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When Environments and Communities Collide

Writing in 1982, sociologist William Catton made this case for the intersection of environments and communities:

There can be no exclusively human community.... The phrase "human community," therefore, should always be regarded as a shorthand for a biotic community dominated by humans.¹

Twenty-three years later, a younger sociologist, Michael Bell, echoed and expanded on Catton's observation:

We need . . . to make the study of community the central task of environmental sociology. Ecology is often described as the study of natural communities. Sociology is often described as the study of human communities. Environmental sociology is the study of both together, the single commons of the Earth we humans share, sometimes grudgingly, with others—other people, other forms of life, and the rocks and water and soil and air that support all life. Environmental sociology is the study of this, the biggest community of all.²

Locating Communities in Environmental Controversies

A Place for Community in Environmental Sociology

This book joins Catton's reflection on the inescapable connection of human and biotic communities to Bell's spirited call to center the idea of

community in environmental sociology. Using rich and evocative case studies, an experiential or inductive approach to making sense of local environmental controversies, and portfolios highlighting many (but not all) of the key questions students of community and environment are likely to ask, we invite you to read and ponder the always complicated and always dramatic intersections of human settlements and biospheres.

Bell is right in observing the essential place of community in the study of sociology. A strong and vibrant tradition of community studies is at the core of the sociological canon. Missing from this literature, however, is a text that pulls together and advances the rich and variegated studies of communities and environments.³ Examine the textbooks in environmental sociology, and community is apt to be mentioned, but it will not appear as a key organizing concept.⁴ Indeed, Bell himself gives limited attention to local manifestations of environmental problems, focusing instead on the broad structural and cultural factors underlying ecological unsustainable ways of life.

The absence of a text organized around the almost inescapable presence of community in the study of environmental sociology is not a reflection of the dearth of empirical research on communities and environments; there is, in truth, a good deal of it. You will encounter many and varied studies of environments and communities in the chapters to follow. Perhaps it is more the fact that the idea of community has become a commonplace in the study of sociology, so common in fact as to be almost banal or taken for granted. More likely, though, is the overwhelming emphasis placed on emergent protest groups and social movements in the sociological study of environment. A rich and valuable literature is now available in this area. Go to almost any standard textbook in environmental sociology, and the idea of grassroots activism and social movements is likely to loom quite large.

Local activism and regional, national, and international coalitions working in concert toward some common end are dynamic sociological phenomena, but aside these is the almost inescapable presence of community. Shift the focus from local activists to the more inclusive idea of community, and a somewhat different, often more complicated, picture emerges. Here is an example.

A Brief Excursus: The Love Canal From Two Perspectives

In 1982 Adeline Levine published her now landmark book *Love Canal: Science, Politics, and People.*⁵ The story of Love Canal is the classic tale of buried toxic waste that everyone forgot until it percolated to the surface and

contaminated a school and neighborhoods in the city of Niagara Falls, New York. Levine became aware of the looming crisis by watching a local news feature on the affected neighborhoods. Using the good help of her graduate students in the Department of Sociology at the State University of New York at Buffalo, Professor Levine embarked on a qualitative study of the actions local residents were taking in response to this growing danger. More important, she made the decision to focus on citizen activists, indeed, on one group of activists, the Love Canal Homeowner's Association (LCHA).

Levine's book stands as one of the premier investigations of citizen activism in response to the perils of toxic contamination. We learn firsthand what one group of informed citizens could do to shape the political and medical response to the crisis. What we don't learn is how this dramatic transformation of the local environment interacted with the neighborhood community, which was far more demographically and economically diverse than the homogenous, white, young-adult female population that constituted the LCHA. In contrast to *Love Canal: Science, Politics, and People,* two cultural anthropologists, Martha Fowlkes and Patricia Miller, examined the interchange between the toxins buried at Love Canal and this broader, more inclusive social community.

Their 1982 study, Love Canal: The Social Construction of Disaster, is based on extended interviews with a random sample of 63 neighborhood residents.⁶ Their goal was to assess people's beliefs, opinions, and perceptions of the risks to health, property, and the viability of the community posed by toxins seeping through the earth's crust into yards, houses, and, perhaps, bodies. Fowlkes and Miller found a far more complicated personal and social response to the contamination than reported by Levine. While essential to the formation of new affiliations within the Love Canal neighborhood and critical to the political outcome of the crisis, the LCHA was only a part of a rich and diverse collective action.

Documented in Love Canal: The Social Construction of Disaster is the presence of a Love Canal Renter's Association, comprised of low- to middle-income blacks who took the position that the chemicals posed no immediate threat and should be cleaned up. They fought efforts to relocate them. Age, it appears, also created a certain social segmentation, with late middle-age and senior residents taking the position that the contamination was not a dire threat. Location in relationship to the waste and the presence or absence of children in the household also played key roles in creating a diverse and conflicting array of personal and social beliefs and opinions regarding the scope and degree of danger.

This all-too-brief summary points to a simple conclusion: though there was only one Love Canal crisis, it is possible to tell two quite different

stories about it. One story recounts the heroic and dedicated work of citizen activists to acquire important knowledge about the dangers and to face off with local, state, and national leaders who sought to minimize the risks or offered silly and inappropriate remedial measures. Another story narrates the crisis from the vantage point of the community. This latter account shows that the contamination seeping into the neighborhood also seeped into its social fabric, creating multiple groups and conflicting beliefs about the true scope of the crisis.

It is this latter story, told from the vantage point of community, that is underrepresented in most standard texts in environmental sociology. This book is offered as a balance to this literature. It was written to fill a gap. By centering the idea of community in the study of environmental sociology, we invite students of people and biospheres to take a fresh look at an essential dynamic in the social and cultural study of environments. The plain fact is that most of us live our lives in some semblance of community, and human communities are always parts of larger, more complicated biospheric communities. When we wittingly or unwittingly alter the biosphere or even propose to do so, people respond, often with differing interpretations, claims, and solutions. In the chapters to follow, we explore this dynamic, focusing explicitly on the troubles, difficulties, and conflicts that are likely to emerge in the wake of real or proposed environmental changes.

Students of environment, as well as those interested in communities or social conflicts, will find this book a useful guide to a rich and provocative case study literature. And aside from this literature, informing and shaping it, is a conceptual vocabulary. It is our hope this literature and vocabulary will inspire you to engage in some spirited thinking and, perchance, some original research.

A Modern Social Drama

A place to begin this study is with the often turbulent nature of human responses to environmental disruptions and troubles. Indeed, environments and communities are often unwitting actors in what are contemporary social dramas: vivid, emotional, and conflicting portrayals of villains, victims, sacrifices, and, sometimes, redemptions. As we write this chapter, a community conflict of epic proportions is emerging in the "wake" of Katrina as New Orleans struggles to survive.

We use the word *wake* deliberately as a play on words to signal the source of the controversy. It was not Katrina's winds that destroyed 80% of New Orleans' housing, but the powerful wakes and waves roused by its winds that breached at least three levees, pouring more than a third of Lake

Ponchatrain into unsuspecting neighborhoods. Early investigations suggest the levees were not properly built. The conflagrations between the city and the Army Corps of Engineers are likely to continue for years as the city and its residents struggle to achieve a just measure of compensation and a levee system that can withstand the super storms expected in the future.

New Orleans, of course, is an example of community conflict orders of magnitude greater than those discussed at length in this book. But post-Katrina New Orleans and the dozens of cases presented in the chapters to follow are shaped, at least in part, by what William James once called the logic of the "forced option." This idea is based on the simple observation that we can avoid some choices but not others.

A young father might decide, for example, to avoid voting on a local referendum to rename a city street after a local politician. It is not something he feels compelled to do. A referendum to block the siting of a hospital waste facility in close proximity to his daughter's school, however, is a vote he could not ignore. Activities begun by others are seen to pose a threat to his own family; he is forced to respond.

In calling attention to the forced option, James did not intend for us to assume that one choice was innately right and the other wrong. What is forced is not a "true" path per se, but the simple fact that some path must be chosen. Consider the example of the waste facility: another parent might argue vigorously for the siting of a well-regulated plant near a school because plant management promises to build new roads, provide new school buses, and contribute \$2 million annually to the school district. The perceived consequences of the siting proposal required a response from both parents, though each chose a different path.

In the aftermath of Hurricane Katrina, New Orleans' officials and residents face a plethora of forced options. Among them, whether or not to return to the city, and if so, when; whether or not to rebuild destroyed homes, and if so, whether to rebuild in the same old style or in one more reflective of vulnerability to flooding (such as constructing houses on stilts or replacing single-family dwellings with high-rise apartments); and whether or not to allow any rebuilding in the most severely flooded portions of the city. Moreover, what will happen if the rest of the nation decides it does not want to spend billions of federal dollars it will cost to repair and improve the levees? It is not that the people of New Orleans want to wrestle with these decisions; circumstances demand that they do so.

On a less publicly visible scale than New Orleans, local communities in ever-increasing numbers are forced to decide how to act toward and make sense of complicated, value-laden environmental problems. Land-use decisions that could alter the quality of environments for generations to come,

toxins in local biospheres, species habitats and human needs, and questions about the use of natural resources for market purposes are among the forced options facing villages, small towns, neighborhoods, and cities throughout the United States and, indeed, worldwide.

Emotional and dramatic intensity issue from the forced option, in part because there is a choice, perhaps several choices, and consensus on what to do is not easily achieved. The title *Volatile Places* conveys our appreciation for the high-stakes consequences of many local environmental controversies. Human life and well-being, a house, friendship, a job, a treasured way of life, and justice itself are often endangered when people cannot reach agreement on how to use environments or the kind and degree of danger they pose.

Complementing and enhancing our focus on the human community and environmental conflict are two far more complex and interrelated processes, each of which will have some bearing on the many and varied discussions to follow: global environmental change and the—equally evocative—end of nature.

Community as Ground Zero in a Global World

In spite of Catton's and Bell's counsel on the significance of human community in the sociological study of environments and our own views on the salience of community to environmental sociology, some readers might still ask, Why focus attention on local, community-based environmental problems when the important issues seem to be global environmental change with its worldwide implications? After all, if the polar ice caps melt and the carbon dioxide (CO₂) content of the atmosphere reaches a certain magnitude, life everywhere is likely to undergo massive ecological, social, and political transformation.

We agree. Global environmental change (GEC) promises sweeping alterations in the lives of untold numbers of people, but we also note that people experience their social, cultural, and environmental worlds in groups and communities, not as separate, isolated, autonomous individuals. Even something as potentially massive as GEC will affect people living in villages, neighborhoods, towns, and cities. It will be experienced in part, in other words, as a local community trouble. Indeed, Katrina herself might be a harbinger of this, as there is reason to be concerned that the record-breaking and unprecedented 2005 tropical storm season may be related to warming of the Gulf of Mexico and Atlantic Ocean currents. Interpretations of the various signals of GEC will occur in local settings through media, conversations with friends and neighbors, work group ties, and so on. Community, we suggest, is ground zero in the human experience of environment.

Understanding how communities struggle with, make disputed sense of, and change or accommodate to their local environments is, therefore, of considerable significance regardless of whether the source of environmental disruption is worldwide climate change or leaking toxic waste drums buried near an aquifer. Local environmental disputes are an increasingly pervasive feature of community life. Indeed, we suspect students reading this text know, or could quickly find evidence, of these types of environmental conflicts occurring in their states, or perhaps in their communities.

On a somewhat grander scale, an inquiry into local environmental conflicts is an occasion to examine the making and unmaking of social life. It is an opportunity to observe people who fashion versions of history to make sense of environmental controversies. It is also a chance to encounter the complicated role of expert knowledge in creating both opportunities and obstacles to community formation. Visible too is the awakening of a political consciousness as people encounter the duplicity of corporations and government agencies. Citizens become moral entrepreneurs, posing questions about the distribution of justice and fairness to the ecological and political conundrums of environmental controversies. And local groups form, many with competing visions of the environmental controversy and its solution. Simply put, local environmental conflicts are often volatile human dramas combining both creative and destructive social forces into historical moments of social transformation. They are, following Lévi-Strauss, "good to think."

Taking the community as ground zero, however, does not mean an exclusive focus on the local level. A characteristic feature of modernity is the pervasive interplay between the local and the global. It will be difficult to grasp what is going on in any particular community without an appreciation of the broader regional, national, and extra-national relationships impinging on and shaping local practices, opinions, and beliefs. A quick example. Economic prosperity, increased leisure time, and the development of an "automobile culture" in the post–World War II era resulted in a dramatic increase of visitors to national parks, intensifying long-standing conflicts over whether the parks existed primarily to provide recreational opportunities for humans or to protect species and habitat. To adequately explain local conflicts over who should use a park and how would require a studied awareness of this broader social and cultural context.

Communities, in other words, are affected by technological, political, economic, and cultural developments that originate beyond their borders. Increasingly, these influences are global in scope. Indeed, the close relationship between the local and the extra-local is, itself, a historical occurrence, appearing only in the last several decades. The social activist phrase "Think globally, act locally" expresses the need to recognize the confounding of

provincial issues and concerns with far-reaching national, international, indeed planetary trends and forces.

The intersection between human communities and environmental troubles is also underscored in the profound ways in which society is remaking the natural and sculpting the contours along which environments and communities—with increasing frequency—collide.

The End of Nature as We Know It: From the Biocentric to the Anthropocentric

Over the course of time, humans altered nature, transforming it into a reflection of ourselves: from a biotic and physical world, set apart from the flotsam and jetsam of culture, to a human artifact. In more formal terms, nature is now as much *anthropocentric* as it is *biocentric*. No longer standing on its own, nature is the handmaiden of civilization.

Let's start with air. The basic chemistry of our air has changed dramatically in the past 40 years. "If you'd climbed some remote mountain in 1960 and sealed up a bottle of air at its peak, and did the same thing this year, the two would be substantially different." In addition to naturally occurring CO₂, produced, for example, by forest fires, there is a human-produced array of CO₂ emissions that now exceed that produced by nature. Burning fossil fuels, deforestation, and waste incineration is increasing CO₂ at a rate of about 1.2 parts per million each year. But CO₂s are not the only problem. Chlorofluorocarbons (CFCs) are not produced anywhere in nature. They are chemical compounds containing chlorine, fluorine, and carbon and are made by people. Air samples taken anywhere in the world will contain at least trace elements of CFC, though they have been phased out in the United States and other Western countries.

The atmosphere, in short, is now a product of human activities. We could make similar arguments for soil and water. Decades ago Rachel Carson reported the presence of DDT (a pesticide) in soil samples around the world. Indeed, it is now found deep in the ice at both the North and South Poles. Residents from 46% of all counties in the United States use groundwater susceptible to contamination from agricultural pesticides and fertilizers.¹¹

This last observation is worth considering. It would appear that just as industrial culture has entered nature, altering its chemistries and ecologies, so too has it entered human bodies, once thought natural. In 1986, an Environmental Protection Agency (EPA) executive summary on chemicals in human tissue reported measurable levels of styrene and ethyl phenol in 100% of adults living in the United States. The study also found 96% of

adults with clinical levels of chlorobenzene, benzene, and ethyl benzene; 91% with toluene; and 83% with polychlorinated byphenols. ¹² There's more. A few years ago, the federal Centers of Disease Control and Prevention admitted "that virtually every person who has lived in the United States since 1951 has been exposed to radiological fallout . . . [and that] all organs and tissues of the body have received some radiation exposure."13 What do these figures and observations imply? Bill McKibben views them as signs that nature is ending.¹⁴ Whether it is the nature of the biosphere or the nature of the human body, it would appear that the "nature" of industrial and postindustrial societies is no longer "natural." Nature as a natural phenomenon will survive in our imaginations, of course, but it is no longer the "natural" nature that nurtured us and ensured our survival as a species. It is, to quote sociologist Anthony Giddens, a "socialized nature." We made it, though unintentionally and without a clear understanding of its effects on human well-being. "Our society," writes Giddens, "lives after the end of nature."16

There is no way to know the long-term effects of shifting from a biocentric to an anthropocentric nature, but one thing seems clear: we have set environments (and bodies) on an unprecedented journey toward some as yet to be defined end, and on that journey human communities will figure prominently as the locations for struggling with the changes we've set in motion.

The past several pages introduced an array of complicated and provocative concerns and ideas. The point of these discussions is to alert the reader to the salience of community in the study of environmental conflicts and to set this topic in a broader, more inclusive, dynamic of global environmental changes and the human manufacture of nature. The second part of this chapter shifts to the conceptual and material organization of the book. As we proceed, please bear in mind the continuing relevance of these broader, more contextual, discussions.

Two Organizing Devices

Two devices or motifs work to organize the materials in this primer. One motif is *taxonomic* and focuses attention on three distinct types of local environmental conflicts. A second motif is both *conceptual* and *pedagogical* and focuses on a portfolio approach to studying conflict. A short discussion introduces each motif, and a longer discussion demonstrates how types of environmental conflicts intersect with a portfolio strategy for abstracting and remembering.

The Three Controversies

The three most prominent types of local environmental conflicts are the conservancy dispute, the siting dispute, and the exposure dispute. These are not necessarily mutually exclusive categories, as we illustrate below. Each type is a classic example of the forced option. Conservancy disputes are characterized by struggles over how to define and protect natural areas and animal species, as well as certain human-created artifacts such as prehistoric and historic buildings.¹⁷ A variant of conservancy disputes which has become increasingly common over the last couple of decades is ecosystem restoration. Efforts to restore prairie, urban wilderness, watersheds, and wetlands are among the examples of this relatively new type of conservancy dispute.¹⁸ This variant of local environmental conflicts, then, is comprised of efforts to protect, or restore, a more biocentric nature.

Siting disputes are formed when opposition develops to some proposed land use. They typically occur when communities, or certain people within communities, resist proposals to build new facilities or modify existing ones. Facilities commonly targeted in such disputes include petrochemical factories, nuclear power plants, solid waste landfills, hazardous waste treatment facilities, and large-scale hydroelectric projects. Siting disputes are directed against what are sometimes referred to as LULUs, or locally unwanted land uses. Siting disputes are often driven by concerns about the human health consequences of an industrialized, anthropocentric nature, though sometimes other, more prosaic, concerns, such as property values and the desire to maintain a neighborhood's "character" and "charm," may be equally, or even more, important. Siting and conservancy disputes can intersect if development is being opposed on such grounds as it threatens a "wild, natural" or "ecologically sensitive" area. (For an example of a siting conservancy dispute, see the Orme Dam case in Chapter 2.)

Exposure disputes, in contrast, are comprised of fights against hazards already existing in the local area. These may include factories that emit air and water pollutants, or chemicals leaching into the groundwater. A common type of exposure dispute is controversies over the accidental or negligent release of toxins into local environments. Human health concerns are preeminent in exposure disputes, though occasionally the primary focus is on risks to nonhuman life forms. The result is an intersecting exposure-conservancy dispute, as seen in the 1989 Exxon Valdez oil spill in Prince William Sound, Alaska. While the spill did raise health concerns about human consumption of contaminated fish and wildlife, the major issues had to do with effects on the aquatic ecosystem and the flora and fauna in the area.¹⁹

Typical of each of these three types of conflicts is the seeming imperative most people feel to take a position on the justice or injustice, the rightness

or wrongness, or the "facts" of the controversy. Below we provide three short vignettes, each illustrating one of the three types of disputes. Before we proceed to that task, however, we first introduce the idea of the portfolio approach.

The Portfolio Approach

Analysis requires seeing beyond the concrete details of any particular conflict to broader patterns of relationships found in similar cases. Many students find analysis—or theoretical work—challenging. It requires making abstract linkages between the general and the specific, which in sociology is accomplished through the use of theoretical concepts and propositions.

This book is not intended as a highly theoretical treatise, but we do want to provide readers with tools which push beyond the simple descriptive level of who said/did what, when they said/did it, and what happened as a result of what was said/done. Not that we want to shortchange description; it is the basic starting point of any investigation, as we illustrate shortly. Yet sociologists seek to augment description with more complex explanations of why and how things happened as they did.

The approach we take to theory in this text derives from the largely inductive, qualitative, and case study research techniques we use in our own work. Induction means that researchers develop theoretical explanations after they have gained extensive familiarity with some aspect of the empirical world.²⁰ Deduction, in contrast, involves the researcher arriving to a study with a theoretical model already in hand. We define our own approach as "largely inductive" because we agree with Fine that the best approach is one that combines inductive and deductive elements.²¹ Students of local environmental conflicts need to have extensive familiarity with the relevant literature before undertaking empirical investigations and to use that literature judiciously where applicable. This is the deductive move in the research process. What induction contributes to the investigative endeavor is the flexibility to deal with the unexpected.

This dual approach is needed because humans reside somewhere between the extremes of complete free will and complete determination (in sociological lingo we would say human social life is characterized by both structure and agency). To paraphrase Karl Marx, humans make history, but they do not do so under conditions of their choosing. There is certainly a great deal of order and patterned regularity to human social life; this is what allows us to make general observations about local environmental conflicts which transcend the specifics of any individual case. Yet humans also have inordinate capabilities to be innovative and creative; they often behave in ways we expect, but not always. Environmental conflicts,

as complex, messy, contested affairs, often involving novel environmental states, are particularly fertile ground for the unexpected.

What we do *not* do in this text is provide readers with an overarching theoretical framework that can be used to explain every local environmental conflict. We do provide readers with an extensive list of questions which can be asked of any conflict and which are designed to encourage students of these conflicts to see beyond the obvious. We separate these questions out in boxes titled Adding to the Portfolio. Each box adds a new set of questions that readers can add to the portfolio, a set of conceptual tools which can be carried into any conflict investigation. Such investigations may take the form of analyzing one of the many published case studies of local environmental conflicts or of gathering original secondary (e.g., newspaper accounts) and primary (e.g., interviews with conflict participants) source material about a particular conflict.

Not every question presented in these boxes will be applicable to every conflict, nor do the lists of questions included in this book (extensive as it is) cover the full range of questions that *could* be asked of these conflicts. Our goal here is not to be exhaustive but to get students started down a path of inquiry. The theoretical ideas informing these questions are discussed in some depth in the analysis section following each case study vignette. The portfolio boxes also double, then, as useful section summaries and study guides.

We turn now to three cases which illustrate conservancy, siting, and exposure disputes, and to accompanying discussions which illustrate how the portfolio approach will be used in this book.²²

Conservancy Disputes

Scotia, California, is a company town built by the Pacific Lumber Company.²³ At odds with the predominant clear-cutting practices of the timber industry, Pacific Lumber had implemented a policy of selective cutting in the 1930s. The company also adopted a sustainable harvesting policy ensuring that trees would not be cut down at a rate faster than natural replacement. This policy would ensure that Pacific Lumber would own a crop of trees to cut down this year, next year, and every year. As a result of these practices, Pacific Lumber entered the 1980s controlling "almost 70 percent of the remaining ancient redwood forest that was still in private hands."²⁴

In the mid-1980s, Pacific Lumber came to the attention of the corporate raider Charles Hurwitz. An associate of the junk bond king Michael Milken, Hurwitz made a career out of taking over publicly held companies with undervalued stocks. Pacific Lumber was just such a firm, the result of its sustainable harvesting policies which reduced short-term profits, making it

appear to the short-term investor as a bad risk. In early 1986, Hurwitz succeeded in a hostile takeover of Pacific Lumber. To accomplish this he had borrowed over \$500 million, much of it from Michael Milken's outfit, Drexel Burnham Lambert. In order to repay this debt, Hurwitz needed to liquidate as many assets of Pacific Lumber as he could, as quickly as he could.

Clear-cutting stands of redwood was the primary means Hurwitz used to generate high levels of profit in a short period. Once harvested and milled, a single redwood's market value is approximately \$30,000. Hurwitz now controlled close to 200,000 acres of prime forest. Pacific Lumber's new clear-cutting policy soon came to the attention of a group of young people who had moved into the area, some of whom claimed affiliation with the radical environmentalist group Earth First! They quickly mounted a variety of defensive actions against the clear-cutting, including tree sitting, protest marches through the streets of Scotia, and lawsuits charging that the California Department of Forestry acted illegally in approving Pacific Lumber's timber harvesting plans.

The environmental activists were opposed by many of the residents of Scotia, who quickly defined the dispute as a Manichean struggle between jobs and a small town's future versus the dispensable luxury of old trees. Moreover, many people in Scotia were now making more money by working overtime to help Hurwitz repay his debt to Milken. Pleased with their new levels of economic prosperity, Scotia residents were angry at those "outsiders" who wanted to take this away from them. That the activists were branded by Pacific Lumber management as long-haired welfare bums without proper respect for authority only served to further fuel the lumber workers' anger and contempt. Anonymous threats of violence and death directed toward activists became increasingly common. In May 1990 the violence escalated when a car bomb exploded inside a vehicle carrying two activists who at the time were on a trip to the San Francisco area. The FBI, which considers Earth First! to be an internal terrorist group, concluded the activists were transporting the explosive material for their own terrorist uses when it accidentally exploded. The activists dispute this claim, though no official investigation to identify other potential culprits was undertaken.

Oppositional activity by environmentalists dropped off markedly in the wake of the car bombing. Life in the town of Scotia returned more or less to normal. The long-term economic effects of Pacific Lumber's clear-cutting policy on the town remain to be seen.²⁵

Conflict Participants and Their Claims

The strategy we employ in this book is to take case study vignettes as a starting point from which to extract important concepts, ideas, and themes. In this

chapter our portfolio questions are focused on basic descriptive information investigators need to know about a case. While our goal is to move students of local environmental conflicts beyond this descriptive level, more complex understandings need to be built on a solid grounding of the "who, what, when, and where" of conflict. Descriptive questions are also more straightforward than the material covered in subsequent chapters and therefore provide a useful starting point for easing students into the portfolio approach.²⁶

One of the most basic descriptive questions which can be asked of a conflict is, Who are the individuals, groups, and organizations involved in it? At the most basic descriptive level, actual names are used, such as the LCHA or Charlie Hurwitz. A slightly more analytic approach locates individuals and organizations within broader participant categories. There are a number of such categories which put in regular appearances in local environmental conflicts. These include grassroots environmental organizations, national environmental organizations, nonenvironmental voluntary associations like labor unions and the League of Women Voters, state and federal regulatory agencies, elected officials, landowners, neighborhood residents, private companies, and university scientists. These categories provide a useful starting point for understanding the words and actions of different conflict participants. For example, a regulatory agency has a different array of possible (and perhaps mandated) responses open to it than, say, a chemical factory or an environmental organization.

A word of caution: do not get too comfortable in assuming that a conflict participant's stance on an issue can necessarily be read from the broader participant category to which the individual, group, or organization belongs. Private companies sometimes voluntarily adopt sound environmental practices, while environmentalists sometimes put narrow organizational interests ahead of viable conservation plans. This is the reason we emphasize the role of human agency; social actors have more options available to them than blindly following the script society dictates. In other words, don't get so caught up in stereotypical thinking that you miss the atypical and unexpected.

Next, it is useful to assess whether conflict participants are local (community insiders) or extra-local (outsiders). We can see the importance of this distinction in the Scotia case, where the Pacific Lumber Company and local residents used young eco-activists' status as "outsiders" to dismiss their concerns and delegitimate their protest. In some cases, insider/outsider distinctions form fault lines along which alliances and hostilities form. Readers will encounter additional examples of such conflict scenarios in Chapter 6. Of course, it is not always easy to clearly classify all participants as local or extra-local. What about a local chapter of the national Sierra

Club? What about a factory which started out as locally owned, was taken over by a multinational corporation, but remains an important source of local employment and community identity? When encountered, such classificatory difficulties should be acknowledged, for a couple of reasons. First, they may become a source of local contention, for example, when long-time residents and ex-urban newcomers quarrel over who counts as a "real" member of a small rural village. Second, participants which span the local/extra-local divide have a unique vantage point and a unique set of network connections which may play an important role in the way the conflict develops, a point we develop further in Chapter 6.

Another important descriptive component is the political agendas of each of the different conflict participants. What are the specific outcomes they are hoping to achieve? In part, this question addresses the basic component of support or opposition for the issues under contention in a conservancy, siting, or exposure dispute. Does the conflict participant want to have the factory built or the species listed as endangered? Yet agendas are often more encompassing than just the stance on one or a handful of related issues; indeed, those stances themselves tend to derive from broader goals and visions. Familiarity with participants' agendas can help students of local environmental conflicts identify potential fault lines of dissension, as well as explain shifting alliances and situations where politics have produced strange bedfellows.

Dizard, for example, studied a conflict over a proposal to allow deer hunting on the Quabbin Reservation, near Boston.²⁹ An important source of drinking water for the city, the integrity of the surrounding watershed (the Quabbin Reservation) was managed by the Metropolitan District Commission (MDC). A number of critics were united in their opposition to the hunt and in their belief that it was the mismanagement of the MDC that had resulted in an overpopulation of deer. Opponents managed to remain united around these shared concerns, despite other differences in agenda. Some opponents, for example, enjoyed the Quabbin as a peaceful sanctuary in which to take walks and commune with nature; they were appalled at the thought of this wilderness retreat being disturbed by the presence of hunters and the sound of gunfire. Animal rights activists were opposed to all hunting on philosophical grounds; they believed every single animal had a right to be protected from human predation and interference. Environmentalists, in contrast, directed their concern not at the welfare of individual animals but to species and ecosystem integrity. Their primary concern was that the MDC was managing the Quabbin for the purpose of timber extraction, something they opposed. Had the MDC agreed to stop this practice, the environmentalists would have likely dropped their opposition to the hunt.

Participants use claims to legitimate and advance their agendas. Claims include assertions of facts ("The city of New Orleans flooded in the aftermath of Hurricane Katrina"), evaluative statements ("The federal response to Hurricane Katrina was woefully inadequate"), and normative directives ("We need to halt erosion along the Louisiana Gulf Coast"). While claims are highly specific statements, such as "This factory will create 400 new jobs for the community," they often resonate with broader themes, in this particular case, economic development. Sociologists often refer to such themes as frames, because they highlight salient features of the conflict.³⁰ Frames connect claims with more encompassing agendas and cultural values and hence are used strategically to win allies. Examining frames also provides a quick lesson in the multiple interpretations that can be given to a singular environmental event. As sociologists are very much aware, there is no automatic or natural sensory appropriation of what humans encounter in their material surroundings. What people "see" when they look out at the environment very much depends on where they are looking from. The "where" here does not refer to a geographic but a structural and cultural location.

To take an example of the way any single event can be subsumed under a number of competing frames, consider the following quotation from the novel *The Buffalo Commons*, which recounts a fictionalized conflict over grassland prairie restoration efforts in the state of Montana.

Almost every schoolchild in the nation ached to see a National Grassland Trust full of buffalo and elk. For most Americans, the project seemed almost miraculous. Some saw it as a way of preserving the past. Others saw it as a vast petting zoo full of nice animals. A few hunters saw it as a place to safari for Boone and Crockett trophies. Some saw it as a way of preserving and restoring the precious topsoil. . . .

A few others thought that perhaps it would become Indian lands, and the tribes would restore their ancient ways of life in that vast territory that lay adjacent to several reservations. Weird Californians opined that the grassland would emanate a great spirit of tranquility and healing that would affect the psyches of all the world's family and achieve psychic unity and peace so everyone would become brothers and sisters.³¹

If conducting original research, students might well wonder where they would turn to collect information about conflict participants and their agendas and claims. This book is not intended as a methods text, and therefore we are not going to provide an extensive answer to this question (though see Box 1.1 for a brief discussion of case study methods). What we will point out here is that often a useful starting place is with local news coverage of

When Environments and Communities Collide

Box 1.1 A Brief Primer on the Case Study Method

It was the Chicago School of Sociology that introduced the case study method to the social sciences. For more than 30 years, from the early 1900s to roughly 1935, the Chicago School dominated American sociology. Chicago itself was viewed as a complex social laboratory that invited dozens of inquiries into the interstices of urban life. Case studies of hobos, taxi dance halls, hotel lobbies, pickpockets, immigrants, neighborhoods, and more were written as master theses, doctoral dissertations, and books. In the middle of the 1930s, the center of sociology shifted from the University of Chicago to Columbia University, where faculty were far less interested in case studies and more interested in systematic surveys and experiments. The contrasts between these two quite different schools of sociology were handed down to later generations, and exist today, as the differences between qualitative and quantitative sociology.

Case studies in sociology generally share a number of qualities. First, they begin from an investigative space that is descriptive rather than analytic. That is, the task of the case study is to provide what Clifford Geertz would call a thick description of the setting, scene, situation, event, or person. Analyses might occur in bits and pieces throughout the description but more likely comes at the end. Second, most case studies are presented in a diachronic manner. That is, most of them follow the clock and the calendar, moving linearly through time. This gives the text a "first then, then that" character. As a story with a beginning, middle, and an end, the case study reads like a chronicle or narrative. Its narrative style is the basis for a third characteristic of the case study: the reader is invited to make both a conceptual and personal connection to the text. Indeed, where the survey rejects personalization in favor of objectivity, the case study personalizes data, encouraging readers to identify, at some level, with the story.

Finally, the quality of case studies always varies with the quality of writing. It might look relatively easy to write a case study. If so, we encourage you to read a few of the Chicago School studies or other case study classics in the field. We suspect you will be impressed by the quality of the writing. Remember, it is easier to invoke a concept than to describe it in a particular historical situation. Take the concept *status*, for example. It is much simpler to write *status* than to describe in loving detail a particular style, expression, physical arrangement, and so on that gives expression to vertical order.

We wrote more than 15 case studies for this book using previously published case study research. So, in a sense, we mined this cache of case studies to create our own cases. Our goal was to reread the published cases to extract what was useful and necessary to cobble together our own accounts of siting, toxic, and conservancy disputes. We were guided by one simple goal: to present what is known about each of the cases in a manner that would underscore contentious issues, group conflict, and community controversies. This is one of the many ways that sociologists borrow from one another to push the field in new and, hopefully, rewarding directions.

We advise you to read these case studies with a critical eye. What is not said in these thick descriptions? How might you compose a more suitable case? Does the case adequately represent the conceptual discussion that follows it?

NOTE: For a classic work on case study research in sociology, see Yin (1994).

the controversy. We present this advice with qualifications, because we do not want readers to assume media will provide an accurate or objective portrayal of the conflict. Indeed, the local media may be highly selective in which participants and claims it covers, or it may simply ignore the controversy altogether. Yet, as long as these shortcomings are kept in mind, local media coverage can provide valuable information in the early investigative stages. This can include names of conflict participants and perhaps even provide preliminary answers to many of the descriptive questions listed in this chapter (though this information should be verified with additional sources). Analyzing media coverage can allow researchers to re-create a public portrayal of the conservancy, siting, or exposure dispute. While hardly a perfect measure of community sentiment, local media can provide insights into the types of interpretive frames and symbolic imagery circulating through the community.

A summary of the basic descriptive questions covered in this section is provided in Box 1.2. Readers will find exercises which illustrate some of the potential uses of these questions at the end of the chapter.

Siting Disputes

Convent is a small, historically black community located in Louisiana's St. James Parish.³² In the early 1990s, the Japanese corporation Shintech proposed to build the world's largest polyvinyl chloride (PVC) plant in Convent. Backers argued that the \$700 million plant would bring needed economic development to the area, including the creation of approximately 165 new jobs for local residents. One of the staunchest and most powerful of Shintech's supporters was Louisiana Governor Mike Foster. Opposition to the project soon mounted, however.

Convent is located along the 90-mile stretch of the Mississippi River that lies between New Orleans and Baton Rouge. Variously known as "the industrial corridor" and "cancer alley," this region houses almost 25% of the nation's chemical manufacturing capacity. St. James Parish, already host to a number of hazardous facilities, was ranked the 11th most toxic "endangered place" in the United States by the National Trust for Historic Preservation. Convent was ranked as one of the most polluted communities in the world.³³

Opponents argued that the PVC plant would increase the pollution burden already borne by local residents. According to their calculations, Shintech would release 600,000 pounds of toxic chemicals per year into the air of St. James Parish. Close to 3,000 people lived within a 3-mile radius

Box 1.2 Adding to the Portfolio: Conflict Participants and Their Claims

- 1. What are the specific individuals, groups, and organizations involved in the conflict? Under what types of broader participant categories can these individuals, groups, and organizations be subsumed?
- 2. Which conflict participants are local (community insiders), which are extra-local (outsiders), and which span the local/extra-local divide?
- 3. What are the specific agendas of the different conflict participants? What possibilities do these agendas raise for alliances and opposition?
- 4. What are the specific claims made by each of the conflict participants? What are the more general themes or frames reflected in these claims?
- 5. How are conflict participants and their claims portrayed in local or other pertinent news media?

of the proposed plant site; 800 children attended school within that same area. In addition to the potential health threats of chronic exposure to pollution from the plant, narrow streets would make evacuating these people in the event of a major leak or other emergency at the plant difficult, if not impossible.

Convent is a unique American town. It was started as a village of freemen shortly after slavery was abolished in 1863. Since the early 1980s, the U.S. environmental justice movement has sought to raise awareness of the disproportionate siting of hazardous facilities in poor communities and in communities of people of color. These siting practices are increasingly viewed as yet another form of discrimination, another way in which poor people, and peoples of color, are forced to bear the costs of economic growth while at the same time receiving few of its benefits.

To oppose the plant, some Convent residents joined forces with the Louisiana Environmental Action Network (LEAN, an umbrella organization for the state's grassroots environmental organizations) and the Tulane Environmental Law Clinic. The law clinic offered court challenges to Shintech. A particularly novel strategy used Title VI of the Civil Rights Act and President Clinton's Executive Order 12,898 to charge that the siting decision constituted an illegal form of racial discrimination. The air emissions permit issued by the Louisiana Department of Environmental Quality was subsequently revoked by the EPA. In the end, Shintech gave up on the St. James site, choosing instead to build a smaller PVC facility in the town of Plaquemines, just to the east of Baton Rouge.³⁴

Developing a Time Line

In this section we continue our focus on basic descriptive questions, this time examining the chronological development of the controversy. Our concern here is with process; the questions presented in this section will help readers set the conflict in motion. We accomplish this through the development of a time line.

Time lines require a beginning point, generally a particular event which precipitated the conflict. Such events stand at the precipice of change, marking a transition between relative quiescence to contentious fighting. The community, in other words, looks different prior to the precipitating event than it looks after the event. Sociologist Ed Walsh captures what is unique about these events in his phrase "suddenly imposed grievance." Something about the local context will change, introducing threats to cherished values and ways of life, disrupting a community or neighborhood setting that residents had previously found an acceptable, perhaps even desirable, place to live.

As in the Shintech case, the precipitating event in siting disputes is generally the announcement of plans to construct some type of new, and at least by some residents unwanted, facility in the area. Exposure disputes may be precipitated by the discovery, and public announcement, of toxic chemicals in a community's drinking water. The U.S. Fish and Wildlife Service listing a species as endangered may precipitate a conservancy dispute. While it is often clear what event precipitates a local conflict, there are times when making such a designation can be tricky, a theme we explore in greater depth in Chapter 2. Sometimes, for example, activity may be going on at a site for quite a while before anyone mobilizes to oppose it.³⁶ There are also cases where what initially appears to be a novel conflict turns out, on closer examination, to be the latest cycle in a larger, long-running battle.³⁷

Conflict ensues because the precipitating event evokes a reaction; individuals and organizations feel threatened and seek to ameliorate or remove the threat through political action. Time lines, therefore, need to record the entry of various participants in the fray, as well as any exits or shifts in alliances. The formation of new groups specifically in reaction to the conflict (such as grassroots environmental organizations) also needs to be noted. We can go back to the language of suddenly imposed grievances to understand why such mobilization might occur in response to a precipitating event. Residents were not mobilized prior to the species listing, siting announcement, or discovery of toxic chemicals in their drinking water because they were reasonably happy with their circumstances. Grassroots groups are a pervasive feature of local environmental conflicts, and when they form are likely to be major players in the unfolding drama.³⁸ Indeed,

grassroots activists and grassroots organizations are so important to local environmental conflicts that the battles between these groups and their opponents are frequently the central focus of sociological investigations. In this book we want to encourage readers to expand their horizons, to situate these conflicts within a broader community context. Even this broader focus, however, still requires extensive knowledge about the activities and concerns of grassroots organizations.

Grassroots activists and other conflict participants engage in various types of strategies (or oppositional activities) to advance their agendas. These strategies can range from lawsuits to public demonstrations. Setting the conflict in motion requires an appreciation of the action-reaction dynamics of controversy: oppositional activity evokes responses from other conflict participants, in turn creating a changed context that may require shifts in strategy. Chapter 6 provides a more focused analysis of this conflict dynamic. For now, we simply want readers to note the need to include a descriptive account of strategic interplay in their chronology of conflict development.

This same set of observations extend to government agencies and officials. Still, we want to stress the importance of documenting key government actions in any conflict time line. The government is being singled out here not because it is considered a more neutral player than other conflict participants but because of its specific, often central, role in local environmental disputes. Many key battles play out in the arenas of government: in regulatory agencies, in legislatures, in courts. The fate of many siting, exposure, and conservancy disputes lie in the hands of government decision makers: whether a permit will be granted, a species listed, a particular cleanup option pursued, a lawsuit allowed to go forward, disaster monies made available, public hearings held, fines levied, or epidemiological studies conducted. To understand any local environmental conflict, it is imperative to know the actions of key governmental players at all levels found in the conflict (community, county, state, federal) and the statutes that both dictate and constrain their behavior. It is equally important to understand the reactions government actions evoke in other conflict participants, a topic we pursue in some depth in Chapter 3.

The final step of creating a time line is to designate an end point for analysis. Ideally, this end point would be the resolution to the precipitating event which sparked the controversy in the first place. As happened in the community of Convent, the end may happen when a siting proposal is defeated. Alternatively, the factory, hydroelectric dam, landfill, or whatever may be successfully built in spite of local protests, providing a different type of ending to the conflict. An exposure dispute may end with removal of the

hazard from the local area, or it may end by relocating people away from the hazard. A conservancy dispute may end when one side or the other exhausts its options for appealing an authoritative governmental decision.

Not all conflicts are marked by such clear resolution points, however. Indeed, designating an end to a conflict is an artifice, a way of bracketing an ongoing stream of community life for special consideration. It is worth remembering that where a researcher chooses to end a story is rarely where the story ends for the community.³⁹ The outcomes of local environmental conflicts may have repercussions, both positive and negative, for years to come. They may strengthen the bonds of communal ties, creating new alliances and feelings of empowerment which are used to tackle other local problems, 40 or they may factionalize and splinter local social ties, creating fault lines of animosity and resentment which divide residents for years to come. 41 Outcomes may undermine the viability of the local economy or result in local hazards which pose threats for decades. Endings may prove particularly elusive in exposure disputes involving radioactive materials and toxic chemicals, since it is almost impossible to completely remove these materials from the environment.⁴² Determining when a conflict "ends" may also be made difficult by long-term emotional and psychological problems, such as depression and posttraumatic stress disorder. 43 Some conflicts become entrenched, and the struggles continue for years or decades, becoming "intractable conflicts."44

Box 1.3 lists the key questions that will assist in the construction of a time line. Because local environmental conflicts are often quite complex, it can be useful to summarize the highlights of time lines in tabular form. An

Box 1.3 Adding to the Portfolio: Developing a Time Line

- 1. What event precipitated the conflict?
- 2. When do various participants enter the conflict, and are any of these participants new groups formed specifically in response to the precipitating event and/or the conflict? What is the timing of any exits from the controversy or shifts in alliances?
- 3. What is the timing of the major strategies nongovernmental conflicts participants use to influence the course and outcome of the controversy? What reactions do these strategies evoke?
- 4. What is the timing of the major governmental actions undertaken at the local, state, and/or federal level? How do other conflict participants respond to these actions?
- 5. What event ends the conflict? If there is no clear ending, what event is chosen as the end point of analysis?

example is provided in Table 1.1, which lists the key events in an exposure controversy which occurred in the small town of St. Louis, Michigan. A more detailed discussion of this case is presented in Chapter 2.

Table 1.1 Example of a Time Line: Major Highlights of the Toxic Disaster in St. Louis, Michigan

Date	Event
1973	Michigan Chemical/Velsicol's St. Louis, Michigan, factory mistakenly ships between 500 and 2,000 pounds of the fire retardant PBB to a Michigan Farm Bureau feed mill, where it is mixed into feed for dairy cows. By the time the adulteration is discovered, the contamination has spread throughout much of the Michigan human food chain.
1974	The Michigan government finally acknowledges the contamination. The St. Louis plant is identified as a likely source of the contamination, and an investigation is begun.
August 1976	Michigan Chemical/Velsicol signs a consent agreement with the state DNR (Department of Natural Resources) to close its St. Louis plant by September 1978.
March 1977	U.S. EPA discloses that 80 tons of PBB contaminated wastes are buried in the Gratiot County landfill.
Fall 1977	St. Louis officials aid Michigan Chemical/Velsicol in its attempt to keep the chemical plant open.
December 1977	Gratiot County landfill is closed.
Spring 1978	Possible employee takeover of the chemical plant is pursued. This plan fails to materialize due to the failure of the DNR and Michigan Chemical/Velsicol to reach an agreement over liability for area contamination.
Fall 1978	Michigan Chemical/Velsicol plant closes. Michigan Departments of Commerce and Labor conduct studies on the economic impact of the plant closing. A task force with extensive local involvement is formed to aid former plant workers.
November 1978	Former plant workers sue Michigan Chemical/Velsicol.

(Continued)

Table 1.1 (Continued)

Dete	F4
Date	Event
December 1978	Gratiot County Development Inc. receives an \$8,000 state grant for use in targeting properties suitable for economic development to aid county recovery from the plant closing.
March 1979	Greater Gratiot Development Inc. receives a \$640,000 federal grant for redevelopment efforts.
November 1979	U.S. congressional hearing (Water Resources Subcommittee of the House Public Works and Transportation Committee) held in Gratiot County.
June 1980	A series of weekly meetings between St. Louis and the Michigan Departments of Public Health and Natural Resources are held to determine an "official plan of action" to address contamination. As an outcome of these meetings, St. Louis officials initiate citywide testing of soil samples to determine the extent of area contamination. This study is conducted by the Michigan Departments of Agriculture, Health, and Natural Resources.
Fall 1980	A request for an "emergency declaration" for Gratiot County due to PBB contamination is sent to President Carter. This request is rejected twice (an appeal is sent after the first refusal) by the Federal Emergency Management Agency on the grounds that Gratiot County is experiencing economic hardship, not a toxic emergency.
November 1980	St. Louis receives a \$2 million Economic Development Administration grant for redevelopment efforts.
June 1981	The state of Michigan names the Gratiot County landfill as its number one priority for receipt of EPA "Superfund" monies.
June 1981	The Michigan Chemical plant is demolished after having been declared structurally unsound by the state DNR.
Fall 1981	St. Louis and Velsicol officials negotiate cleanup arrangements on several smaller contaminated sites in the area.
November 1982	The state of Michigan reaches a \$38.5 million settlement with Velsicol for cleanup and containment of contaminated sites in Gratiot County.

SOURCE: Adapted from Aronoff and Gunter (1992a), p. 352. Copyright 1992 by The Society for the Study of Social Problems.

Exposure Disputes

In 1962 a fire started in a seam of anthracite deep beneath the earth's surface on the outskirts of a small town in northeast Pennsylvania.⁴⁵ Mine fires are nothing new to the American landscape. At any one time there are typically 150 to 200 fires burning throughout the United States. What was troubling about this particular fire was its potential to burn underneath the town of Centralia, posing severe risks to health and safety. From 1962 to 1982 the federal government spent more than \$5 million to extinguish or at least abate the fire. The underground blaze marched on.

In spite of its inexorable advance toward the village, the fire wrought little visible damage over the years. But it posed a subtler kind of menace. In 1969, for example, carbon monoxide gas forced three families to evacuate their homes; seven years later more of the same gas, in a concentration 20 times that of the lethal human exposure, was found pouring from a borehole 27 feet from the doorstep of another house in town. In 1980 the federal government purchased seven houses considered unsafe, and other property sales followed in short order. Increasingly, residents showed up in physicians' offices with headaches, nausea, or respiratory discomforts. Then, on Saint Valentine's Day 1981, a 12-year-old boy walked into his grandmother's backyard and almost dropped off the face of the earth. The earth, apparently weakened by the fire, simply opened up underneath him. As he dropped down, he grabbed an exposed tree root and hung on desperately until a friend pulled him out. He was lucky. The subsidence that opened in his grandmother's yard was over 100 feet deep.

In response to the near tragedy, several Centralians, mostly young parents, formed a community action group to press for more drastic government action against the fire. One might assume that townspeople rallied round their call for a solution to the fire; but quite to the contrary, the militant organization, which drew substantial media attention, touched off rancorous community discord. Many residents dismissed the group as a mob of hysterics and blamed its members for the plague of reports that descended on the town. Public meetings became forums in which residents lashed out bitterly not only at perceived government indifference but also at one another. Anonymous telephone threats, slashed tires, and a fire bombing brought this once peaceful village to the brink of social chaos.

A principal source of the local enmity was the ecological features of the fire itself. Underground, it could not be seen; its poison carbon-based gases were invisible to the senses. Many health and environmental impact studies reached opposing conclusions, with some claiming minimal and others maximal damage. Finally, the geographic configuration of the town ensured that residents living on the south end would experience the fire directly,

while those living on the north end could continue their way of life as if very little had changed. Like a Rorschach card, the underground mine fire was sufficiently ambiguous to invite multiple and conflicting interpretations. Indeed, in a mere 5 years, seven grassroots groups formed in response to this conflagration, each representing an opposing view of its scope and degree of danger.⁴⁶ This conflict eventually ended through relocation of local residents.

A Focus on Context

Conflict draws and holds our attention. It is dramatic, touches on deeply held moral convictions, generates victims and villains, and motivates deep-seated desires to right wrongs and ameliorate harms. It is the presence of conflict which draws social scientific attention to places like Centralia, and in recognition of that fact, our first two sets of descriptive questions are designed to highlight the key features of local controversies. This final set of portfolio questions is designed to invite students to embrace a cognate goal of this book: a more Catholic or expansive consideration of the community context within which conflict occurs.

Information about local context contributes to both descriptive and analytic endeavors. Attention to context aids description by providing richness and depth, helping readers visualize a place they have never been. Contextual factors can also play an important role in explaining conflict dynamics. This analytic task is the more challenging of the two, and one that we wait to develop in the following chapters.

A good contextual starting place is to capture the character of the local area where the conflict is occurring. Is it a large urban area of several million people? A small city of several hundred thousand? A suburban residential area? A small town of several thousand? A rural area? Does the town lay claim to a unique history or other distinguishing feature, as we saw in the case of Convent, Louisiana, reported earlier in the chapter? If local people had to describe their community to outsiders in a few sentences, what would they say?

Another important contextual factor is the demographic profile of the area. Are most residents working class, or upper middle class? Is the local population predominantly white? Black? Hispanic? Indian? Vietnamese? Some local areas are highly diverse, with a mix of different social classes, racial/ethnic groups, and family types. Other communities (including specific neighborhoods within urban settings) are quite homogeneous. What is the average level of education among the local people? What about the age distribution; are there a lot of elderly people in the community, or perhaps

young families with small children? Has there been any substantial population movement (in- or out-migration) in recent decades? Is the community shrinking because young people are leaving due to lack of local opportunities? Alternatively, has a new group of people, demographically distinct from older residents, moved into the area? Basic demographic factors such as these not only provide a sense of who lives in local areas; they also give clues about possible fault lines along which conflict may develop.

Students of local environmental conflicts also need to have a good sense of the economic base of communities of interest. Who are the major employers in the town? Specific companies or firms which are major employers in a local area, such as the Pacific Lumber Company in Scotia, California, need to be identified. Is the local area highly dependent on one type of economic activity, such as mining, agriculture, manufacturing, or tourism? Alternatively, is the local economy highly diversified? What has been the track record of economic performance over the last several decades? Has it held steady, experienced growth, or been plagued by a recession? What are the current rates of unemployment and underemployment? Both the demographic makeup and economic viability of local areas can affect how residents perceive the fairness of various decision outcomes, a point we develop in more depth in Chapter 5.

Another important contextual element pertains to the key features of the local landscape. Alternatively we could ask, What is the visual appearance of the local area? Is the housing stock well maintained or run down? Is retail space located in strip malls or in quaint downtown areas? Does industrial or extractive infrastructure loom large on the horizon? What are the basic topographic features of the local landscape? What rivers and streams run through the area? What types of outdoor recreational spaces are available? What features of the local landscape present risks or hazards to the local people? What aspects of the local environment are aesthetically pleasing? In Chapter 7 we provide some guidelines for using landscape features in explanatory accounts of the local environmental conflict.

One final contextual feature bears mentioning: the key points of contact between local residents and relevant aspects of their surrounding environment. It is not the mundane forms of contact where the environment serves as mere backdrop to action that concerns us, but rather the circumstances and moments where the environment moves to the foreground as an integral part of the action. Anyone engaged in chopping down trees, hunting, fishing, or trying to figure out why the water smells and tastes funny is interacting with the environment in a very direct and purposeful way. It is these points of engaged contact which are likely to generate local knowledge about environmental conditions, and which may become the source

of contending interpretations between community residents and outside experts. We address this issue in some depth in Chapter 4.

Questions which will aid students' endeavors to describe the community context of local environmental conflicts are provided in Box 1.4. As with all the portfolio boxes, this list is not exhaustive, though it does cover the basics. Still, the framework we provide in this book is designed to provide flexibility in the face of the unexpected, which means investigative forays into terrain not covered by these questions may at times be warranted.

Box 1.4 Adding to the Portfolio: A Focus on Context

- 1. What type of community characterization best fits the local area where the conflict is occurring?
- 2. What is the demographic profile of the area?
- 3. What type of characterizations best fit the local economy?
- 4. What are the key features of the local landscape?
- 5. What are the key points of human-environment contact?

Summary

Each of the three cases presented above represents in turn a conservancy, siting, and exposure dispute, and each one is driven by the logic of the forced option. People living in Scotia, California, could only sit passively by as anonymous junk bond traders trafficked with their futures. But they responded, indeed felt they must respond, to the efforts of "outside agitators" to save the trees that meant jobs and futures for them. Residents of Convent, Louisiana, were compelled to respond to the plans of a Japanese company to build the world's biggest PVC plant in their backyard. If they did nothing, the plant would be built. Similarly, many residents of Centralia, Pennsylvania, could not ignore the underground mine fire; they felt obliged to act. Those who did try to ignore the fire quickly found they could not ignore their activist neighbors. It is in these ways that environmental conflicts are often perceived as Manichean battles between right and wrong, good and evil, justice and injustice.

Framed in these terms, community residents are less likely to choose environmental strife and more likely to feel that the conflicts choose them. Once joined, however, local environmental controversies quickly become a cacophonous chorus of claims and counterclaims.

This book is a short, concise inquiry into the community dynamics of environmental conflicts, with particular attention to how and why these controversies are variously interpreted by local groups and associations, regulatory agencies, the media, politicians, and others with a stake in their outcomes. Its purpose is to help students think more carefully and critically about local environmental conflicts by proposing a strategy and set of key terms for understanding and, perhaps, investigating them. The portfolio approach distills the key questions, providing a set of conceptual tools for exploring local environmental controversies. Beginning with basic descriptive information about the conflict and about the local area in which the conflict occurs, subsequent chapters treat readers to considerably more analytic endeavors.

The Book as a Map

This book is a resource for students of communities and environmental conflicts. The discussions to follow delineate key dynamics or forces which may influence the origin, nature, processes, and outcomes of a particular conflict. Following are five chapters, each of which discusses in some detail a dynamic source of environmental conflict, providing case material throughout as illustrations. In the order of their appearance, these sources are presence of the past, trust and betrayal, problems of uncertain knowledge, perceptions of fairness, and oppositional activity and social capital. The goal of these chapters is to help readers develop richer, more complex understandings of conservancy, siting, and exposure disputes by following an inductive logic which moves from description to analysis. A final, concluding chapter takes this task one step further, by encouraging readers to analyze conflicts from the vantage point of the symbolic realist perspective. Below we present a brief summary of each of these chapters.

Chapter 2: The Presence of the Past

Local environmental conflicts do not occur in a social and historical vacuum. Local people always have some type of long-standing relationship with the environment they inhabit. This relationship may be one of relative indifference and neglect, but it may also be one characterized by extensive enjoyment of aesthetic vistas provided by the local landscape and/or by use of locally available environmental resources. In some cases these landscapes and resources are linked with long-standing community traditions and collective identity; to threaten the integrity of the local environment is to threaten the heart and soul of the people who inhabit that environment.

The past manages to make itself felt in other ways as well. Communities are patterns of social relationships, styles, manners, and so on, some of them long-standing. There are local norms for expressions of solidarity and conflict, traditions of group formation and collective action, common understandings of who is in and outside of the community. By no means do these norms, traditions, and understandings determine a community's response to crises, but they do fashion and guide both thought and action. In addition, sometimes conflict participants invent new histories in the heat of conflict which offer new interpretations of past events or make salient aspects of the past previously neglected or ignored. Such inventions are undertaken for strategic reasons: to mobilize support and justify particular courses of action. We introduce a historical dimension to the study of local environmental conflicts not to advocate historicism but rather to cultivate an appreciation for the indisputable presence of the past in personal and collective life.

Chapter 3: Trust and Betrayal

Local environmental conflicts bring community residents into extensive and protracted interaction with such powerful social organizations as corporations and government regulatory agencies, sometimes as adversaries and sometimes, at least initially, as potential sources of assistance. Residents may discover through this contact that the organizations do not behave as they expected: rather than move swiftly to protect residents from harm, they instead engage in evasiveness and foot dragging, appearing more concerned with protecting taxpayers' dollars, company profits, and the local economy than residents' welfare. Examples of such betrayals of trust are legion in environmental disputes. A U.S. Department of Public Health report concludes that several stillbirths in a small town do not constitute a statistical cluster linked to airborne contaminants from nearby factories, but are more likely the results of poor hygiene and lifestyle choices of pregnant women. A petroleum company claims it successfully cleaned up a catastrophic oil spill in pristine fishing waters, but local communities are advised to avoid eating the fish from these waters, and commercial markets won't buy them. The federal EPA claims it successfully cleaned up a hazardous waste site adjacent to a neighborhood, but residents continue to experience trouble breathing and children break out in rashes after playing in their backyards. The EPA suggests the complaints might be "psychosomatic." Faced with this kind of organizational bias against acknowledging the legitimacy of their troubles, residents are likely to define powerful institutional actors as, at the very least, unconcerned, if not downright hostile.

The sociological challenge is to unravel the complex array of factors that give rise to ostensibly craven actions. We argue for the need to take account of both the intentions of the powerful social actors engaged in troubling behavior as well as the perception of that behavior by local residents and other conflict participants. We reserve the term premeditated betrayal to cover those cases where powerful social actors are intentionally being duplicitous and misleading. We use conflict theory and political economy to illustrate how the impetus toward self-serving, deceitful, and miscreant acts are deeply embedded in existing social arrangements. At the same time, accusations of betrayal can occur in the absence of any intentionality. Indeed, government personnel may be branded as unresponsive or malfeasant even in situations where they are trying hard to be helpful. We refer to this as "structural betrayal" and use organizational theory to explain why bureaucracies, which are poorly equipped to deal with novel or unusual circumstances as well as interrelated community problems, may respond to environmental conflicts and crises in ineffectual ways, which are read by local residents as intentional betrayal. We also introduce the concept of "equivocal betrayal," which we apply to situations where the intentions of powerful social actors are difficult to empirically document and are equally amenable to organizational and politically motivated explanations.

Chapter 4: The Problem of Uncertain Knowledge

Disputes about knowledge are a perennial feature of local environmental conflicts. These disputes revolve around the ambiguity of these events. One source of ambiguity is the simple problem of trying to predict the future. Consider the case of siting disputes. In this case, projections or extrapolations must be made about the likely consequences of activities. How much of a danger will the facility pose to the local community? Will there be accidents, such as fires, explosions, or releases of gases? How many new jobs will the facility create? The future as-yet-to-be-decided nature of these questions ensures conjecture, opposing science, and endless debate.

Disputes over contested knowledge shape up along both vertical and horizontal dimensions. The vertical dimension pits local residents against credentialed experts. Epidemiologists, toxicologists, hydrologists, wildlife biologists, and a host of other trained scientists are permanent fixtures of local environmental conflicts. They are located in a wide array of organizational settings, including government agencies, private industry, environmental organizations, and universities. In the past, scientists were granted considerable authority to make declarative statements about the empirical

world, but increasingly both the knowledge generated by scientists as well as their privileged position are being challenged by ordinary citizens who believe they too know things of value about the world. Indeed, local residents who have lived in a community for years may feel like they are more authoritative experts on local environmental conditions than trained scientists who breeze in for 2 weeks' worth of research.

The horizontal dimension, in contrast, is one which pits local residents against each other. Residents can have fierce disagreements about such things as whether or not chemical contaminants are in their drinking water and, if so, whether or not these pose any health risks. Shared perceptions about the safety of one's immediate environment may be a prerequisite for civil communal life; when a group in a community starts to question that apparent safety, they may be greeted with hostility and acrimony by other residents who do not share their concerns and who do not appreciate having their own feelings of security threatened.⁴⁷

Chapter 5: Perceptions of Fairness

Fairness and its many allied terms, *impartiality*, *justness*, *equality*, and the list goes on, is much easier to talk about than actually achieve. But fairness is never far from people's minds and hearts in environmental controversies. At its most basic, fairness issues address the distribution of costs and benefits from environmental decision making. Who gets (or loses) jobs? Who gets the pollution? Who has to bear the burden of increased noise and traffic? Which property owners take a financial hit because a noxious facility is located in their neighborhood or because government efforts to preserve wetlands have rendered it impossible to pursue the most profitable uses of their land? Fairness forms central themes in such disparate forms of collective action as the environmental justice movement and the sagebrush rebellion. Claims about fairness are often not limited just to the outcomes of particular conflicts but linked to broader historic patterns of injustice.

What counts as a fair distribution of costs and benefits? To make this issue even more complex, sometimes it is not even clear what counts as a "cost" and as a "benefit." Fairness cannot be discussed apart from the values that inform the judgments about these issues. Indeed, fairness is a fundamentally contested issue because values themselves are contested. Value disputes and perceptions of unfairness often elicit surprisingly strong emotions. Sometimes, such emotions are intentionally inflamed as part of an oppositional mobilizing strategy.

Chapter 6: Oppositional Activity and Social Capital

By oppositional activity we mean the variety of ways residents combine into local groups, organize protests, use the media to carry their messages, establish ties with regional or national organizations, and engage in similar activities to voice their objections and agendas regarding contested local issues. Through oppositional activity, grassroots activists network with allies and contend with enemies. These activities have tremendous implications for social capital, that fund of goodwill which facilitates communal life. In Chapter 6 we explore the ways oppositional activity both intentionally and unintentionally builds and erodes social capital.

Students of social capital draw a distinction between bonding and bridging capital.⁴⁹ Bonding capital operates on a local, horizontal plane, drawing together neighbors and residents. Bridging capital, in contrast, links local residents and external groups. There are many permutations of the ways in which oppositional activity might build and erode bonding and bridging capital; we address three. These include the simultaneous building of both bridging and bonding capital, the building of bonding capital in the absence of bridging capital, and the simultaneous building and eroding of bonding capital.

Chapter 7: Social Facts and Brute Facts: Confounding the Social and the Physical

There is a kind of third estate in environmental sociology. It is comprised of social scientists who think that the examination of social life need not preclude inquiry into organic and material conditions, resources, and constraints. Members of this third estate include those sociologists who study the body as a powerful presence in social and cultural affairs. ⁵⁰ Also included among this group are a number of environmental sociologists who acknowledge the importance of the physical and organic to the study of people and biospheres. ⁵¹

In this chapter, students are introduced to a style of inquiry that begins with the assumption that the physical and organic environment exists outside our languages and senses. Unlike a more conventional sociological topic, say, the family, the environment has a hard and obdurate reality—quite independent of us. It will not go away simply because we stop acting toward it or thinking about it. But the meanings of environment, what we think and feel about it, is dependent upon language or, more broadly, culture. In short, environment (unlike family) exists both outside and inside of

human actions and meanings. Return to the two quotations that start this chapter. Read them again. What Catton and Bell are describing is the point of departure for this final chapter.

The term *symbolic realism* will assist us to make some sense of this dual nature of nature.⁵² However much societies have tinkered with and changed nature, it nevertheless continues to be a brute presence in our lives, a thing outside of society and culture, a physical-organic world with its own rhythms, cycles, disasters, and other mutations. In short, it is *real*, it exists, whether or not we know it. But always modifying that realism is our capacity (indeed our compulsion) to symbol. The environment is always symbolic; in other words, insofar as how we act and what we know about this brute presence is dependent on our particular social and cultural practices. The following passage applies the idea of symbolic realism to a sociology of environmental hazards and disasters:

[We are attempting here to] join environmental sociology's assumption that biospheres and social structures are interdependent with a key assumption of symbolic interaction that people act on the basis of the meanings they attribute to events and conditions. From this perspective, social responses to hazards and disasters are affected by both the nature of the disruption in human/environmental relations and the appraisals people make of those disruptions.⁵³

In this final chapter we fashion a way of looking at local environmental controversies from the vantage point of symbolic realism. It is arguably the most demanding chapter but one that will, hopefully, kindle your imaginations by suggesting new and provocative research questions.

A Concluding Word

One goal of this book is to get readers started on an investigative journey. In line with the metaphor of a journey, readers will frequently encounter our use of the imagery of "lenses" in the chapters to follow. Just as novice hikers will "see" much more along the Appalachian Trail if they go equipped with a guidebook, binoculars, a magnifying glass, and infrared night goggles, so the conceptual lenses we present in this book are meant to draw attention to facets and complexities of local environment conflicts easy to overlook by students new to their study.

Just like medical doctors need in-depth knowledge of the endocrine system, the cardiovascular system, and the central nervous system (among others) before they can begin to make diagnoses of disease in particular individuals, so social scientists and others need in-depth knowledge of the

possible lay of the land before they can begin to analyze local conflicts. In our estimation, initial presentation of this material is best accomplished through an in-depth discussion of each key force or dynamics taken, to the maximum extent feasible, in isolation from the other factors. This conceptual separation is an artificial one, however. As we touch upon in the last chapter, what matters in terms of understanding the origin, nature, dynamics, and outcomes of any local environmental conflict is the particular mix of dynamic factors present and how these interact with each other over time.

STUDENT EXERCISES

- 1. Using one of the three cases of local environmental conflicts presented in this chapter, answer as many questions as you can from Boxes 1.2, 1.3, and 1.4. What additional information would one need to know to adequately answer all of the questions presented in these three boxes?
- 2. Create a hypothetical conservancy dispute over efforts to preserve habitat for the lesser three-toed red-eyed lizard by making up defensible answers to the questions listed in Box 1.2. In what ways, if any, do you think the answers to these questions might have been different if you had done a siting or exposure dispute instead?
- 3. Follow a local dispute in the local broadcast news and/or local paper for a week (this does not have to be an environmental conflict). At the end of that week, create a time line for the conflict, using the questions presented in Box 1.3.
- 4. Using the questions presented in Box 1.4, describe the context of a rural area, town, suburb, or urban area you lived in at some point in your life. In what ways do you think knowing these contextual elements would help you explain any environmental conflict which might develop there?
- Provide three to five examples of ways in which communities are affected by technological, political, economic, and/or cultural developments which originate beyond their borders.

Notes

- 1. Catton (1980), 104.
- 2. Bell (2004), 2.
- 3. We want to emphasize that we are talking about textbooks here, because there is an extensive history of research on communities and their environments in rural sociology and disaster studies. For one example, see Barton (1969). Bell also

pursued an in-depth examination of environments and communities in his 1994 book on Childerly, England.

- 4. For example, see Gould (1994); Hannigan (1995); Harper (2003); Frey (2001).
 - 5. A more extensive discussion of this case is provided in Chapter 3.
 - 6. Fowlkes and Miller (1982).
 - 7. James (1956), 68.
 - 8. Giddens (2000).
 - 9. Beck (1999).
 - 10. McKibben (1999), 18.
 - 11. Olson and Cameron (1995), 20.
 - 12. Stanley (1989).
 - 13. Glanz (2002), A14.
 - 14. McKibben (1999).
 - 15. Giddens (1991).
 - 16. Giddens (2000), 45.
 - 17. Carmean (2002); Copps (1995).
- 18. Shirley (1994); Gobster and Hull (2000); Lowry (2003); Tidwell (2003). This final book is primarily about the loss of wetlands in coastal Louisiana, but it does provide a brief discussion of restoration efforts and the tremendous challenges confronting those efforts.
 - 19. Picou, Gill, and Cohen (1997).
 - 20. Glaser and Strauss (1967).
 - 21. Fine (2004).
- 22. Of necessity, the vignettes we present in this book do not present the complete richness of these cases, many of which would require a book-length treatment to do full justice. Rather, we have highlighted particular portions of the cases as a means of illustrating analytic themes of interest to us. We encourage readers to spend time examining the original sources from which our vignettes are drawn or to spend time exploring the Web or other relevant resource material if they are interested in seeing "what eventually happened" in particular cases.
 - 23. Case material from Harris (1996).
 - 24. Harris (1996), 19.
 - 25. Harris (1996).
- 26. The descriptive questions outlined in this section are derived from the social constructionist approach to social problems. For a general introduction to this approach, see Best (1995) and Loseke (2003). For a specific application to environmental conflicts (though not local conflicts), see Hannigan (1995).
 - 27. Gottlieb (2001).
 - 28. Bryan and Wondolleck (2003).
 - 29. Dizard (1999).
 - 30. Loseke (2003).
 - 31. Wheeler (1998), 180-181.
 - 32. Case material from Roberts and Toffolon-Weiss (2001).

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- 33. Roberts and Toffolon-Weiss (2001).
- 34. Ibid.
- 35. Walsh (1988); Walsh and Warland (1983).
- 36. Beamish (2002).
- 37. Espeland (1998); Walton (1992).
- 38. Cable and Cable (1995).
- 39. The same can be said of beginnings, a topic we pursue in some depth in Chapter 2.
 - 40. Allen (2003).
 - 41. Kroll-Smith and Couch (1990).
 - 42. Couch and Kroll-Smith (1985).
 - 43. Picou, Marshall, and Gill (2004); Picou and Gill (1998).
 - 44. Lewicki, Gray, and Elliott (2003).
 - 45. Case material from Kroll-Smith and Couch (1990).
 - 46. Kroll-Smith and Couch (1990).
 - 47. Kroll-Smith (1995).
 - 48. Putnam (2000).
 - 49. Ibid.
 - 50. Bourdieu (1979); Kroll-Smith and Floyd (1997).
- 51. Catton (1982); Couch and Kroll-Smith (1997); Kroll-Smith, Gunter, and Laska (2001); Irwin (2001).
 - 52. Kroll-Smith, Gunter, and Laska (2001).
 - 53. Couch and Kroll-Smith (1994), 28.