors involved in water supply—both network and nonnetwork providers. The flexibility implied in this approach does not, however, mean lower standards; on the contrary, a human right to water demands certain minimum levels of services, and thresholds for availability, quality, accessibility, and affordability. As a result, a human-rights approach implies a focus on the most vulnerable groups, and thereby provides a potentially powerful means of combating the "elite capture" of water supply systems. A "rights-based" approach to water thus has both potential strengths and potential pitfalls—as explored in the case study of South Africa provided in chapter 5.

The Ambiguous Merits of Community Water Management

Chapter 6 turns to the question of community water supply. For anti-privatization advocates, community water supply is a strategy of placing water in the public sphere as a means of opposing privatization. For proponents of the private sector, involving a community is a means of resisting government interventions. Both are often equally suspicious of government action and cognizant of the benefits of involving communities in the management of water.

Of course, appeals to community are not unique to the water sector (and flourish under a variety of banners, from postneoliberalism to the

"post–Washington Consensus"). Indeed, alternative community economies of water exist around the world and have been the focus of extensive study. Chapter 6 does not review this literature; instead, the analysis focuses on a critique of the concept of community invoked in current debates over water privatization. The chapter summarizes the rather eclectic range of community options proposed in current debates, from water "commons" and cooperatives to various forms of community water governance. In the analysis, I suggest that although community provision has many advantages, it cannot comprehensively deal with the demands of distributive justice nor adequately address environmental concerns in urban areas: hence the "ambiguity," in my opinion, of appeals to community. A brief case study of Bolivia illustrates these points.

The Environmental Dimensions of Privatization

The thrust of chapter 7 is that debates about privatization need to systematically integrate environmental as well as socioeconomic concerns. For the urban poor, issues of livelihoods and environmental quality are intertwined. But the focus of much of the privatization debate obscures the larger environmental picture, in which improvements in the quality of human life are predicated on the restoration and preservation of water ecosystems. From this perspective, ecological efficiency, the conservation of natural resources such as water, and the eradication of poverty are necessarily interlocking goals.

These observations are inspired by debates over what academics term "political ecology," a mode of analysis which focuses on the interrelationships between livelihoods, justice (both environmental and socioeconomic), political economy, and sustainability concerns. Such views, and others like them, begin from the point of view that resources are cultural and ecological (and not just technical) phenomena. Simply put, just as we admit that forests are more than wood warehouses, we must recognize that waterways are more than natural reservoirs. The implication follows that innovations in our management of resources—such as privatization—have simultaneously socioeconomic, cultural, and ecological impacts that must be weighed together. In chapter 7, I use the term "ecological governance" to capture these ideas and expand on their consequences for debates over water privatization, properly framed as an issue of socioecological justice.

Reframing Privatization

Why do these arguments matter? As explored earlier, the water privatization debate intersects with broader debates over development, the roles

of states and markets, and environmental management. Disagreements over the support given to private companies by development agencies raise questions about the role and extent of markets and private companies in the provision of public services. Debates over the involvement of private companies raise issues of social, economic, and ecological sustainability. Questions about the respective roles to be played by communities, governments, and private corporations raise issues of deliberative democracy (which might be simply defined as theories of democracy that treat collective, public deliberation of ideas as the core of the practice of democracy, rather than the mere aggregation of private votes). Essential for life, fresh water provides a powerful lens with which to examine these broader debates on the legitimate roles of governments, markets, and communities in environmental management and the provision of public services.

These conceptual issues are not restricted, of course, to urban water supply. Similar debates are occurring with respect to public services (from education to health care) and utility networks (from electricity to information technology). But water is a particularly interesting issue because it is essential for life and ecological health and is imbued with spiritual and political significance. Water supply thus raises issues of social and ecological justice in a particularly acute way. In debating water privatization, in other words, we are also debating the relations and responsibilities among private actors, communities, governments, and the environment.

Opinions adopted within these debates will naturally be the subject of fierce dispute. I do not expect that all readers will be convinced by my analysis (and indeed I expect that disagreement is inevitable, particularly with my critiques of the private sector in chapter 3, the human right to water in chapter 5, and community water supply in chapter 6). Readers, however, may like to bear in mind that my objective is not to convince them of the definitive failure or success of water privatization initiatives, nor to advocate for any one particular alternative. Rather, the book's primary goal (and a measure of its success) is to draw the reader into a broader conceptual space in which our criteria for alternatives to conventional public and private approaches (which I believe to be urgently necessary) can be refined, and in which wide-ranging debate over urban water governance can flourish.

These are urgent matters. Over half of the world's population lives in cities.[25] In lower-income countries, many urban residents lack access to safe water. Most poor households lack in-home connections to the water supply network. Instead, the urban poor rely on alternative solutions—like water vendors or self-dug wells. These alternatives are often costly and provide water of poor quality and unreliable availability. The public-health

implications—high rates of child morbidity and mortality—are staggering. The impacts on people's productivity, longevity, and dignity are profound. Supporters of privatization argue that private companies may succeed where governments have failed in supplying water to the urban poor. Interrogating this argument, demonstrating its limits, and exploring alternatives are the central tasks of this book.[26]