



The greening imaginary: urbanized nature in Germany's Ruhr region

Hillary Angelo¹ 

Published online: 13 September 2019
© Springer Nature B.V. 2019

Abstract

This article provides a sociological explanation for urban “greening,” the normative practice of using everyday signifiers of nature to fix problems with urbanism. Although greening is commonly understood as a reaction against the pathologies of the industrial metropolis, such explanations cannot account for greening’s recurrence across varied social and historical contexts. Through a study of greening in Germany’s Ruhr region, a polycentric urban region that has repeatedly greened in the absence of a traditional city, I argue that greening is made possible by a social imaginary of nature as an indirect or moral good, which I call *urbanized nature*, that is an outcome of, and subsequently becomes a variable in, urbanization. I draw on processual accounts of urbanization and the sociology of morality to explain urbanized nature’s emergence in the Ruhr at the beginning of the twentieth century, and its use to fulfill two competing visions of urban democracy in the postwar period. I find that rather than an ideological reaction against cities, greening is an aspirational practice that can be mobilized by a range of actors in a variety of places and times. By showing how a new social imaginary made new forms of moral action possible and how those ideals were then materialized in urban space, this article draws attention to the role of cultural imaginaries in urban change and to the material consequences of moral beliefs.

Keywords Green space · Morality · Social imaginaries · Urban greening · Urban nature · Urbanization

Green as a “good” is everywhere in contemporary urban environments. Everyday signifiers of nature are generally recognized as community investments in shared public space and understood to be important ways to show care for a neighborhood, and the addition of parks, green spaces, or street trees to city neighborhoods are widely

✉ Hillary Angelo
hangelo@ucsc.edu

¹ Department of Sociology, University of California, Santa Cruz, 1156 High Street, Santa Cruz, CA 95064, USA

interpreted as improvements. This belief motivates community-based gardening and greening efforts; as a consequence of it, the presence of trees and parks even increases property values (Crompton 2001). In the past few decades, the “green as good” formula has become ubiquitous in urban planning and the green or sustainable city the motivating image for contemporary urbanism. Today, urban greening is understood to be a global policy trend, used by transportation planners, architects, locavores, activists, and city governments to make urban environments more hospitable and more sustainable. From Detroit’s urban agriculture to New York City’s High Line, the idea that greening improves cities has been naturalized as everyday common sense. This does not mean this idea is uniformly embraced by all people everywhere, but that it is hegemonic: reinforced by institutional and spatial structures and widely reproduced in public discourse and popular culture (Eliasoph 1998; Gramsci 1996).

But where did these beliefs and practices come from, and how do they affect the transformation of urban environments? The addition of green space to cities is not intrinsically meaningful. In the absence of these associations, not only would it not necessarily *occur* to people to try to improve urban environments with street trees, flowers, or window boxes, but these actions would not be interpreted by audiences as “improvements.” And though ubiquitous today, nature is also an essentially contested concept (Williams 2005), with a long and complex history, and many concrete instantiations, that need not be valorized in these ways. Urban greening is commonly understood as a reaction against the city, especially the industrial metropolis, plagued by pollution and public health problems (Bender 1982; Green 1990; Nash 2014; Schmitt 1990). But this does not explain the recurrence of this practice or its ubiquity today. To explain why, across very different places and times, people recurrently act to improve cities through nature, this article asks: What are the conditions of possibility for expressing normative ideals through green space? Within what spatial and temporal parameters is green coded as a “good” for cities in these ways?

I build on growing body of work on nature in relation to the city to answer these questions, offering a sociological account of urban “greening,” defined as the normatively motivated practice of using nature to fix problems with urbanism. I do so by drawing on processual accounts of urbanization (Brenner 2013; Angelo and Wachsmuth 2015) and the sociology of morality (Hitlin and Vaisey 2013) to examine the historical origins and sociospatial effects of the idea of green as a good in cities. I argue that rather than a reaction to “cities” per se, greening is a product of a distinctly new idea of nature as an indirect, or moral good, which I call *urbanized nature*, that is an outcome of, and ultimately becomes a variable in, urbanization processes. I also argue that it is a particular type of moral belief, a “social imaginary” (Taylor 2004; Castoriadis 1997; Anderson 2006), in that it motivates action, is widely legible, and is a social form that can be filled with various substantive contents.

I arrive at this argument by studying urbanized nature in a place that challenges commonsense explanations for greening. Germany’s Ruhr Valley is a low-density, polycentric region that, since the beginning of the twentieth century, has recurrently greened in the absence of the conditions to which this practice is normally attributed: density and an empirical lack of open space. The article offers two historical snapshots: of urbanized nature’s emergence in the Ruhr in the first decade of the twentieth century, as nature shifted from a “direct,” material good used for subsistence purposes to an “indirect,” moral or symbolic good; and its use to fulfill two competing visions of

urbanism in the postwar era. It shows that even in the absence of a large, dense city, once broader urban transformations brought this new idea of nature in the Ruhr, it became possible to green in the familiar, contemporary sense—to act through nature to improve urban environments and have those actions be legible as improvements.

This article's empirical intervention is a reappraisal of the origins and uses of signifiers of nature in cities that updates the commonsense explanation for greening in line with contemporary urban-environmental thinking. Based on the Ruhr's explanatory challenges, I argue that greening is not an ideological reaction to problems with urbanism, but a social practice driven by a new social imaginary of nature as an indirect, moral good that can be mobilized by a range of actors as a vehicle for very different normative visions of society. I bring together insights from sociology and urban studies to make this argument and offer two related theoretical contributions, one for each field. For urbanists, this argument extends recent accounts of urbanization as a socationatural process into sociological domain by defining the role of culture and social imaginaries in urban change—showing how, at moments of major urban restructuring, this social imaginary was a cause as well as an effect in urban transformation. For sociologists, it “materializes” the sociology of morality by providing an account of morals in action that emphasizes the material dimension of moral beliefs, and their effects on the built environment.

Nature and cities in social analysis

The familiar, commonsense story of the greening impulse is that it was a reaction against the industrial metropolis, plagued by pollution and public health problems. Historians attribute greening to a romantic view of nature that arose out of modern urban society, and was motivated by a desire to “reconnect” to pre-industrial and extra-urban social forms and experiences (Marx 2000; Nash 2014). As “real” nature retreated, simulacra of nature, such as Olmsted's Central Park, were added to cities to provide a pastoral respite from poverty, density, pollution, and alienation (Cranz 1982; Cronon 1995; Schmitt 1990). Such accounts suggest that the growth of industrial cities produced greening, as a nostalgic return to nature and escape from urban society, and see urban parks and public green spaces, like housing and sanitation improvements, as social reform projects that were a reaction to the problems of industrial cities. As Lewis Mumford (1965) put it in a review of Ebenezer Howard's *Garden Cities of Tomorrow*, “the existence of cities without gardens is a symptom of urban pathology: a by-product of high land values and low life-values;” to this, greening was a corrective.

This explanation also reflects the classical understanding of the relationship between cities and nature in scholarship, which until very recently has been one of opposition. While society/nature binaries, and aspects of these sensibilities, have a much longer and broader history (Bell 2018), modern cities and urban society in particular have long been taken to be antithetical to nature (Čapek 2010; Park and Burgess 1984 [1925]; Wirth 1938). This view was in a large part a product of industrial urbanization in the nineteenth century (Wachsmuth 2012; Williams 1973). As growing cities devoured the pastoral countryside and its resources, industrialization tore people from the land, moved them to cities, and exposed them to complex urban society. As European and American social scientists examined the social consequences of these transitions, they

understood the new characteristics of urban society in analogue with these spatial relationships. Urban *Gesellschaft* was defined in opposition to the disappearing agricultural past, while *Gemeinschaft*, with its close social ties of village life, was at least implicitly linked to agricultural economies, land ownership or tenure, and physical location in the countryside (Tönnies 2011 [1887], Simmel 1964 [1902]). Although not explicitly theorizing this relationship, early studies of the city suggested that growth of anonymity, social complexity, and anomie in cities corresponded with increasing alienation from nature, as people left the country for the city, gave up gardens for apartments, and swapped manual for mental labor.

A great deal of scholarly work across geography and the social sciences has been devoted to undoing these binaries and their associations in recent years by bringing nature in to the study of the city and urban society. Environmental historians and geographers have reversed the modernist narrative of cities as places without nature by redescribing urbanization as a process of large-scale socioenvironmental transformation (Cronon 1992; Gandy 2002; Kaika 2005) and demonstrating the intertwining of the social and the natural in urban environments at a variety of scales (Angelo and Wachsmuth 2015; Elliot and Frickel 2015; Gustafson et al. 2014). Sociologists have studied nature's symbolic utility in contemporary urban environments (Angelo 2017; Grazian 2017; Jerolmack 2013; Loughran 2016), its social construction across class, national, or cultural difference (Bell 1995; Jerolmack 2007), and its power in politics and everyday interaction (Brewster and Bell 2009).

Urban greening has not yet received this treatment. The commonsense story of urban greening as a reaction against the pathologies of industrial cities does not reflect the insights of this critical reappraisal of city/nature relationships and their recent recasting as an interrelated rather than binary pair. Meanwhile, widespread associations of green with good remain the naturalized, unquestioned premise of much contemporary scholarship on urban greening, which examines the social and economic consequences of these beliefs, but only rarely asks where they came from in the first place (Angelo 2019). In response, this article extends recent efforts to rewrite cities as constitutively “socio-natural” environments by providing an updated explanation of urban greening as a social phenomenon in light of these theoretical advances. I do so by examining the social and cultural conditions that make it possible to view green as a “good” in the first place, and the social and spatial consequences of the practices this belief produces.

Moral nature as urbanized nature

Raymond Williams famously quipped that “nature” is one of the most complex words in the English language, connoting everything from to urban parks to apparent wildernesses, plague or famine, providence or destruction, force or resource (2005, pp. 71–75). The versions of nature of interest in this article are the everyday signifiers of domestic nature commonly inserted into urban environments—plants, trees, small animals, and especially green open space—that are widely recognizable as goods for society, and deployed, self-consciously or not, as symbols of a real nature “out there” that can be brought in to improve (alienated, disconnected) human environments. Such understandings of nature as a “good” for society are commonly understood to be products of modern urban life (Farrell 2017; FitzSimmons 1989; Taylor 2016). As

historian Roderick Nash has put it, “nature appreciation” is a “full stomach” phenomenon: “society must become technological, urban, and crowded before a need for wild nature makes economic and intellectual sense” (2014, pp. 44, 344).

These associations with signs of nature in cities are moral in what sociologists of morality describe as a “formal, not substantive” sense (Hitlin and Vaisey 2013, p. 55; see Tavory 2011): not in terms of right or wrong, but in “encompass[ing] any way that individuals or social groups understand which behaviors are better than others, which goals are the most worthy, and what people should believe, feel, and do,” and the opposite of which “is not immoral but nonmoral or morally irrelevant.” The sociology of morality is concerned with symbolic and classificatory struggles over knowledge, norms, and values, especially regarding how moral beliefs emerge and are mobilized at the level of practice (Abend 2014; Krause 2014; Strand 2015). A key insight of such approaches is that “moral beliefs [are] historical and relational entities that are situated and dated by the conditions marking their appearance in a field” (Strand 2015, p. 537; Wilson and Bargheer 2018). To understand such phenomena, Hitlin and Vaisey (2013, p. 54) have recommended studying “the social processes that create and sustain particular conceptions of morality” (what they describe as morality as “dependent variable”); and with “how morality affects strategies of action over time and/or in natural contexts” (which they call morality as an “independent variable”).

These are the questions that need to be asked of greening. Like other affectively loaded concepts such as “peace” or “community,” the “green as good” logic is a case of normative understandings of an apparently descriptive term having gained hegemonic standing and social power. Mobilizing such insights yields the questions: what are the origins of nature’s moral relevance, and what are the effects of this status on urban politics and urban transformation?

The argument made here is that urbanization is the origin of nature’s moral relevance and eventually, its action context. “Urban,” of course, is a word nearly as complex as nature, but for the most part the phrase “urban nature” has simply meant “nature in cities” (Angelo 2017; Angelo and Wachsmuth 2015), rather than ideas about nature that have been transformed by urbanization processes, in the sense examined in this article. I call the greening imaginary *urbanized nature* in line with recent calls in urban studies for a shift from cities as places to multiscalar urban processes as objects of analysis (Brenner 2013; Brenner and Schmid 2015; Angelo and Wachsmuth 2015), and to indicate two things about emergent moral ideas. First, that rather than the local morphology and physical conditions of dense, industrial cities, it was a broader set of underlying transformations—especially the shift from agricultural to wage labor, and from subsistence living to a market economy—that “urbanized” conceptions of nature by changing people’s view of it from a direct, material good required for subsistence purposes into an indirect, moral good. And second, for this imaginary to take hold in any specific place, it was necessary for protagonists in a given location to be—and to be self-conscious of being—economically, politically, and socially embedded in a global network of other urban actors, which became their reference group and through which this view of nature spread. Throughout this article, the word “city” describes a normative ideal and a category of practice—the ideal to which greening protagonists aspired—and “urban” a category of analysis (Brubaker and Cooper 2000): the bundle of transformations that set the stage for these new ideas of nature to emerge, along which they traveled, and the field they aimed to influence.

I describe these ideas about nature as a good for society as a “social imaginary” because the concept emphasizes the relationship between widely-held beliefs and the practices they make possible. Social imaginaries are understandings of the moral order of a social world that are historically specific and intersubjectively shared within their domain (Taylor 2004; Castoriadis 1997; Anderson 2006). They are “carried in images, stories, and legends;” “shared by large groups of people;” and, through these common understandings, “make the reproduction of common practices” possible (Taylor 2004, p. 23; see also Calhoun et al. 2015). Benedict Anderson’s classic *Imagined Communities*, for example, showed how a shared imaginary of the “nation” as an imagined, finite, and sovereign community produced feelings of belonging, acts of exclusion, and even inspired people to die for theirs, as this social imaginary arose and “spread” across the modern world (2006, pp. 6–7). Beyond the nation, social imaginaries of concepts such as democracy, cosmopolitanism, the public sphere, civil society, and the market have been shown to be used to evaluate the existing environment and guide interventions in it (Calhoun 2008; Taylor 2004; Vertovec 2012). Social imaginaries also explain the return of practices across eras, by giving social practices a distinct “idiom” of expression (Gaonkar 2002, p. 10). In the case of urban greening, the argument is that a social imaginary of nature as a “good” for cities initially made greening practices possible and that its presence helps explain why people recurrently turn to nature as a “fix” for urban problems.

The explanatory challenges posed by the Ruhr as a case—a site of recurrent greening, in the absence of a large city—also call for an account of the travel, legibility, and polysemy of these signifiers. If not urban density, what are the conditions of possibility for greening to be legible as a form of moral action? Although foundational statements on social imaginaries did not deal much with questions regarding the extent to which given social forms are contagious, how foreign concepts become thinkable, or how similar “idioms” of expression are taken up in very different contexts, they have been more recently elaborated (Gaonkar 2002). Goswami (2002), in particular, has extended Anderson’s account of “modular” nationalism to distinguish between specific nationalisms and the more general thinkability of nationalism as a “social form,” showing how once it became possible to think of the world in terms of nations, the concept could travel to very different places, with very different histories, producing nationalist movements of very different kinds. Her argument highlights nationalisms’ formal similarities across their various concrete instantiations, and emphasizes the structural as well as cultural or social conditions that allow the concept of nation to travel and take hold in specific places. The Ruhr’s history reveals the same dynamics at work in the greening case. That this imaginary and practices were able to travel to a place with ample green space confirms that urbanized nature was not simply a knee-jerk response to the pathologies of industrial cities, but an idea that emerged out of the same broader set of urban transformations that also produced those cities. Once historically available, the necessary local condition for greening was that the potential greening protagonists become—and come to view themselves as—participants in an international field of other cities and urban actors mobilizing nature in these ways. It was then that greening could appear in various concrete forms, as a solution to a variety of perceived problems, in the Ruhr as elsewhere, in the absence of the specific conditions motivating its initial uses.

Greening, like other social practices, can play out at various scales, and it is affirmed and reproduced materially. Censuses, maps, and museums, for example, are familiar technologies for establishing nationalism (Anderson 2006); citizens perform national identity by saying a daily pledge of allegiance as well as by constructing national monuments. The greening case brings two additional, more general features of social imaginaries and practices to light. First, as formal, not substantive concepts, social imaginaries are available to a range of actors and political projects with varying relationships to power, even in the same place and time—in other words, *competing* moral visions can be played out through green space. It is for this reason that it is appropriate to describe greening as an “idiom” or grammar of moral action rather than a specific viewpoint; it is a social form through which to communicate moral visions in general. Second, these practices are not just symbolic but literally help create the worlds they envision. Greening practices are inherently material, and when this imaginary is deployed while making decisions about the built environment, it can add up to quite significant transformations of the physical and social landscape. This brings into focus a view of the built environment as constituted by these “imaginative” choices as well as by structural factors.

Case selection, data, and methods: urban greening in the absence of a city

I arrive at this argument through a study of greening in Germany’s Ruhr region—a place where traditional explanations for the greening impulse fail. The Ruhr is one of Western Europe’s largest urban agglomerations, historically known for its coal mining and steel production and (depending on how its boundaries are drawn) consisting of about 1000 mile² and 6.5 million people. It is also a case of urban greening in the absence of a city. For 150 years, it has been seen as a “problem” urban environment, lacking a classical city form or a cosmopolitan citizenry: spatially diffuse, working class, and culturally provincial. The German urbanist Walter Siebel once remarked that if “one asks people in Europe what they immediately associate with the term urbanity, there is little by way of hesitation ... urbanity traditionally means crowded streets, 24-hour shopping, and the traditional character of the European city.” But in the Ruhr, “everything that fits with the image of a European city is missing—a central core, urban/rural contrast, and a mix [of functions]. This is urbanized countryside without a real city” (Siebel 1999, p. 123). More recently, in a book titled “cities without cities,” urban theorist Thomas Sieverts (2003) developed his concept of a *Zwischenstadt* (literally “in-between-city”) in large part in reference to the Ruhr.

And yet, the Ruhr is also one of the world’s largest examples of the greening impulse at work; since the beginning of the twentieth century, the design of green space has been a central mode of reconfiguring the region spatially and socially. In 2010, it was named European Capital of Culture for its IBA Emscher Park, a region-wide redevelopment of brownfields into parkland, industrial relics into museums, and rail lines and sewage canals into greenways and blueways. Since the beginning of the twentieth century, the Ruhr has also “greened” in the absence of exactly the conditions to which the practice is usually attributed: urban density and industrial slums (Hall 2002), rampant public health problems, or a “cosmopolitan” middle class engaged in

conspicuous consumption (Green 1990) or progressive reform. The site's long history and unusual morphology thus make it possible to track the emergence and transformation of this understanding of nature in the absence of the usual explanatory characteristics.

Data for this article are drawn selectively from a larger research project that traces 150 years of greening in the Ruhr, based on archival research, interviews, and participant-observation carried out during two years of fieldwork, from 2011 to 2013. The overall project is a longitudinal comparison (pace Walton 1992), designed to identify commonalities in greening practices at three moments of major global urban restructuring: industrialization around 1900, deindustrialization in the 1960s, and neoliberalization in the 2000s (Brenner 2004; Jessop 2002; Aglietta 2000). This article profiles projects in the first two of those moments: the construction of the region's first, flagship garden city in the early 1900s, as urbanized nature emerged in the Ruhr; and two competing visions of postwar democratic publics realized through green space in the 1970s. Each greening project was locally significant, deliberately designed to serve as signifiers of new urban identities in the wake of a moment of urban upheaval, and representative of, and explicitly in conversation with, greening paradigms common throughout the region and the Western world in each era. Evidence presented here about the rationale for the projects and how they were seen at the time to align with international trends and expected to catalyze change locally, comes from local and regional planning documents, original archival sources, and existing secondary historical sources on the region, the latter read through the theoretical lens being developed here. Scholarly writing that informed the projects during the time of their construction—here, by Jürgen Habermas, Oskar Negt, and Alexander Kluge in the postwar period—is used as an historical source.

Finally, in this analysis, the Ruhr figures as an urban case. Work on nature as a technology or representation of social and political power has tended to take the nation as its context (Fourcade 2011; Mukerji 1997; Scott 1998)—especially in Germany (Cioc 2002; Lekan and Zeller 2005). Chandra Mukerji, for instance, has described the gardens of Versailles as “a form of material practice, a way of acting on the land that helped to make it seem like France” (1997, p. 9). In the projects examined here, greening is a way of acting on the land to help make the Ruhr seem like a *city*. To be sure, greening projects in the Ruhr reflect specific national concerns—such as rebuilding democracy in postwar West Germany—but protagonists self-consciously situated themselves in an international comparative field of other cities and of other urban actors and, though the projects met utilitarian needs for residential and recreational space, they were also understood to be demonstration projects and deliberate attempts to remake the Ruhr to reflect new urban ideals.

The origins of nature's moral relevance: urbanized nature comes to the Ruhr

A main argument of this article is that industrial urbanization brought about a shift in the way nature is valued from a *direct* to an *indirect* good: from materials valued for subsistence purposes to ones seen as having primarily affective, immaterial benefits. Environmental historians have documented the emergence of this contemporary,

recognizable moral conception of nature across industrializing Western Europe and America in the nineteenth century, without describing it as such. The French Revolution marked the beginning of the transfer of royal gardens and woodlands to Paris's public, followed by major investment in park construction (Ives 2018), and new forms of nature art and spectacle in the 1830s and 1840s (Green 1990). In England, industrial capitalism created longing for the countryside by the beginning of the nineteenth century (Williams 1973). In New England, “urbanization” “overwhelm[ed] the arcadian image” of factory towns and forced the development of an “urban vision” by the 1840s (Bender 1982, p. 77). Frederick Law Olmsted and Calvert Vaux created their Greensward Plan for Central Park in the 1850s (Crawford 1995). Progressive-era social reformers prescribed nature as a relief from poverty, overcrowding, and pollution in Chicago by the 1890s.

The Ruhr was a late adopter; this new social imaginary and the first recognizable greening efforts did not appear until the beginning of the twentieth century in the Ruhr. By 1900, the major transformations of urbanization had all taken place: the booming coal and steel economy transformed a quiet agricultural valley with a population of 300,000 into a seething industrial agglomeration of two million; peasant farmers were becoming salaried employees in a nascent industrial economy (Jackson Jr 1997); and labor and consumption patterns were changing, as men began working in mines rather than fields, and women began buying food rather than producing it (Steinborn 1991). But in spite of these transformations the Ruhr had not yet urbanized *imaginatively*. Even surrounded by these new forms of labor, consumption, and social relationships, at the end of the century local power-holders' normative ideal of society was still an agrarian or rural one; they did not yet view the Ruhr as a city or its first-generation industrial workforce as urban citizens.

This agrarian orientation in an urban-industrial context was clearly visible in the behavior and beliefs of the Ruhr's industrial barons, most notoriously the Krupp enterprise in the city of Essen. Through the end of the century, its industrial workers were still predominantly of rural origins and “the line of division between the miner and the peasant-cultivator was not an easy one to draw” (Pounds 1968, pp. 89–90). But beyond individual employees, the entire management and spatial arrangement of the company self-consciously replicated agrarian social relationships in the landscape. Krupp and the other Ruhr factory owners famously adopted a “paternalistic” model of labor management that replicated feudal relationships between overlord and serf with new employer-employee interdependencies (Drucker 2012), providing housing, education, medical, and retirement services in exchange for workers' “unconditional obedience” (Günther and Prévôt 1905, pp. 35, 181). They provided all infrastructure and public services (Hundt 1902; Larsen 1996, p. 975), rather than the nascent public sector. And they constructed locally unique company housing in the form of “colonies”—small, semi-detached clusters of houses, with individual gardens and sheds for keeping animals (Steinborn 2010).

The colonies were a simulacrum of rural life that deliberately organized workers' daily lives to reflect this agrarian ideal. They were not intended to cultivate an urban public or citizenry. There were no public spaces designed for social mixing, no sense that workers should mingle and meet each other, no value in cosmopolitan exposure to difference articulated. Instead, the colonies clustered workers by country of origin to ensure that they “were able to continue the country ways from the rural districts from

which they came” (Koch 1954, p. 81—quoting from Pieper’s 1903 *Die Lage der Bergarbeiter im Ruhrgebiet*). They also provided ample access to nature for subsistence purposes. At the end of the nineteenth century, fully 96% of company housing units had sheds for keeping goats, chickens, and pigs (Hundt 1902, p. 31); an 1893 survey counted, among 16,060 miners with access to gardens and fields, 524 horses, 8210 cattle, 31,221 goats, 38,017 pigs, and 885 sheep (Dege and Dege 1983, p. 50). The animals were important because Krupp still imagined heads of households engaging in agricultural work outside their industrial labor, declaring that that a “full-time worker, who wants to care for his garden and small animals, must not be subjected to a long way” to reach them after a day in the mines (Heinrichsbauer 1936, p. 42).

This vision of the Ruhr, and its workers, changed in the first decade of the twentieth century, as prominent local factory owners, planners, and philanthropists started imagining the Ruhr as a region that should measure up to European capital cities culturally as well as economically. At this point they made an imaginative shift from *Gemeinschaft* to *Gesellschaft*—from traditionally rural or agrarian “community” to cities and urban society as a normative vision for the Ruhr—and subsequently began to register increasing concern about the Ruhr’s lack of traditional markers of urbanism. In 1900, the Ruhr rivaled cities such as Berlin and London in size and economic importance. But rather than being plagued by overcrowding, pollution, and disease (Lees 1985; Schmidt 1912), the polycentric Ruhr had other problems related to its legibility as a city. The region’s spatial footprint had been laid by a chain of medieval market towns, and as it grew, it took on the “appearance of a continuous giant city ... teeming with a giant army of workers ... [and] enveloped and covered by a misty, gassy, dusty, dirty veil” (Hickey 1985, p. 19—quoting from Pieper’s 1903 *Die Lage der Bergarbeiter im Ruhrgebiet*). It also lacked a cosmopolitan middle class, thanks to Kaiser Wilhelm II’s “educational blockade,” that had aimed to maintain an ignorant and docile workforce by preventing any universities from opening in the Ruhr (Regionalverband Ruhr 2010). It had no cultural institutions such as Paris’s Louvre, Berlin’s Staatsbibliothek, or London’s Hyde Park—local philanthropist Karl Ernst Osthaus’s efforts to establish a modern art museum in the Ruhr in 1902 even provoked the comment that “high quality art belonged in Berlin, not in the provinces” (Schulte 2009, p. 215). And due to the spatial arrangement of the colonies, it also had no street life, public spaces, or places for strangers to meet and mingle. Around 1900, Ruhr elites began to see this lack of educated bourgeoisie, opportunities for flânerie or consumption, or great cultural institutions or public spaces as problems, and began to view its residents—many first-generation industrial workers and new migrants to Germany—as part of a diverse urban citizenry.

These growing concerns mark the moment urbanized nature came to the Ruhr. As local elites began to see the city as a spatial and social ideal to which to aspire, they began to understand symbolic forms of nature as a means to achieving that goal. Throughout the nineteenth century, urban reformers in other industrial cities had proposed green interventions in the urban form to help solve problems of sanitation and overcrowding, such as Ebenezer Howard’s garden city in the United Kingdom. At the beginning of the twentieth century, emulating European capitals, the Ruhr’s industrial barons turned to nature as a solution to problems with urbanism, even in the absence of the specific problems that motivated their use elsewhere.

In 1910, Krupp put this new imaginary to work at Margarethenhöhe, the region's first, flagship garden city. Margarethenhöhe used Howard's garden city model for different local purposes. It was explicitly designed to symbolize the Ruhr's future *as a city* and to help approximate the form and sensibilities of European capitals by housing industrial workers in the image of the city rather than the country. The Ruhr's first regional planner, Robert Schmidt, described the garden city, along with green belts and public parks, as a means for the "schematic presentation of an incipient big city" on an industrial area (Schmidt 1912, p. 90). For Osthaus, the garden city—like his art museum—was a means to elevate the mind, to promote the "unrestrained circulation of mental life" throughout the whole system (1911, p. 34). And for the Krupps, after half a century of factory settlements operating independently of the Ruhr's pre-industrial cities, Margarethenhöhe was a "gift" to the city of Essen that housed middle class residents alongside Krupp workers for the first time (Krupp'sche Gussstahlfabrik 1912, p. 314), and that was deliberately designed to bolster Essen as an "artistic, unique district ... affiliated with the city center" (Metzendorf 1906, p. 4; Kallen 1984, p. 48). In the Ruhr, the garden city was not a response to industrial slums, but a design the region's elites explicitly intended to produce more cosmopolitan, cultured citizens and patterns of daily life.

A principal way that Margarethenhöhe helped transform agricultural laborers into recognizably bourgeois urban citizens was by laying out new relationships to nature. While the colonies had provided access to nature as a direct, subsistence good, garden cities provided green space in the contemporary, recognizable manner—for its benefits as an indirect or moral good. As in the colonies, each unit had its own green space, but the fruit trees were now only decorative (Metzendorf and Mikuscheit 1997), and animal keeping was expressly forbidden (Margarethe Krupp-Stiftung für Wohnungsfürsorge 1915). Although the Krupps had once found garden culture both "economically" and "morally useful," by 1887 the family patriarch registered concern that "if the garden ... is not controlled by the woman alone, then he [the husband] works at home and rests at the factory," and thus declared that "subsistence agriculture must not be practiced" (Günter 1970, p. 154). As agricultural activity changed from labor for men into hobbies for women and children, nature changed from a space of labor into one of leisure. Margarethenhöhe's designer, Georg Metzendorf, planned its gardens and surrounding woodlands to be a "space of recuperation ... at the end of the day's duty" for "the social life of the family" (Metzendorf 1906, p. 12; Kallen 1984, p. 55). As the settlement expanded around one of the region's remaining farms, he also helped the struggling owner reconceptualize his failing agricultural business as a "garden-pub and excursion destination" (Metzendorf and Mikuscheit 1997, pp. 67–68). Margarethenhöhe's backyards, woodland, and farm-café each reflected a new imagined subject and new ideas about nature as a space of leisure that transformed its goods from material subsistence to spiritual edification and produced the conditions for experiencing nature as scenic.

Historians of the Ruhr do not interpret the arrival of the garden city in the Ruhr as a dramatic change from the colonies that preceded it, given that both were low density housing forms offering ample green space. But through this lens it was: the new rules for green space marked a decisive shift in use of nature from the preservation of direct/subsistence relationships to indirect/moral uses. The timing of its emergence also indicates that the changes industrialization wrought in social relationships and ways of life were necessary but not sufficient conditions for the emergence of urbanized

nature. Local elites' vision of the good life had remained an agrarian or rural one throughout half a century of heavy industry, even though the Ruhr's labor and migration patterns, social relationships, and economic forms were already urban ones. The second key factor was an imaginative turn to the city among regional elites, who increasingly saw themselves as participants in an international field of other cities and urban actors, in which the idea of green as a good for cities was actively in use. This was when an alternative urban ideal of society, and urbanized imaginary of nature, caught on in the Ruhr, and when ideas of green as an indirect, moral good began recognizably to govern interventions in the built environment. While Essen's first street trees had been understood as frivolous decoration at the end of the nineteenth century (McCreary 1964, p. 127), for instance, in the twentieth the growing public sector began to view forms of nature such as street trees, public parks, and municipal forests as public goods to be provided alongside cultural institutions such as libraries and opera houses (McCreary 1964).

Urbanized nature's subsequent uses: two green visions of postwar democracy

Once nature came to be perceived as a good in the Ruhr, protagonists could, and did, continue to spatialize changing ideas of urban publicness through green spaces. Initially an outcome of urbanization, urbanized nature became a variable in urban change as it was drawn on to remake the urban environment at subsequent moments of major urban restructuring. In the decades after World War II, two very different groups realized competing visions of democratic society through nature. Their greening projects demonstrate this imaginary's availability for two very different political projects in the same period and the imaginary's material consequences.

As Howard's garden city was the paradigmatic use of nature to remedy urban ills in the nineteenth century, in the postwar era there were two competing planning paradigms and corresponding visions of cities and civic life in the West (Klemek 2011). Both had green expressions. The first was a spatial version of Fordist modernization that embraced architectural modernism and functionalist planning principles—a planning paradigm realized architecturally as Le Corbusier's "skyscrapers in a park," programmatically in the 1933 Athens Charter's vision of functionally divided cities, and physically with the construction of Brasília, the new capital of Brazil, in 1960. In the United States at this time such ideas drove automobile-based suburban expansion and were a response to white flight, urban blight, and black poverty in American cities. But the 1960s also saw increasing community backlash against comprehensive planning and totalizing, large-scale urban redevelopment schemes. The battle between Robert Moses and Jane Jacobs over the proposed Lower Manhattan Expressway's route through the West Village is perhaps the most famous of these antagonisms, and though the lines were often not so clear, at their most polarized they represented planning that was top down versus bottom up, large scale versus small, and planned versus organic. In American cities in the 1970s, the design and use of green spaces, such Washington Square Park or the People's Park in Berkeley, were key sites for battling these out.

In the Ruhr at this time, international green urban planning paradigms were again deployed as solutions for unique national and local problems—in this case, for helping rebuild an urban democratic public. By the 1960s, the region was confronting the collapse of the industrial economy and massive structural change, while the country as a whole was coping with the aftermath of National Socialism and Hitler's wartime atrocities by creating democracy in the new West Germany. As the industrial barons' power waned, it was the planners and policy makers of the new democratic government who were tasked with imagining and realizing the Ruhr's post-industry future. While critical of Moses-style autocratic, large-scale planning (Diefendorf 1999; Klemek 2011), they looked to functionally divided American automobile cities as the spatial form synonymous with American democracy (Göderitz et al. 1957), and they combined this quintessentially suburban American spatial form with West German political ideals. In the 1960s and 1970s, Jürgen Habermas's concept of the bourgeois public sphere offered planners and public officials a vision of postwar democracy based on rational-critical discourse among diverse citizens (Bahrdt 1952; Habermas 1991). But as frustration with top-down, bourgeois, and abstract versions of politics and spatial planning grew in the Ruhr, as throughout West Germany, New Left counter-movements advocated for an alternative model of a "proletarian" or "half-public" sphere, based on the principle of "mixture" (*Mischung*) rather than "division" (*Trennung*) (Jameson 1988, p. 160), and drawing on the work of two of Habermas's students, Negt and Kluge (1993).

The first, Habermasian model was spatialized by Ruhr planners as a series of large, regional recreation parks, called *Revierparks*, built to serve as spaces for the new democratic public. The *Revierparks* were part of comprehensive regional planning efforts on the part of the *Siedlungsverband Ruhrkohlenbezirk* (SVR), a regional planning body established by Robert Schmidt at the end of the nineteenth century. The SVR's regional plans carved urban space into four functionally divided realms—work, private life, transportation, and leisure—and designated new spatial forms for each (Landesregierung Nordrhein-Westfalen 1968, 1970). The construction of universities would make it possible to train a new white-collar workforce; high-rise housing would "modernize" a provincial working class; highways would provide freedom and mobility; and—most importantly—the parks would cultivate democratic public life. A national study of leisure time described the Ruhr's *Revierparks* as a "prototype" of new leisure spaces that would further the goals of "open and democratic society" by creating "diverse and open exchange" in spaces that made class differences "invisible," by promoting shared values, and contributing to politics by "emancipating" individuals as "political citizens" rather than individualized "consumers" (Lüdtke 1972, pp. 49–51).

For Ruhr planners, large parks in a functionally divided city represented Habermas's ideal in the landscape, and (like Krupp's garden cities) were also meant literally to help create this ideal public sphere and imagined public. They made the intended social consequences of this spatial intervention explicit in a 1978 brochure designed to introduce the new *Revierparks* to the German public (Ehrich and Springorum 1978). It served as an instruction manual for their use by showing people how to behave in the new parks and who to be in them; it also illustrates how planners imagined the parks would facilitate the creation of democracy. Figure 1 is characteristic in that it brings the future ideal into focus by explicitly contrasting it to the past to be left behind. The past is depicted by the Ruhr's colony housing, visible in the small black-and-white picture



Fig. 1 The Ruhr's insular past and cosmopolitan future (Ehrich and Springorum 1978)

in upper right, in which a family of nosy neighbors leans out a ground-level window. Although the colonies and garden cities had remained important sources of housing and food production during wartime, by the 1960s planners and landowners preferred demolishing the colonies to “modernizing” them, and the housing was commonly represented in planning documents and the popular press as outdated, insular, and provincial. Here the colonies of the past are presented as a contrast to the Ruhr’s cosmopolitan future—depicted by the full-color, full-page photograph in which white German women and children relax guilelessly in public, proximate to new Italian and Turkish immigrants playing cards in the inset photograph on the left. The visual contrast corresponds with the text, which reads:

Before, they leaned out the window, after work, on Saturday, on Sunday. Everyone knew everything about everybody: who with whom and when and where. They also knew where extra hands were needed, knew who was sick, who was pale with grief, knew where help was necessary, just stopped by. It’s no longer so easy with neighborhoods, not so easily understandable as in the times of closed society. It’s perhaps more anonymous today, probably more intimate too. Better? Worse? Who can judge? Different in any case. But you need ‘heat in the stable’ if you haven’t learned to be alone, you need others, you want to talk; without feedback, without resonance, you can’t be. You seek contact, you want to communicate, without suspicion and shyness, just like that. And you understand the “new ones,” the other, the Turk, the Italian, who can’t speak German so well yet.... Maybe you think that your grandfather ... —oh, forget it—Come here, you! Do you play chess? Ball? My, you have such beautiful eyes....

This passage reflects the extent to which the regional parks were understood to be places for learning to participate in the new urban *Gesellschaft*. The “before” to be escaped is the claustrophobia of *Gemeinschaft*—where “everyone knew everything about everybody”—represented by the colonies; the “today” that is “different” reflects the Ruhr’s higher-than-national-average immigrant population, drawn by the region’s constant need for industrial labor, revived industrial production, and the country’s low unemployment rate that had drawn about four million guestworkers and their families from Turkey, Italy, Greece, and Yugoslavia to West Germany in the postwar years (von Einem 1982). The SVR deliberately designed the parks to be accessible to this population by placing them in the Ruhr’s densest areas, proximate to public transit and hospitable to a variety of uses for the whole family (Landesregierung Nordrhein-Westfalen 1968, 1970). As zones for interaction among strangers across ethnicity and class, the parks were a technocratic fulfillment of West Germany’s ambitions for a thriving public realm, the foundation of urbanity based in sharp distinctions between public and private, and a “bourgeois” public of relative anonymity, rational discourse, and shared experiences of leisure.

But in the same decade, a local New Left countermovement rejected the *Revierparks*’ vision of bourgeois urban democracy and functionally divided city, and communicated an alternative social vision through nature, with a very different relationship to power. Since the construction of Margarethenhöhe, and the arrival of urban aspirations and urbanized nature to the Ruhr, the colonies had been devalued economically and imaginatively. They were physically decaying, and they and their residents were represented as old fashioned and provincial in popular culture and in materials like the *Revierparks* brochure. Planners and policymakers aligned with bourgeois visions of democracy (as well as property owners, who stood to gain from increased rents) wanted to tear them down and build high rises. But the construction of universities in the Ruhr brought a New Left, comprising university faculty and students, to the region, who argued for an alternative “proletarian” public sphere and democratic politics, which they located in the Ruhr’s nineteenth century workers’ colonies. Anticipating critiques of modernist planning, faculty and students, along with colony residents—still mainly the Ruhr’s traditional working class—began to organize to save the colonies.

The most prominent target for preservation was Eisenheim, the oldest workers’ colony, built in 1844. The movement to save Eisenheim reimagined the colonies’ spatial politics and based arguments to preserve them on an alternative, proletarian democratic, urban, and political ideal they located in the colonies’ nature. Like *Revierparks* planners, the movement saw nature as a tool for building urban democracy, and the colonies’ animals, gardens, and shared green spaces were central to their published materials (see Fig. 2).

But rather than a Habermasian public sphere of bourgeois strangers, they depicted these spaces and materials as providing the foundation for an alternative democratic politics (Faecke et al. 1977; Günter and Günter 1999). Although the colonies had originally reflected an agrarian imaginary of life and social relationships, in a new political economy the movement was able to imaginatively recast these spaces as the foundation for a new proletarian politics. In their eyes, in the twentieth century and in the absence of industrial barons as owner-employers, Eisenheim’s gardens and green spaces became places able to create a “solid basis of real mass experience” to give

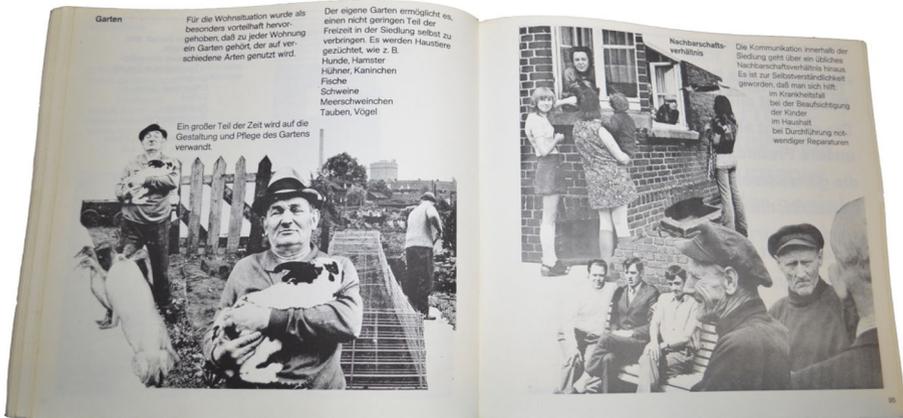


Fig. 2 Nature makes neighbors (Projektgruppe Eisenheim 1973, 94–95)

“weight” to a proletarian public sphere of citizens whose interests were reflexively classed, historicized, and located, instead of ostensibly abstract, ahistorical, and universal (Negt and Kluge 1993, p. 80).

An excerpt from a resident interview in one of the movement’s published books explains the relevance of images like Fig. 2, declaring that “people who keep a lot of rabbits are supported by their neighbors” (Projektgruppe Eisenheim 1973, p. 123). What is the connection between nature and neighborliness? The movement argued that nature’s demands and its products—literally, the care it requires and fruits it bears—facilitated more and qualitatively different kinds of social interactions. Rabbits create opportunities for neighborliness by attracting children, by encouraging residents to spend leisure time at home, and by having litters that need homes. Gardens produce more flowers than one person can pick or more vegetables than one nuclear family needs, creating opportunities for cooperation and sharing. Especially as the industrial workplace (the traditional location for organized labor and class-based consciousness [Crew 1979]) disappeared, the movement argued that the colonies’ multi-use gardens, small animals, and “green rooms” were small scale, multi-generational, “half-public” spaces that produced a proletarian public sphere by increasing social interactions, encouraging trust, sharing, and solidarity, and reproducing community values (Projektgruppe Eisenheim 1973).

The construction of *Revierparks* and the *Rettet Eisenheim* movement illustrate how, once available, urbanized nature becomes a variable in urban change, and its availability for very different political projects in the same period. As in the case of Margarethenhöhe, the Ruhr’s *Revierparks* and colonies were not seen simply to represent competing normative visions but literally understood to be key sites for communicating new ideals of cities and citizenship, and spaces where new norms and habits were to be learned and reproduced. It also highlights urbanized nature’s cumulative spatial and social effects on urban politics and built environment. This social imaginary transformed the landscape physically—the Ruhr’s *Revierparks* and its colonies remain central to the region’s spatial identity today—and socially, in that both were the places where a democratic public sphere and political consciousness were and continue to be cultivated.

Discussion: the greening imaginary and urban change

The main argument of this article is that urbanization turned nature into a moral good that, once available, made it possible to use greening projects as solutions to problems with urbanism in large industrial cities, but also beyond them. Of course, I am not the first to link urbanization with transformed ideas of nature or to describe the widespread diffusion of urban ideas. Urbanists have observed that historically “urban” or “rural” ideas eventually “have an independence of their own,” transcending the places and times in which they arose (Angelo 2017; Bell 2018: 12; Wirth 1938). But exactly how urban ideas and moral frameworks travel and transform has not been elaborated in recent theories of urban nature, either theoretically or empirically. Arguments for the study of urbanization as a multi-scalar, socionatural process have emphasized the physical transformation of cities and broader extractive landscapes and global political economies (e.g., Arboleda 2016; Brenner and Katsikis 2014). Words like epistemologies and imagination, “phenomena” and “condition,” frequently appear in landmark texts (Brenner 2013; Brenner and Schmid 2017), and it is presumed that just as urbanization processes move and transform goods, people, and raw materials around the globe, cultural forms, practices, and ideas circulate as well. But what are those cultural forms and practices, and how is it that they travel?

This article concretizes and elaborates these claims by documenting the historical movement of the greening imaginary to a place that is not a traditional city. It provides a sociological explanation for why and how these practices recur and spread, and how they impact the transformation of physical and social space, through the concept of the social imaginary. Drawing from sociologists of morality’s attention to the genesis of moral categories, I have argued that urbanization made greening into a moral practice; that the social imaginary I call urbanized nature is an outcome of urbanization that then becomes a variable in urban change. To translate this into the language of urbanists, we might turn to Neil Brenner’s distinction between the urban as “nominal essence” and “constitutive essence.” Nominal essence refers to the social and spatial forms that urban “phenomena, conditions, or landscapes” take (e.g., cities themselves), while constitutive essences are “the various processes (e.g., capital investment, state regulation, collective consumption, social struggle, etc.) through which the urban is produced” (Brenner 2013, pp. 96, 98). Urbanized nature was a product of urbanization as constitutive essence: the changing forms of investment, production, consumption, and social relationships of industrial urbanism literally “constituted” this new moral view of nature, just as they constituted cities. Once it became available, urbanized nature has affected the urban form as nominal essence: cities and other urban environments are constituted in part through this idea of nature as it is drawn upon when making decisions about the built environment.

Accounting for this practice as a result of a social imaginary, rather than a mystified response to environmental problems, also offers an alternative, and more sociological, conception of the causes and consequences of greening that helps explain its politics and ubiquity today. “Ideology,” in the strict, Marxist sense, is quite often the lens for critical analyses of greening, implying both a mis-recognition of the social problems of the industrial city, and actions or beliefs that uphold dominant class interests (Purvis and Hunt 1993; Williams 1977, p. 108). This diagnosis is also a product of the commonsense framing of greening as a reaction against the city. Urban greening

initiatives understood in these terms are often taken to be ideological responses that mistake the source of those problems, attempts to fix them with place-based band aids rather than deeper structural transformation, or simply likely to be domesticated or coopted. This assumption is implicit in the framing of many questions about the politics of community gardens and other urban green spaces, especially regarding their attempts and inevitable failures to provide true service to the public: Can community gardens be counter-hegemonic spaces or are they just another site of neoliberalism (McClintock 2014)? Did Olmsted know how elitist his design for Central Park really was (Rosenzweig and Blackmar 1992)?

This assumption is historically inaccurate—the Eisenheim movement provides one historical example of a case where the emphasis on the social and political power of urban green space coexists with a Left structural analysis of the problems of their present, and an argument about how participation in proletarian green space could lead to political change—but more to the point, these questions offer limited ways into understanding greening projects’ problems and possibilities. As social projects, greening projects cannot help but be partial; across eras, they will inevitably reflect the intentions of their creators and the political economy of the moments in which they are carried out. What such questions and framing fail to account for is nature’s power and polysemy: not only the fact that it *can* be selected, but that it actually *is* selected quite often, and its availability for multiple projects in the same period, directed toward a variety of ends. In the 1970s the Eisenheim movement and the *Revierparks* offered two distinctly different visions of urban democracy through nature in the same period; today, greening is mobilized in projects across the political spectrum—by guerrilla gardeners as well as green growth machines.

Instead, the argument outlined here offers an explanation for the availability of green solutions for projects across the political spectrum, bottom up as well as top down—why it is not just naïve or reformist urban planners who have placed hope in green design as a solution to social problems, but all kinds of actors who are apt to act to realize them through green space. Phenomenally similar green spaces, such as parks, community gardens, urban farms, allotments, and window boxes, can reflect and project very different social ideals, counter-hegemonic and revolutionary as well as system-affirmative or reform-minded. A shared underlying imaginary of this set of aesthetic representations as “good” makes these everyday signifiers of nature—flowers on a table, plantings in window boxes, community gardens—broadly legible as containers of value, and therefore useful vehicles for a wide array of social visions, regardless of their politics. Urbanized nature is even available for anti-urban visions, such as alternative food movements with a back to the land ethos and visions of small-scale communities living in harmony with nature, growing their own food. None of these is a “free” space in terms of un-inscribed, but rather they project normative visions of the world, whether articulated through collective practices or planned top-down. Practicalities of scale and cost contribute to the fact that the most visible greening projects are ones that use nature to confirm existing social arrangements, but there is nothing necessarily hegemonic about greening as a practice, nothing internal to it that requires it to uphold the status quo.

This argument about the origins and effects of greening has implications for both the sociology of morality and theories of urbanization. For urbanists, it provides a sociological perspective that highlights the role of culture and ideas in urban change. Though

urbanists ‘know’ that “production” includes not just manual and economic labor, but imaginative and cultural work and “social accomplishment,” this cultural and social work is often overlooked and undertheorized (Smith 1998, p. 277). The commonsense argument that greening is a reaction against the city reflects this orientation, in that it views greening as a reactive mode, suggesting that urban problems come first and (ideological) green solutions second. But as David Harvey has noted—not coincidentally, also in the context of an argument about ideas of nature—“even Marx” was “willing to countenance ways ideas could become a ‘material force’ for historical change when embedded in social practices” (1993, p. 31). In making it clear that the temporal order can and may often be the reverse—that greening is an aspirational practice, that literally lays out new visions of (in this case) cities and citizenship in the landscape—the Ruhr helps correct this bias by showing how social imaginaries, and ideas more broadly, become a “material force”: they are causes, as well as effects, in urban transformation.

This is also an explanation for greening that walks a line between materialist and cultural approaches to urban transformation in a manner consistent with the objectives of earlier scholarship using the concept of the social imaginary. I call these historical efforts “greening” deliberately, to highlight the continuity between contemporary greening efforts and those of prior eras. The argument is precisely that though the substantive projects and specific values people attach to nature change, nineteenth century urban parks and contemporary green cities are—formally—the same activity, products of the same social imaginary. Reading this argument into accounts of urban change foregrounds that, while social imaginaries do not have free rein, they are also not simply epiphenomena of material conditions. Large-scale landscape transformations are in part a product of these imaginative efforts; inevitably, such projects also reflect the political economy of each era, in terms of their particular normative aspirations, material constraints, and spatial politics. The social imaginary has long been a tool in such projects—of defining the causal role of “culture” in relationship to more structural variants of Marxism—or as Bob Jessop has put it, to explain how “imaginaries provide not only a semiotic frame for *construing* the world but also contribut[e] to its *construction*” (Jessop 2010, 342; italics in original). Anderson’s *Imagined Communities* is often read as marking a shift from “structural and materialist” analyses of nationalism to (additionally) “cultural” ones (Goswami 2002, p. 771); Castoriadis was motivated by a political and intellectual commitment to theorizing creative work and outcomes that could not be traced back to structural sources (1997, pp. 24–25; Gaonkar 2002). Here too, the social imaginary provides a framework for understanding the eternal return of an idea mobilized repeatedly in the context of urban change.

In turn, the urban context extends the sociology of social norms and values from the analysis of discourse to action by emphasizing the material effects of social imaginaries as greening projects spatialize new ideals of urban publicness and transform urban space. While well-sensitized to the causal role of culture, sociologists have not always been attuned to the “materiality” of moral beliefs or imaginaries (McDonnell 2010; Rubio 2014). Although theoretically “kinesthetic” and “emotive” as well as discursive (Glaser 2011, p. 18), in practice, social imaginaries, norms, and values have generally been studied as a cognitive and discursive terrain. Ann Mische, for example, in outlining several ways that futures are produced, “focuses primarily on text and talk,”

and does not address the question of “how future projects are given material form” beyond calling for additional work on this topic (2009, pp. 699–702; 2014; p. 244, 442). The sociology of morality has tended to treat beliefs and practices separately—providing accounts of moral beliefs’ social origins (Strand 2015), how they drive language and practice (Abend 2014), and situations of verbal justification (Boltanski and Thévenot, 2006).

The greening case draws sociologists’ attention to the material consequences of moral beliefs through a view of urban landscapes as, in part, products of moral action. Greening in the Ruhr literally established distinctions between public and private space, laid the region’s basic spatial footprint, and recurrently reshaped its social life. This history previews ways the sociology of morality might incorporate a “material sensibility” (Rubio 2014) into their analyses by becoming attuned to different modes of moral action, by bringing the built environment into focus as an archive of these decisions—centering it as a key site where negotiations about normative visions are materially carried out—and by highlighting several roles that materials can play. These materials and spaces have an agentic capacity to “do” things: bring people together, create new forms of social interaction or political consciousness. They cause inertia and facilitate cultural reproduction, as objects that remain in the landscape; because greening projects are materially durable, they are capable of shoring up social visions and aspirations in the minds of audiences, often beyond the lives of their creators. And they are tools for change: whether through new projects or the reinvention of existing forms, greening projects are deliberate efforts to remake society through the landscape. Greening is a particularly rich site for seeing these material effects precisely because nature is freighted with so many values and associations, and because urban greening projects are inherently material, but in much the same way the idea of nation influences solitary action in the modern world, urbanized nature produced greening as a moral practice that transforms urban environments spatially and socially.

Conclusion

Recent critical reappraisals of city/nature and society/nature relationships have emphasized the centrality of nature to cities and urban life. In line with these interventions, this article provides a sociological explanation for urban greening that updates the commonsense understanding of the practice. Although the Ruhr lacks the physical conditions traditionally understood to provoke greening, since the early twentieth century, greening projects have been central to remaking the region as a physical and social space. Documenting the emergence and subsequent use of this new idea of nature in a place that was not a large, dense city makes it possible to show the role of broader, underlying social transformations and participation in a shared, imaginative field in producing these practices instead. The contemporary moral view of nature that motivates greening practices was itself an outcome of bundle of transformations in ways of life and social relationships associated with industrial urbanization in the nineteenth century: from growing food to buying it, from subsistence living to selling one’s labor, from a relatively homogenous social environment to heterogeneous ones. This idea emerged first in large industrial cities, but, once available, became legible beyond them. The condition of its travel was not local morphology, but participation in a

transnational, comparative, urban field in which green was already a relevant moral category. And once it arrived, urbanized nature—initially an outcome of urbanization—became a variable in urban change, as greening projects were used by various protagonists to spatialize new ideals of urbanism and create new kinds of people. In tracing urbanized nature’s emergence and subsequent use, this article emphasizes the connection between beliefs and practices, by showing how a new social imaginary literally made new forms of moral action possible and how those ideals were then materialized in urban space.

Acknowledgements This article has benefitted greatly from the insights and suggestions of Gianpaolo Baiocchi, Claudio Benzecry, Neil Brenner, Craig Calhoun, John Hall, Eric Klinenberg, Gemma Mangione, Harvey Molotch, Colin Jerolmack, Hannah Wohl, and Richard Sennett, as well as the *T&S* editors and three reviewers. I am especially indebted to Gianpaolo Baiocchi and Craig Calhoun for their thoughtful engagement with several drafts. Earlier versions of this paper were presented at the Social Science History Association (2015), American Sociological Association (2016), and American Association of Geographers (2018) annual meetings, as well as at the University College London, University of California Santa Cruz, Northwestern University, Georgetown University, and Dartmouth College. The research was supported in part by the Horowitz Foundation for Social Policy and a Mellon/ACLS Dissertation Completion Fellowship.

References

- Abend, G. (2014). *The moral background*. Princeton: Princeton University Press.
- Aglietta, M. (2000). *A theory of capitalist regulation: The US experience*. New York: Verso.
- Anderson, B. (2006). *Imagined communities*. New York: Verso.
- Angelo, H. (2017). From the city as a lens to urbanization as a ‘way of seeing’: Country/city binaries on an urbanizing planet. *Urban Studies*, 54(1), 158–178.
- Angelo, H. (2019). Added value: denaturalizing the “good” of urban greening. *Geography Compass*, 7(8), 578–587. e12459.
- Angelo, H., & Wachsmuth, D. (2015). Urbanizing urban political ecology: A critique of methodological cityism. *International Journal of Urban and Regional Research*, 39(1), 16–27.
- Arboleda, M. (2016). Spaces of extraction, metropolitan explosions: Planetary urbanization and the commodity boom in Latin America. *International Journal of Urban and Regional Research*, 40(1), 10–112.
- Bahrdr, H. P. (1952). Nachbarschaft oder Urbanität. *Bauwelt*, 51/52, 1467–1477.
- Bell, M. M. (1995). *Childerley: Nature and morality in a Country Village*. Chicago: University of Chicago Press.
- Bell, M. M. (2018). *City of the good: Nature, religion, and the ancient search for what is right*. Princeton: Princeton University Press.
- Bender, T. (1982). *Toward an urban vision: Ideas and institutions in nineteenth century America*. Baltimore: Johns Hopkins University Press.
- Boltanski, L., & Thévenot, L. (2006). *On justification: Economies of worth*. Princeton: Princeton University Press.
- Brenner, N. (2004). *New state spaces: Urban governance and the rescaling of statehood*. New York: Oxford University Press.
- Brenner, N. (2013). Theses on urbanization. *Public Culture*, 25.1(69), 85–114.
- Brenner, Neil & Katsikis, Nikos. 2014. “Is the Mediterranean urban?” *Implosions/explosions: Towards a study of planetary urbanization*, 428–459. Berlin: Jovis.
- Brenner, N., & Schmid, C. (2015). Towards a new epistemology of the urban? *City*, 19(2–3), 151–182.
- Brenner, N., & Schmid, C. (2017). Planetary urbanization. In *The globalizing cities reader* (pp. 479–482). New York: Routledge.
- Brewster, B. H., & Bell, M. M. (2009). The environmental Goffman: Toward an environmental sociology of everyday life. *Society & Natural Resources*, 23(1), 45–57.
- Brubaker, R., & Cooper, F. (2000). Beyond “identity”. *Theory and society*, 29(1), 1–47.
- Calhoun, C. (2008). Cosmopolitanism in the modern social imaginary. *Daedalus*, 137(3), 105–114.

- Calhoun, C., Gaonkar, D., Lee, B., Taylor, C., & Warner, M. (2015). Modern social imaginaries: A conversation. *Social Imaginaries*, 1(1), 189–224.
- Čapek, S. M. (2010). Foregrounding nature: An invitation to think about shifting nature-city boundaries. *City and Community*, 9(2), 208–224.
- Castoriadis, C. (1997). *The imaginary institution of society*. Cambridge: MIT Press.
- Cioc, M. (2002). *The Rhine: An eco-biography, 1815–2000*. Seattle: University of Washington Press.
- Cranz, G. (1982). *The politics of park design: A history of urban parks in America*. Cambridge: MIT Press.
- Crawford, M. (1995). *Building the workingman's paradise*. London: Verso.
- Crew, D. F. (1979). *Town in the Ruhr*. New York: Columbia University Press.
- Crompton, J. L. (2001). The impact of parks on property values: A review of the empirical evidence. *Journal of Leisure Research*, 33(1), 1–31.
- Cronon, W. (1992). *Nature's metropolis: Chicago and the great West*. New York: W.W. Norton.
- Cronon, W. (1995). The trouble with wilderness; or, getting Back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Rethinking the human place in nature*. New York: W. W. Norton & Co..
- Dege, W., & Dege, W. (1983). *Das Ruhrgebiet*. Berlin: Gebrüder Borntraeger.
- Diefendorf, Jeffrey. 1999. *The West German debate on urban planning*. Presentation. The American impact on Western Europe: Americanization and westernization in transatlantic perspective. Conference at the German Historical Institute. Washington, D.C. (<https://www.ghi-dc.org/conpotweb/westempapers/diefendorf.pdf> (Accessed March 2013)).
- Drucker, P. (2012). *Management*. New York: Routledge.
- Ehrlich, M., & Springorum, D. (1978). *Hier bin ich Mensch: Oasen einer Industrielandschaft*. Essen: Siedlungsverband Ruhrkohlenbezirk.
- Eliasoph, N. (1998). *Avoiding politics: How Americans produce apathy in everyday life*. Cambridge: Cambridge University Press.
- Elliot, J. R., & Frickel, S. (2015). Urbanization as socioenvironmental succession: the case of hazardous industrial site accumulation. *American Journal of Sociology*, 6, 1–42.
- Faecke, P., Stefaniak, R., & Haag, G. (1977). *Gemeinsam gegen Abriß: Ein Lesebuch aus Arbeitersiedlungen und ihren Initiativen*. Wuppertal: Hammer.
- Farrell, J. (2017). *The battle for Yellowstone: Morality and the sacred roots of environmental conflict*. Princeton: Princeton University Press.
- Fitzsimmons, M. (1989). The matter of nature. *Antipode*, 21(2), 106–120.
- Fourcade, M. (2011). Cents and sensibility: Economic valuation and the nature of “nature”. *American Journal of Sociology*, 116(6), 1721–1777.
- Gandy, M. (2002). *Concrete and clay: Reworking nature in New York City*. Cambridge: MIT Press.
- Gaonkar, D. P. (2002). Toward new imaginaries: An introduction. *Public Culture*, 14(1), 1–19.
- Glaeser, A. (2011). *Political Epistemics*. Chicago: University of Chicago Press.
- Göderitz, J., R. Rainer, and H. Hoffman. 1957. “Die gegliederte und aufgelockerte Stadt.” *Archiv für Städtebau und Landesplanung*. (Bd. 4).
- Goswami, M. (2002). Rethinking the modular nation form: Toward a sociohistorical conception of nationalism. *Comparative Studies in Society and History*, 44(04), 770–799.
- Gramsci, A. (1996). *Prison notebooks*. New York: Columbia University Press.
- Grazian, D. (2017). *American zoo: A sociological safari*. Princeton: Princeton University Press.
- Green, N. (1990). *The spectacle of nature*. Manchester: Manchester University Press.
- Günter, R. (1970). Krupp und Essen. In M. Warnke (Ed.), *Das Kunstwerk zwischen Wissenschaft und Weltanschauung* (pp. 128–174). Gütersloh: Bertelsmann Kunstverlag.
- Günter, J., & Günter, R. (1999). *‘Sprechende Straßen’ in Eisenheim*. Essen: Klartext.
- Günther, A., & Prévôt, R. (1905). *Die Wohlfahrtseinrichtungen der Arbeitgeber in Deutschland und Frankreich* (Vol. CXIV). Leipzig: Dunder & Humblot.
- Gustafson, S., Heynen, N., Rice, J. L., Gragson, T., Shepherd, J. M., & Strother, C. (2014). Megapolitan political ecology and urban metabolism in Southern Appalachia. *The Professional Geographer*, 66(4), 664–675.
- Habermas, J. (1991). *The structural transformation of the public sphere*. Cambridge: MIT Press.
- Hall, P. (2002). *Cities of tomorrow* (3rd ed.). Oxford: Blackwell.
- Harvey, D. (1993). The nature of environment: Dialectics of social and environmental change. *Socialist Register*, 29, 1–51.
- Heinrichsbauer, A. (1936). *Industrielle Siedlung im Ruhrgebiet*. Essen: Verlag Glückauf.
- Hickey, S. H. F. (1985). *Workers in Imperial Germany: The miners of the Ruhr*. Oxford: Oxford University Press.
- Hitlin, S., & Vaisey, S. (2013). The new sociology of morality. *Annual Review of Sociology*, 39, 51–68.

- Hundt, R. (1902). *Bergarbeiter-Wohnungen im Ruhrrevier*. Berlin: Julius Springer.
- Ives, C. (2018). *Public parks, private gardens: Paris to Provence*. New York: The Metropolitan Museum of Art.
- Jackson, J. H., Jr. (1997). *Migration and urbanization in the Ruhr Valley 1821–1914*. Boston: Humanities Press.
- Jameson, F. (1988). On Negt and Kluge. *October*, 46, 151–177.
- Jerolmack, C. (2007). Animal practices, ethnicity, and community: The Turkish pigeon handlers of Berlin. *American Sociological Review*, 72(6), 874–894.
- Jerolmack, C. (2013). *The global pigeon*. Chicago: University of Chicago Press.
- Jessop, B. (2002). Liberalism, neoliberalism, and urban governance: A state-theoretical perspective. *Antipode*, 34(3), 452–472.
- Jessop, B. (2010). Cultural political economy and critical policy studies. *Critical Policy Studies*, 3(3–4), 336–356.
- Kaika, M. (2005). *City of flows: Modernity, nature, and the city*. New York: Routledge.
- Kallen, P. W. (1984). Idylle oder Illusion? Die Margarethenhöhe in Essen von Georg Metzendorf. In T. Konerding & Z. Felix (Eds.), *Die Margarethenhöhe. Das Schöne und Die Ware, Der Westdeutsche Impuls 1900-1914: Kunst und Umweltgestaltung im Industriegebiet* (pp. 48–96). Essen: Museum Folkwang.
- Klemek, C. (2011). *The transatlantic collapse of urban renewal*. Chicago: University of Chicago Press.
- Koch, M. J. (1954). *Die Bergarbeiterbewegung im Ruhrgebiet zur Zeit Wilhelms II.* Düsseldorf: Droste.
- Krause, M. (2014). *The good project*. Chicago: University of Chicago Press.
- Krupp'sche Gussstahlfabrik. 1912. *Krupp 1812–1912: Zum 100-jährigen Bestehen der Firma Krupp und der Gussstahlfabrik zu Essen. Herausgegeben auf den hundertsten Geburtstag Alfred Krupps*. Essen-Ruhr.
- Landesregierung Nordrhein-Westfalen. 1968. *Entwicklungsprogramm Ruhr 1968–1973*. Düsseldorf.
- Landesregierung Nordrhein-Westfalen. 1970. *Nordrhein-Westfalen-Programm 1975*. Düsseldorf.
- Larsen, C. (1996). What should be the leading principles of land use planning? A German perspective. *Vanderbilt Journal of Transnational Law*, 29(5), 967–1017.
- Lees, A. (1985). *Cities perceived*. Manchester: Manchester University Press.
- Lekan, T. M., & Zeller, T. (Eds.). (2005). *Germany's nature*. New Brunswick: Rutgers University Press.
- Loughran, K. (2016). Imbricated spaces: The High Line, urban parks, and the cultural meaning of city and nature. *Sociological Theory*, 34(4), 311–334.
- Lütke, H. (1972). *Freizeit in der Industriegesellschaft: Emanzipation oder Anpassung?* Opladen: Leske.
- Margarethe Krupp-Stiftung für Wohnungsfürsorge. 1915. "Mietvertrag und Hausordnung." Visitor's Center, Gartenstadt Margarethenhöhe, Essen.
- Marx, L. (2000). *The machine in the garden: Technology and the pastoral ideal in America*. Oxford: New York.
- McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. *Local Environment*, 19(2), 147–171.
- McCreary, E. C. (1964). *Essen 1860–1914: A case study of the impact of industrialization on German community life*. New Haven: Yale University History Department, PhD Dissertation.
- McDonnell, T. (2010). Cultural objects as objects: Materiality, urban space, and the interpretation of AIDS campaigns in Accra, Ghana. *American Journal of Sociology*, 115(6), 1800–1852.
- Metzendorf, G. (1906). *Denkschrift über den Ausbau des Stiftungsgeländes*. Essen-Rüttenscheid: Margarethe Krupp-Stiftung für Wohnungsfürsorge.
- Metzendorf, R., & Mikuscheit, A. (1997). *Margarethenhöhe: Experiment und Leitbild*. Essen: Margarethe Krupp-Stiftung für Wohnungsfürsorge.
- Mische, A. (2009). Projects and possibilities: Researching futures in action. *Sociological Forum*, 24(3), 694–704.
- Mische, A. (2014). Measuring futures in action: Projective grammars in the Rio+20 debates. *Theory and Society*, 43(3–4), 437–464.
- Mukerji, C. (1997). *Territorial ambitions and the gardens of Versailles*. Cambridge: Cambridge University Press.
- Mumford, Lewis. 1965. "Revaluations I: Howard's Garden City." *The New York Review of Books*. Accessed online, Aug. 3, 2018: http://www.nybooks.com/articles/1965/04/08/revaluations-i-howards-garden-city/?sub_key=5b57a6077a720.
- Nash, R. F. (2014). *Wilderness and the American mind*. New Haven: Yale University Press.
- Negt, Oskar and Alexander Kluge. 1993. *Public sphere and experience*. Translated by Assenka Oksiloff and Peter Labanyo. Minneapolis: University of Minnesota Press.

- Osthaus, Karl Ernst. 1911. "Die Bedeutung der Gartenstadtbewegung für die künstlerische Entwicklung unserer Zeit." Pp. 99–101 in *Die deutsche Gartenstadtbewegung. Zusammenfassende Darstellung über den heutigen Stand der Bewegung*. Berlin.
- Park, R. E., & Burgess, E. W. (1984). *The City*. Chicago: University of Chicago Press.
- Pounds, N. J. G. (1968). *The Ruhr: A Study in Historical and Economic Geography*. New York: Greenwood Press.
- Projektgruppe Eisenheim mit Jörg Boström und Roland Günter. (1973). *Rettet Eisenheim*. Bielefeld: Verlag für das Studium der Arbeiterbewegungen.
- Purvis, T., & Hunt, A. (1993). Discourse, ideology, discourse, ideology, discourse, ideology... *British Journal of Sociology*, 43(3), 473–499.
- Regionalverband Ruhr. 2010. "Bildungsblockade." http://www.ruhrgebietregionalkunde.de/html/aufstieg_und_rueckzug_der_montanindustrie/huerden_des_strukturellen_wandels/bildungsblockade.php%3Fp=4_2.html.
- Rosenzweig, R., & Blackmar, E. (1992). *The park and the people: A history of Central Park*. New York: Henry Holt and Company, Inc..
- Rubio, F. D. (2014). Preserving the unpreservable: Docile and unruly objects at MoMA. *Theory and Society*, 43(6), 617–645.
- Schmidt, R. (1912). Ein modernes Stadtgebilde: Die Industrie und Wohnstadt. In *Essens Entwicklung 1812-1912 Herausgegeben aus Anlaß der hundertjährigen Jubelfeier der Firma Krupp* (pp. 34–42). Essen: Fredebeul & Koenen.
- Schmitt, P. J. (1990). *Back to nature: The Arcadian myth in urban America*. Baltimore: Johns Hopkins University Press.
- Schulte, B. (2009). Karl Ernst Osthaus, Folkwang and the 'Hagener Impuls': Transcending the walls of the museum. *Journal of the History of Collections.*, 21(2), 213–220.
- Scott, J. (1998). *Seeing like a state*. New Haven: Yale University Press.
- Siebel, W. (1999). Industrial Past and Urban Future in the Ruhr. In R. Smith & B. Blanke (Eds.), *Cities in Transition* (pp. 123–134). New York: Palgrave Macmillan.
- Sieverts, T. (2003). *Cities without cities: An interpretation of the Zwischenstadt*. New York: Routledge.
- Simmel, G. (1964). The metropolis and mental life. In K. H. Wolff (Ed.), *The sociology of Georg Simmel* (pp. 409–424). New York: Free Press.
- Smith, N. (1998). Nature at the millennium: Production and re-enchantment. In B. Braun & N. Castree (Eds.), *Remaking reality: Nature at the millennium* (pp. 271–285). New York: Routledge.
- Steinborn, V. (1991). *Arbeitergärten im Ruhrgebiet*. Recklinghausen: Westfälisches Industriemuseum (Landschaftsverband Westfalen-Lippe).
- Steinborn, V. (2010). Arbeitergärten im Ruhrgebiet. In M. Oldengott & C. Vogt (Eds.), *Zwischen Kappes und Zypressen: Gartenkunst an Emscher und Ruhr* (pp. 52–58). Essen: Klartext.
- Strand, M. (2015). The genesis and structure of moral universalism: Social justice in Victorian Britain, 1834–1901. *Theory and Society*, 44(6), 537–573.
- Tavory, I. (2011). The question of moral action: A formalist position. *Sociological Theory*, 29(4), 272–293.
- Taylor, C. (2004). *Modern social imaginaries*. Durham: Duke University Press.
- Taylor, D. (2016). *The rise of the American conservation movement*. Durham: Duke University Press.
- Tönnies, Ferdinand. 2011. *Community and society*. Translated by Charles P. Loomis. Mineola: Dover Publications.
- Vertovec, S. (2012). "Diversity" and the social imaginary. *European Journal of Sociology*, 53(3), 287–312.
- Von Einem, E. (1982). National urban policy—The case of West Germany. *Journal of the American Planning Association*, 48(1), 9–23.
- Wachsmuth, D. (2012). Three ecologies: Urban metabolism and the society-nature opposition. *The Sociological Quarterly*, 53, (4), 506–523.
- Walton, J. (1992). *Western times and water wars*. Berkeley: University of California Press.
- Williams, R. (1973). *The country and the city*. Oxford: Oxford University Press.
- Williams, R. (1977). *Marxism and literature*. Oxford: New York.
- Williams, R. (2005). Ideas of nature. In *Culture and materialism* (pp. 67–85). New York: Verso.
- Wilson, N. H., & Bargheer, S. (2018). On the historical sociology of morality: Introduction. *European Journal of Sociology*, 59(1), 1–12.
- Wirth, L. (1938). Urbanism as a way of life. *American Journal of Sociology*, 44(1), 1–24.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Hillary Angelo is an Assistant Professor of Sociology at the University of California, Santa Cruz. She is an urban and environmental sociologist whose work explores the relationship between nature and urbanization from historical, theoretical, and ethnographic perspectives. Her work has appeared in leading social science and geography journals, including *The Annals of the Association of American Geographers*, *Theory and Society*, and the *International Journal of Urban and Regional Research*. She is currently completing a book on the history of urban greening in Germany's Ruhr region (under contract with The University of Chicago Press), and is at work on two additional projects: one on infrastructure and sociology, and the other on the rise and politics of urban sustainability planning.