Structures for Environmental Action

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This article develops a typology of what we term "structures for action"—strategies, mechanisms, and means—used by local environmental groups to facilitate actions such as lifestyle shifts, civic protest, and environmental preservation. Based on data from nineteen groups in several states, we distinguish between *internal* structures that facilitate action for members of the groups and *external* structures that facilitate action among nonmembers and other groups. Within both internal and external structures, we identify three dimensions: knowledge, meaning, and praxis. Our typology of structures for action is designed to stimulate further research and to be useful for environmental groups, as well as for other social issue-oriented local groups that seek to be more effective.

Introduction

Local groups are active players in many arenas of sustainability and environmental action in the United States and abroad (Edwards 2005, Hawken 2007, Mitchell et al. 1992, Taylor 2002). Groups vary greatly in size and in ideologies, orientations, motives, background, and perspective (Cole 1992), but have made

significant and growing impacts on public life and awareness of environmental issues in many areas (Barlett 2002, Edwards 2005, Kitchell et al. 2000, Taylor 2002). Enabling this effectiveness is what Stevenson and colleagues describe as mobilizing structures, "the forms that social movement organizations take and the tactics that they engage in order to communicate a message and to press for political change" (Stevenson et al. 2007: 37). We use the term "structures for action" to refer to the organizational strategies, venues for participation, objects, and messages that local environmental groups employ to facilitate environmental action among their members, as well as among members of governmental agencies, business, and the general public (Stevenson et al. 2007: 37-8). Using data from a multi-year, multi-site research project and our personal experiences in working in and with environmental groups, we examine thirteen structures—strategies, mechanisms, and means—that assist people to take and continue action, whether as individuals or as members of the group.

The study of local environmental groups recognizes the importance of "multiple environmental identities" for group members (MacNaughten and Urry 1995: 216) and builds on dissatisfaction with the traditional trident of "litigation, lobbying, and technical evaluation" in understanding the broad range of organized efforts to protect and restore the environment (Cole 1992: 635 n.46). Less conventional channels of political action have drawn attention (Dryzek and Lester 1995: 328-29), but few studies have explored the operational functioning of local environmental groups (*cf.* Moberg 2001). Substantial research has examined individual attitudes (position, orientation, or bearing indicating an action, feeling, mood), values (relative worth, desirability, importance), and behaviors with respect to the environment (e.g., Aronson 1993, Dunlap 1995, Hansis 1995, Kempton et al. 1995, Kushins and Brisman 2005, Lam and Chen 2006, Paolisso and Maloney 2000, Ryan and Bernard 2006, Tanner 1980). Research that has focused on organizations either has considered *whether* (but not *how*) organizations have contributed to the development of environmental concern (Palmer 1993, Chawla 1998) or has been conducted at the macro level with the concentration on large, national organizations—their genesis, development, and interactions with each other (Costain and Lester 1995, Gottlieb 1993, Ingram et al. 1995, Shabecoff 1993).

The local environmental groups that form the basis of our work are small and medium-sized, issue-specific or place-specific, single-chapter organizations, such as watershed alliances and citizen groups. Though mainstream environmental organizations, such as the Sierra Club, were part of the original sample, we focus less on their work here since they are large, multi-issue, multi-chapter environmental law, policy, and advocacy organizations with a regional, national, or international focus.

In this paper, we take the local environmental group as our unit of analysis and separate the structures for action we found into two categories. *Internal* structures build the ability of individuals within the group to act. These actions may occur in their home lives, work lives, or in an even broader public arena. Physical structures

such as t-shirts or baseball caps, as well as group dynamics that build trust and confidence, help potentiate the action of the group's members. *External* structures support actions of individuals outside of the group by offering the physical means for nonmembers to take action (such as by placing recycling bins in public spaces), disseminating information to the public (and thereby bridging governments and citizens), and by coordinating legal and political action (such as publicizing and facilitating attendance at hearings and meetings or seeking and gathering plaintiffs for a lawsuit challenging a governmental act or omission).

To be sure, a fair amount of overlap exists: some internal structures can extend outward beyond the group; some external structures can help attract new members, who then strengthen the internal structures and help generate new internal and external ones. Despite the occasional blurry lines, we argue that the concept of "structures for action" can serve as a useful approach to understand how local environmental groups foster new behaviors and play a dynamic role in cultural change and political struggle with respect to the environment. We also hope this analysis will be useful for groups that seek to strengthen their actions.

After a note about methods, discussion of internal and external structures begins with a description of the Rock Creek Watershed Alliance, where we argue that the creation of a local environmental group serves both as a structure in and of itself, as well as a step towards the formation of other structures. After briefly sketching the genesis, development, and growth of this one group, we turn to three dimensions of environmental action that help us to understand both the internal and external structures we will present. We label these dynamic and interactive dimensions "knowledge," "meaning," and "praxis" and present brief examples for illustration. We note that the identification of a particular environmental issue or problem can lead to group formation, information collection, expertise development, and further problem identification—all facets or components of the "knowledge" dimension. Though each structure is presented separately, they may interact. For example, physical structures for action, such as wearing a baseball cap or displaying a yard sign, can cross dimensions by serving as an action, disseminating information, strengthening attachment, clarifying values, and fostering identity.

Turning then to external structures for action, we link the three dimensions of knowledge, meaning, and praxis to actions that spread beyond the group itself. Here we note how the content of information disseminated to those outside the group or the nature of actions undertaken by the local environmental group can influence the local environmental group's reputation and credibility, affecting its internal strength, recruitment, and ability to achieve its goals. We conclude with some comments on how this typology of structures can stimulate further avenues of research.

Methods

This analysis began with a comprehensive study led by Willett Kempton and Dorothy Holland of local environmental groups in North Carolina and the Delmarva Peninsula (a large peninsula occupied by portions of three states—

Delaware, Maryland, and Virginia—and bordered on the west by the Chesapeake Bay, and on the east by the Delaware River, Delaware Bay, and Atlantic Ocean).[1] Local environmental groups in these two areas were surveyed, revealing close to 500 community-based (i.e., non-institutional) environmental groups, as well as 120 high school groups (Kempton et al. 2001). These groups conduct a variety of activities to affect environmental practice and policy, including political action, education, land acquisition, habitat restoration, consumption management, and local monitoring. Sizes of the groups vary widely; of the 186 groups in North Carolina that reported their group sizes, the number of members ranges from 6 to 55,000. About a third of those reporting (46 groups) have fewer than 100 members, and only 10 groups in the North Carolina study have more than 10,000. For eighteen groups from the total sample (see Table 1), individual members and leaders were interviewed by Bunting-Howarth and Kempton, along with multiple research assistants.[2] Participant-observation included attendance at meetings and protests, visits to local fairs and festivals, and semi-structured interviews. We draw for this analysis primarily from the Delmarva Peninsula and North Carolina study, supplementing it with Barlett's Georgia experiences. All individuals are named here using pseudonyms.

Establishing a Group

Local environmental groups are formed from diverse motives and avenues of inspiration (MacNaughten and Urry 1995, Moberg 2001), but there are some common phases of the formation of such groups, and these phases link to the structures for action that have emerged in our research. The example of the Rock Creek Watershed Alliance in Atlanta illustrates a simple group formation process. This small group began in the context of much publicity and litigation about Atlanta's water quality treatment and combined sewer overflows. A node of four people began to get to know one another and to discover mutual interests in a local creek, in spreading awareness of environmental issues concerning water, and in fostering healthier water quality in the region. Through several meetings, the decision was made to create a new watershed alliance group. The decision flowed from information about other watershed alliances that had formed in the area and the benefits to them, but also from the enjoyment of face-to-face interactions and the building of trust. Subsequently, group members explored the ecosystem of the creek and received training in water quality testing provided by the county. These enjoyable activities built social capital among the members.

2 Involved in the Delaware and North Carolina research project were Kim Allen, Lesley Bartlett, Katherine Bunting-Howarth, JoAnn Carmin, Erin Hannan, Dorothy Holland, Willett Kempton, Cheryl Darlene McClary, Christopher Payne, Charles Seagle, and Elizabeth M. Taylor.

Closely allied with this social process was information sharing, as members pooled knowledge and clarified diverse points of view. Questions such as how to measure water quality, which homeowner actions have what effects on water quality, and what legislation and local ordinances are relevant were all engaged to develop a new body of knowledge and a new vocabulary. As the group developed and attracted new members, common value stances, attitudes, and frameworks of understanding emerged, although divergent values, attitudes, and worldviews also emerged and were accommodated. This dimension of group formation built shared meaning, along with shared knowledge. The collegiality, opportunities to exchange information, shared experiences, and common frames of meaning all supported loyalty to the group and a willingness to take action on its behalf.

The founders then moved to build more legitimacy for the alliance by choosing a name and a logo and developing a descriptive pamphlet. A mission statement was hammered out in larger meetings, with new members that were attracted by publicity efforts. A more formal structure for the group, including officers, a dues structure, and non-profit registration with the state, ensued. Street signs and flyers advertised public meetings, which in turn led to various activities: water quality testing each month, creek cleanups twice a year, park land acquisition, removal of invasive species, and public education efforts.

Embedded in this quick history of the emergence of a local environmental group are three intersecting dimensions: knowledge, meaning, and praxis. This tripartite distinction draws from the work on place attachment developed by Low and Altman (1992; see also Barlett 2005) and illuminates different dimensions in our review of structures for action. Information-sharing, for example, builds the group, but does not necessarily bring with it emotional ties or deeper meaning, either felt towards the group or towards the creek (see Louv 2006: 1). Knowledge can remain separate from meaning (as well as from action). Meaning, however, can emerge from factual knowledge or it may exist separately. The affective dimension is often fostered by the activities of the group—especially by seeing a great blue heron feeding in the creek, in the heart of the city (and near one's home). Emotional attachment or meaning may also precede the scientific information learned from the watershed alliance group. Thus, knowledge and meaning are separable, but often linked.

Action can likewise be seen as an outcome of sufficient knowledge, together with the values and ethical stances that support mobilization to action (Ajzen 1991, Blake 2001, Dietz et al. 1998, Oreg and Katz-Gerro 2006). But such a sequence is not essential; action can sometimes come first (Kitchell et al. 2000). For example, the father of a Boy Scout whose troop committed to a creek cleanup became involved in activities of the Rock Creek Watershed Alliance out of a desire for time with his son and with neither knowledge nor affective meaning attached to the creek work. Likewise, a teenager headed to the mall may value her friend's companionship sufficiently to be persuaded to attend a community hearing or rally instead, thereby becoming exposed to new environmental knowledge and meaning. Many are the stories of later leaders who began their careers through some unexpected action,

without benefit of knowledge or meaning with regard to a particular cause, both of which were developed subsequently.

With this overview of the three dimensions, we turn now to the nine structures we have identified that foster action among members of local environmental groups.

Structures to Action Internal to the Group

1. The group itself provides a structure to action in several different ways. First, face-to-face interactions can generate trust within the group and provide a container or support system, which can be crucial if the group coalesces around a controversial issue. At a more basic level, the group's name, mission, and logo contribute to a sense of belonging to an organized effort. Of course, groups may find this social process an occasion for conflict and dissention as well as creativity, but in order for the group to survive, some degree of positive social capital must emerge, and this fosters action.

We identify two additional ways that groups provide structures to action, each of which revolves around the *knowledge* dimension identified above.

2. Knowledge creation and then dissemination are usually critical early steps. Once an interacting group has been created, it shares knowledge and usually seeks to gather more. In Delaware, groups of citizens called EcoTeams formed to pursue lifestyles with lower environmental impact. Beginning with reading about possible personal behavior and lifestyle changes, group members chose individual experiments in altering daily actions. Members described their experiences in personal narratives at subsequent meetings, and these discussions created group knowledge about successful strategies to change lifestyles to reduce environmental impact. Dissemination of knowledge within local groups often involves emails and websites, newsletters, pamphlets, posters, news articles and other means of sharing information gathered with others in the group (and, of course, with others outside the group, to be discussed later). For the EcoTeams, dissemination took place through a newsletter to a larger group of members and in later team meetings.

3. Individual expertise is fostered through the group's activities, often by common readings, discussions, lectures or videos. Such events allow members to practice using the information they are learning and master the unique vocabulary of the issues they address. The HazTrak Coalition in North Carolina, for example, a group that monitored potential environmental hazards, expanded the group's expertise by recruiting as members of the board of directors different stakeholders, such as farmers and owners of recycling companies. They also invited biologists and chemists to provide expert opinions to educate the group in preparation for opposition to environmentally harmful activities. In this way, the expertise of members was strengthened, and the group as a whole became a clearinghouse for critical scientific information on environmental issues. Regardless of whether the information gleaned from such interactions, meetings, and "classes" contributes to the development of new structures, the simple acquisition of such information is crucial. Individuals begin to associate what they have learned with the local

environmental group, strengthening their commitment to the organization and interest in the issue(s).

We identify three other structures to action that are more related to the *affective, meaning-making component* of the local environmental group.

4. Problem recognition is a transition that occurs in an individual's understanding of a local situation, when the situation is redefined as something that requires action and acquires new meanings (Azjen 1991, Dietz et al. 1998). As group members become more educated about issues, the disjuncture between their values or worldview of how things ought to be and their perceptions of local realities leads them to discern a need to act. Simply defining an issue as a problem can be a helpful step toward action. For example, Rock Creek Watershed Alliance members became aware that the creekbed was widening and trees were falling in at a growing rate, as a result of runoff from impervious surfaces. Water quality testing also showed damage to stream habitats from erosion and scouring in heavy rains. This problem was addressed with the development of some guidelines for homeowners to help them adopt new land use practices in their yards to reduce runoff and allow more water to penetrate the soil during heavy rains. The watershed alliance also pointed interested citizens to the pamphlets and websites of another group that provided guidance for "rain gardens" that create boggy patches to slow runoff.

Development of new messages, rhetoric, and rationales are also ways that the group supports action by articulating and supporting values, attitudes, and understandings of the environment as a whole or the issues in question. The group's messages provide new interpretations or refine existing interpretations, thus supporting a new system of meaning. Kegan's (1994) work suggests that revised worldviews in this way foster coherent actions on behalf of others and reduce the mental stress of coping with an imperfect world. Articulating compelling rationales for action and rhetorics that express common values also attracts new members to the group.

5. Peer support is another important way that the group fosters action. Encouragement to speak out or adopt some new daily behavioral practice is crucial for many individuals to act in ways that make both an objective and subjective impact. For example, one member of an EcoTeam in Delaware told the group that taking her own reusable grocery bags to shop made her feel uncomfortable, because others would "look at her funny." When this individual heard of others' similar behaviors and experiences, she came to consider her actions in light of the group's goals and values. She began to experience greater comfort in the action and greater confidence in the importance of continuing it. Especially when the group's goals require members to violate societal norms, such as trust for authority and passivity in the public arena (see generally Corral-Verdugo and Frias-Armenta 2006), peer support and empathy can be crucial to developing the personal courage to act.

One group provided peer support verbally in public contexts. In a public hearing about expansion of neighborhood incinerators, they called out "Uh-huh!" and "Say it!" to encourage each other. Members of another group were called "rednecks" at

a public event, their opinions dismissed by local officials as ignorant and backward. At their next public meeting, group members showed their solidarity by all wearing red bandannas around their necks. Audible and visible cues to the group provided emotional support in their efforts.

6. A new identity is a final way that groups foster the actions of individuals. As certain frames and meanings coalesce, and as a group begins to attract new members and redefine local reality, an individual may come to develop a new identity that is supported and maintained by the group. The individual's new identity can subsequently support action both for other individuals and for the group as a whole. An example is one farmer in North Carolina who opposed a hog facility seeking a permit to locate next to her farm. Through talking at a HazTrak Coalition workshop with self-identified environmentalists, this individual came to redefine herself as more than just a farmer, but also as an environmentalist. The HazTrak Coalition, she said, "explained to me that everything I was doing was basically what an environmentalist is, because I care so much about the environment." Subsequently, at a meeting with United States Department of Agriculture inspectors, this farmer spoke out against disparaging comments about environmentalists and supported her remarks by claiming the identity both of farmer and of environmentalist. Other people in the room then spoke out and expressed similar sentiments. Thus, the common ground offered by HazTrak helped her adopt a new identity that encompassed dimensions of her caring for the land, which facilitated her public actions.

The identity of the Nanticoke Watershed Preservation Committee as an environmental conservation organization was reinforced (and the range of actions the group would tackle was clarified) when they decided that trash pickup along the riverbank was an appropriate activity to support better water quality. Concerns about increased traffic from a new industry, however, were held not to be consistent with the group's identity, and that action was rejected. Thus, collective identities serve as supports and boundaries, as individuals navigate the immense numbers of concerns that can claim their time.

Turning now to praxis, the concrete ways that groups foster action, we identify three other structures to action.

7. Physical structures, such as baseball caps and t-shirts, are common among environmental groups. These visible carriers of the group's identity, logo, or message help legitimize the willingness to act. They may operate in all three dimensions: conveying information, articulating important values and meanings, and signaling appropriate action. The Neuse River Foundation members wear blue baseball caps to public meetings to show support for environmentally friendly policies. Likewise, commercial fishers and their business allies in North Carolina display blue ribbons, wear blue caps, or North Carolina Fisheries Association t-shirts to show solidarity. These visible cues provide an outward expression of their cohesion and their commitment around measures being proposed, which may further strengthen the bonds between existing group members as well as attract new ones.

8. Financial or technical support is another tangible way that groups foster action. Office space, grant funding, access to GIS mapping, or other physical resources can shift a vague willingness to do something into a coherent effort. Watershed alliances commonly provide water quality testing equipment and chemicals, which make possible the collection of scientific data. In some instances, watershed alliances have offered access to computers to enable contributions to a statewide database on water quality.

9. Telling stories is a final and particularly effective means of potentiating action within the groups studied. Stories convey information, reinterpret meanings, and offer examples of successful action (Caduto 1998, Kitchell et al. 2000). Groups can certainly be effective with a dry, science-based approach to their missions, but the vitality and optimism found in some of the most successful groups is fostered by storytelling. HazTrak board members take turns at meetings telling their individual accounts of how they went from being upset about an issue to actually doing something about it. In one case, Linda recalled feeling helpless about a rubble landfill coming to her area. At first, she did not know to whom to turn, but she learned how to contact her county commissioners and how to make a case to the county; ultimately the site of the facility was blocked. Such stories communicate possible avenues for effective action and provide encouragement that success is possible. They allow individuals to identify with the speaker and overcome personal hesitations. Storytelling can also provide peer support, as with EcoTeam members who relate their personal experiences in reducing consumption, thereby encouraging other group members also to change consumption patterns.

These nine structures to action each affect different stages of an individual's mobilization to act. Though environmental actions emerge from a diverse (and punctuated!) series of steps, and vary greatly from individual to individual and within the same individual at different points of time and in different contexts, structures that support individual action by the local environmental group can be seen at various stages in the process of mobilization. A particular action requires some knowledge of the issue—fostered by the information created and shared within the group—which may lead to a well-developed expertise on the issue. A decision to act also generally assumes a more-or-less coherent value stance (attitudes, worldviews, or personal philosophy) on an issue, such that one concludes the action is desirable. Information about particular options to redress the problem must be combined with some of the skills needed—such as the ability to write a formal letter or to speak publicly or to organize a meeting. The group fosters an awareness and perhaps development of individual skills through its peer support and then galvanizes action through its physical structures.

Structures to Action External to the Group

Whereas the *internal* structures discussed above facilitate environmental action by individual members as members of the local environmental group, *external* structures support action outside of the group by offering means for nonmembers to take action. The same "dimensions" apply in this section as in the previous section, but the structures manifest themselves in different ways.

1. Physical Structures, such as public recycling bins, encourage new behaviors not only to group members, but also to community members who may not be aware of the group. The Newark High School Nature Society lobbied school administrators to place recycling bins in more numerous and more convenient locations. This provided a structure to reduce waste for all who moved through the school facility. Such a project can increase recycling behaviors with little additional knowledge, if students simply use the bins as convenient waste receptacles. Alternatively, the bins can convey both greater knowledge about recycling and the value of reducing the waste stream. In this way, bins can function as a means of *external* (as well as *internal*) knowledge dissemination (#2 above). They can also provide a form of peer support (#5 above): an individual seeing the bins may feel inspired or more confident to recycle at home even if he/she does not have anything to deposit in the bins at the moment of encounter. Likewise, many watershed alliances stencil painted fish logos near street storm drains, together with a warning against dumping trash or paint, since the site "drains to stream." Such a logo conveys powerful environmental information and may assist individuals in making other connections between their behaviors and their ecological footprints. On the other hand, they may be read as simply a legal warning against dumping paint or chemicals in the street. Both structures to action, however, regardless of what knowledge or meaning is conveyed to the passerby, do intrude on previous habits and offer an opportunity for change, both in behavior and in awareness.

2. Group networking is another way in which organizations contribute to the development of environmental concern and action by linking groups and facilitating communication across different communities of knowledge (Jasanoff 1997). Some local environmental groups attempt to *bridge the knowledge and expertise* of a state or federal agency with that of the local community. The Delaware Nature Society's Stream Watch program, for example, created a database of information on the health of Delaware's streams. Although sponsored by the Delaware Department of Natural Resources and Environmental Control, the data in the Delaware Nature Society's database were gathered by coordinated efforts of local community volunteers from the group and subsequently by members of other local environmental groups, such as the Newark High School Nature Society, the White Clay Creek Watershed Alliance, and the Nanticoke Watershed Preservation Committee.

Such bridgework among local groups and other agencies may be essential to the group's success and may forge common ground, but it may also serve confrontational purposes. In some instances, the local environmental group may simply function to *transmit information*, such as a new policy or practice that the state is attempting to try or implement. Green Delaware, a group concerned about new power plants and the status of clean-up efforts to reduce emissions from energy generation, gathered and publicized information by attending regulatory agency hearings and monitoring energy companies' plans and performance. The local group need not articulate a particular stance, but may simply *facilitate the flow of information* from the government or corporation to the people of the

region. In other instances, the group may function as somewhat of a *watchdog*, sounding the alarm once the state, federal, or corporate entity attempts to undertake an action of which the local environmental group disapproves. Here, the local group disseminates information, but also draws a distinction between state-sponsored action/inaction and local environmental group-sponsored action/ interaction. The HazTrak Coalition, for example, monitored potential hazardous waste deposit sites and reported law violations, publicizing each case, whether it involved governmental action/inaction or private companies. In the context of environmental justice, some local environmental groups *built networks with mainstream environmental organizations* with expertise in social justice and civil rights issues in order to build a broader movement or mobilization. In these ways— by bridging the knowledge and expertise of a state or federal agency with that of the local community; transmitting information that the state is attempting to try or implement; enabling and improving the flow of information; serving as a watchdog; and building linkages with mainstream environmental organizations—the local environmental groups effectively present multiple paths of environmental action to a broad community of nonmembers and members of other groups, facilitating their environmental action goals and/or building their membership base.

   3. Legal/Political structures to action: Most U.S. environmental law grants administrative agencies significant discretion in implementing particular legislation and provides interested parties with the opportunity to engage with these agencies in rulemaking. This engagement may include critiquing environmental impact statements, commenting on proposed regulations, participating in scientific advisory committees, providing data and information for agencies, and testifying at administrative hearings.

   For example, opportunities for public comment are required under the Coastal Zone Management Act, Comprehensive Environmental Response, Compensation and Liability Act, Endangered Species Act, Federal Land Policy Management Act, the Multiple Use and Sustained Yield Act, National Forest Management Act, and the Resource Conservation and Recovery Act, among others. These comments are not simply *pro forma*. The Resource Conservation and Recovery Act contains provisions for public comment and encourages the public to report to the Environmental Protection Agency any exposure to hazardous waste at treatment, storage, and disposal facilities. The Federal Land Policy Management Act requires the Bureau of Land Management to provide opportunities for the public participate in the formation and, when appropriate, revision, of plans and programs relating to the management of public lands. As a last resort, most of these statutes grant interested parties the opportunity to sue administrative agencies that fail to fulfill their legal duties (Beierle and Cayford 2002, Brisman 2007, Cole 1992, Mitchell et al. 1992).

   Environmental groups differ with respect to the types of public participation and environmental action in which they engage, as well as the stages in the legislative process. Some groups take an early, active and eager role in the comment process of a draft environmental impact statement; other groups enter later on, litigating

to challenge an agency's failure to consider public comments on the draft impact statement. Because of the cost and expertise required, local environmental groups may favor letter-writing campaigns to legislators, participation at public hearings, and other efforts at broad mobilization, while mainstream environmental organizations may opt for the familiar strategies of "litigation, lobbying, and technical evaluation" (Cole 1992, 635 n.46), mentioned at the outset of this paper.

Although outside the scope of this article, we note that direct action, legal and illegal, can also be part of political structures to action. Unlike the "environmentalist center," such as the Sierra Club and the National Resources Defense Council, which favor "conventional channels of political action" (Dryzek and Lester 1995, 328-29), more radical groups such as Greenpeace, Earth First! and Earth Liberation Front (ELF) prefer direct action (Manes 1990, Rosebraugh 2004, Scarce 1990). When group members chain themselves to logging equipment, block access to forests or ports, or destroy vivisection labs or SUV dealerships, their actions cross from the legal to the illegal realm. While such direct action obviously can serve to inspire and educate others to act (see Brisman 2008, 2009a), it can also serve as a means of knowledge dissemination, facilitating law-abiding environmental action in others. Finally, illegal environmental behavior may serve to strengthen the group identity of law-abiding local environmental groups, who can better delineate their mission goals and structures in comparison to more radical groups.

4. Reputation: As a group develops expertise and shares it publicly, it develops credibility with external entities such as local corporations or governmental agencies. Such a reputation supports the future actions of individual members and makes them more effective, while also enhancing recruitment to the group. Particularly in situations requiring scientific testimony, presentations of alternative accounts of current history (see #9 above), or disputes of fact, the past actions of a group can lighten the burden of current actions. An environmental group that has carried out past successful lawsuits or regulatory appeals is particularly well positioned to gain attention when it raises a new issue. Zoning meetings or interactions with government officials or corporate attorneys can be made very difficult when the reputation of the group is poor or not yet established. A strong reputation makes the group's comments and recommendations more legitimate to powerful actors on the local level. For example, the Delaware Nature Society recruits current and former government and industry employees to their advocacy committee to improve the group's understanding of governmental regulations and procedures and the environmental damage mitigation techniques used in their opposition of commercial, large-scale hog farms and rubble landfills.

Conclusion

Much of the research on environmental organizations has been conducted at the macro level with the concentration on large, national organizations. Research on local environmental groups has tended to center on *whether* (but not *how*) organizations have contributed to the development of environmental concern.

Taking the local environmental group as our unit of analysis, we used data from nineteen local environmental groups in North Carolina, Georgia, and the Delmarva Peninsula, and engaged in participant observation of their meetings and events. We identify both internal and external structures for action to facilitate engagement by their members and by other local citizens. Both internal and external structures contain three dimensions of environmental action: knowledge, emotion/affect, and practice.

In outlining thirteen structures, we have explored a typology for *how* organizations have contributed to the development of environmental concern. While our data have enabled us to distinguish organizational capacities, strategies to build participation, and new supports for identity, our data are insufficient to assess which structures are more effective. Although *problem recognition* was vital to the formation of the Rock Creek Watershed Alliance and *peer support* integral to the vitality of the EcoTeam in Delaware, the nature of each group (i.e., the issue or problem around which it forms or orients itself) may preclude some structures or make others more successful, and thus future study will be necessary to determine patterns of efficacy.

As activist readers and researchers explore further the intersections and overlaps of these structures, we expect that some groups will use a wider menu of structures and find them very effective. For other groups, a more limited palette will increase the likelihood of success. There may be principles or properties of the above-mentioned structures that affect the nature of their interaction; likewise, there may be a tipping point—a number or combination of structures that no local environmental group can support.

Finally, our paper suggests, but does not dictate, a temporal sequence to the formation of structures. For some groups and individuals, the dimension of affect will precede knowledge. For others, it will be the opposite. And for still other cases, some local action may be undertaken before the local group is even formed. But *physical structures* are unlikely to precede *group formation* and for some individuals—especially those involved in establishing the group—the physical structures will represent a logical continuation of *problem recognition*. For newcomers to the issues, we expect that the physical structures will trigger problem recognition and may lead to new individual and/or collective environmental action and new identities.

As greater environmental responsibility and awareness are emerging in many areas of the United States and strengthening momentum toward sustainability (Brisman 2009b), we hope our understandings can strengthen that movement. Perhaps other kinds of social issue-oriented groups may find our analysis useful as well. In addition to outlining the diverse structures for action, our goal is to encourage emerging groups to think about how to support their own efficacy. This review of structures may encourage a group to ask: "Do we need to network?" "Can we strengthen our expertise?" "Would we be better off in recruitment of new members with a cap or t-shirt or newsletter?" Groups that have disseminated information but experienced little mobilization to action might want to look at

the meaning-making dimensions of their work and the extent to which their social interactions build trust or social capital among members. "Is there sufficient time for story-telling?" "Are the group's activities fun?" and "What else can we do?" Such an outcome in praxis will enhance the meaning-making of this effort at knowledge dissemination.

Acknowledgements

References Cited

Ajzen, I.
  1991 The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes 50:179-211.

Aronson, H.
  1993 Becoming an Environmental Activist: The Process of Transformation from Everyday Life into Making History in the Hazardous Waste Movement. Journal of Political and Military Sociology 21 (Summer): 63-80.

Barlett, P.F.
  2005 Reconnecting with Place: Faculty and the Piedmont Project at Emory University. In P.F. Barlett (Ed.), Urban Place: Reconnecting with the Natural World. pp. 39-60. Cambridge, MA: MIT Press.
  2002 The Global/Local Paradox: Emerging Visions of Sustainability among Grassroots Groups. Paper presented at the Conference on Globalization of the Claus M. Halle Institute for Global Learning, Emory University, and Bogazici University. May 31. Istanbul, Turkey.

Beierle, T.C., and J. Cayford
  2002 Democracy in Practice: Public Participations in Environmental Decisions. Washington, D.C.: Resources for the Future.

Blake, D.E.
  2001 Contextual Efects of Environmental Attitudes and Behavior. Environment and Behavior 33(5):708-25.

Brisman, A.
  2009a. Direct Action as Conceptual Art: An Examination of the Role of the Communiqué for Eco-Defense and Animal Liberation. Paper presented at the 2009 American Society of Criminology Annual Meeting, Philadelphia, PA (Nov. 5, 2009).

2009b. It Takes Green to Be Green: Environmental Elitism, "Ritual Displays," and Conspicuous Non-Consumption. North Dakota Law Review 85(2):329-370.

2008 Crime-Environment Relationships and Environmental Justice. Seattle Journal for Social Justice 6(2):727-817.

2007 Toward a More Elaborate Typology of Environmental Values. New England Journal on Criminal and Civil Confinement 33(2):283-457.

Caduto, M.J.
  1998 Ecological Education. Journal of Environmental Education 29(4):11-16.

Chawla, L.
  1998 Significant Life Experiences Revisited: A Review of Research on Sources of Environmental Sensitivity. Journal of Environmental Education 29(3):11-21.

Cole, L.F.
  1992 Empowerment As the Key to Environmental Protection: The Need for Environmental Poverty Law. Ecology Law Quarterly 19:619-683.

Corral-Verdugo, V. and M. Frías-Armenta
  2006 Personal Normative Beliefs, Antisocial Behavior, and Residential Water Conservation. Environment and Behavior 38(3):406-421.

Costain, W.D. and J.P. Lester
  1995 The Evolution of Environmentalism. *In* Environmental Politics and Policy: Theories and Evidence, 2d ed. J.P. Lester, ed. Pp. 15-38. Durham: Duke University Press.

Dietz, T., Stern, P.C., and G.A. Guagnano
  1998 Social Structural and Social Psychological Bases of Environmental Concern. Environment and Behavior 30(4):450-471.

Dryzek, J.S. and J.P. Lester
  1995 Alternative Views of the Environmental Problematic. *In* Environmental Politics and Policy: Theories and Evidence, 2d ed. J.P. Lester, ed., Pp. 314-330. Durham.: Duke University Press.

Dunlap, R.E.
  1995 Public Opinion and Environmental Policy. *In* Environmental Politics and Policy: Theories and Evidence, 2d ed. J.P. Lester, ed. Pp. 63-114. Durham: Duke University Press.

Edwards, A.R.
  2005 The Sustainability Revolution: portrait of a paradigm shift. Gabriola Island: New Society Publishers.

Gottlieb, R.
   1993   Forcing the Spring: The Transformation of the American Environmental
            Movement. Washington: Island Press.

Hansis, R.
   1995   The Social Acceptability of Clearcutting in the Pacific Northwest. Human
            Organization 54(1):95.
Hawken, P.
   2007   Blessed Unrest: How the Largest Movement in the World Came into Being
            and Why No One Saw It Coming. New York: Viking.

Ingram, H.M., D.H. Colnic, and D.E. Mann
   1995   Interest Groups and Environmental Policy. *In* Environmental Politics and
            Policy: Theories and Evidence, 2d ed. J.P. Lester, ed. Pp. 115-45. Durham:
            Duke University Press.

Jasanoff, S.
   1997 NGOs and the environment: from knowledge to action. Third World
            Quarterly 18(3):579-94.

Kegan, R.
   1994 In Over Our Heads: The Mental Demands of Modern Life. Cambridge:
            Harvard University Press.

Kempton, W., Boster, J., and J. Hartley
   1995 Environmental Values in American Culture. Boston: The MIT Press.

Kempton, W., Holland, D., Bunting-Howarth, K., Hannan, E., and C. Payne
   2001   Local Environmental Groups: A Systematic Enumeration in Two
            Geographical Areas. Rural Sociology 66(4):557-578.

Kitchell, A., Hannan, E., and W. Kempton
   2000 Identity through stories: Story structure and function in two environmental
            groups. Human Organization 59(1):96-105.

Kitchell, A., Kempton, W., Holland, D., and D. Tesch
   2000 Identities and Actions within Environmental Groups. Human Ecology
            Review 7(2):1-20.

Kushins, J. and A. Brisman
   2005   Learning from Our Learning Spaces: A Portrait of 695 Park Avenue. Art
            Education 58(1):33-39.

Lam, S-P., and J-K. Chen
   2006 What Makes Customers Bring Their Bags or Buy Bags from the Shop? A
            Survey of Customers at a Taiwan Hypermarket. Environment and Behavior
            38(3): 318-332.

Low, S.M. and I. Altman.
    1992 Place Attachment: A Conceptual Inquiry. *In* Place Attachment. I. Altman
        and S.M. Low, eds. Pp. 1-12. New York: Plenum.

Louv, R.
    2006 Last Child in the Woods: Saving Our Children from Nature-Deficit
        Disorder. Chapel Hill: Algonquin Books.

MacNaghten, P. and J. Urry
    1995 Towards a Sociology of Nature. Sociology 29(2):203-20.

Manes, C.
    1990 Green Rage: Radical Environmentalism and the Unmaking of Civilization.
        Boston: Little, Brown.

Mitchell, R.C., A. G. Mertig, and R.E. Dunlap
    1992 Twenty Years of Environmental Mobilization: Trends Among National
        Environmental Organizations. *In* American Environmentalism: The U.S.
        Environmental Movement, 1970-1990. R.E. Dunlap and A.G. Mertig, eds.
        Pp. 11-26. New York: Taylor and Francis.

Moberg, M.
    2001 Co-opting justice: Transformation of a Multiracial Cnvironmental Coalition
        in Southern Alabama. Human Organization 60(2):166-77.

Oreg, S. and T. Katz-Gerro
    2006 Predicting Proenvironmental Behavior Cross-Nationally: Values, The
        Theory of Planned Change, and Value-Belief-Norm Theory. Environment
        and Behavior 38(4):462-83.

Palmer, J.A.
    1993 Development of Concern for the Environment and Formative Experiences
        of Educators. Journal of Environmental Education 24(3):26-30.

Paolisso, M. and R. Shawn Maloney
    2000 Recognizing Farmer Environmentalism: Nutrient Runoff and Toxic
        Dinoflagellate Blooms in the Chesapeake Bay Region. Human Organization
        59(2):209-21.

Rosebraugh, C.
    2004 Burning Rage of a Dying Planet: Speaking for the Earth Liberation Front.
        New York: Lantern Books.

Ryan, G.W. and H.R. Bernard
    2006 Testing an Ethnographic Decision Tree Model on a National Sample:
        Recycling Beverage Cans. Human Organization 65(1):103-14.

Scarce, R.
    1990 Eco-Warriors: Understanding the Radical Environmental Movement. Chicago: The Noble Press, Inc.

Shabecoff, P.
    1993 A Fierce Green Fire: The American Environmental Movement. New York: Hill and Wang.

Stevenson, G.W., Ruhf, K., Lezberg, S., and K. Clancy
    2007 Warrior, Builder, and Weaver Work: Strategies for Changing the Food System. *In* Remaking the North American Food System: Strategies for Sustainability. C.C. Hinrichs and T. Lyson, eds. Pp. 33-62. Lincoln: University of Nebraska Press.

Tanner, R.T.
    1980 Significant Life Experiences. Journal of Environmental Education 11(4):20-24.

Taylor, B.
    2002 How Do We Get from Here to There? *In* Sustainable Planet: Solutions for the Twenty-first Century. J.B. Schor and B. Taylor, eds. Pp. 233-51. Boston: Beacon Press.

Table 1. Local Environmental Groups Studied

Blue Ridge Gamelands Group (North Carolina)
Citizens Unite (North Carolina)
Concerned Citizen of Rutherford County (North Carolina)
Delaware Nature Society
Delaware Sierra Club
Ducks Unlimited (Delmarva)
Earth First! (North Carolina)
Earthaven (North Carolina)
EcoTeam (Delmarva)
Green Delaware
HazTrak Coalition (Delaware)
Nanticoke Watershed Preservation Committee (Delmarva)
New River Fishing Association (North Carolina)
Newark High School Nature Society (Delaware)
Pamlico Fisherman's Auxiliary (North Carolina)
Ruckus Society (North Carolina)
Student Environmental Action Coalition (Delaware)
Tangier Sound Watermen's Association (Delmarva)

(from Kitchell et al. 2000: 3)