

Introduction

A New Look at NIMBY

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Driving through southwestern Germany's Black Forest region, one encounters tranquil villages, idyllic pasturelands, and, if one is lucky enough to arrive in the fall, the spectacular colors of the fabled forest itself. It looks much as it did generations ago, but for a few distinctly modern touches. State-of-the-art wind turbines now dot the hillsides, and many of the characteristic Black Forest houses are adorned with solar panels. Driving down into the meadowlands near the Rhine, it is difficult for a visitor to imagine that this gentle landscape was once slated to become the smog belt of Europe.

In the early 1970s, the German, French, and Swiss governments planned to transform the Upper Rhine region into a massive industrial zone. Nuclear power plants, oil refineries, and chemical processing facilities would line the river from Basel to Frankfurt, squeezing out the vineyards and farms. Local planning authorities threw up their hands, complaining that they were consulted only after these facilities had been decided upon at higher levels of government, if they were consulted at all (*Der Spiegel* 1975). As natural landscapes dwindled, local populations began to rise up against the industrial build-out. Farmers and vintners, university students and clerics organized petition campaigns, filed legal actions, mobilized mass demonstrations, and finally resorted to site occupations in order to stop the construction. Dismissed by many as backward-looking NIMBY (Not In My Backyard) protesters, they stood their ground and began to push back, characterizing the large-scale development plans as unnecessary, technologically unsound, and environmentally and socially destructive.

Mass mobilization against nuclear power on the German side drew broad attention to the issue and started a national conversation about economic growth and energy policy goals. With time, as the concerns of the protesters were borne out, the state and national governments altered their plans. The protests, which policy makers had initially written off as NIMBY obstructionism, gave rise to a grassroots movement to develop

decentralized, environmentally friendly alternatives to nuclear and fossil fuels. With help from the veterans of the anti-nuclear protests, this southwestern corner of Germany eventually achieved international renown for its innovations in solar technology. It is now proudly advertised as Germany's "solar region." Visitors from all over the world come here to learn about locally generated, environmentally sustainable energy.

As industrialization intensifies across the globe, local populations worldwide are mobilizing to protest environmental threats to their communities. Often, contrary to the negative stereotype of NIMBY, these movements achieve lasting change beyond the particular siting controversy. This is true across regions, types of political system, and levels of economic development. In this volume, we analyze cases of local protest in a variety of countries, including Germany, the United States, China, Russia, Japan, Taiwan, and Korea. These cases encompass a range of authority structures, including representative democracies, recently consolidated or consolidating democracies, and authoritarian governments. We find cases in which NIMBY leads to innovation irrespective of political or social context. The process begins with a serious environmental threat to the lives and livelihoods of local citizens. These citizens seek to redress the threat, but they find their access to the center of political power blocked. The blockage may result from a variety of factors, including corporatist design (Germany, Japan), the inability of the national government to implement policies effectively (China), or the dominance of particular private interests (USA), to name a few. Inaction from the state and blocked access to channels for political influence force local citizens to respond through NIMBY protests.

Local action is shaped initially by the political opportunity structure, but it can also reshape that structure. NIMBY protests can initiate a process of community learning in which important issues of citizen self-understanding, democratic politics, technical expertise, and issue framing are addressed, resulting in innovative solutions that can serve as models for others. In the end, NIMBY politics often leads to more general changes in the pattern of citizen-state relations and also to technological innovation, with positive results in terms of both environmental outcomes and participatory governance. By casting a wide net and finding such cases in a range of political settings, we demonstrate that these innovations are not limited to wealthy, advanced democracies, but are possible, and in fact are likely, to occur in poorer non- and semi-democratic countries as well.

We thus reject the common notion of NIMBY protests as particularistic, parochial, and short-lived. We argue instead that these protests often pursue more general aims and achieve positive, lasting influences on environmental policy and governance. Our volume stands out from other recent work for its geographical reach, its comparison of dissimilar political

systems, and its theoretical emphasis on the positive impacts of political conflict. In some of our cases, such as the Chinese protesters' defense of the Nu River as a cultural asset rather than an energy source, local protest movements have aimed directly to pursue a competing notion of the public good (Plantan). In others, such as the German anti-nuclear protesters' development of new policy mechanisms for promoting renewable energy, local protest has resulted in innovations that have benefited not only the narrow community, but also the broader society (Hager).

Our purposes are to show that in many cases NIMBY conflict can be constructive, to explore the kinds of innovation that result from these conflicts, and ultimately to suggest explanations for how and why the innovations occur. We do not claim that NIMBY always results in broader societal change. Our claim is that such change occurs often enough, in a wide range of settings, to justify a re-interpretation of the significance of grassroots conflict.

In making this argument, we join a growing body of scholars offering a more nuanced view of NIMBY (Kraft and Clary 1991; McAvooy 1999; Wolsink 2006; Aldrich 2008; Devine-Wright 2010). We go a step farther than these scholars in showing how the grass roots itself can be the source of political, technological, and social innovation in the face of inaction at higher levels of governance. This is particularly important in contemporary politics, when national- and international-level political actors struggle to deal productively with pressing issues such as climate change.

We begin our comparative analysis with a review of the existing literature on NIMBY protest. We use perhaps the most common definition of NIMBY: the term describes protest organized by local citizens that centers, at least at first, on preventing an environmental harm in their community. In addition to local citizens, the participants may eventually include other actors such as journalists (Plantan), sympathetic local political officials (Kanatsu), or clergy (Hager). While the concept of NIMBY has evolved over time, there are fairly consistent underlying assumptions that have supported an overall negative view of the phenomenon. We describe those assumptions and explain how our case studies challenge each of them. We then introduce the individual chapters, explaining how our cases, taken together, support a new, more complex, and more positive interpretation of the role of NIMBY conflict in political life.

NIMBY in the Social Science Literature

The term "NIMBY" has appeared in a great variety of academic fields and contexts. By the early 1980s, NIMBY had become a common acronym in the American social science literature, employed to discuss the wide range

of community protest activities that emerged in response to local environmental threats (Portney 1984; Matheny and Williams 1985). It was most often used to describe community protests against government-sponsored polluting facilities such as power plants and hazardous waste dumps. NIMBY was eventually joined by other formulations, including LULU (Locally Unwanted Land Use), NIABY (Not In Anybody's Backyard), NOPE (Not On Planet Earth), and even BANANA (Build Absolutely Nothing Anywhere Near Anything [or Anyone]).¹

Local protests against certain types of facilities, most notably hazardous waste disposal sites and nuclear power plants, often resulted in a failure to site the facilities at all (McAvoy 1999). As the acronyms make clear, these local movements were often derided in the press as uninformed, purely obstructionist, and detrimental to economic and social progress. Social scientists, too, commonly described NIMBY in terms of illness, as a "syndrome" in need of a cure (Dear 1992; Mazmanian and Morell 1994; Inhaber 1998). Underlying many of these critiques was a largely unexamined conception of NIMBY protest as a matter of particularistic versus general interests, parochial interests versus the public good.

Not all scholars have dismissed the NIMBY phenomenon as purely negative. Some early analyses, based primarily on hazardous waste siting, took a more differentiated view (Kraft and Clary 1991; Gerrard 1994; Rabe 1994). They sought to find ways to mitigate protest by understanding the positions of the various participants in the conflict. Studies focusing on the government/industry side showed how facility siting plans and processes often provoked a NIMBY reaction by essentially forcing polluting facilities on unwilling local populations. Barry Rabe, for example, characterized NIMBY as "a realistic local response to an immediate problem: national and subnational policies that were poorly designed and ham-handedly implemented" (1994: 3). In this view, NIMBY is not irrational or retrograde. Mitigation would involve restructuring local participation in the siting process. Such studies increasingly view the state or national government as a strategic actor that can broaden participation in policy decisions, either in order to avoid a NIMBY reaction in the first place (Lesbirel and Shaw 2005; Rogers et al. 2008; Haggett 2010), or in response to sustained local protest over its initial coercive strategies (Aldrich 2008).

Other studies focus on the affected communities, seeking to understand the motivations of the protesters in order to provoke a better response. Some of these examine factors such as psychological motivations, perceptions of risk, and attitudes toward government (Wildavsky and Dake 1990; Hunter and Leyden 1995; Snary 2004). Others examine demographic factors such as age, education, and income, as well as variations

in support based on incentives offered by industry (Benford et al. 1993). The literature on social movements has challenged the notion that latent community characteristics are responsible for shaping community responses to unwanted projects. They draw attention instead to active framing processes that lead community members to mobilize outside the bounds of the official participation process (Snow et al. 1986; Snow and Benford 1992). Robert Futrell shows how the NIMBY frame emerges as a result of an “information haze” of conflicting information about the risks of a project (2003: 365). He points out that it is, however, just one of several frames that may be employed by communities over the course of a siting conflict.

In sum, many recent studies have challenged the initial, rather black-and-white interpretation of NIMBY protest. They have re-conceptualized conflict over siting in more strategic and contingent terms that treat all actors as rational and capable of learning. We have certain things in common with both of the above schools. Like Aldrich and others who focus on the government/industry side of NIMBY conflict, we assert that NIMBY actors are rational. But our emphasis is not on how NIMBY prompts government to dig deeper into its toolbox for new strategies. We find that NIMBY actors are much more engaged in devising solutions than this focus suggests. We show that, for our cases, local citizens are an active part of the innovation process. Like Snow, Futrell, and other social movement theorists who focus on the protest side of NIMBY, we share an interest in framing processes and strategic action; this literature, however, tends not to examine the influence of NIMBY beyond the bounds of the particular siting controversy, whereas we look for its sometimes more subtle but arguably more important broader societal impacts.

The central aim of most studies of NIMBY has always been to suggest ways to avoid or minimize the negative effects of local resistance. With this volume, we offer a more explicit challenge to the particularistic-general dichotomy that paints local resistance as contrary to the public good. We propose to view NIMBY mobilization not as regrettable intransigence, nor even as a legitimate response to a flawed policy process, but as a potentially *beneficial* component of participatory politics.

Taking a New Look at NIMBY Protest

The particularistic-general dichotomy is based upon four assumptions that our cases challenge directly. These include the ideas that conflict is undesirable, and a primary goal of analyzing NIMBY politics is to find a way to avoid or overcome it; that the projects around which the conflicts

erupt can be improved, but their construction is in the interest of the broader public; that technical expertise resides in the state and industry; and that the NIMBY story ends with the construction or rejection of the controversial facility. We will examine each of these assumptions in turn.

The Desirability of Conflict

Conflict has long been viewed by political theorists and practitioners alike as evidence of a failed political process (Mazmanian and Morell 1994). This tendency has been strengthened in recent years by the move toward collaborative governance in many policy areas as well as in theories of the state (Hirst 2000; Fung and Wright 2001). For example, Mark Tewdwr-Jones and Philip Allmendinger write that, by the late 1990s, the commitment to collaboration had become “hegemonic” in the planning literature (1998; 1975). The shift in both theoretical emphasis and policy practice toward collaboration tends to reinforce the view of NIMBY conflict as a pathological response to a flawed policy process.

We, too, find that NIMBY activism arises from a flawed process, namely a blockage in the conventional channels for citizen participation. The blockage may be the result of technocratic design (Hager). Alternatively, it may have to do with the incentives of local officials (Gunter) or national officials (Kanatsu). Where we differ from the prevailing opinion is in our view of NIMBY more as a *corrective* to the flawed process than as a symptom of a deeper malaise. We find that NIMBY is not anti-industry, and it is not anti-government. It takes aim at particular facilities, institutions, and practices that shut out participation from those who must bear the consequences of the construction. It often draws attention to broader issues of environmental justice or challenges dominant political and economic paradigms. It sometimes forces a revision of the decision-making process toward greater inclusion, but at times the point is made through conflict alone.

Conflict, in other words, is not necessarily something to be avoided. It plays an important role in politics, a role that probably cannot and should not be usurped by collaborative arrangements. Furthermore, a collaborative decision process does not always fulfill its promise to give voice to the interests of all concerned citizens. Various authors have pointed out that disparities in power are often built into such processes and masked by their inclusive form (Tewdwr-Jones and Allmendinger 1998; Walker and Hurley 2004).

There is some support for this more positive view of conflict in the recent NIMBY literature; some authors argue for a more agonistic politics that acknowledges conflicting positions and tries to use them to achieve

legitimate change (Barry and Ellis 2010; Devine-Wright 2010). As John Barry and Geraint Ellis explain, “an agonistic theory insists upon preserving democratic struggle as something both *inevitable* and indeed *intrinsically good* for the health of democracy and democratic citizenship” (2010: 35). Daniel Aldrich finds in his study of siting controversies in the United States, France, and Japan that sustained citizen protest is correlated with a healthy civil society (2008). Our case studies lend further support to this view. We find that grassroots conflict often brings positive results, from the protection of public health in China (Gunter) and culturally important landscapes in China and Russia (Plantan) to the accelerated implementation of emission control technologies in Japan (Kanatsu) to peaceful democratization in Korea and democratization in Taiwan (Haddad). Moreover, we find that, in general, the longer a conflict goes on, the more likely it is to result in political and social innovation (Poulos).

The Conception of the Public Good

A corollary of the view that NIMBY is particularistic and obstructionist is the assumption that the disputed facility serves a broader public good. This assumption is often couched in terms of diffuse benefits and concentrated costs of a project (Lesbirel and Shaw 2005). While the assumption is correct in some cases, in many others it is simply not supported by the facts. NIMBY protest often prevents the construction of projects that reveal themselves in the long run to have been ill-advised. In Gregory McAvoy’s study, citizen protest prevented the siting of hazardous waste storage facilities in Minnesota. In response, the state shifted its strategy to waste prevention, with the result that no further storage facilities were needed (McAvoy 1999). Daniel Sherman records a similar result in this volume with the issue of low-level radioactive waste disposal siting in the United States. In the German case in this volume, cross-border protest mobilization prevented the construction of massive overcapacity in nuclear power (Hager). In Russia and China, industrial projects that would have destroyed World Heritage sites of great cultural value were prevented or relocated (Plantan). Our case studies show that it cannot simply be assumed that the disputed facility is in the public interest.

Our studies also suggest that public officials do not legitimately define the public good in isolation from the citizenry. There are competing conceptions of the public good, and those held by government officials are not necessarily more legitimate or more properly informed than those held by local citizens. We show how prevailing notions of the public good may be challenged and redefined in societally beneficial ways through NIMBY conflict.

The Value of Counter-Expertise

The particularistic-general dichotomy tends to promote the view that local resistance is motivated by selfishness rather than information. However, one of the primary challenges NIMBY poses to conventional politics is to question the legitimacy of excluding citizens from decision-making on grounds of a supposed lack of technical expertise (Fischer 1990; Dryzek et al. 2003). In our cases, NIMBY actors undermine technocratic decision-making in several ways. One is to challenge a project on technical or scientific grounds through the development of what we call “counter-expertise.” Counter-expertise is knowledge generated in order to offer an alternative to an inaccurate or incomplete but popularly accepted scientific view. In Russia, NIMBY mobilization to save Lake Baikal from an oil pipeline provided an opening for dissenting scientific opinions to be aired (Plantan). In Germany, anti-nuclear protesters founded an institute that provided a home to scientists skeptical of nuclear power and eager to develop alternative sources of energy (Hager). NIMBY groups can build their own enduring networks of counter-expertise, resulting in a broader public discussion of alternatives.

Sometimes the challenge to technocratic decision-making is less direct, arising as a by-product of the conflict itself. Elite choices of particular technologies may be based upon debatable scientific, economic, and demographic assumptions that come to light in the course of the NIMBY conflict; the delays caused by ongoing protest force industrial and political elites to rethink the assumptions upon which the project was originally based. In the United States, citizens opposed to nuclear waste storage sites were able to paint officials as technically incompetent and politically motivated in their choices of technologies (Sherman). In so doing, they prompted changes that increased the technical soundness of the end result. In Japan, ongoing citizen pressure led government officials to adopt lower-emission automobile technologies years ahead of their previous timetable (Kanatsu). Both types of challenge—direct and indirect—serve to weaken the legitimacy of elites’ claims to a monopoly on expertise. In so doing, they also weaken elites’ claims to a monopoly on decision-making authority.

Finally, NIMBY actors may pose a more fundamental challenge to technocratic decision-making by questioning whether the decision to pursue a particular project is really of a technical nature at all or is more properly a matter for the broader society to decide (Hager 1995; Wolsink 2010). Many of our cases ended up posing such a challenge. In Germany and California, for example, NIMBY protest widened into a productive discussion about democratic participation in energy decisions (Schreurs and Ohlhorst). Recasting technological decisions as political ones can contrib-

ute to the democratization of decision processes and the empowerment of local citizens.

The Impact of NIMBY

The common analytical focus on the siting process means that the results of NIMBY protest beyond the particular siting controversy are seldom analyzed. This is true even of studies that focus on NIMBY groups as social movements. These may try to account for the expansion or transformation of movement goals during the course of a conflict (Shemtov 1999; Futrell 2003) or demonstrate how protest may expand geographically over time (Boudet 2011). But here, too, the analysis generally ends with the conclusion of the siting controversy. NIMBY is not generally credited with having any broader societal impact, perhaps in part because that change can be hard to see and harder to measure (Giugni 2007, 70–71).

Our cases show that NIMBY activity is not simply oppositional; it has important proactive components and significantly wider impact than commonly imagined. We focus on the sometimes subtle processes of political, technological, and social innovation set in motion by local protest. NIMBY can contribute to democratization of institutions or even regime change (Haddad), the formation of participatory networks and new political groupings (Hager, Schreurs and Ohlhorst), and improved technology or new technological initiatives (Sherman, Kanatsu). In cases in which a disputed project ultimately is built, it is often a “better” project in terms of environmental criteria (Plantan, Gunter).

Political Innovation

NIMBY protest can open new channels for citizen access. NIMBY engages and connects people who have not been politically active in the past. It involves building networks of support among diverse actors, including technical experts and government officials. Oppositional groups negotiate a variety of regulatory structures and levels of governance. In China, for example, opponents of a chemical plant were able to network with national and international-level groups after local officials blocked their participation (Gunter). NIMBY conflict sometimes brings inter-ministerial conflicts and overlapping policy responsibilities into sharp relief. Local groups can take advantage of political opportunities offered by these cracks in the institutional armor, sometimes to the point of changing the pattern of citizen participation, as environmental movements in Korea and Taiwan were able to do (Haddad).

NIMBY can also result in institutional change. Innovations in decision-making structures are often initiated by citizen groups. These include new, more democratic procedures. They can also include a new, differently structured political party as in the German case (Hager), or even a change in government as in the Korean case (Haddad). Other studies have pointed out that, even where institutions do not change much outwardly, they may function in a different way as a result of citizen activism (Haddad 2012). In our Japanese case, the national economic bureaucracy remained central after the NIMBY conflict, but participants had learned how to use lower levels of government to weaken its policy dominance (Kanatsu). Democratic process and function can be enhanced even in a context in which institutions do not change.

NIMBY can also result in substantive policy change, both locally and more broadly. In Japan, local activism not only forced enhanced local environmental regulations, but it also prompted government officials to negotiate new national emission standards with the “Big Four” automakers (Kanatsu). In Germany and California, NIMBY responses to renewable energy projects resulted in redesign aimed at taking account of societal goals such as nature protection and noise reduction (Schreurs and Ohlhorst). Schreurs and Ohlhorst also point out how YIMBY (Yes In My Backyard) movements in Germany fought to win cutting-edge renewables projects for their towns and helped devise creative forms of finance to promote citizen investment in projects that have been imitated across the country.

Technological Innovation

NIMBY conflict contributes far more to the development of new technological solutions than is commonly acknowledged. First, the development of counter-expertise helps to delegitimize technocratic policy making on the one hand and to legitimate alternative sources of technical expertise on the other. This can create a positive atmosphere for innovation, as we see in the German case (Hager). By calling into question the government’s justification for nuclear build-out, anti-nuclear activists opened the door for the development of new energy forms.

Technological innovations that emerge from NIMBY protests are sometimes initiated under pressure from citizen groups. These include energy grid improvements (Schreurs and Olhorst) and new low-level radioactive waste treatment processes in the United States (Sherman). Sometimes the innovations are proposed by the groups themselves. In the German case, anti-nuclear activists wanted to do more than oppose; they wanted to develop alternatives to the nuclear energy technologies they rejected (Hager). They were some of the early innovators in solar-panel technology and solar architecture. They helped German businesses become global

leaders in these new renewable energy industries, and they opened an important new source of employment.

Social Innovation

NIMBY politics often brings together people who would not see themselves as having much in common ordinarily, such as local vintners and dissenting scientists (Hager) or villagers and international environmental NGOs (Gunter). It helps forge new social networks and broaden civic competence generally, while referencing local culture and traditions (Plantan). It may activate formerly disenfranchised people or transform the nature of their participation, from that of victims seeking compensation for environmental harms to citizens actively shaping their own futures (Haddad).

NIMBY is Beautiful—Case Studies

The case studies yield a complex picture of citizen protest and provide a window into the societies in which NIMBY occurs. NIMBY is beautiful because local protests highlight critical issues and generate positive solutions that are relevant on a wide scale. Our analysis of NIMBY protest transcends the somewhat artificial distinction between local and supralocal, national and subnational political action by focusing attention on the long-term societal impacts of NIMBY.

The following chapters take a more detailed look at the process through which NIMBY leads to political, technological, and social innovation in a variety of contexts. In chapter 1, Helen Poulos offers a broad overview of the impacts of NIMBY through a multivariate quantitative analysis. Starting with an archive of newspaper accounts, Poulos develops classification trees to identify features of NIMBY protest associated with different forms of innovation. The remaining chapters are detailed case-study accounts of NIMBY conflicts in a variety of countries. They use process-tracing methodology (George and Bennett 2005) to identify the mechanisms through which NIMBY protest generates innovations.

The first three case-study chapters explore energy issues in advanced industrial democracies. Nowhere are the positive results of NIMBY clearer than in Germany, and this is why our substantive case studies proceed from the German case. In chapter 2, Carol Hager analyzes the Freiburg area's transition from the center of anti-nuclear protest to Germany's "solar region." Germany also demonstrates the evolving complexity of NIMBY politics; renewable energy projects themselves have become targets of NIMBY protest there. Miranda Schreurs and Dörte Ohlhorst address this

issue in chapter 3. Their comparative study of Germany and California shows how NIMBY movements against renewables projects, along with YIMBY movements to attract such projects, help generate a positive debate about citizen participation in shaping Germany's and the United States's energy futures. In chapter 4, Daniel Sherman explores low-level radioactive waste disposal issues in the United States. He shows how NIMBY opposition resulted in changes in generation and on-site treatment of waste that reduced the hazard to host communities.

The next two chapters look at NIMBY mobilization around pollution and energy issues in the more authoritarian political settings of Russia and China. In chapter 5, Elizabeth Plantan shows how local environmental movements in China and Russia employed cultural heritage frames, counter-expertise, and international attention to protect threatened areas from development. Mike Gunter, Jr. explores how environmental groups achieved results against chemical pollution in China not by targeting the state, but by connecting with other domestic and international NGOs and local communities in chapter 6.

In chapter 7, we return to an advanced industrial democracy, but one in which civil society organizations are less well-established than in the United States and Germany. Takashi Kanatsu shows how NIMBY mobilization pressured the corporatist Japanese national government to rethink its automobile emission standards even in the absence of significant NGO activity in favor of environmental protection. Mary Alice Haddad explains in chapter 8 how local environmental activism in transitional societies Korea and Taiwan supported successful national-level democratizing movements. The conclusion sums up the case study findings in terms of the main themes of the book.

Notes

1. Some studies involving LULU: Schively 2007; Greenberg et al. 2012. Studies of NIABY: Lesbirel 1998; Boudet 2011. Schively 2007 also makes note of BANANA. Maize and McCaughey 1992 cite NIMBY, NOPE, LULU, and BANANA.

References

- Aldrich, Daniel. 2008. *Site Fights: Divisive Facilities and Civil Society in Japan and the West*. Ithaca, NY: Cornell University Press.
- Barry, John, and Geraint Ellis. 2010. "Beyond Consensus? Agonism, Republicanism and a Low Carbon Future." In *Renewable Energy and the Public: From NIMBY to Participation*, edited by Patrick Devine-Wright, 29–42. London: Earthscan.

- Benford, Robert D., Helen A. Moore, and J. Allen Williams, Jr. 1993. "In Whose Backyard? Concern about Siting a Nuclear Waste Facility." *Sociological Inquiry* 63(1): 30–48.
- Boudet, Hilary Schaffer. 2011. "From NIMBY to NIABY: Regional Mobilization against Liquefied Natural Gas in the United States." *Environmental Politics* 20(6): 786–806.
- "Da geht es blind durcheinander." 1975. *Der Spiegel* 40: 96–104.
- Dear, Michael. 1992. "Understanding and Overcoming the NIMBY Syndrome." *Journal of the American Planning Association* 58(3): 288–301.
- Devine-Wright, Patrick, ed. 2010. *Renewable Energy and the Public: From NIMBY to Participation*. London: Earthscan.
- Dryzek, John, David Downes, Christian Hunold, David Schlosberg, and Hans-Kristian Hernes. 2003. *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany and Norway*. Oxford: Oxford University Press.
- Fischer, Frank. 1990. *Technocracy and the Politics of Expertise*. Newbury Park, CA: Sage.
- Fung, Archon, and Erik Olin Wright. 2001. "Deepening Democracy: Innovations in Empowered Participatory Governance." *Politics and Society* 29: 5–41.
- Futrell, Robert. 2003. "Framing Processes, Cognitive Liberation, and NIMBY Protest in the U.S. Chemical-Weapons Disposal Conflict." *Sociological Inquiry* 73(3): 359–86.
- George, Alexander L., and Andrew Bennett. 2005. *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press.
- Gerrard, Michael B. 1994. *Whose Backyard, Whose Risk: Fear and Fairness in Toxic and Nuclear Waste Siting*. Cambridge, MA: MIT Press.
- Giugni, Marco. 2007. "Useless Protest? A Time-Series Analysis of the Policy Outcomes of Ecology, Antinuclear, and Peace Movements in the United States, 1977–1995." *Mobilization* 12(1): 53–77.
- Greenberg, Michael R., Frank J. Popper, and Heather Barnes Truelove. 2012. "Are LULUs Still Enduringly Objectionable?" *Journal of Environmental Planning and Management* 55(6): 713–31.
- Haddad, Mary Alice. 2012. *Building Democracy in Japan*. Cambridge: Cambridge University Press.
- Hager, Carol. 1995. *Technological Democracy: Bureaucracy and Citizenry in the German Energy Debate*. Ann Arbor: University of Michigan Press.
- Haggett, Claire. 2010. "'Planning and Persuasion': Public Engagement in Renewable Energy Decision-Making." In *Renewable Energy and the Public*, edited by Patrick Devine-Wright, 15–27. London: Earthscan.
- Hirst, Paul. 2000. "Democracy and Governance." In *Debating Governance*, edited by J. Pierre, 13–35. Oxford: Oxford University Press.
- Hunter, Susan, and Kevin M. Leyden. 1995. "Beyond NIMBY: Explaining Opposition to Hazardous Waste Facilities." *Policy Studies Journal* 23(4): 601–20.
- Inhaber, Herbert. 1998. *Slaying the NIMBY Dragon*. New Brunswick, RI: Transaction.
- Kraft, Michael, and Bruce Clary. 1991. "Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal." *Western Political Quarterly* 44(2): 299–328.
- Lesbirel, S. Hayden. 1998. *NIMBY Politics in Japan: Energy Siting and the Management of Environmental Conflict*. Ithaca, NY: Cornell University Press.

- Lesbirel, S. Hayden, and Diagee Shaw. 2005. *Managing Conflict in Facility Siting: An International Comparison*. Northampton, MA: Edward Elgar.
- Maize, Kennedy P., and John McCaughey. 1992. "NIMBY, NOPE, LULU, and BANANA: A Warning to Independent Power." *Public Utilities Fortnightly* 130(3): 19–21.
- Matheny, Albert R., and Bruce A. Williams. 1985. "Knowledge vs. NIMBY: Assessing Florida's Strategy for Siting Hazardous Waste Disposal Facilities." *Policy Studies Journal* 14: 70–80.
- Mazmanian, Daniel, and David Morell. 1994. "The 'NIMBY' Syndrome: Facility Siting and the Failure of Democratic Discourse." In *Environmental Policy in the 1990s*, 2nd ed., edited by Norman J. Vig and Michael E. Kraft. Washington, DC: CQ Press.
- McAvoy, Gregory E. 1999. *Controlling Technocracy: Citizen Rationality and the NIMBY Syndrome*. Washington, DC: Georgetown University Press.
- Portney, Kent E. 1984. "Allaying the NIMBY Syndrome: The Potential for Compensation in Hazardous Waste Treatment Facility Siting." *Hazardous Waste* 1: 411–21.
- Rabe, Barry. 1994. *Beyond NIMBY: Hazardous Waste Siting in Canada and the United States*. Washington, DC: Brookings.
- Rogers, Jennifer C., Eunice A. Simmons, Ian Convery, and Andrew Weatherall. 2008. "Public Perceptions of Opportunities for Community-based Renewable Energy Projects." *Energy Policy* 36: 4217–226.
- Schively, Carissa. 2007. "Understanding the NIMBY and LULU Phenomena: Reassessing our Knowledge Base and Informing Future Research." *Journal of Planning Literature* 21(3): 255–66.
- Shemtov, Ronit. 1999. "Taking Ownership of Environmental Problems: How Local NIMBY Groups Expand Their Goals." *Mobilization* 4(1): 91–106.
- Snary, Christopher. 2004. "Understanding Risk: The Planning Officers' Perspective." *Urban Studies* 41(1): 33–55.
- Snow, David A., E. Burke Rochford, Jr., Steve Worden, and Robert D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51: 464–81.
- Snow, David A., and Robert D. Benford. 1992. "Master Frames and Cycles of Protest." In *Frontiers in Social Movement Theory*, edited by Aldon D. Morris and Carol McClurg Mueller, 133–55. New Haven, CT: Yale University Press.
- Tewdwr-Jones, Mark, and Philip Allmendinger. 1998. "Deconstructing Communicative Rationality: A Critique of Habermasian Collaborative Planning." *Environment and Planning A* 30: 1975–989.
- Walker, Peter, and Patrick Hurley. 2004. "Collaboration Derailed: The Politics of 'Community-based' Resource Management in Nevada County." *Society and Natural Resources* 17: 735–51.
- Wildavsky, Aaron, and K. Dake. 1990. "Theories of Risk Perception: Who Fears What and Why?" *Daedalus* 119: 41–60.
- Wolsink, Maarten. 2006. "Invalid Theory Impedes our Understanding: A Critique of the Persistence of the Language of NIMBY." *Transactions of the Institute of British Geographers* 31(1): 85–91.
- . 2010. "Near-Shore Wind Power—Protected Seascapes, Environmentalists' Attitudes, and the Technocratic Planning Perspective." *Land Use Policy* 27: 195–203.