

A VITAL FRONTIER

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F R Ξ Water Insurgencies in Europe



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I dedicate this book to my daughters Olive and Liliana, the centers of my universe, as well as to all of those protecting the water all over the world.



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PREFACE

I write this book in the midst of an endless pandemic, the beginning of which I spent (among many other things) wondering how the global water industry would respond to a planetary crisis where the consistent washing of hands we were asked to perform makes water seem more precious than ever before. By May 2020 I had attended a virtual Corporate Water Leaders Panel organized by Global Water Intelligence (GWI), a self-described "unchallenged leader in high-value business information for the water industry." It was moderated by Debra Coy, who was introduced by the GWI representative as the "queen of Wall Street" and the "queen of water technology." Coy is an executive in residence at XPV Water Partners, the largest water-focused growth equity fund in North America. For decades Coy has provided strategic advisory services for municipal utilities, investors, and companies from a capital markets perspective, and, worldwide, she is considered one of the most experienced consultants covering the water sector. The meeting also featured corporate executives Hara Prasad





Nanda from DuPont Water Solutions, Cath Schefer from Stantec, Rafael Perez Feito from Aqualia, Alejandro Jimenez from Acciona, and Ana Giros from Suez, all of whom implicitly agreed over the course of their conversation that they should never let a good crisis like the pandemic go to waste. The atmosphere of the panel was one of optimism about the accelerating opportunities for innovation and growth that the pandemic offered to the water industry. Unlike the 2008 financial crisis, which had hit all sectors of the global economy more uniformly, the pandemic's effects would be uneven and sector specific. The participants mused that the industry's profile seemed to have been raised in that the world now recognized that the private water sector has a "critical role in maintaining public health." The group noted that this was a potentially transformative moment, as companies had within the first months of the pandemic already demonstrated to governments that they could efficiently and swiftly implement best practices across whole regions under pandemic conditions. They had "built trust" that could be potentiated by pushing the boundaries of environmental performance and by investing more in the digitization and automation of water payments (many of which were lagging, the executives noted, as the pandemic wore on). Most importantly, the water executives also noted that the pandemic was an opportunity since it would create new budgetary constraints for public institutions needing investments for water infrastructures. These needs could be met by private investment because a huge amount of capital was sitting idle and looking for opportunities for long-term stable revenue.

These ambitious visions of increased private capital expansion into water utilities came right at a moment when several United Nations special rapporteurs published a dramatic op-ed in the *Guardian*, arguing that the pandemic vividly exposed "the catastrophic impact of privatizing vital services" like water and sanitation. The rapporteurs argued that states should "no longer cede control as they have done" and that they should cease delegating core goods and services to private companies and the market on terms that will "effectively undermine the rights and livelihoods of many people" (Farha et al. 2020; MacDonald and Spronk 2021). Seemingly oblivious to these warnings, executives on the Corporate Water Leaders Panel insisted that "as a sector, we should try to get all that capital," with Coy concluding that the focus would soon shift from the management of pandemic risk to postpandemic growth and to "getting more attention, more public awareness, more dollars."

This book could easily be a tale told about the ravages of global capital expansion into water utilities; a tale of dispossession and of more and



more dollars accumulated under the guise of efficiency, innovation, environmental performance, and public health. It could easily be told as a tale about a terrain "overdetermined by logics of capital in our present historical conjuncture" (Sunder Rajan 2012, 21) and about financial markets that are "monstrous beyond doubt" (Langley 2012) and in dire need of major regulation (Farha 2021). But my commitment is to pry open the spaces where this financial terrain itself is made unstable by insurgent life—by water insurgencies that refuse to frame infrastructures as opportunities for capital accumulation and that insist instead on the inviolability of water as right, vital resource, and life. In so doing, water movements craft imaginative projects around questions of property and the commons; democracy and just price; and about law, justice, and collective fiscal and infrastructural responsibility. It is these frontiers of the political imagination that I seek to honor with this book. Water movements hold many keys in their hands, and it is my hope that we know to use them.

This book emerged out of the varied routes I took beginning in 2014. My interest in European water insurgencies was first peaked by the Italians and the astonishing political and legal work they performed in the lead-up to a national referendum in 2011. But it was a first conversation with Saki Bailey in Turin about the Italian referendum and the Berlin Water Table and its striking achievements that led me to live in Berlin in 2015-2016 to conduct research in both Italy and Germany. While there, Dorothea Härlin from the Berlin Water Table took me to a meeting of the European water movement in Brussels, where David Sánchez Carpio from Food and Water Watch urged me to go to Ireland because the mass insurgency against metering was still ongoing and because "water there is not priced." Claus Kittsteiner from the Berlin Water Table had also been involved in a water referendum that was held in 2014 in Thessaloniki, Greece, which is why I visited there, too. That trip was short but involved among other things, an epic motorcycle ride and lots of good food with the unforgettable Yiorgos Archontopoulos. I also conducted a month-long visit to France during the summer of 2017, where I relied especially on the knowledge and generosity of Thierry Uso in Montpellier and a number of others in Paris. The result is a story that circulates as much as the members of these diverse water movements circulate—across varied hydrological, political, economic, and cultural terrains that are always in resonance with each other as people share epochal problems and common obstacles (Mezzadra 2015, 222). What follows are not case studies that allow for symmetrical comparison. Nor am I able to capture national, regional, or local water struggles in their



fullness. Rather, these are ethnographic accounts, not of bounded community struggles but of the shifting and always vibrant political and legal fault lines opened up by processes of financialization.

I trace how these water insurgencies ebb and flow, sometimes in conversation with each other, but often also separately since distances could not always be traversed and languages were not always mutually understood. Methodologically, this meant tracking movements via ethnographic techniques like participant observation and interviewing in what were sometimes very long and sometimes very short research trips. All in all, I attended the Berlin Water Table's meetings and followed their ongoing campaigns during my year-long stay in Berlin. I also spent a month in Ireland, where I moved between Dublin and Cork to interview people and also sat in meetings and attended demonstrations and, on one occasion, a court case. I further spent a total of three months in Campania, where I was initially fascinated by the remunicipalized Neapolitan water utility, Napoli Acqua Bene Comune (Naples Water as Commons; ABC), but soon got drawn into the ongoing and no less dramatic struggles faced by people in the region's smaller rural towns and villages. Throughout, I traveled to these towns and villages and sat in on meetings and also engaged sources ranging from government reports, laws, and online accounts including those available on social media-both as communicative devices and as visual archives of protest and lively fora of debate. Taken together, the chapters that follow can be read individually, but their message will be enhanced through juxtaposition as readers detect resonances across the stories I tell. Much of this book thus aims to capture the rich heterogeneity of situated struggle. But it also seeks to grasp the often stifling political and legal parameters against which this heterogeneity must assert itself.

Sometimes, I came late to water struggles and sought to document them retroactively. I saw that water struggles had moved on to other political terrains, such as when I was invited to meet Irish water activists as they were demonstrating for the right to housing for those rendered homeless by the housing crisis. Some struggles documented in this book continue unabated until today, even if they are more dispersed or weakened by the exhaustion of activists. In many cases, my interlocutors were left with a sense that their victories were fragile achievements that could easily be overturned. They were experienced enough to know that their political work—even if it ended in successful remunicipalization—would have to be constantly renewed because the forces intent on extracting financial value from their most precious resource were constantly renewing and



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rebuilding themselves as well. Many thus practiced a constant vigilance in a world where no successfully won battle for water as a commons would be the last, and where battles would have to be fought over and over again, by them and by generations to come. This was a politics that was perhaps not best captured by Marx's decidedly terrestrial metaphor-that of the old mole burrowing around in the underground only to then suddenly appear as revolution—but by the hydrological metaphor of the water cycle as a politics and poetics of constant returns and recursions. Just as water is a constantly shapeshifting substance, moving from its solid into liquid and then vaporous states, so too are the politics of water insurgencies marked by a continuous, constantly transmuting cycle of renewal that has no beginning and no end, and that will likely have to repeat itself, over and over again over time. And yet, everything I document in this book points to the conclusion that water movements are offering the world an insurgent gift—that of posing radical questions about wealth, value, and inappropriability and of working in common to continue to pose these questions.

If I were to trace the routes that my own thinking took over the years, I would start with a sparkling conversation I had with my dear friend Gavin Smith in Toronto on Edward Palmer Thompson. But there were other moments of clarity that I was gifted by friends and colleagues and that make this book the fruit of thinking in common: Firat Bozcali, who coined the term "infrastructures of financialization" for me; Sardar Saadi, who reminded me that the question of democracy was crucial and that I needed to foreground it analytically in the introduction; Naor Ben-Yehoyada on the Strathernian question on indivisibility; Tania Li on financial frontiers and the possibilities of that concept; Andrea Ballestero on pushing back at that concept; Hannah Appel on how weirdly interesting contracts are when studied ethnographically; Francesca Coin on genealogies of vitalism and the defense of life; Theodoros Rakopoulos for a question on usufruct; Enzo Alliegro on the importance of the biocidio movement and the terrifying specters of aquifer contamination; and especially Kelly Gillespie and Leigh-Ann Naidoo on insurgent questions and the insurgent practices that flow from such questions. The group that convened over a volume on financial frontiers also refined my thinking infinitely as we met across impossible time zones, distances, and life challenges during a pandemic: I salute and thank Hannah Appel, Geoffrey Aung, Julia Elyachar, Karen Ho, Jorge Nuñez, Horacio Ortiz, Gloria Pérez-Rivera, and Michael Ralph. Andrea Ballestero, again, was always luminous and illuminating; I am thankful for our friendship. Others who have accompanied me along the



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But most of all, this story is buoyed by the water insurgents I had the joy of meeting over the last few years. In Italy, I thank Marco Bersani, Costanza Boccardi, Carlo Borriello, Renato Briganti, Paolo Carsetti, Ida Dello Ioio, Raffaele Nunzio De Mauro, Renato Di Nicola, Tommaso Fattori, Valentina Gambarella, Enzo Guadagno, Giuseppe Grauso, Alberto Lucarelli, Ugo Mattei, Giuseppe Micciarelli, Maurizio Montalto, Stefano Risso, Enzo Ruggiero, Consiglia Salvo, Simona Savini, Francesco Sessa, Enzo Tosti, Gerardo Vitale, Padre Alex Zanotelli, and Ernesto Zona. I thank Giulia Romano from the University of Pisa for prompt and clarifying emails; Francesco Fusco, who made initial fieldwork in Naples pleasurable through his humor and generosity; Sergio Marotta, who shared his wisdom in a three-hour conversation and numerous clarifying emails; and Mario Visone, who delighted me by whisking me off to hang out with a Super Mario during what seemed like a very long and adventurous night in the Campanian countryside. I also want to express my debts to Bonnuccio Gatti and Ciro Annunziatamay they both rest in power. They look back on lives well lived. In Berlin, I thank Thomas Blanchet, Michael Efler, Johanna Erdmann, Christa Hecht, Carsten Herzberg, Ulrike Kölver, Shahrooz Mohajeri, Timothy Moss, Hermann Roloff, Gerlinde Schermer, Gerhard Seyfarth, Ulrike von Wiesenau, and Herrmann Wollner. I'm particularly thankful to Claus Kittsteiner, who welcomed me into his apartment, which was really the archive of the Berlin Water Table, stuffed from floor to ceiling with papers; Mathias Behnis, who sat with me for hours sifting through and talking about this archive; Carl Waßmuth, a man who knows numbers and holds a deep well of patience; and Dorothea Härlin and Heidi Kosche, both of whom have become dear friends. In Ireland, I thank the indefatigable Lynn Boylan, Patrick Bresnihan, Karen Collins, Ann Farrelly, David Gibney, Brian Gould, Gavin Harold, John Lonergan, Anne McShane, Noreen Murphy, Maggie Ni Caoimh, Diarmuir O'Flynn, Donal O'Sullivan, Ted Tynan, and the unfor-



gettable Balleyphehan/South Parish Says No group. I will also not forget sitting in a Dublin McDonald's with eyes wide open when I realized that the tall and burly red-haired man I was having a great old laugh with was a water fairy. Though he and others I spoke to will remain anonymous, they were some of the most raucously witty water insurgents to talk to. I also thank Karen Doyle for an incredibly illuminating conversation and Noreen Murphy for her indomitable spirit, humor, and political wisdom. As she and many others in Ireland taught me, the struggle for public water is serious, but it can also be filled with laughter. In Paris, I thank Armelle Bernard, Henri Coing, Martine Depuy, Marc Laimee, Matthieu Marquaille, Jean-Claude Oliva, Jean-Luc Ouly, and Graciela Schneier Madanes; while in Montpellier I remain indebted to Thierry Uso, Jean Baron, and Grégory Vallée. I also thank my students, who know this manuscript and all of its various ins and outs intimately. Thank you, Tessa Bonduelle and Salvatore Giusto, for being outstanding fieldwork companions along the way. Thank you, Jacob Bessen, Xiaoling Chen, Ferda Nur Demirci, Bronwyn Frey, Gina-Marie Grawe, Justin Langille, and Sandy Hyunjoo Oh, for your intellectual friendship and your willingness to work on details in such thoughtful ways.

I have also shared many iterations of this work at different institutions, members of which were gracious enough to host me and to think in common through ideas. I think of myself as having cocreated parts of the story I tell here with these audiences—and especially students—at El Colegio de México and the Universidad Nacional Autónoma de México, the University of Chicago, Manchester University, the University of Sussex, the Freie Universität Berlin, the Graduate Institute in Geneva, St. Andrew's University, Cambridge University, the University of Bergen, McMaster University, Columbia University, Simon Fraser University, and at the Temple Hoyne Buell Center for the Study of American Architecture; as well as the Departments of Anthropology at Columbia University, the University College London, Harvard University, Princeton University, the University of Zürich, the THESys Institute at Humboldt University, the University of Oslo, the NYU School of Law, the University of San Diego, Yale University, the University of Edinburgh, the University of Basel, the University of Warwick, Ludwig Maximilian Universität, the Universität Hamburg, and CUNY Graduate Center. Thank you. I was very honored by your presence and thoughtful engagement. The incredible team at Duke University Press—with Elizabeth Ault leading the way, with Benjamin Kossak helping me get my act together, and with Mattson Gallagher, Maria Katsantones, Lisl Hampton, and especially Bird Williams crafting this project into



shape—has been a life raft as I tried to finish a book with children at home and manage my departure from the University of Toronto to the University of Bremen, where I am thrilled to hold a professorship dedicated to maritime anthropology and cultures of water.

Finally, it takes time and money to indulge in the writing of books. I could not have done it without funding from the Wenner-Gren Foundation for Anthropological Research, a grant from the Deutscher Akademischer Austausch Dienst, a grant from the Dean's Faculty Research Funding at the University of Toronto at Mississauga, and a University of Toronto Faculty Research and Scholarly Activity Fund. A Jackman Humanities Institute Faculty Fellowship at the University of Toronto and a half-year sabbatical granted by the University of Toronto at Mississauga provided the magical time I needed to pound the last few bits of this book out.

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INTRODUCTION

A Vital Frontier

A TATTERED PHOTOCOPY OF A BILL, shown to me by an elderly man living in an impoverished town just outside of Naples in Southern Italy, sometime in 2016. He had rummaged through an archive in his living room, boxes brimming with papers stacked next to a piano, looking to find proof of the insane prices that the privatized water utility company *Gestione Ottimale Risorse Idriche* (Optimal Water Resources Management or GORI SpA) had made him and others pay. Eventually, he pulled out a crumpled piece of paper and showed it to me: a photocopy of what people there called a *bolletta pazza*, a "crazy bill." I had seen crazy bills like this held up high in the air during demonstrations or burned on flaming piles of wood. People were incensed by the fact that the utility was retroactively charging customers thousands of euros for water for which they had supposedly underpaid. For this elderly gentleman, the bill was a scandal, an utter betrayal of the Italian people. After all,



in 2011, Italians had won an unprecedented national referendum against the privatization of water.

An image of members of the Berlin Water Table (Berliner Wassertisch), sitting in a room wearing small white and golden paper crowns, holding a paper sign that said "Der Souverän sind wir" (We are the sovereign). Some were smiling triumphantly after a recent citywide popular referendum that they had won in 2011 and organized under the banner of "Wir Berliner wollen unser Wasser zurück!" (We Berliners want our water back!). The referendum, which also included a peoples' law (Volksgesetz) written by the Wassertisch itself, forced the public disclosure of a secret contract that had governed relations between the city and the French multinational Veolia and the German energy utility Rheinisch-Westfälisches Elektrizitätswerk AG (RWE) for over twelve years. The disclosure caused such a political scandal that Berlin was forced to remunicipalize the utility by 2013, promising more transparency and democracy in the referendum's wake.

A mother—tall, blond, and strong as a bear—protesting in Ireland. I had been told by people in Cork, located on the southern tip of Ireland, that she was the first person in the country who had decided to block the installation of a water meter very early one day in April 2014. Things were bad enough already—she had also repeatedly failed to receive help for her ill son in her austerity-wrecked town. Now, the new national water utility, Irish Water, was installing millions of water meters that were going to reap even more profits from the poor. The water meters were, people said, the straw that broke the camel's back. Little did she know that her protest, standing steadfast at the entrance of her working-class estate with her son sitting in his stroller, would eventually spiral into one of the most massive social mobilizations Ireland had seen in decades, with thousands of people barricading the entrances to their estates and surrounded by police as they shouted "From the river to the sea, Irish water will be free!"

These three stories are all fault lines in the processes unleashed by the financialization of public water utilities. All are examples of the fissures that open up when global financial frontiers extend into utilities that for large parts of the twentieth century provided water as a public good. These utilities, like others in many parts of the world, have moved from providing a vital service to citizens at subsidized rates toward relying on global creditors and the selling of services to clients on a full cost recovery basis. This process of privatization initially involved smaller-scale private shareholders or infrastructure companies. Today, it involves much more powerful global financial actors such as private equity firms and large pension funds ready





to invest billions into infrastructural assets. Yet this attempted conscription of public utilities into global circuits of capital accumulation—that recursive process that Marx called *ursprüngliche* (original) or primitive accumulation—is often vehemently contested. As public utilities are revalued and converted into publicly traded bankable corporations, they become zones of struggle, reconversion, and reappropriation as well.

This book explores these zones of struggle and the vital politics that have erupted in their wake. It shows how the exuberant horizon opened up by the promise of future profits is often met by the fact that the population at this frontier may itself become a risk. By focusing on these zones of struggle through the lens of the frontier, I refer not to a place but to a global process both volatile and generative—a mobile proliferation of appropriation and theft, protests and violence, as well as various claims to ownership and sovereign lawmaking, legality and illegality (Ballestero and Muehlebach et al., forthcoming); Tsing 2003, 5101-2). The financial frontier is always also an attempt at revaluation—a conversion of highly localized qualities into abstract quantities and of local into global regimes of value making. When global investors argue that they are more capable of understanding "the true value of water" and that "water tends to be undervalued around the world" (Yang 2020), they project that universal market laws will replace government and local municipalities' seemingly arbitrary and particularistic forms of valuation. Proper pricing will, so the story goes, better regulate demand and supply, trigger transformations of behavior, and create the conditions for the superior valuation and conservation of scarce resources (Dukelow 2016, 144). Proper pricing will also attract shareholders who will trade their shares speculatively; shares that have become assets thus become a form of wealth that derives its value out of claims made on future payments—a specter of endless returns.² Investors thus seek not simply to extract value from previously public utilities but to set the terrain of valuation. They attempt to dispossess people not only of public goods but of their capacity to determine what value and wealth are (Elyachar 2005, 8).

Water movements thus struggle against more than the financialization of water and water utilities. They struggle against the hegemony of finance as a measure of value and thus against the financialization of value as such (Christophers and Fine 2020, 22). Against the life-draining necropolitics of financialized accounting (Manjapra 2019, 35), water movements posit other modes of valuation and other modes of accounting and express them both within and outside the logic of numbers. Against the insistence of the "universal fungibility of all value on Earth through the general equivalent



of the money form" (Manjapra 2019, 34), water movements insist that it is impossible to render fungible the value of water. Against the durable debt that finance seeks to install through infrastructures of long-term profit, water movements insist on a transcendent debt that humans have always already incurred toward water, and thus toward life as such.

One might be tempted to think of contemporary finance as the "greatest and most monolithic system of measurements ever created, a totalizing system that would subordinate everything-every object, every piece of land, every capacity or relationship—on the planet to a single standard of value" (Graeber 2001, xi). Indeed, there is little doubt that the financial industry has arisen as a global network of exchange that creates, compares, and trades in all sorts of things that now count as assets (Ortiz 2012). Yet narratives of monolithic totality obscure the fact that a plurality of forms of valuation persist and are in fact newly provoked by and generated out of the dominance of finance. This book tracks how Europe's water movements have articulated their own "counter-valuations" (Collins 2017, 6-7) against this single standard of value, and how these movements have refused to submit what they often call "their water" to narrowly economistic ways of seeing the world. Against dreams of financial revaluation, these movements insist that water is not undervalued at all but in fact the most valuable, most sacred form of wealth. Emphasizing the ways in which water is often treasured in highly localized ways, water movements insist that water is theirs—a substance with specific tastes, meanings, and histories sustained across generations. For them, the value of water is, even when priced, ultimately incalculable and immeasurable and thus incommensurable with an abstract market logic. For them, water should thus be priced in ways that would allow it to remain radically accessible, especially to those in need (Ballestero 2019, 20). Against regimes of financial valuation that always increase water price, water movements posit a diametrically opposed regime of valuation that foregrounds affordability, accessibility, and just price. They argue that water justice can only be achieved if their resource is democratically and transparently managed through a just politics of societal distribution.

The financial expansion into the public sector is thus a nonlinear process and far from inevitable. It is often met with insurgency as the people burdened with replenishing speculative dreams of infinite wealth respond with their own sets of values—of democracy, social contract, transparency, and just price. As the price of vital goods is made subject to global investment schemes backed by an increasingly authoritarian state



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and emergency law, a series of political fault lines spring up as well. This push to privatize in the Global North came after a wave of investments into utilities in the Global South in the 1990s led to retreat as investors realized that the infrastructures needed in poorer countries were simply too expensive to build and maintain. Coupled with antiprivatization protests and the underperformance of profits, many multinationals withdrew as dozens of cities in the Global South remunicipalized their water works, with Latin America leading the way (Bakker 2013, 254–55; see also Björkman 2015; von Schnitzler 2016).³ Water insurgencies in Europe must thus be understood as being fed by what appear to be Europe's margins, with processes that first unfolded in global "peripheries" now (re)constituting the "center" (Chakrabarty 2000; Tsing 2003, 5101; Byrd et al. 2018; Morris 2016, 47). Put differently, the privatization of water utilities is a "double arrival" to the West of both colonial and capitalist logics—two forms of predation whose "disorders have come home to roost" (Clover 2016, 167; Cesaire 2000; Comaroff and Comaroff 2006, ix; Susser 2017, 3). Financial frontiers shift across Europe just as they shift across the globe. After all, the whole world is a frontier for capital, with terra nullius "continuously declared, as if for the first time" (Cooper and Mitropolous 2009, 367).

Yet, the financial frontier is highly indeterminate terrain. Water insurgencies struggle not only over modes of financing and accounting but over political questions about democracy, sovereignty, and legality; indeed, over the very nature of the political and the lawful as such. They throw into relief philosophical questions about private, public, and common forms of property; and about contract, price, distribution, and the law. Through these politicizations, distinctions between public and private institutions, between commodities and social goods, and between profits and fees, become fields of struggle. None of these distinctions can be taken for granted as stable entities. Indeed, many of the "public" utilities that were in the process of being "privatized" were already thoroughly corporatized (Berlin, Naples) or partially privatized (Ireland). The vitalism of this financial frontier thus consists of the fact that public and private goods, institutions, contracts, or commons are constantly destabilized and restabilized in terms of what they might actually mean. Water movements are thus not restorative social movements that seek to recuperate a lost moral economy or "public." Instead, they present us with new frontiers of the political imagination that ask what the public or common might be. The financial frontier might thus appear as a global project that seamlessly conscripts public utilities into teleological circuits of capitalist self-expansion



(Fraser 2016, 166; see also Sopranzetti 2017). In fact, it is made by the equally relentless proliferation of political imagining by water movements that argue that the sell-off of their common goods is the most immoral form of theft of all—the theft of life itself.⁴

It matters that water management is usually a local affair. In many parts of the world, water is managed as a common-pool resource through community-controlled mechanisms (Bakker 2007, 442). In Europe, particularly in Germany, Italy, and Ireland where this story is set, water was for the longest time managed municipally via local water sources and infrastructures (Dukelow 2016; Fantini 2014; Lanz 2005).⁵ This means that the history of water infrastructures developed very differently from other modern infrastructural systems like railroads, telecommunications, and electricity grids, which were made subject to centralized government schemes to universalize access and to unified regulatory regimes (Collier 2011, 205–6; Bakke 2016). Contrary to the regional and national scaling up of these publicly owned infrastructures that occurred in Europe and the United States beginning in the 1930s, water works almost always stayed local, in part because of transportation costs but also because water cultures and long durée infrastructures have always been communal (McDonald 2018, 49). Even in France, which has long managed its water via more centralized river-basin institutions, water basin authorities are still largely managed according to principles of subsidiarity (Juuti, Katko, and University of Tampere 2005, 37).6

It is these localized vital histories and their attendant material intimacies that have created the contours and ethics of the political mobilizations documented here and that make water utilities particularly resistant to financialization. The intimate intensity with which people hold "their" water dear stands in stark contrast with the abstract pricing and trading infrastructures that global finance seeks to build (Besky 2016).7 As anthropologists have long argued, inalienable possessions hold transcendent value and are often held in common (Kockelman 2020,14). They tend to be "essential to the continuity of the thread of life between past, present, and future" (Narotzky and Besnier 2014, 9; Weiner 1992). These possessions may under some circumstances be counted and priced, but always with questions of justice in mind and never by outsiders who treat these inalienable possessions as mere resources from which wealth can be extracted. After all, inalienable possessions are never mere economic, but also juridical, political, ethical, and affective facts that cannot easily be rendered equivalent through numbers (Kockelman 2020, 15; Ballestero 2015, 2019).



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Many of my interlocutors understood the privatization of their public utilities as an enclosure of a common good that should, under all circumstances, be kept public. 8 They experienced enclosure in very concrete ways: in the form of crazy bills that could not be paid and were thus unjust; in the form of water meters that sought to press the "last drop of blood out of stones"; as nominally public utilities that suddenly seemed to be governed by faraway inscrutable forces; as contracts that people argued they never signed; or as laws and violent policing that they perceived to be profoundly illegitimate, even illegal. My interlocutors thus experienced financialization not primarily as a set of abstract economic institutions but as an intimate social formation that came with often obscure practices and illegitimate effects; a "sedimented financialization" that propelled seemingly distant processes into the everyday lives of households with accelerated speed, anxiety-inducing intensity, and polarizing class effects (Song 2014, 41; Palomera 2015; Kalb 2020; Mattioli 2020). It was against these concrete, everyday financialization effects that Europe's water insurgencies arose and through which finance emerged as a highly politicized object.

Moving across Italy, Germany, and Ireland, I explore the uneven distribution, expansion, and retraction of processes of financialization—economic logics that are also always modes of political governance accompanied by modular kinds of lawmaking and circulatory moral and contractual forms (Appel 2019; Vogl 2017). As I track the political insurgencies that emerge in response to and always in excess of this apparatus of capture, I show that the financial frontier consists of a series of volatile encounters with uncertain effects. Unsurprisingly, two of the insurgencies I document appeared in Europe's racialized "peripheries" (Italy and Ireland, part of what mainstream media widely called the "PIIGS" during the 2008 financial crisis, i.e., Portugal, Italy, Ireland, Greece, and Spain [Franquesa 2018, 123-24, Schneider 1998]). But they occurred also in what is frequently thought of as one of the hearts of the European project: Berlin. Across these terrains, I track the vitality of insurgency as people relentlessly push back and thus shape the financial frontier. 9 When Allianz Global Water, a subfund of Allianz Global Investors, urges investors to "ride the wave" and invest in water infrastructures while insisting that such investments are secure because they are "immune" to "political and sentiment-driven volatility," it misrepresents what is often a precarious terrain to which global firms like Allianz must respond. 10 While investors like Allianz are constantly rearranging their narratives and tactics as they anticipate critique (such as when water corporations suddenly speak of water as a human right),



movement critiques cannot always be seamlessly integrated. Instead, fault lines open up in their wake. It is only through attention to the proliferation of these fault lines that the financial frontier can be fully grasped. And it is only through a focus on these fault lines that prospects for an emancipatory contemporary politics can be discerned (Fraser 2016, 57).

I refer to this frontier as vital because my interlocutors all equated water with life—a language that bore striking resemblance to indigenous movements that have long argued that extractive capitalism is a form of thievery that relies on the world's "open veins" for sustenance (Estes 2019; Gómez-Barris 2017, xvii; de la Cadena 2015; Farthing and Fabricant 2018; Shiva 2016; Simpson 2017, 2021). As neoliberalism renews its "extractive-dispossessive form" in an era of financialized sovereignty (Gago 2015, 11), its necropolitical core is challenged by the vitality of the politics of water as life, now a rallying cry around the world. 11 I also refer to these politics as *vital* because the history of neoliberalism cannot be understood without reference to the expansion of commercial processes into life itself. Value is today produced through life, as the biotech revolution has shifted the locus of value production to the level of the genetic, microbial, and cellular (Sunder Rajan 2006; Cooper 2008, 19; Helmreich 2008). 12 While the expansion of the financial into biological life processes has been well documented (Langley 2020b), I argue that this mode of appropriating value must be understood as including the vital infrastructures necessary to make life substances like potable water circulate and flow (see Langley 2018, 2021; Bear 2015; Harvey 2004). Vital infrastructures, in short, are a crucial part of the life that capital seeks to absorb (Murphy 2017, 149; Hardt and Negri 2000). As the flows that circulate through urban fabrics are monetized via consumer payments and as potential present and future income streams, investors make claims on the future of cities and the human and nonhuman life entangled with it. They generate wealth out of the stuff of life and the infrastructural backbones it relies on, subordinating the substance of society to the laws of the market (Langley 2018, 177; La Duke and Cowen 2020; Polanyi 2001, 75). It did not matter to my interlocutors that global investors were for the most part more concerned with infrastructural assets (the pipes, collection wells, pumping stations, and filtration and sewage treatment systems needed to manage and move fresh water and wastewater systems) than with water as an asset class per se, though this is now rapidly changing. 13 For my interlocutors, the financialization of water infrastructures was a struggle over their water being taken away, and it was their water they wanted back.



Water is a charismatic protagonist at this frontier. For insurance, banking, and asset management firms, scenarios of extreme scarcity from California to Cape Town create horizons of expectation promising durable wealth that stretches far into the future. Investors bank on life's infinite dependence on water as a vehicle toward infinite wealth. For them, the frontiers opened up by the structural imbalance between water supply and demand should be addressed through massive private investment—large-scale credit and the forms of public indebtedness they entail. Investors foreground infrastructural breakdown and the moral imperative to meet these material needs. What they obscure is what is really at stake: long-term financial opportunities through debt financing (Bear 2017, 2020; Mitchell 2020).

Yet water is a profoundly "uncooperative commodity" that is not readily enclosed or owned (Bakker 2003), a "limit figure" that escapes from or at least resides at the edges of enclosure (Kockelman 2016, 5). 15 As William Blackstone put it in his eighteenth-century commentary on English common law, water is "a moving, wandering thing, and must of necessity continue to be common by the law of nature so that I can only have a temporary, transient, usufructuary property therein" (Blackstone 2016, 11). As an unruly substance that constantly circulates through rock, soil, air, and flesh, water troubles the fiction of possessive ownership and bodily sovereignty (Ballestero 2019, 415; Björkman 2015, 14-15; Cattelino 2015b; Helmreich 2011; Neimanis 2019; Strang 2005; Povinelli 2016). With qualities difficult to measure and temporalities that exceed human comprehension, there is perhaps no other substance that is as out of sync with finance capitalism's short-term rhythms, modes of disembedded ownership, and modes of valuation (Bersani 2011, 89; Muehlmann 2012; Satsuka 2019, 203). Water is vital both from the point of view of everyday household reproduction as from the point of view of capitalization, creating terrains of struggle that oscillate between appropriation and reappropriation, capture and overflow. My use of the term *vital* is not meant to ontologize life or to appeal to some immanent insurrectionary power or autonomous force. ¹⁶ But it does acknowledge the fact that there are few substances that are as universally revered as sacred, such as when a Neapolitan priest sprinkles bystanders with water from a public water fountain—as if he were distributing holy water with the world and its inhabitants as his church. The privatization of this sacred good, while shrouded in the "phantom objectivity" of exchange value, seems unnatural, even evil, to many (Taussig 1980, 4). Water symbolizes a gift that money cannot buy, "the whole of potentiality; it is



fons et origo, the source of all possible existence" (Eliade 1958, 188; Helmreich 2011, 132). A symbolically dense sign and substance, water buoys the frontiers of water movements' political theorizing, while always also existing in excess of it.

The term insurgency, etymologically linked to surge and most likely to the late-fifteenth-century Middle French word sourge (fountain or stream), is defined as a rising, swelling up, or ascension from below. Today, we define insurgency as a condition of revolt against a government whose authority is deemed illegitimate. Anthropologists have long documented insurgencies in the Global South, where, for decades, governments have had to manage populations as they became risks to the implementation of structural adjustment regimes (Peterson 2014, 54-56; von Schnitzler 2016). They have further documented the kinds of "insurgent citizenship" that have made powerful demands in countries like Brazil and Bolivia, where profound inequalities and the urban poor's alienation from the law and democratic process have seen waves of reappropriations and "autoconstructions" of law and democracy from below (Holston 2009; Lazar 2007; see also Graeber 2004, 83-84; Hines 2021). When the Berlin Water Table insisted that they were the sovereign and wrote a disclosure law to prove it, or when the Italians built and won a referendum in 2011, they similarly insisted on their right to democratic process and to auto construct the law. When the Irish blocked the installation of water meters using their bodies as barricades, they similarly reappropriated public space and engaged in a public battle over debt, justice, and sovereignty—with sovereignty implying not exclusive jurisdiction or possession but a commitment to the inappropriability of life (Simpson 2020, 686; Subramanian 2009, 171). All did so from the vantage point of deeply grounded histories and tactics of collective political mobilization, using already available cultural and historical arsenals at their disposal.

Arising from the level of households, neighborhoods, and cities, water insurgencies pose profound challenges to the liberal democratic project as it has evolved under conditions of financialized capitalism in Europe. Here, the rise of authoritarian neoliberalism has seen executive branches marginalize the policy-making function of national parliaments in order to fast-track austerity reforms and fiscal adjustment programs. They have structurally inscribed "a permanent state of exception into its legal and institutional practices" (Cozzolino 2018, 337–38; Bieler 2021, 96),¹⁷ and they have centralized decision-making processes to reduce spaces of dissent (Tansel 2018; Mattioli 2020). Against this conflation of emergency legislation



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with ordinary policy-making functions (Cozzolino 2019, 340), and against what many of my interlocutors called "the illegality of the law" (see also Holston 2009, 19), European water movements have used all tools at their disposal—self-authorized lawmaking and exuberant public demonstrations; political maneuvers as well as guerilla actions; evocations of both human rights and broader questions of "life." They have done so relentlessly through a continued renewal of political will, collective organizing, and common purpose. The temporality of insurgency that I document here is thus certainly eventful (such as when the majority of a population expresses its political will through a resoundingly successful referendum against the privatization of water). But insurgency is just as often built patiently over the long term through community work, often over years, sometimes decades.

Water movements are not exclusively constituted by citizens making demands on the nation state. Rather, they often occur in the name of the human right to water and, increasingly, in the name of water and nature as kin. Bearing family resemblance to both indigenous mobilizations for the protection of water (de la Cadena 2015; Estes 2019; Simpson 2017, 2021) as well as to submerged Christian traditions, such as when Italians referred to water as sorella acqua (sister water) after an eleventh-century Franciscan prayer (Muehlebach 2018b), the insurgencies documented here emerge out of a profoundly contradictory historical moment in which the rise of vital infrastructures as a financial asset class coexists with the fact that rivers and other bodies of water are increasingly granted constitutional rights as persons (Warne 2019; Chiasson 2019). 18 Many of my interlocutors were aware of this mostly indigenous-led global politics that recognizes the Earth and its substances as animate, rights-bearing subjects, just as they were very knowledgeable about processes of financialization. It was these incommensurable global developments that opened up fraught ethical questions about life in its indivisibility as well as about futurity and debt—a debt that current generations owe to water as life-giving substance and to human and nonhuman generations to come. If the principle of investment "hinges upon the belief that the future is exploitable" (Papadopoulos 2017, 139), water movements raise the question of futurity and whether limits ought to be set to the future's-indeed life's-exploitability.

This book tracks how people across Europe have come together in insurgent, sometimes even riotous groups to publicly burn water bills at the stake, block the installation of water meters with their bodies, sabotage water meters, write their own laws, hold their own referenda, force the disclosure of contracts, or refuse to sign contracts. By focusing on those



bearing financialization's weight as its intimate effects unfold across every day and sometimes quite unexpected terrains (Ho 2020; Miyazaki 2012), I show that people are never subsumed under a steadily expanding totalitarian financial regime (Weiss 2018, 460; Hart and Ortiz 2014, 472; Besky 2016). Instead, they exist in a frictitious, rebellious, sometimes riotous relation to this process. By conceptualizing these fault lines as a frontier, I insist on financialization's contingency and volatility. The extractive zone is always a zone of "permanent provocation" as well (Li 2007, 11; Byrd et al. 2018; Mezzadra 2015, 222). At this frontier, the extraction of wealth from life is met with a resounding affirmation of life as the only form of wealth.

Financializing Life

In March 2019, over seven hundred "top water leaders" and business executives met in London at a three-day Global Water Summit to help investors discuss global water markets and their movements. London was a highly symbolic location, as the summit's watermeetsmoney.com website put it, since the city is not only "historic, grand, and global," but also a "hub for creativity and finance, two of the pillars of a more successful water future."19 The main topic of the summit was the "disruptive designs" that would help investors "accelerate opportunities in the global water sector" in light of the growing capital requirement for water infrastructures. The summit was only one of many recent spectacular international events that have showcased the ways in which a huge global capital liquidity superfluous money produced by a superfluous class with no real social function, as Hannah Arendt poignantly put it (1976, 148)—is intersecting with a growing anticipation that water and water infrastructures are rapidly becoming some of the most lucrative commodities on the planet.²⁰ These events hinge on the promise of ample future returns, such as when Allianz Global Water predicts that investors will derive multiple forms of "environmental, social, and financial alpha" from their investments (with alpha indicating excess or abnormal rates of profit).²¹ The global "rush" (Li 2014, 4) to invest in water is thus as much a moral as it is a fiscal story, with investors accruing both financial and ethical returns.²²

The summit included roundtables on desalination and how this technology might serve, among other things, corporate mining needs; how the effects of future water scarcity might impact beverage industries such as Coca-Cola; and what the role of smart money might be for the North



American oilfield water services market.²³ Yet one of the summit's main stated goals was to bring together investors with utility managers in order to meet the growing financial needs of aging urban water utilities around the world. Thus, even as the global rush for "unconventional hydrocarbons" is today coupled to an equally frantic search for "unconventional water" (Gandy 2014, 12), one of the summit's central concerns was the decidedly more mundane question of how and under what conditions global investors might invest in urban water utilities. As one Swiss financial company estimated, the size of the global water market was around US\$591 billion in 2015, US\$500 billion of which was invested, allocated, or directly managed by municipal or public utilities (Ballestero 2019, 18). Allianz Global Investors argue that in 2019 alone, "the accumulative investment gap on water infrastructure was US\$81 billion. Other calculations suggest annual needs of more than US\$100 billion each year for the next 20 years" (2021). The number of people globally served by privatized water companies is thus growing, from 335 million in 2000 to 1.1 billion in 2015, with political support for water privatization building globally, particularly in China, Brazil, and the United States (McDonald, Marois, and Spronk 2021, 118-21). These specters of yet-to-be completed investments along the water supply chain mean that the frontiers of water financing are gravitating toward public or municipal water infrastructures. They make up the majority of the market share, especially in larger urban areas in middle- and highincome countries.24

Global Water Intelligence (GWI), a firm that sponsored the Global Water Summit, is a good example of this frontier in the making. It offers members an online monthly roundup of water-related news and carefully scours world political developments to discern the laws and policies that might "unlock" water infrastructures for future investment. Is Chile's government backing the reforms to water utility regulation? How to interpret the language of a US\$1.4 billion environmental bond bill introduced in Massachusetts last week? GWI does not attempt to veil what is at stake: a global war over water about which intelligence must be collected—"unpriced information" that must reach GWI's clients before the competition does (Leins 2018, 81). The urban water utility sector is, in short, a projected horizon of wealth accumulation that intersects with the urgent needs of ecological and infrastructural modernization (Bresnihan 2016, 115).

The financialization of water infrastructures sets in motion multiple layers of predation. Public utilities in post–Maastricht Treaty Europe are today compelled to raise money through debt financing, just like their



counterparts in the Global South were when the IMF and the World Bank implemented structural adjustment policies decades ago (Whiteside 2019, 1478). Municipalities thus vie for global investments by rendering themselves "bankable," that is to say, legible to financial investors. A utility's bankability (or "investment grade") is measured not only in terms of how well it is able to transform itself from a previously "invisible" and "inefficient" water network into a transparent and accountable infrastructure asset (Bresnihan 2016, 117; Heslop 2020, 364–81; see also Collins 2017), ²⁵ or in terms of how quickly it can convert "weak operational performances" into what investors call "forward momentum" that will secure future funding for large-scale infrastructure investment. ²⁶ Utilities must, first and foremost, demonstrate that they can and will be able to repay incurred debts.

They do so by turning themselves into joint stock companies that must demonstrate their financial efficiency and regulatory compliance through the use of corporate accounting methods and the reduction of operational costs (Bresnihan 2016). External loans are repaid through the municipal capacity to secure a captive income stream from households who pay predictable water tariffs over predictable time periods (Bayliss 2016, 386). Apart from outsourcing labor or selling public assets, privatized utilities are thus also reliable debtors insofar as they can guarantee stable income streams. The capital at stake is huge. A PricewaterhouseCoopers report for Ireland, for example, estimated that the debt capacity of the national water utility, Irish Water, could rise fantastically from 606 million euros in 2015 to 2.9 billion euros by 2030 (Bresnihan 2016, 120)—a debt capacity that translates into long-term contractually guaranteed returns for investors. Investors accrue an additional layer of value through the bond and derivatives trading built on top of municipal repayment of high-interest debts (Bear 2017, 5). After all, utility shareholdings have become assets that are speculatively traded, with ownership changing rapidly according to volatile financial market indicators. Public services have thus been transformed into tradable assets, with households around the world producing the income that allows for the steady "trickle up" of wealth through their consumption of essential goods (Bayliss 2014, 295). As Global Water Intelligence put it in a 2019 global water tariff survey, the average water, wastewater, and storm water tariffs increased by 3.3 percent on average over the previous year, a trend that shows no sign of abating.27

Contractually guaranteed long-term profits end up increasing, not decreasing, municipal debt (Whiteside 2018, 3; Lobina 2014, 3). This is not to say that municipalities were not always financial actors or that they were



not also previously indebted.²⁸ Rather, there has been a move from what Laura Bear has called "political debts" to "monetary debts" (Bear 2017, 3). Public infrastructures for much of the twentieth century were financed through tariffs, taxes, Keynesian deficit spending, and sovereign debt (Langley 2018, 175)—debts that were characterized by government collaboration with forms of capital such as pension funds and that entailed a fiscal policy in service of political and social reproduction (Bear 2020, 2017, 3). It is only when this debt became financialized, that is, when control over fiscal policy moved from states to banking and financial rentier classes, that debt had to be paid back with often high interest. This logic of nonnegotiable monetized debt has now saturated political governance and accounting from India to the European Union (Bear 2017, 4).

This public capture by finance has changed the forms and temporalities of political governance, with the tributary structures erected around debt repayment now constituting the very logic of public institutions. This orientation toward creditors—the "God of Debt," as one of my German interlocutors put it—means that remnants of whatever long-term political reasoning is still left have been hollowed out (Bear 2015, 51). State institutions are experimenting with biopolitical rationalities that explicitly foster and support processes of financialization. They create extensive legal and regulatory provisions for capital while pledging their own tax base to investors (Langley 2018, 172–82; Smith 2020, 329).

My interlocutors across Europe were incensed by the fact that the debts their utilities were accruing would accumulate in the long run and cascade across generations, generating future debts to be-paid by their children and grandchildren. They struggled against this intergenerational bondage to debt—a "perpetual motion scheme" where distant creditors generate money out of money by living indefinitely off interest and burdening future generations with present financial and political arrangements (Foster 2018, 298; see also Arendt 1976, 144).29 Against this politics of municipal debt (or what scholars have called the urban "debt-machine" or "bond-market urbanism" (Peck and Whiteside 2016), European water movements articulated not only an oppositional politics of monetary debt and financial accounting, but their own, contrarian poetics of vital debt—an incalculable debt that humans and nonhumans owe to water on a daily basis. They thus articulated a very different quality and temporality of value (Narotzky and Besnier 2014, 4)—one generated out of life's indebtedness to water as it is renewed with every drop, every day, and as it holds together humans and nonhumans, bodies across space, and generations across time. Italian



politician Tommaso Fattori made this point beautifully when he recounted Ovid's *Metamorphosis*, a classic of Latin literature written more than two thousand years ago. In it, the goddess Latona addresses a group of peasants who refused to allow her to drink from a pool, asking, "Why do you refuse me water? The common use of water is the sacred right of all mankind. Nature allows no one to claim as property the sunshine, the air, or the water. When I drew near, it was a public good I came to share.... A draught of water would be nectar to me; it would revive me, and I would find myself indebted to you for life itself" (Fattori 2001).

The financialization of life is a political process, too. Some of my interlocutors noted that their main adversary in this David-and-Goliath battle were, in fact, politicians. As Claus Kittsteiner, one of the founding members of the Berlin Water Table put it to me, "Our frontline (unsere Frontebene) was never the capitalist corporation, which does what we expect it to do. Our frontline was always the politicians who signed these scandalous contracts." Their most incisive critiques were thus reserved for those public institutions that had sold off what some of my interlocutors in Germany called their Tafelsilber (or silverware, which in English is perhaps more appropriately translated as crown jewels)—their water (Moss 2020, 284-89). Indeed, municipal water works are often desperate for investments since public subsidies were radically reduced since the 2008 financial crisis, right at a moment when infrastructure bonds and debt financing became more popular. This means that this frontier of dispossession operates also on the level of desire—of public utilities yearning to develop debt capacity and to become worthy of global investment (Morris 2016, 33; see also Björkman 2015). State actors are thus as invested in attracting global capital as they are in staging a fantasy of credit worthiness—that they are or will in the future become efficient debtors. Yet desire does not fully capture the psychic life of public indebtedness either. Consent and the commitment to good behavior matter, too, insofar as haute finance can only entrench its grip on politics because loans and the renewal of loans hinge on credit, which in turn hinges on "good behavior" reflected in the budget (Polanyi 2001, 14). As Marco Bersani from Italy's National Forum for Public Water put it, "Politicians and their parties have consented to the expropriation of their political function."

Parallel to this apparatus of guaranteeing and leveraging debt runs a process of political centralization, an economy of scale matched up with the administrative scaling up of water management systems (Romano, Guerrini, and Campedelli 2015, 46). In Marx's words, the concentration



of property results in political centralization because centralized governmental structures can better accommodate large-scale investments and shared capital corporations (Marx and Engels 1967, 65). This means that states need to actively create the properly scaled political conditions for financialization. In Italy and Ireland, for example, states passed legislation to create single, consolidated (in Ireland national, in Italy regional) water companies (Bresnihan 2016, 9), as was the case in England and Wales in 1989. The regional centralization via regional water authorities was set in accordance with watershed areas; but this ecologically sound rearrangement nevertheless also facilitated privatization (Bakker 2001, 145). Political and administrative centralization, in short, is necessary to economic monopolization (see also Boyer 2019, 16). It is a process that runs parallel to the fact that water provisioning is a natural monopoly and not a competitive market. Because there exists only one infrastructure for the aqueduct and only one possible supplier of the resource through the network, the body running the service will have monopoly and thus access to a captive income stream—a form of monopoly rent or what some of my interlocutors called a "hostage market." Such patterns of monopolization were already evident in nineteenth-century private water provisioning, where private companies did not compete but "followed a model familiar to crime bosses: they realized far better profits by dividing the territory into separate monopolies where they each set their own rates as they saw fit" (Salzman 2013, 67). A century earlier, states had already intervened into highly monopolized mercantilist economic life when monopolies became dangerous because they impacted the "necessaries of life" (Polanyi 2001, 69). One of my German interlocutors, social-democratic politician Gerlinde Schermer, similarly commented on this dual process of economic monopolization and political centralization, arguing that the financialization of public utilities often reverses decades of federalism and municipalism in favor of centralized political and administrative structures. They allow for global investors to negotiate "only with one, not with several kings. That way, you only need to talk to a single decision maker to get at what is in fact our property!"

Infrastructural assets allow for this existing global liquidity to embed itself in durable material and social infrastructures at a moment of intense global economic volatility—a long-term guaranteed stability of returns that emerges out of the fact that water is what specialists call a "nonoptional" and "fixed-demand" service. Humans are not free to decide whether or not to use water. Their demand does not vary much in relation to contingencies (in moments of crisis, a family might only marginally reduce its



demand for water or even increase it). Thus, even though investments in expensive water infrastructures may take years to return their value, they promise "low-risk, high-yield, inflation-proof investments" over time (Campra et al. 2014, 5; Della Croce and Yermo 2013; Harvey 2004, 63; Mitchell 2020). Value in this financialized economy is thus extracted from life and the households that produce and reproduce it, the infrastructures that sustain it, and the rent that can thereby be accrued. It lies not primarily in their infrastructural capacity to move commodities across space, but in their capacity to facilitate durable *financial* flows across time (Mitchell 2020). This durable rent structure also arises out of durable legal and political infrastructures. After all, investments in water infrastructures are made through contractual agreements that last almost the length of a generation, usually twenty-five to thirty years or more, thus guaranteeing the durability of corporations that can outlast many an elected government.³⁰ While the guaranteed returns on investment (12-15 percent per year) are humble in contrast to the 25 percent returns that can, say, be made through shortterm corporate restructuring, the security they offer in times of market turbulence is priceless to investors like pension funds. 31 Studies of water utility privatization in the United Kingdom have shown, for example, that companies have made profits well in excess of predictions, paying dividends to their shareholders well above the average paid to stock market investors (Bakker 2001, 157).32

At the heart of this financial frontier lies the household—the site from which wealth is extracted, bill by bill, month by month. The spiraling debt economies that go hand in hand with the financialization into public utilities ensnares not only public budgets but people's everyday lives as well. Households are central to this vital frontier as indebtedness has become necessary for the acquisition of life's necessities. Utilities have come to rely on the steady income of household payments in order to manage debt. The current round of accumulation, in short, relies at least in part on the movement of wealth "upward" through household payments on vital goods—on water but also rent, energy, phones, and subscription fees. ³³ Households have thus become anchors to which the volatile post-2008 global financial system is attached; they function as "shock absorbers" in a market lurching from one crisis to the next (Cooper and Mitropoulos 2009, 364). Yet households are volatile anchors and can become sites of refusal, too. Once stretched too thin, they are the terrain upon which fault lines appear.



Recursions

When Adam Smith wrote The Wealth of Nations, the prospect of commodifying water was still unthinkable. Arguing that the usefulness of a good could be inversely related to its value, he gave the famous example of a diamond that was useless and yet expensive while "there is nothing more useful than water. But [water] will purchase scarce anything; and scarce anything can be had in exchange for it" (Smith [1776] 1937, 33). Smith was operating within the basic parameters of Western law, which, born out of Justinian jurisprudence, differentiated between public goods, private goods, res nullius (goods that belong to no one and that therefore can be appropriated by everyone), and res communes (goods that belong to everyone such that no one can use them exclusively for themselves, including freshwater and seawater [Fattori 2013, 382; Shiva 2016, 20]). Beginning in the nineteenth century however, that which was unthinkable to Smith and unknown within the Western legal canon became thinkable, even commonsensical: the turning of res communes into assets through which future value is earned in the present (Mitchell 2020; Barlow 2005).

Of course, water itself has been priced, bought, and sold in different ways for millennia. Ancient Rome already distinguished between water, free for the taking by commoners out of public basins, versus water that was provided by the city to the upper classes via pipes running from the main system to their private houses or baths. The former were warned never to sell their free water ("A marble wellhead from the ninth century in Rome's San Marco church carries an inscription cursing anyone who dares to sell the well's water"), while the latter had to pay a water tax that was reinvested into infrastructure maintenance (Salzman 2013, 54-57). The medieval market for holy waters was similarly vibrant, as was the European trade in healing mineral waters that emerged in the eighteenth century and that still exists today (Salzman 2013, 23). Another exquisite story, told in the immediate aftermath of World War II, describes Naples' water sellers selling acqua ferrata (water containing iron) in rounded cups shaped like women's breasts and charging "three or four times the equivalent amount of wine" (Lewis 1978, 85-86).

Yet this provisioning of water for a price, whether in ancient Rome, medieval France and Germany, or modern Naples, always appeared as an exception against the backdrop of the fact that water, with its life-giving capacities and inimitable material qualities, is widely, indeed cross-culturally, thought of as a natural commons that ought to exist outside of the spheres



of market exchange.³⁴ Thus, even though humans have for millennia built infrastructures to capture water or even at times sell it, they never before made it subject to the kinds of financial speculation and rent seeking that first occurred in the mid-nineteenth century and that is reoccurring again today. The quantifications of water's qualities (such as when a cup of water equals three to four cups of wine, or when ancient Rome's wealthy were taxed for the water flowing through city infrastructures) cannot be equated with current regimes of capitalization that hinge on the belief in the limitless exploitability of future returns (Muniesa et al. 2017).

The current financialization of water utilities thus differs profoundly from the buying and selling of water as it has occurred, on and off and in limited ways, across millennia. Instead, it represents the (re)emergence of interest-bearing capital in ways that facilitate accumulation (Christophers and Fine 2020, 20), thus replaying nineteenth-century speculative endeavors through which common goods were converted into financial gains, the Earth's gifts into sites of accumulation (Luxemburg 1913, 230–31). As I show for the case of Berlin, city officials signed almost identical contracts with similar political, social, and infrastructural effects in the mid-nineteenth and the late-twentieth centuries. This means that the current era of financial expansion offers insight into the enduring power of financialized infrastructures as they appear and reappear across space and time. But it also allows us to see that these incursions build on, recombine with, and complexly fold back upon earlier histories of finance while throwing open similar fissures and fault lines once again.

Scholars have explored the recurrent logics of what David Harvey, in his rereading of Rosa Luxemburg, has called a "new imperialism." Here, value is accumulated through dispossession and expropriation—a process that today dwarfs the exploitation of waged labor as a principal source of value production and capital expansion (Harvey 2004; Federici 2004; Fraser 2016). Capitalism did not evolve teleologically from a prehistory of originary (*ursprüngliche*) or "primitive" accumulation—the theft of labor, land, water, and other natural resources that Luxemburg called the Earth's free gifts and "natural treasures" (*Naturschätze*) (1913, 230–31)—toward the production of surplus value in the factory, the mine, or the agricultural estate (Harvey 2004, 73). Rather, capitalism must constantly reiterate its own violent origins, especially in periods of crisis (Morris 2016, 38; Arendt 1976, 148). Originary or salvage accumulation—the conversion of noncapitalist into capitalist forms of value (Tsing 2015)—is thus recursive rather than teleological, structural rather than temporal (Morris 2016, 62; Federici





2004, 12–13). It exists permanently as "capitalism's disavowed confiscatory underside" (Fraser 2016, 168). While both mechanisms of accumulation—by dispossession and through labor exploitation—are constitutive parts of the same capitalist whole (Luxemburg 1913, 203), the latter has today been demoted as the principal source of surplus value (Cooper 2008, 24).

This recursivity of dispossession means that frontiers must constantly be remade, as natural commons like land, air, and water, or cultural forms like music, public goods, and universities are pillaged (Harvey 2004, 75). Indeed, the insurgencies documented here bear striking resemblance to insurgencies documented across history, such as those made famous by Edward Palmer Thompson in his work on peasant crowds during the early modern English era of enclosure—people rendered "turbulent" not by an "irrational" desire to riot (or not pay for their water, as critics of water movements often falsely accuse them of), but by a moral and political consciousness that responds to the plunder of the commons.³⁵ Then as now, wealth was ruthlessly extracted from the "prime necessities of life" (Thompson 1993, 270, Muehlebach 2018a). Then as now, these insurgencies are profoundly gendered, as women were most directly impacted as the everyday reproduction of household life became the cusp of frontiers of finance (Roberts 2008, 236; Federici 2004). ³⁶ Through the mobilizations of women, the deprivations suffered by private households were politicized and rendered public for all to see—through the public burning of bills, for example.

The term frontier comes with much historical ballast not only from the US American West but also from Latin America (Tsing 2003, 5100). Yet I here turn to Rosa Luxemburg's analysis of the building of the Suez Canal in late nineteenth-century Egypt because it is a paradigmatic example of a financial frontier fueled by British and French imperialism. I find her analysis particularly helpful as it bears resemblance to the forms of dispossession explored in this book. Describing how London's nineteenth-century stock market was engulfed with a fever for exotic bonds, she shows how emerging states such as Argentina, Mexico, Uruguay, Turkey, Greece, and Egypt took out loans worth hundreds of millions of pounds sterling from England, most of which were immediately spent buying English commodities including coal, steel, and the machinery needed to build railroads, mines and, crucially, water infrastructures (see also Khalili 2021). Lurching from one cycle of bankruptcy to another, these countries again turned to England for even more high-interest loans. English investors—soon followed by the Germans, French, and Belgians—were more than happy to oblige (Luxemburg 1913, 283-84). As both Luxemburg and Arendt insist, this "export of



money" relied foundationally on the material power of the state, which utilized its political institutions exclusively as vehicles for the protection of private property (Arendt 1976, 149).

In Egypt, the collusion between French and British investors with Egyptian political elites in the second half of the nineteenth century saw the country's debt grow like an avalanche—the weight of which was carried by impoverished Egyptian peasant households (Luxemburg 1913, 286). Here, dams, irrigation systems, wells, and canals were built to provide water for plantation crops cultivated for European consumption: indigo, sugar, cotton. Yet it was the Suez Canal that was the most fatal infrastructural project for Egypt. The Egyptian state offered tens of thousands of corvée laborers to the French Compagnie de Suez and bought company shares worth 70 million mark, 40 percent of the Companie de Suez's total assets. The ensuing debt was "mercilessly beaten" out of the peasantry that had already been not only dispossessed of their land and labor but forced to pay land taxes, head taxes, and cattle taxes as well as a tax on every single date tree and every single mud hut they owned. Once plantation irrigation systems were built, peasants were charged for the water they needed for their fields. The more debt grew, the more peasants were coerced into paying taxes. Everyone, writes Luxemburg (1913), was drawn into the immense labor of repayment—humans, animals, even the earth itself was expropriated (289).³⁷ By 1875, Egypt was so indebted that it sold its Suez shares to the British government, only to be met with another round of crippling interest payments (291). By 1879, Egypt's finances came under permanent European control. By 1882, Egypt was occupied by the British. The Egyptian king's land was confiscated just as he had forcibly confiscated that land from peasant households. Large parts of it went to the Compagnie de Suez (292).38

I tell this story because Suez looks back on being one of the longest running corporations in the world. Until a short while ago, it operated in the global water sector under the name of Suez Environnement and was, together with another French multinational Veolia Environnement, one of two dominant transnational players in the water privatization market today (the companies have since merged).³⁹ Some of the water utilities that my interlocutors waged years of struggle against are partially managed by subsidiaries of Suez. Suez today accumulates wealth through fiscal mechanisms and political maneuvers very similar to those utilized in the past, with similar effects on those situated at the center of this financial frontier—often already impoverished households.





I also tell this story because the building of the Suez Canal in nineteenthcentury Egypt is one historical example of the ways in which fairy-tale profits could be captured through investments in water infrastructures (Luxemburg 1913, 290). Many other water infrastructures were built by British and French investors at the time as they moved effortlessly between the colonies and their home countries—an empire of finance driven by the quest to draw modern cities' growing demand for water into global financial circuits (Kar and Schuster 2021). In 1850, the British East India Company drew up plans to provide water to Bombay (Anand 2017, 34). Indeed, it was in India where some of the earliest forms of speculative capitalism and its colonial forms of corporate and contract law first arose (Bear, Birla, and Puri 2015, 389). In 1852, a group of British aristocrats founded the Berlin Water Works Company, a London-based joint stock company. In 1878, the Anglo-French General Credit and Discount Company founded the Naples Water Works Company. 40 Water infrastructures, in short, were already once part of a global regime of accumulation seeking to absorb life's dependency on water into its speculative orbit.

I tell this story, finally, because it invites a reflection on the recursive modes of financialization, their tactics, long durée cycles, and often volatile and open-ended effects. I here draw on social theorists who have conceptualized recurrence in the capitalist economy as a tripartite sequence that broadly began with the financial expansion led by merchant or finance capital in the nineteenth century and then was replaced by manufacturing and industrialism in the early twentieth century. When the limits of this system were reached by the 1970s, capitalism moved again into an age of financial expansion—an era currently characterized by evermore desperate attempts at accumulation. This tripartite structure moved from circulation to production back to circulation, from asset to commodity back to asset, and from rent to profits back to rents. This cyclicality, so the argument goes, has generated a concomitant cycle of political action that has moved from riots (over the price of vital necessities) to labor strikes (over the price of labor power) back to riots.⁴¹

While this historical framing certainly elucidates historical patterns in highly abstracted ways, I am as an ethnographer most committed to historically grounded, contextually specific, often also nonlinear and surprising social struggles. I am thus more interested in attending to the granularities and specific genealogies of political protest, such as when the Irish mobilized anticolonial registers in their water meter protests or when my German interlocutors reminisced about the historical importance of having



held a key trial in a particular court room with a chilling Nazi history. This book thus attends to capitalism's "genuinely weird temporality" (Sewell 2008, 533)—the fact that it is characterized by a "strange stillness" (as its mechanisms and forms recur across time and space) *and* intense volatility and nonteleological contingency at the same time (519).

Likewise, I attend to the weird temporalities of political protest—the fact that they periodically recur and bear resemblances to each other while also being characterized by great contingency. Many of the protests I document here bear striking similarity to protests that others, including Rosa Luxemburg (1913), documented for the late nineteenth century when communally held "natural economies"—those noncommodified worlds that capitalism so foundationally depends on—put up bulwarks against capitalism's unbridled expansion. For "natural economies," there was "no other attitude than opposition and fight to the finish" (371). Similar bulwarks were put up in European cities in the late nineteenth century, where early financial investments into water infrastructures were accompanied by political upheaval because they created problems of unequal access, distribution, infrastructural inefficiencies, and corruption—all coupled to often unpayable municipal debt. With hostility growing against the "functionless" investor and rentier (Hardt 2010, 348), many late-nineteenth-century cities decided to municipalize their water infrastructures, with water utilities falling (or being pulled into) public hands. As liberal statesman Joseph Chamberlain declared in 1884, "It is difficult, if not impossible, to combine the citizens' rights and interests and the private enterprise's interests, because the private enterprise aims at its natural and justified objective, the biggest possible profit" (Juuti, Katko, and University of Tampere 2005, 41). 42 Today, remunicipalizations abound again as cities from Paris to Berlin and Naples take back their water utilities and place them under local control (McDonald and Swyngedouw 2019), yet we cannot assume that the meaning of "the public" or of "property" or of "the commons" have remained static over time.

In part, these initial, early-twentieth-century municipalizations occurred because municipalities had gained the right to borrow money at low interest rates, versus the high-interest loans cities had previously taken out from private creditors—a local fiscal sovereignty that allowed them to take on debt for long-term infrastructural investments (Hall and Lobina 2012, 4). Municipalities underwrote these loans with their municipal capacity to tax and thus their capacity to guarantee future fiscal revenue (Smith 2020, 329). They began to invest in the development of their own infrastructural systems in the name of modernity, public health, and poverty alleviation—an



investment that resulted in more effective control (of pricing, for example), better infrastructural coverage, and higher employment for locals. It could also be quite lucrative for cities (Juuti, Katko, and University of Tampere 2005, 42). Most contemporary water infrastructures were thus built by municipally owned public enterprises during the twentieth century, with central governments playing a crucial role once municipalization had been achieved. This included major extensions of networks into rural areas following World War II—a hydro-social contract managed through the taxation of urban populations, low-interest loans, and massive cross-subsidizations (Hall and Lobina 2010, 4). Here, the term *profit* was often not used in reference to water provisioning. Rather, *surplus* was considered more appropriate for an industry supplying a vital service (Bakker 2001, 144; Ballestero 2019, 52). All of this changed as the noncommodified spheres of public water utilities got drawn into financialized modes of valuation.

Milieus of Enclosure

The public-private partnership is a key device at the financial frontier. It uses the guise of a fair contract between partners to deeply integrate public utilities into highly unequal circuits of accumulation (Pistor 2019; Appel 2019). Water movements have long criticized this particular kind of entanglement of the public with the private sector. The public-private partnership is contractual, not concessional, which means that "the state becomes an "equal" *commercial* party to a legal agreement" (Appel 2019, 141). As water movements across the world have shown, this arrangement almost unfailingly works to the detriment of the public because it is a contradictory marriage between two incommensurable entities: one dedicated to the maximization of profits, the other (at least nominally) to public service. Presented as a partnership, the public-private partnership is a classic frontier ruse where contracts mask expropriation.

To my interlocutors, the crisis facing water utilities was a *political* crisis that emerged out of this mutual imbrication, a state that had not simply been captured but that had actively colluded in this process of dispossession (Kalb 2020, 26). The result was the entrenchment of an economized style of government whose "forms of command" were distributed across public institutions, private corporations, banks, and financial institutions; it was a "milieu of enclosure" that entangles public and private actors and institutions in formal and informal reciprocities (Vogl 2017, vi–vii). All bore



uncanny resemblance to the ways in which public institutions under pressure from structural adjustment in the Global South soon ceased to exert actual powers. Commercial law began to organize public resources; and "the public" came to arrange itself along private lines (Tsing 2003, 5102; Peterson 2014, 90; EuroNomade 2018).⁴⁴

There is no single European model for this highly malleable and constantly evolving form (Whiteside 2018, 3)—an arrangement between the public and private sectors that allows for the funding, construction, renovation, management, or maintenance of public infrastructures or services. The Organization for Economic Co-operation and Development (OECD) defines public-private partnerships as an alignment of the public with the private, an agreement between the government and "one or more private partners according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partner" (OECD 2008). Public-private partnerships have been implemented for many public services worldwide, including bridges, highways, hospitals, and schools, thus inserting the logic of private property and profit seeking "into the heart of public infrastructure" (Whiteside 2018, 4). They are in fact not, my interlocutors argued, particularly risky. On the contrary, as Carl Waßmuth, a German engineer and member of the Berlin-based Gemeingut in BürgerInnenhand (Common Goods in Citizens' Hands) put it to me, public-private partnerships are "beautiful formal structures" that allow for what are often risk-free investments—a financing, not funding of infrastructure, and thus a way for governments to "rent money." Even in case of failure, the vital service must still be guaranteed by the state, which remains the last instance guarantor when all else fails.⁴⁵

The battle over elementary water infrastructures, Waßmuth explained, was occurring because the "big stuff" like telecommunications, energy sectors, postal services, railways, and waste management had in many countries already been fully privatized during the 1990s. Investors soon realized that the maintenance of these huge infrastructures was prohibitively expensive. Public-private partnerships provided an elegant solution to this conundrum. Rather than pay for infrastructural investments themselves, investors today offer high-interest loans to cash-starved municipalities who are looking for quick monetary fixes in times of financial crisis. ⁴⁶ The municipality, in turn, offers a long-term concession to a consortium that obtains the right to extract revenue directly from end users (Campra et al.



2014, 33–39). Contractually guaranteed returns oblige public institutions to fulfill this obligation by whatever means necessary. In practice, local governments, whose debts are now often millions higher than if they had kept their services under public operation, scramble to repay debts—sometimes by relinquishing their own profits, at other times by taking out new loans to pay off old ones. The public-private partnership thus conjures a fantasy of contractual equality where there is none.⁴⁷

The marriage of incommensurables between the public and private also does violence to the holism of water. After all, the "unbundling" of the utility into several spheres of operation—with municipalities, for example, being responsible for the protection of water while broader competencies are handed over to a "more efficient" private consortium—means that water, a hydrological totality, is managed across various institutions with different institutional cultures, forms of knowledge, and economic and ethical commitments (Mohajeri 2006, 180–85). European municipal governments came to the contractual table under duress of a post-Maastricht Treaty politics that sacralized (and in the Italian case, constitutionalized [Cozzolino 2019]) the fetish of balanced budgets, inaugurating what Walter Benjamin called a cult of blame and debt (verschuldeter Kultus) (Vogl 2017, 160). Having introduced fixed public debt ceilings—the "Black Zero" (Schwarze Null) as the Germans call it—Maastricht created a landscape of intense fiscal discipline where many municipalities create what my German interlocutors called Schattenhaushalte (shadow households)—complex nested corporate structures that do not appear on the official books even though they become the instruments through which high-interest loans are procured by the public. They operate under the auspices of private law and pursue their own policies and water pricing (the calculation of which now ceases to be disclosed publicly [see Ballestero 2015]). Public-private partnerships thus often increase opacity and render the governance of vital resources not more, but less transparent. 48 In many cases, European municipalities have incurred billions of euros of debts that are not only higher than if they had borrowed directly but also hidden from view (Massarutto 2020, 8).⁴⁹ This debt lives in the shadow of the officially "balanced" municipal budget—a negative space that haunts what appears as good budgetary behavior.

Public-private partnerships further unsettle the terms of how ownership within the still nominally public utility is organized and conceived. Even if politicians insist that the utility is still publicly owned (which they always do since the municipality still owns a majority of the shares in the utility-turned-joint-stock-company), water movements everywhere were



worried about the de facto deactivation of the distinction between public and private spheres. Not only had the purported public or private nature of a utility "lost traction as an index of distinct legal and economic logics" (Ballestero 2019, 47), the question of ownership had also become deeply obscure, as is always the case in frontier situations (Tsing 2003, 5104).

To be sure, asset ownership within public-private partnerships typically rests with the public authority, and all rights to those assets revert to that authority when the partnership ends (Campra et al. 2014, 39). But ownership means little if the utility orients much of its activity toward creditors rather than toward the public. ⁵⁰ Indeed, just as the corporations publicly traded on Wall Street during the 1990s began to understand shareholders as the "true owners" of companies (Ho 2009, 3), so too do public-private partnerships inaugurate a form of utility ownership that ultimately rests with distant creditors. The surplus generated out of the utility, previously owned by the public and redistributed back into the utility, is made to trickle far upward, an apotheosis of what Veblen (1923) called "absentee ownership."

Against this indeterminate milieu of enclosure, water movements argued for a reinvigorated discussion about what "the public" is or ought to be. Many even argued against the recuperation of a public and instead for a much more democratized sense of the commons. In this discussion, water utilities were owned and accountable to those who had built them— "the people," over decades, through their own labor, taxes, and fees. 51 My interlocutors thus refused the public-private partnership as a model for ownership and public association (Birla 2009, 25) as well as the theory of the public it entailed. As joint stock companies, the selling of shares ("going public") allows for the public to be imagined as nothing more than an agglomeration of investor individuals. And while joint stock companies are a collectively held form of wealth (Martin 2002, 137), the publicly traded public utility consists of nothing more than a public of individual traders, a "non-totalizable multiplicity" (Elyachar 2012) where "private interests are treated as identical to the interests of the public" and where public life appears as nothing more than the totality of private interests (Arendt 1976, 145). The single purpose of this public, in short, is to be "mined as a collection of financial assets for elite and private gain" (Ho 2018, 149; Birla 2009, 3-4), leading to a profound reconfiguration of what the "public interest" is (Whiteside 2018, 3; Langley 2020a, 133). Water movements attempted to reimagine this perversion of the public by insisting that water ought to be treated as a particular kind of property, a property that is not really property



at all, but a *Gemeingut* (common good) in Germany or a *bene comune* (commons or commonwealth) in Italy.

Terrains

In this last section, I track some of these parameters across the European context that tie otherwise often disparate European terrains together. These ties were achieved not only through the vibrant circulation of people, images, and texts through movement networks or through the fact that many activists were producing similar analyses of their predicaments despite living in different countries and speaking different languages; ties were also achieved because they emerged from the fact that movements dealt with similar corporate tactics as they recurred across time and space. Monopolized capitalism comes with a relentless monotony of corporate forms—contracts that recur across time and space, tactics of obfuscation that remain numbingly consistent, and discursive techniques that insist that water is a human right even as they work to undermine it.

At the same time, the European water movement also created ties of its own, for example, through shared origin stories that they rehearsed and repeated about their movements' genesis. Many of the Irish people I met looked to the United States, specifically the desperate water struggles in Detroit and Flint, as the dystopian figure against which they measured their own possible future. But my Italian and German interlocutors pointed to Cochabamba, Bolivia, as the foundational moment for their water movements, a moment when certain modes of struggle and conceptual registers first came to their attention. There, Aguas del Tunari, an international consortium of US, British, and Italian multinationals, had signed a forty-year concession with the Bolivian government in 1999 that had guaranteed investors a 15 percent annual rate of returns, the result of which were a series of water tariff hikes people could not pay for. The people of Cochabamba responded by founding the Coordinadora de defensa del agua y la vida (Committee for the Defence of Water and Life), a mass coalition of unions, peasant organizations, ecologist movements, and students that captured the political imagination of millions around the world with its protests for "life" and against neoliberalism's necropolitical culture of death. By April of that same year, the Coordinadora had kicked the consortium out of the country (Olivera and Lewis 2004; Bakker 2010; Hines 2021). 52 The Cochabamba victory rendered



visible the fact that "the battle over common goods was the new frontier in the struggle against neoliberal globalization," a realization that came at a moment when alter-globalization movements were already focusing on the illegitimacy of growing international financial institutions (Bersani 2011, 21–23; De Angelis 2017, 306–10). But a turning point came during the 2001 World Social Forum in Porto Alegre, when one representative from the Coordinadora turned to activists from the Global North and said, "Dear comrades, we are happy about your solidarity, but I want to say one thing to you: Of the ten water multinationals on the planet, nine are European and they are also trying to grab your water. When will you understand that the best way to help us would be to fight these corporations in your home countries?" (Bersani 2011, 24). An identical story featuring Kenyan activist Wangui Mbatia was told to me by the Berlin Water Table's Johanna Erdmann. In both cases, it was to provocations from the Global South that European water movements responded, not least because the effects of the financial crisis had engulfed Europe, too. At the same time, my interlocutors displayed a keen sense of the fact that struggles had to be fought in plural and situated ways, on particular terrains and through locally grounded tools and mechanisms.⁵³ Argentina, which had managed to kick out Suez, was different from Paris, which had refused to renew its contract with Veolia and Suez in 2008 after twenty-five years of privatization. The Berlin Water Table, named after Venezuela's mesas de aguas after founding member Dorothea Härlin encountered them while traveling in South America, knew that its worlding-its attempt at building worlds otherwise-must always consist of projects growing out of distinct watery histories and political terrains.

There is a European history to be told here, too. Most of the people I met told the history of water enclosure from the vantage point of the 1992 Dublin Statement on Water and Sustainable Development, which was the first global document to insist that "water has an economic value in all its competing uses and should be recognized as an economic good (Principle No. 4)."54 While Principle No. 4 recognizes "the basic right of all human beings to have access to clean water and sanitation at an affordable price," it also notes that the misuse of water was the result of the "failure to recognize the economic value of water." The Dublin Statement thus inaugurated a paradigm shift—that it was only through a new regime of financial valuation that water could be used efficiently and equitably. Soon, the World Bank argued that it was state subsidies that *caused* the global water crisis, with private markets providing the solution (Ballestero 2019, 57; Collins 2017, 5–6). 55





The year 2000 saw the adoption of the European Union's Water Framework Directive. While a substantial and ambitious piece of environmental legislation (the Directive calls for an integrated river basin approach that reflects the ecological dimensions of the water cycle), and while stating that water is not a commercial product, the Framework also uses economistic and technocratic registers that are hard for communities to navigate (Moore 2019, 17).⁵⁶ Article 9 of the Water Framework Directive is of particular concern for water activists as it calls for full-cost recovery and requires member states to use economistic analyses in managing their water resources.⁵⁷ Much of this early legislation was met with critical pushback—a fault line immediately opened up. This is why member states today have some subsidiarity power to determine how social, environmental, and economic aspects are included and priced (Lanz and Scheuer 2001). Because of this political pushback, a number of controversial passages of the Water Framework Directive were written in ways that allow for different interpretations and implementations (Kaika 2003). This is also why water services have remained outside the European Union's single market and are somewhat protected from the pressures facing other public services in the region (Moore 2019, 14).

The European Commission, in contrast, continues to demand that member states appropriately value water as assets, including rivers, lakes, groundwater, and coastal waters. For the Commission, both nature and infrastructures ought to be (re)valued in terms of the economic and ecological services they perform (Bresnihan 2016, 121). This means that EU water management has moved from simply maintaining existing infrastructures to reassessing them in response to future risks. Understood as part of Europe's "natural capital," water resources are conceptualized as providing economic and ecological functions, all of which need to be accounted for (European Environment Agency, 2015). Public utilities and their infrastructures, indeed nature as such, have thus been drawn into an "asset management culture" (Bresnihan 2016, 121). "Raw" nature, previously conceptualized as a market externality, is now "rendered commensurate through a common apparatus of measuring techniques and technologies" (Bresnihan 2016, 122; Brockington 2011; Cattelino 2015a; Robertson 2006; Sullivan 2013). In these technocratic dreamscapes, assets are conceptualized as soon-to-be performing rents that are measured in terms of financial and ecological value and evaluated, compared, and potentially traded (Bresnihan 2016, 122). All sorts of unlike entities—water, pipes, managerial systems, and nature—are reworked to appear as quantified, standardized,



and priced, rendering their value commensurate and thus comparable and movable across time and space (Kockelman 2016, 16). Against these technocratic regimes of valuation and pricing, in 2013, the European Water Movement launched an unprecedented European Citizen's Initiative called Right2Water. It gathered almost two million signatures in an effort to call for the United Nations (UN) to legislate the human right to water and sanitation at the European level. ⁵⁸ In direct response to this provocation, the European Parliament recognized water as a public good that should be priced appropriately. It also called for good working conditions in the industry and for the banning of water cutoffs in response to nonpayment (Laaninen 2018, 3).

None of these political mobilizations were carried out by single "activist" figures alone. On the contrary, some people I spoke to bristled at being described as such. Some preferred to call themselves "democracy experts," since they saw themselves engaging in the work of pushing for people's direct participation in the management of common goods. Others eschewed that terminology altogether, emphasizing the work that communities perform to organize themselves relationally and reciprocally through everyday concerns (see also Cody 2016, 179).⁵⁹ I thus understand these water insurgencies in Fred Moten's terms, as mobilizations that are "constantly renewed in small groups, on front porches or around kitchen tables, in clubs and lunch rooms" long before the figure of the activist comes into full view (Sirvent 2018). Moten's insistence on the social source of insurgencies is important here because it speaks to the ways in which households are sites of extraction but also sites of mobilization. 60 Cutting across party politics and other social distinctions, the violence of financial abstraction is met with deeply grounded and often highly gendered collective responses that grew out of the "ordinariness" of the troubles people were facing.

Women were often prominent in water mobilizations, mostly because of their role in the social and material reproduction of the household. As one interlocutor in Berlin put it to me, "[w]ater is a women's thing (*Frauensache*). They cook, do the laundry, clean, bathe the children, water the plants. Water is central to our everyday experience and work" (see also Weston 2017, 18; Barnes 2013, 2014, 33–34; Limbert 2001; Naguib 2009). In Ireland, I was told that it was women, not men, who were responsible for doing the household bills "99 percent of the time." It's never the man, "even if they're both not working. She knows her bottom line . . . about the electricity, the mortgage. If there's another bill, she knows it's going



to stretch them more." Women in Ireland were thus repeatedly referred to as the backbone of the water movement. Time and again, I heard people say, "When you have the women out with you, then you can rebel. It was the same in 1916 (when the Irish rose against British colonial rule)." One Sinn Féin member, a party that resurged during the Irish water protests, said, "I remember being an activist for Sinn Féin a decade ago, and while we were canvassing we had a saying: 'If you get the woman you get the house." In Italy, too, the men still active in the local water committees that lingered on after the national referendum in 2011, reminisced about the days when the women and youth were on the streets as well, "Because that is when we understood that we had a movement." All shared a collective outrage that a substance as life giving as water would be privatized. "What next," I was repeatedly asked, "the privatization of air?"

Moving from these more general parameters, the chapters in this book unfold across the following terrain: Chapter 1 tracks the financial frontier as a contested zone of lawmaking, where the law of the many is pitted against the law of the few. Situated in the Southern Italian region of Campania and crisscrossing a landscape that includes protesting majors and a collective love affair with old public water fountains, I connect these small political and infrastructural battles with the national water movement's "making" of a referendum—a practical, highly innovative frontier of political imagining that people insisted was an alternative to the "authoritarian democracy" that had engulfed them from above. Carl Schmitt once argued that land appropriation is the primeval act of all possible law since fences divide but also bring order (Zimmer 2015, 138). Yet there is evidence that it was rules establishing access to water in arid regions that might have predated property law for land (Salzman 2013, 46).61 The Italian water movement used water to do precisely that-to experiment with law, democracy, and property through their struggle for water. The frontier, in short, consisted of novel ways of "the many" collectively enunciating and self-authorizing both law and new forms of property—a commons organized around use rather than possession. Chapter 2 focuses on the financial frontier as a zone of state violence and policing as its infrastructures of financialization the water meters-became an object of intense contestation. Situated in austerity-ridden Ireland, I track how the meters—an important step in the anticipation of contracting with global investors—was met with the largest social movement seen in the country since independence. As Rosa Luxemburg (1913) put it long ago, the conversion of indivisible common property into private property (ungeteiltes Eigentum or Gemeineigentum into



Privateigentum) is never uncontested at the frontier; the thicket of local social relations is always the strongest bulwark against the violence of capitalist expansion and valuation (245). In the process, the struggle over water meters was always also a struggle over legal and political boundary making: What was legal, what illegal, what criminal, what political? The criminalization of social protest under conditions of authoritarian neoliberalism proved to be the alter ego to the power of the popular barricade—both protesting device as well as vehicle for the building of sociality, community, and a moral and fiscal vision of societal distribution (Simpson 2021). Chapter 3 is set in Berlin and focuses on an intrepid group calling itself the Berlin Water Table as it worked itself through several court cases and toward a citywide popular referendum that eventually forced the disclosure of a private contract and the secret embedded therein: that the city had guaranteed global investors a return on investments in direct contravention of a ruling by Berlin's Constitutional Court. I thus treat the financial frontier as a zone of illegibility but also as a zone where profound clarity can be reached: that capitalism must rely on expropriation and theft, not on equilibrated contractual exchanges, in order to accumulate wealth. The Berlin case shows that capital accumulation always relies on mystified mechanisms of value accumulation, but that there are also moments where these mystifications are rendered legible and visible for all to see. What resulted was a scandalous popular referendum that forced Berlin to disclose the water contract and to remunicipalize its water utility. Chapter 4 returns to Campania and focuses on the financial frontier as a zone of contested valuation and of struggles over what constitutes just price. Here, I explore what people called crazy bills-bills so high that they could not be paid. This last chapter thus explores two very different regimes of valuation—one deeply committed to the treasuring of local waters, the other to the pricing of water in ways that would allow for its value to move "upward" into global trading circuits. If "command over price is not so easy to distinguish from sovereignty" (Clover 2016, 53), then the struggles I track here are struggles over the local, sovereign right to determine value through price and to determine what a moral economy of just price might look like as well. I conclude by offering a glimpse into Paris's remunicipalized water utility Eau de Paris, asking how it offers us insight into imaginative frontiers that are political, moral, legal, and fiscal. These frontiers are constantly renewed in water struggles all over Europe as they demand a future as ethical possibility and material promise (Gillespie and Naidoo 2019, 237) and the possibility of a world and the commons as inappropriable and inviolable.



NOTES

Introduction: A Vital Frontier

- 1 I build on already existing work that has long pointed to the neoliberal transformation of water services as a process of accumulation by dispossession as it transfers publicly owned resources and/or services to the private sector. See Bakker (2001, 2003, and 2013); Björkman (2015); De Angelis (2017); Harvey (2004); Roberts (2008); Swyngedouw (2005); and von Schnitzler (2016).
- 2 I rely on anthropologists who have written about this theme, especially Peterson (2014, 112); Song (2014, 41); Weiss (2018, 463); and Zaloom (2017). The question remains however whether this is speculation at all or simply rent seeking. As Kate Bayliss (2017) has put it, some "highly leveraged corporate structures operate in the absence of financial speculation; these financialized corporate structures are in fact ways for 'rentier transfers' to become normalized" (383).
- The promises on the part of the World Bank and other institutions often fail to materialize when it comes to expensive water infrastructures, with most middle-income African countries still financing their water works through public sector



- finance (Hall and Lobina 2012, 3). Indeed, there exists a wide gap between World Bank ideology, which sees water policy as being driven or led by international donors and the reality of many national governments who are developing their own policies and are, in fact, providing the majority of finance through often more democratic governance structures (Hall and Lobina 2012, 17).
- 4 Andreas Bieler summarizes five ways in which water has become a frontier of capitalization. First, water is often diverted from local use toward large agribusiness companies as part of the globalized system of industrialized food production. Corporate or state-led land grabs are ultimately a form of water grabbing, as agricultural land would be worthless without access to the water necessary for growing crops. Second, extractive industries such as mining, including hydrocarbon industries such as fracking, tar sands, and the exploration of oil, all significantly burden drinking water resources. Third, large dam constructions for the generation of hydroelectric energy and hydropower development put heavy pressure on local water supplies. Fourth, the bottled water industry is growing and creating acute water stress worldwide (Kaplan 2007, 2012). Fifth, Bieler points to the privatization of water and sanitation services, which has increasingly become a focus for profitable private investment (Bieler 2021, 5–6).
- 5 As Christa Hecht, former director of the German Alliance for Public Water Works (Allianz der öffentlichen Wasserwirtschaft) put it to me in an interview in 2016, the principle of local use (*Örtlichkeitsprinzip*) dominates the provisioning of water in countries like Germany. Hecht cited a German saying to me, "Use the water out of your own well. If you poison it, you deprive yourself of your own livelihood."
- 6 Centralized river-basin institutions have arisen in states that have historically been centralized monarchies—Spain, England/Wales, and France (Juuti, Katko, and University of Tampere 2005, 37).
- 7 I thank Francis Cody and Shiho Satsuka for pushing me on this point.
- 8 With enclosure, I mean "enclosure as commodification," i.e., the means through which something is "alienated, unitized, quantified, standardized, and priced" (Kockelman 2016, 5) although my interlocutors also implicitly referenced enclosure as the historical process whereby commons—land, rivers, forests—were turned into private property. To them, "new waves of enclosure" were now reoccurring all over the world (Fattori 2013, 378).
- 9 I thank Gavin Smith for our ongoing conversations about this topic.
- 10 Allianz Global Water is part of Allianz Global Investors, a leading global service provider in insurance, banking, and asset management founded in Germany in 1890. Allianz Global Water was founded in April 2008 and invests in equity securities of water-related companies worldwide, emphasizing long-term capital appreciation. Allianz's point that "[w]ater is a defensive investment theme with prospects for high growth" that is "cycle- and politics-immune" and "protected from wider political and economic volatility" can be found

- here: https://nordic.allianzgi.com/-/media/allianzgi/eu/luxembourg/documents/water-your-assets-for-growth.pdf (last accessed January 7, 2022).
- 11 I use *necropolitics* in Achille Mbembe's (2019) sense to define neoliberalism as a "sacrificial economy" of "organized destruction" that cheapens and destroys life (38).
- 12 Melinda Cooper puts it succinctly when she notes that neoliberalism has reconfigured the relationship between debt and life: "What neoliberalism seeks to impose is not so much the generalized commodification of daily life—the reduction of the extra-economic to the demands of exchange value—as its exchange value. Its imperative is not so much the measurement of biological time as its incorporation into the nonmeasurable, achronological temporality of financial capital accumulation" (2008, 10).
- 13 The rise of infrastructure as an asset class is well described by Collier (2011, 227–30) and Bear (2015, 2017, 2020). Both have argued that the unitary entity called "infrastructure" emerged in a 1994 World Bank report, where international financial institutions, government committees, global investors, and market consultancies assembled a series of public works as disparate as railways and water works into one, singular category (Bear 2020, 64). At stake was the transformation of public works into privatized infrastructures, with people reconceptualized as users or customers of these systems rather than as citizens who built them through fees and taxes. This was the beginning of a "death foretold of state-run public works and the birth of financialized infrastructure" (Bear 2017, 5).

The water market, in contrast, was for a long time a corporate aspiration rather than an actual reality (Dukelow 2016, 146). Citigroup's chief economist noted years ago that he expects to see a globally integrated market for fresh water within twenty-five to thirty years: "Once the spot markets for water are integrated, futures markets and other derivative water-based financial instruments... will follow. There will be different grades and types of fresh water, just as we have light sweet and heavy sour crude oil today. Water as an asset class will...become the single most important physical commodity-based asset class, dwarfing oil, copper, agricultural commodities and precious metals" (Bayliss 2014, 302). At the time of this writing, this is exactly what has happened, with water joining gold, oil, and other commodities traded on Wall Street. As CNN reported on December 7, 2020, investors can now, for the first time in the United States, trade water futures and thus hedge against or bet on projected water scarcities in the future. The market has thus moved from letting buyers and sellers buy and sell water rights in the California spot markets in dry years (i.e., in markets where financial instruments or commodities are traded for immediate delivery) to allowing traders to buy and sell water in futures markets on the Chicago Mercantile Exchange. As always, the argument is that a futures market will allow for the better management of risks and a better alignment of supply and demand through transparent pricing practices (Tappe 2020; James and Hing 2021).



- 14 Many authors have critically interrogated scarcity discourse (Jaffee and Case 2018), with Swyngedouw (2006) arguing that scarcity language has contributed to "the discursive production of the imminence of a hydro-social-ecological disaster" (201). Scarcity is also of course the gravitational center of capitalism's cosmology, which is propelled by the fantasy of endless needs that must be met through more consumption (Sahlins 1974).
- 15 I build on the important work of many, including Bakker (2003, 442); Anand (2017); Björkman (2015); Ballestero (2019); Illich (1985); Strang (2004); Strang (2015); and Neimanis (2017, 2019). In Polanyian terms, water is a fictitious commodity insofar as it was not produced to be bought and sold on the market, like labor, land, and money. It thus does not behave in the same way as "real" commodities do even as its commodification seems intuitive or natural to investors (Block 2001, xxv).
- 16 This tendency to insist on life as force and excess outside of capitalist subsumption is found in the insurrectional anarchism and some neovitalist forms of contemporary theory where "life" exceeds and erodes all forms of constraint and representation. Critics have however noted that life and excess operate as "consolatory ideological forms" that overstate their capacity to overturn capital and the state (Noys 2015, 176–80).
- 17 Bieler (2021) describes authoritarian neoliberalism as a process that is not necessarily inaugurated by nondemocratic means or brute force (although that can be the case, as my chapter on Ireland shows). Rather, it can be observed "in the reconfiguring of state and institutional power in an attempt to insulate certain policies and institutional practices from social and political dissent" (Bieler 2021, 96; see also Boyer 2018; Molé Liston 2020, 25).
- 18 As Warne notes for the case of New Zealand, however, indigenous critics have argued that the rights-based framework does injustice to the relationship that they actually seek to restore, which is that of relations oriented around mutual obligation, not rights. For more information on this topic, see also the Global Alliance for the Rights of Nature, https://therightsofnature.org/ (last accessed January 7, 2022).
- 19 See Global Water Summit, "2019 Overview: Disruptive Designs at the https://www.watermeetsmoney.com/2019-overview-2/ (last accessed January 7, 2022).
- 20 A good example is Veolia, the French multinational corporation, which had revenues of 24.4 billion euros in 2016, assets of 37.9 billion euros, equity of 7.6 billion euros, and more than 163,000 employees (McDonald, Marois, and Spronk 2021, 118). This makes the company a larger economy than almost half of the world's countries.
- 21 The investor website Investopedia defines the term as a measure of performance. Alpha (α) is used when an investment strategy, trader, or portfolio manager "has managed to beat the market return over some period, producing what traders call "excess return" or abnormal return." James Chen, "Alpha: What It Means in Investing, with Examples," Investopedia, March 19, 2022, https://www.investopedia.com/terms/a/alpha.asp.

- 22 I thank Stefan Leins for pushing me on this point. There is a growing literature on the rise of social finance markets, which offer investors measurable social impact as well as financial returns on investment. They thus allow for a proliferation of new forms of social and financial value to coexist and blend, creating what investors are calling double and triple bottom lines (Leins 2020; Langley 2020a, 2020c).
- 23 The role of water in extractive industries such as oil, gas, and mineral exploitation is not just an existing but a growing concern for industry. Recent moves to financialize water (see note 10) are clearly also linked to this growing demand on the part of the extractive industries, since the buying and selling of water rights will allow owners to auction off rights to the highest bidder in times of scarcity.
- 24 Water financing varies significantly globally. In many parts of the world, water utilities continue to be funded out of a mix of domestic resources, tariff payments, taxes, and international aid. In part, this is the result of the fact that global water corporations have been hesitant to invest in low-income countries where opportunities to recover costs are insecure. But they have also shied away from investments because political backlash in the Global South has often been strong (although note that in India, the Modi government recently offered loans to federal governments on the condition that they introduce private water sector provisioning and prepay meters [Bear 2018]). Both impediments have played less of a role in middle- and high-income countries so far (McDonald, Marois, and Spronk 2021, 122; Bayliss 2017).
- 25 For an astute critique of the equally deeply problematic language that has governed the management of the Colorado River for decades, see Muehlmann's analysis of "beneficial" versus "inefficient" use (2013, 26).
- 26 For additional information on how the watermeetsmoney conference framed these issues, see its 2022 summit agenda: Global Water Summit, "Introducing the Urban Water Catalyst Fund: The Case for Accelerating Utility Turnaround," https://www.watermeetsmoney.com/urban-water-catalyst-fund/ (last accessed January 7, 2022).
- 27 For GWI's infographic, see https://globalwaterintel-info.com/p/36G3-5QE /gwi-2019-water-tariff-infographic-nb?fbclid=IwAR2NQS2dRBhSyUklyXCB 8x03mUiorhzHmqPlGJBwyAq58qftcy2TiYgWu4Y (last accessed January 7, 2022).
- 28 As Christophers and Fine have argued, capitalism is at its core a financial system. The postwar twentieth century with its emphasis on national accounting and the national economy diminished the role afforded to finance capital, yet this diminishment was abnormal in longue durée terms. This would mean that there is no such thing as financialization—just different variants of finance and how and to what degree finance is regulated by the state (2021, 23).
- 29 Not surprisingly for the time, Soddy's invectives against bankers and financiers bordered on anti-Semitism (see Foster 2018; Raffles 2007).



- 30 In addition, the length of PPP contracts has nothing to do with the infrastructure as such—its technology, engineering, or life span. Rather, these contracts mimic rental contracts—with thirty years being their outer legal limit (Rügemer 2008, 161; see also Mattert et al. 2017).
- 31 Canadian public pension funds are particularly egregious players in this regard in that they have become indistinguishable from other financial investors. As Kevin Skerrett (2018) from the Canadian Union of Public Employees (CUPE) notes, these "new masters of the neoliberal universe" have become "pioneers in infrastructure investing" and "global leaders in the direct ownership of public infrastructure, primarily in other countries" (122). Canadian pension funds have thus ironically become key beneficiaries of infrastructure privatization while public-sector workers in other parts of the world have seen their employment, wages, and benefits suffer. This model of investment has by now found aggressive support by the G20, OECD, and the World Bank. This means that pension funds from the Global North will further be investing in the acquisition of public infrastructures elsewhere—i.e., precisely the "assets" that trade unions and those on the political left usually demand stay in public hands.
- 32 For a summary, see Sandra Laville, "England's Privatised Water Firms Paid £57bn in Dividends since 1991," *Guardian*, July 1, 2020, https://www.theguardian.com/environment/2020/jul/01/england-privatised-water-firms-dividends-shareholders.
- 33 I lean on the work already done by others, including Beggs, Bryan, Rafferty (2014, 982); Song (2014); Stout (2019); Weiss (2018, 463); Zaloom (2019, 201); Leyshon and Thrift (2007, 98); and Kalb (2020).
- 34 I build on work by Strang (2005); Limbert (2001); Illich (1985); and Ballestero (2019).
- 1 use the terms commons and commonwealth interchangeably even though there is a lively ongoing debate about various possible distinctions, including also between the common (singular) and the commons (plural). Massimo De Angelis, e.g., has argued that common goods (and commonwealth) ought to be differentiated from the commons insofar as the former are only one element within the larger social system called the commons (always in plural). For De Angelis, the social system of the commons includes not just common goods but commoners and the activity of commoning—i.e., "doing in common" (2017, 18). Hardt and Negri, in contrast, include both the Earth's substances and the results of human labor and creativity under the rubric of commonwealth (Hardt 2010, 112), but this commonwealth cannot yet be claimed as such; it is only through an expansion of the commons and of commoning practices, systems, and ecologies, that such a claim to a general commonwealth will be justified (De Angelis 2017, 18–19).
- 36 Research in Great Britain showed that water bill arrears were higher for women, for households with children, and for single parents (Bayliss 2016, 393).
- 37 Marx, speaking about land and modern capitalist agriculture, writes that "all progress in capitalist agriculture is a progress in the art not only of robbing

- the worker, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress toward ruining the more long-term sources of that fertility" (Federici 2015, 203).
- 38 For a history of the French water corporation Veolia, see Brown (2019).
- 39 The merger of Suez with Veolia creates an unprecedented monopoly in the water sector. As Food and Water Watch put it, "[t]his lack of competition will worsen our water affordability crisis, eliminate good union jobs, and open the door to cronyism and corruption" (Food and Water Watch 2021).
- 40 An early example of speculative wealth accumulated through the building of water infrastructures can be found in the United States in 1801, when the bank of the Manhattan Company established itself as the United States' most powerful financial institution by providing New York City with "pure and wholesome water." The company soon gave up all pretense of doing so since it failed miserably at this attempt, transforming itself into the powerful Chase Manhattan Bank or what is today known as JP Morgan Chase (Salzman 2013, 66).
- 41 I draw on Arrighi (1994); Badiou (2012); Federici (2004); Hardt (2010); and, above all, Joshua Clover (2016), while recognizing that the cyclicality of capitalist temporality has been the subject of much additional writing, too. As Bill Sewell (2008) writes, the problem of recurrent crises was not only central to Marx's work. Joseph Schumpeter's focus on "business cycles" and Immanuel Wallerstein's focus on longer-term cycles in world system theory are also examples of this line of inquiry into capitalist temporalities (520).
- 42 Swyngedouw (2005) outlines this history by differentiating between four distinct stages in urban water utilities. The first lasted until the second half of the nineteenth century and was characterized by a number of relatively small private companies that provided services to those who could afford them while excluding those who could not (an inherently exclusionary project that was also erected and mostly maintained in the colonies, where water provisioning was directed toward colonial elites (see also Anand 2017, 14). The second period was the era of "municipalization," when concerns over public health and public access led to the consolidation of water systems and the provisioning of water at a highly subsidized rate. The third stage, beginning around the end of World War I, was characterized by increased Keynesian national regulation, with the expansion of services and subsidized pricing; while the fourth, beginning in the 1980s, saw the neoliberal restructuring of basic services.
- 43 Note that this was not just a Leftist move. There were plenty of conservative municipalities who have sought a more rationalized form of public government in order to promote overall market growth (McDonald 2018).
- 44 As Vogl has argued, these entanglements between financier and sovereign have long existed and created the basis for the modern state. He gives as an example the states involved with the wars with the Habsburg Empire, which accepted advance payments and loans with interest in order to cover both exceptional financial requirements and regular and permanent expenses. It



- was these debt economies that deeply integrated the emergent modern state into merchant finance and that led to the emergence of stock markets in the first place. Sovereign debt, in short, preceded political sovereignty (2017, 56).
- 45 In some countries, the public-private partnership is a mere concession where the services provided are paid for by the public. In others, public-private partnerships can include a variety of outsourcing and joint ventures between public and private actors (Campra et al. 2014, 32). In general, however, public-private partnerships are recognized as having three characteristics: (1) the relatively long duration of the relationship; (2) the method of funding the project, in part from the private sector, sometimes by means of complex arrangements between various players; and (3) the important role played by the economic operator, who participates at different stages in the project (design, completion, implementation, funding).
- 46 These private loans frequently come with interest rates of 3–7 percent rather than the 0–1 percent when taken out directly by governments. Private borrowers initially always pay higher interest rates because they, unlike governments, cannot pledge a tax base as collateral. Once the infrastructures are actually built, private investors can refinance their loans from, say, 6.5 to 4.5 percent, while the state "partner" is still contractually obliged to pay the original interest to creditors. So, in addition to the contractually agreed return of investment, private investors count on these additional windfall profits (Rügemer 2008, 44–45).
- 47 Public-private partnerships were initially called *private finance initiatives* (PFIs) by Tony Blair, whose government invented the term around 1997. He soon switched to the term "public-private partnerships" (Rügemer 2008, 18) in an effort to conjure the fiction of equality between partners. Yet there are many more types of predation that lurk in this form—too many for me to recount in this book. One of the most egregious are the infamous Investor State Dispute Settlement (ISDS) clauses, which allow for private water companies to claim compensation for cancelled service management contracts, or changes in future profits due to regulatory or pricing controls (Kishimoto, Lobina, and Petitjean 2015). Companies, well protected by commercial and contract law, have the upper hand, as cases are judged according to commercial law rather than public interest or service standards (Moore 2019, 9).
- 48 Bayliss makes the important point that companies still listed on the stock market or owned by infrastructure conglomerates have flatter group structures with "just one or two intermediaries between the regulated company and the ultimate registered parent. The finance owned companies, by contrast, have a long ladder of companies between the regulated water provider and the ultimate parent company. Most of these rungs in the ladder do little apart from receiving and paying out interest and dividends to other companies in the group" (2016, 386).
- 49 Note however that this capacity to borrow off the books is unequally distributed in Europe. For many municipalities, public-private partnerships are a

way to avoid stipulated debt ceilings since they don't officially get entered into the books as debt. This is not the case for countries like Greece, which has to keep even public-private partnership debt on its official books. This stricture came with the "brutally direct" pressure to privatize national assets in Greece as a result of the Eurozone crisis (Bieler 2021, 25).

- 50 In the case of Berlin, the original formal arrangement between the city and French multinational Veolia had taken the shape of a "silent partnership" (stille Gesellschaft), with the private corporation holding a financial stake in the utility without having the right to intervene into formal decision-making processes. Soon, Veolia insisted on a separate contract for the "protection of its interests" (Interessenwahrungsvertrag)—a contract that existed in parallel to the formal agreement and that bought them seats in the board of directors and other perks. I thank David Hartmann for a conversation at Heidi Kosche's office at the Berlin Abgeordnetenhaus in May 2016.
- 51 "The people," "il popolo," or "das Volk" were terms I often heard while conducting research, with their meaning ranging from "common or ordinary people" to "the sovereign" (Cody 2020, 62).
- 52 Many high-profile examples of urban resistance to water privatization have occurred in the Global South. See Ahlers (2010); Barraqué (2011); Barlow (2005); Beveridge and Naumann (2014); Hines (2021); Madaleno (2007); Olivera and Lewis (2004); Petrella (2001); Wu and Malaluan (2008); and Zaki and Amin (2009).
- 53 This is why Italians involved in the water movement would never use the term *bene comune* in the singular, but always in the plural.
- 54 Initially after Dublin, loans given out by the World Bank and the IMF all stipulated that water services needed to be privatized. Contracts subsequently signed all contained the basic features that contracts signed in the Global North today contain as well, including the commitment to full cost recovery. A first draft of GATT, the General Agreement on Tariffs and Trade, did not include water as a service to be commodified. That changed in 1999 when the European Union demanded the inclusion of a provision that mandated the full liberalization of water utilities in seventy-two countries, thirty of which were considered to be the poorest in the world. As already mentioned elsewhere, water corporations have since almost entirely pulled out of the African continent, with the public sector remaining the dominant source of finance for water, energy, and transport (Hall and Lobina 2010, 7). At the same time, growth is expected in India, Eastern Europe, America, and China (Moore 2019, 11), especially in a context where multinationals can push for the integration of waste, energy, and water services into multiutilities and where they can invest in wastewater management, desalination plants, consultation projects, and water-based financial products at the same time. Importantly, multiutilities usually pay more frequent returns than other utility forms (Romano and Guerrini 2019, 1).
- In Europe, England was the only country to sell off its water infrastructures entirely. Today, the United Kingdom water market is dominated not by



- mega-corporations such as Suez and Veolia, but mostly by massive private equity firms (Moore 2019, 11; Bakker 2003).
- 56 European water legislation can be grouped into three waves of regulation: water quality for human activities (1973–1988), pollution prevention (1988–1995), and the protection and management of water (1995–present) (Moore 2019, 14–15).
- 57 Each member state was required to provide a River Basin Management Plan (RBMP) by 2009, which is updated every six years. RBMPs are the translation of the WFD into local legislation (Boscheck et al. 2013). If the objectives of the WFD are not reached, the RBMP must outline how a member state aims to reach them.
- 58 The European Water Movement was founded in 2012 after the Alternative World Water Forum in Marseille. Adopting the Italian Water Forum's Naples Manifesto that frames water as a commons and universal right, it is organized horizontally as a critical forum to link European water movements together through the themes of ecology, remunicipalization, and antiprivatization (see Naples Water Manifesto, http://europeanwater.org/about-the-european -water-movement/naples-manifesto [last accessed January 7, 2022]). It coordinates campaigns around European water policy such as the recent Drinking Water Directive, the Water Framework Directive check-in, the Concession Directive, and the Blueprint to Safeguard Europe's Water Resources, and it has participated in the Alternative Water Forums and COP21 summits. The movement has thirty-four members across ten countries, including public water operators, trade unions, NGOs, environmental groups, and community activists (Moore 2019, 25). For the Right2Water initiative, see https://www .epsu.org/article/right2water-first-ever-european-citizens-initiative-make-it (last accessed January 20, 2022).
- 59 None of my interlocutors went as far as the Standing Rock water protectors, who made a somewhat similar point about the "protestor" and "activist" terminology that they find demeaning. The term *protestor*, in particular, misrepresents what people at Standing Rock said they were doing—protecting the water from capitalist incursion. Both *protestor* and *activist* were terms that my interlocutors were also sometimes not comfortable with, but they did not articulate as coherent an alternative as the Standing Rock water protectors did. See Herrera (2016).
- 60 This is not to say that trade unions were not crucial actors in many instances I discuss (for a detailed treatment of the coalition building between unions and civil society actors in European water movements, see Bieler [2021]). But my own research showed that water insurgencies almost without fail initially emerged "from below" on the level of households unwilling to pay soaring bills.
- 61 Ancient Jewish water law prioritized access according to use, with drinking water given priority, followed by irrigation and grazing. Yet the highest priority for access "was granted to those in need regardless of whether or not they belonged to the well's community of owners." Islamic water law was similar

to Jewish water law; in fact, the Arabic word for Islamic law, *sharia*, literally means "the way to water" (Salzman 2013, 50).

Chapter 1: You Cannot Sell to Us What We Already Possess!

- 1 The first network of mayors in favor of managing water as a commons was formed in 2007 in the southern region of Puglia. A similar network, the Network Association of New Municipalities (Associazione Rete Nuovo Municipio), was established on the national level in 2008, when over two-hundred Italian municipalities were actively engaged in the question of public water management and in the referendum process (Bieler 2015).
- 2 Ibuild on Jean Comaroff and John Comaroff's (2006) work on law and disorder in the postcolony, where they describe the rise of an "almost salvific belief" in (re)written constitutions and their capacity to conjure radical breaks with the past and visions of an equitable future. This "fetishism of constitutionality" comes "in the midst of the lawlessness that has accompanied laissez faire in so many places." While they note that this belief is particularly prevalent in postcolonial contexts, the Italian case makes clear that this sense of law and lawlessness pertains to the Global North as well (22–24). See also Brenner, Peck, and Theodore (2014).
- 3 The story of Napoli ABC is a complex and dramatic one that I cannot do justice to here. Suffice is to say that the utility went through several changes in the presidency after its remunicipalization and included many highly publicized spats between Napoli's mayor Luigi de Magistris and Napoli's various directors (including Ugo Mattei and Maurizio Montalto); a highly publicized court case that included compensation for one of its ex-directors; worker's struggles over wages; controversies over mode and number of inclusion of civil society groups into the participatory organ of the utility; a national media news report that falsely stated that Naples' water is undrinkable; and fears that Napoli ABC would ultimately be infiltrated by the Camorra since it was, after all, a lucrative business. Activists further feared the looming amalgamation of Naples with the larger surrounding metropolitan area; a scheme that many said would ultimately lead to the subsumption of the remunicipalized Napoli ABC under the larger, partially privatized metropolitan utility GORI. Despite these controversies, and despite activist fears that Napoli ABC might one day be privatized again, Napoli ABC remains a remarkable achievement within the larger Italian context and a pillar of hope for water activists across the country. I thank Sergio Marotta, Francesco Fusco, Renato Briganti, Ugo Mattei, and Maurizio Montalto for extended conversations on this topic.
- 4 This insistence that the water of Naples was "good to drink" emerged out of a national scandal that occurred when the illustrious Italian magazine *L'Espresso* made an argument about Napoli's poor water quality. *L'Espresso* based its story on the fact that members of the US military base in Naples had been warned that water off base was unfit for human consumption. The city later took the magazine to court for defamation, arguing that its water

