

CHAPTER 5. PALMERTON CITIZENS FOR A CLEAN ENVIRONMENT: NEGOTIATING POWER FROM THE MARGINS

“An increasingly noticeable feature of American society is the presence of newly formed groups of private citizens concerned with preventing and preparing for possible disasters or with recovering from actual impacts of such types of community crises.”

(Quarantelli, Characteristics of citizen groups, 1989, p. 177)

“We wouldn’t be doing this if we didn’t love Palmerton.”

(Theresa Roberts, PCCE member, quoted in Fortney, 1991b, p. D5)

Freire (1986) wrote that although people are conditioned in thought and behavior to serve the interests of the group that dominates them, they have the potential to overcome that conditioning. During my tenure with the residents of Palmerton, I searched for resistance to the hegemony of the industrial-alliance’s dominant discourse. One day while going into the Palmerton Library, I spotted a used book-cart with texts for sale in the entrance way. A volume caught my eye titled, *As we Breathe: The Challenge of our Environment* (1971). It’s 239 pages were a testimony to the environmental damage inflicted on the earth by human behavior. Successive pages repeated the same story of a plundered environment: “Man, in his quest for progress, has blighted the air, the land, and the water” (p. 3). The library was purging a book that told the tales of many American cities and rural spaces, including Bartlesville, Oklahoma, (p. 217), a site owned by Horsehead Industries. Palmerton could have easily been a chapter in the book. Turning the pages, I could not help but wonder whether the library was selling this for fifty cents because of it’s contents, which included vignettes of successful citizen fights against industries. Eliminating such texts would undoubtedly aid in maintaining citizens’ conditioning to contamination. Could such lines seed seditious thoughts of resistance that would lead citizens to transform the relationships which sustained pollution and social control? The

book announced such bold statements as, “Action--not just words--is what has been taking place [across America]. Local groups have banded together to fight pollution...they have battled against air pollution...and have begun clean up campaigns. Helping these citizens achieve their goals has amounted to a...revolution in America” (p. 229). Were provocative ideas like this too dangerous to remain in public circulation?

Resistant Grassroots “Girls” Uncover The Possibility Of Public Articulation

Palmerton Concerned Citizens for the Environment was a group similar to those described in the text, *As we Breathe*. In 1990, six women banded together to act and not just talk about the potential human health impacts of industrial contamination. Finger, (1994) has shown that environmental catastrophes are a major stimulus for “social environmental behavior and social behavior change” (p. 147). Palmerton’s women were a portion of the community’s reservoir of (unwitting) “intellectuals” who pondered their lifeworld and held meaningful conceptions about it. During several years of contact with PCCE, I had come to learn that the resistance these organic intellectuals offered to the hegemonic center and its allies was not informal, disorganized and apolitical as Miller (1983) has show for some groups. Too, many of PCCE’s actions were more than resistance behaviors, they were counter-hegemonic, entailing “inherently educational work” (Lather, 1984). Counter-hegemonic groups are known to: articulate a clear theoretical consciousness that empowers individuals to both understand and act upon their discontent; to work to raise the intellectual level of the public; to concern themselves with constructing alternative ideologies, institutions, and cultures; and to demonstrate a lived experience of how the world can be different. The women were “intellectuals” in the sense of Giroux, Shumway, Smith and Sosnoski (1985). They were “mediators, legitimators, and producers of ideas and practices; they [performed] a function that was eminently political in nature” (p. 478).

The Palmerton Citizens for a Clean Environment was founded for the purpose of negotiating the meaning of exposure to toxic waste. They organized to challenge the privileged narrative of the dominant group. One motivation for incorporation was the realization that “nothing was being done about [toxic waste]” in their community (Fortney, 1991b, D5). Relative to Superfund, they focused, in part, on cleaning the contamination in homes and yards, as well as on public property. PCCE was a grassroots movement engaged in a contest to modify the social and political “rules” that governed lives in Palmerton. They were participants in the struggle to mobilize citizens for change, as well as to position themselves for access to the environmental decision making process. Performing the latter brought them in direct conflict with PETF.

PCCE has many characteristics and behaviors including, articulation and diffusion of an alternative world view that promotes skepticism regarding the dominant discourse among the community; politicization of people, especially regarding the lived daily experiences of exposure to heavy metal toxins; members transcended private concerns; and they asserted leadership in transforming the culture. Although Salamini (1981) found that groups generate skepticism of traditional intellectuals, PCCE supported and purveyed traditional intellectual products; most of the positions to which they subscribed were articulated by government, academics, or specialists. In Palmerton, the alternative view that PCCE promoted was most often in conformity with the federal regulatory bureaucracy--a view which the community at large opposed. Of significance is the fact that progressive groups, including PCCE, have the potential to reinvent the possibility of public articulation; struggle to make sense in a way different than the dominant group; contest the meanings in key signifiers in the culture; bring a renewed vision of the world to a situation; help others to understand the uneven distribution of knowledge, resources and power; critique the *status quo*; and challenge the acts of domestication, silencing, and dismissal performed by the dominant group. Like all human agents, members in the organization were found to have multiple social positioning and complex identities.

Members of PCCE identified their organization as both a political pressure group and a self-help supportive group, similar to those formed in response to toxic contamination at Love Canal (Levine, 1982, p. 175) and at other sites (Hill, 1995a; in press). PCCE was a voice for some citizens who were inhibited from doing the kind of education and action to which PCCE was dedicated. However, as we have seen, to some they were “a bunch of ‘loudmouths’ and ‘troublemakers’ ” (Fortney, 1991b, D5). Despite these characterizations, there have never been protests, civil actions or collective activist behaviors by them in Palmerton. Yet, members of the industrial alliance continue to mark them as “other” and make available a discourse that allowed disfranchisement. This led to such statements like that provided by a 93-year-old resident who claimed he was “disgusted with the folks who are making all of the hullabaloo,” referring to PCCE members (p. D5).

PCCE, similar to other ECGs (Quarantelli, 1989), has a small but very active core group, a slightly larger support group, and a number of nominal supporters. Characteristics identified by Quarantelli, applicable to PCCE, include: group activities outside of the core tended to be sporadic and episodic; core members devoted very large blocks of time to the board; core members had only a general perception of the other members’ specific attitudes and beliefs; women were more active than men; decisions were made by a type of consensus or informed consent; questions rather than demands constituted the initial bulk of communications with governmental agencies; strategies that had been adopted were intended not to convey the signified notion of “radical” to the larger community; and the ECG had a charter, a newsletter, and several fund raising events each year. PCCE differs from the general characteristics of ECGs provided by Quarantelli in that they: developed an ecological model of interdependency for leadership that allowed and encouraged differences in the core group; maintained the “question style” rather than the “interrogation/listing of demands style” of interaction with government; did not primarily seek or sustain outside help from other ECGs or mainstream environmental alliances; moved beyond a single issue posture; and they had no horizontal networking with other ECGs in the local area.

From Borrowed Spaces, the Emergence of PCCE

“Leave your thoughts, Woman! on the sewing room floor...Leave fact to the scientist and engineer and politician who care not for essence of family or community...Meddle not in the affairs of the boardroom or The House. You are-Just a Housewife-/Stay in your kitchen, Oh Woman! do not pretend to know ought. Be not fooled by your heart that you, Woman! are One. Avoid all knowledge-your brain but a pea. Think not; be not muddled by life’s mysteries. You are but a housewife-Be glad and be still! Can’t you see? Oh, Woman!/You’re not a man- Climb not the Master’s Hill.

(Environmental activist Helen MacDonald, “Just a Housewife,” 1994, p. 22)

In 1990 when six women banded together to form the Palmerton Citizens for a Clean Environment, the first grassroots organization emerged in Palmerton. Its members took a position that favored the federal USEPA clean up, supported the (weak) state Department of Environmental Resources’ efforts to have industry comply with permit conditions; pressed for government environmental reform where regulations or policies were inadequate; and expressed grave concerns about health and environmental issues in the borough. Since this time, the community has become engaged in multiple contests over “environmental questions” including whether the residents are at risk due to the contamination and toxic exposure which were faced daily by them, at the hands of the zinc industry. A non-exhaustive list of the issues that evoked contested understandings were: whether the source of contamination was due to past industrial practices, present metal recycling activities, non-industrial origins like lead paint or automobile exhaust; the threshold of allowable levels of pollutants to be established for the final record of decision; the role of risk assessment in setting those thresholds; the use of appropriate technologies for measuring, monitoring and remediating the contamination; who would be liable for clean up costs; who would qualify for both interim and final clean up; whether the “rules” for decontamination were being executed properly by USEPA; whether the industry-sponsored

Neighbor Helping Neighbor program was a greenwashing process to merely “revegetate lawns” rather than an effective decontamination scheme; whether the zinc company agreed to reclaim 1,000 or 2,000 acres of barren and poisoned mountainside; whether the mountain remediation was “successful” or was the newly planted vegetation acting as metal accumulators and making poisons more bioavailable; where to dispose of contaminated dredged material from the Aquashicola Creek (a stream designated by the state environmental agency as suitable for “waste accumulation”); how to cap and contain the heavy metals in the 33 million ton hazardous waste pile in the borough--as well as how to extinguish the fires burning beneath its surface; whether drilling deep wells into the drinking water aquifer to determine its quality was prudent--the list goes on seemingly interminably!

In the late 1980s, Horsehead Resource Development Company sought a state storage permit for a hazardous material they recycled at the Palmerton plant called Electric Arc Furnace Dust, or EAF, a hazardous material. Although the declaration of the locality as a Superfund site in 1982 did not trigger a high level of resistance behavior *to the company*, the announcement of an application for a storage permit several years later did. The latter was a trigger that became an energizing event, giving oppositional shape to previously perceived forces in the social sphere. The storage permit provoked a sense of saliency. Despite long-standing contamination problems associated with Superfund, the announcement of an application was a prominent and conspicuous event which generated perceptions of immediate, communal, and personal hazards. It signified that problems were “vital,” concrete,” and “near at hand.” Saliency, in turn, was the trigger that accelerated an industrial alliance backlash targeted at these elements of saliency. The “condition” (it was not defined as a problem) was long-term and therefore distant, historic, abstracted, and not of much significance. To “prove” this, proponents of the industrial point of view called attention to longevity of residents and the community sentiment that “Palmerton was a nice place to live.”

In response to the storage permit, citizens began to talk within social networks, independently, in an attempt to make sense of what the permit, if issued, might mean. It was from these informal gatherings that PCCE was born. Several locations in the unfolding of

consciousness and behavior through which PCCE members have passed in their personal and collective journeys are apparent. Although appearing wholly linear, the stages on occasions were episodic:

(1.) *Initial feelings of eccentricity, isolation and “aloneness.”* Initially, many respondents assumed they were peculiar or “strange” for concerns about pollution, despite the obvious death to the mountain and observable degradation of lawns and gardens. Several used the self-description, “oddball.” Kada Rehrig reported believing that she “privately felt that I looked at things differently than a lot of people” (7/19/96, lines 352-354). Seeking answers related to the question, “Who am I?” was the first in a series of “classical philosophical searching” (see Stanage, 1997; Sissel, et al., 1997) that many of the women experienced.

(2.) *Discerning the presence of others similar to themselves, with comparable concerns, values and interests.* This position allowed the development of an identity of “similarity” and the potential for group membership and belonging. Coming together in solidarity, a fact made possible by the women opening a space for question-making, and for generating sense in a way different than was done before disrupted feelings of isolation.

Tess was amazed that she “could find five other people in the community who were annoyed by the pollution and what the industry was doing” (lines 1627-1641). She reported that in 1988 there were “just isolated cases” of people questioning whether the environmental situation was perilous. She said, “there was a group of people who, unbeknownst to me, really felt...the same way. We didn’t know enough--and that the industry was taking a lot of liberties...and that small group of people, we met once or twice after 1988--this was before PCCE was ever thought of--and we would talk about things....A lot of the others in that group had a lot of fugitive knowledge that they brought to the table” (7/19/96, lines 273-289). Louise Calvin felt, “is anybody else in the whole world seeing the problem here or am I all alone?...am I crazy? It’s always nice to have the support of people who think as you do...in an issue like this”

(7/30/96, lines 667-676). This route of inquiry revealed another element of the classical framework of philosophical questioning which some members shared, “What can I know?”

Kathy Ozalas related the early history of a growing community awareness of the environmental situation. She had written a paper on Palmerton and heavy metal contamination for a nursing class, parts of which made their way into the local press. “At the swimming pool during a swim meet one of the other mothers came up to me and started asking questions....She was asking me basically, do you think there’s a problem here, and I said, ‘Yes I do.’ And she said ‘I do too.’ And she asked me if I was aware of the application for a [hazardous waste] storage permit. And I said no, I didn’t know anything about that. And she asked if I’d be willing to get together with her and a couple of friends, to talk about it. And I said, ‘sure, why not, this would be great.’ So we did” (8/16/96, lines 158-174). The group of women became, in time, the founders of PCCE. Kathy went on, “This wasn’t PCCE at the time, it was just a couple of women.”

It has been noted that most environmental mobilization done at the local level originates with women (Edwards, 1995, p. 38). More often than not, this is by women with little or no prior political experience (Krauss, 1993a) and for whom politics was previously considered empty (Greider, 1992, p. 167). It has been characterized as a “movement of housewives” concerned primarily for the health of their families and communities. Palmerton in some ways replicated this pattern. During this time Linda Holland, too, was talking about the hazardous waste storage permit with a few of the women in town. She reported that prior to the newspaper announcement for a storage permit, no one knew “what [the company] was exactly doing....We wondered, how could they have a storage permit? What are they even processing down there?”(7/22/96, lines 101-109). These and other questions related to the interrogative, “What can I know?”

By word of mouth Holland heard that there was a group of concerned women in the community. She reported “a girl lived down the street from me [who knew about them], so I found her and she said, ‘Yeah, come to our organizational meeting.’” This began the third level

of classical philosophical questioning, “What ought I to do?” Linda’s first action was to go to meetings to learn more about the situation.

The picnic area of the public swimming pool became borrowed space for the women--a site of conspiracy against the community script. It was the first of many shifting and overlapping sites of learning. Keeping their families in mind, Linda remembered they “decided on that place because at least the kids would have somewhere to play and not bother us” (lines 254-256). It was here that they spoke transgressive language, shared forbidden information, and read to each other reports and parts of booklets not sanctioned by the dominant group. They were trafficking in material banned in the industrial culture. Tess Roberts recalled lugging thick binders crammed with information to the picnic area where she reported they would “read and...file, and...tell our stories” (7/19/96, lines 390-394).

(3.) Making the acquaintance of concordant resistant intellectuals who thought “otherwise” to the community script. This stage entailed exploring differences with those not like themselves and commonalities shared within their growing identity. It meant abandoning the intentional refusal to know. Linda Holland emphasized, “we were always, always sharing [information]” (line 1216). Ellen Colangelo discussed this phase saying, some individuals passed out fliers telling “about the very first PCCE meeting--and as a matter of fact that wasn’t even the name--we came up with the name later” (7/20/96, lines 58-64). She attended because she “wanted to know more about what was going on [after] hearing other things besides there was a fire on the mountain [that killed it]” (lines 66-71). At these rudimentary organizing meetings, “the girls...gave out [information on the environmental contamination]” (lines 150-160), which Ellen found to be “pretty upsetting” (line 159). During this phase many of those who assembled did not know each other. Education was a key function at this stage; learning was instrumental. The thirst for information drove individuals to return and share their findings. Some brought texts and material from the library and outside organizations whom they contacted for the expressed purpose of garnering data and advice. Informal meetings of the concerned mothers were held “at different [private] places” (Ozalas, 8/16/96, line 185),

including “people’s kitchens” (Sandy Peters, 7/22/96, line 287), in addition to the swimming pool. Tess Roberts, as several others, talked about “meeting behind closed doors” (7/19/96, lines 356-362). For Louise Calvin, the opportunity to discuss information was important, but not as important as sharing feelings which occurred among and between like-minded women. She noted that most individuals would have preferred to have been on the side that was popular, adding, “but popular doesn’t make [a thing] right!” (lines 731-746).

(4.) Individuals resolved to raise unsheltered questions and to work as part of an emergent citizen group dedicated to the public articulation of specific knowledges not examined--or examined and rejected--by the dominant social group. As interest grew, so did the need for community meetings, moving from the closed circles of the committed few. The group was prepared to contest the privileged speaking location of those in the industrial culture. At meetings a sign-up sheet would be passed around. From the sign-up sheet, a list was constructed from which the organizers would “just call you and say, ‘Hey, you know, we’re going to have a meeting, do you want to come?’” (Colangelo, lines 237-239). The telephone was a key tool for the cohesion of the group and for the distribution of information outside of the founding women. Ellen reported that “after months and months when we got acquainted with each other, we were constantly on the phone! Constantly, constantly, constantly...I can remember the hours and hours” (lines 240-243). Conversations revolved around ways to appropriate industrialized signifiers and reinscribe them with new meaning. It was transformed into a powerful political tool. Ellen said that they discussed among themselves the company’s threats to shut down industrial operations (economic blackmail), the environmental situation which had previously been constructed as healthy and safe, and how to overcome labels (marked as the other) such as “troublemakers.” The phone gave them one of the ways to live in the space of negative representation. Kathy Ozalas, a school nurse, spoke of “phone calls from the time I got home from school until late at night, constant. DER, EPA, the other five ladies, other members, people who worked for the zinc company, reporters--everybody. It was

unbelievable” (8/16/96, lines 981-986). Gathering together gave the women a new sense of power, something that Edelstein (1988) has identified for other grassroots toxic groups as well.

Kada reflected on the use of the telephone in her and other members’ struggles. When asked what it felt like to make that first phone call to USEPA to raise a voice that defied the dominant community ethos and ask for help, she responded, “freeing, freeing...it was a freeing experience” (7/19/96, lines 828-833). She added, “the first phone call to EPA was hard for a lot of people to make.” The phone was the vehicle for: reporting violations, asking menacing questions, and challenging legislators and government officials to live up to the community’s expectations of them. The telephone was a relief valve for some. Louise Calvin reported that it was used by individuals to “scream and wail to each other” (line 1052) about the contamination, governments’ failings to protect human health and the environment, or against the industrial alliance’s behaviors that thwarted full and effective clean up. Almost all of those interviewed used the phone for discussions, organization, information gathering and educational exchange. The phone, too, was the medium through which members received threatening communications from those who wanted to stop their outspoken instigation.

One of the first moves of the inchoate group was to act by requesting a public meeting with the state environmental agency; the Department of Environmental Resources, refused the request. DER stated, “the [public comment] period had passed and there wasn’t enough interest in the community” (Ozalas, 8/16/96, lines 191-194). Kathy Ozalas recalled that “the women wanted to have a public hearing [on] the permit and so I helped them compose...a petition” (lines 184-199). The women’s response to DER’s initial denial for a meeting was to collect “hundreds and hundreds of names...requesting a public hearing which surprised DER and brought the attention of the media” (lines 195-199) after which the state DER agreed to a meeting.

The six women who had continued to confer together, prepared for the DER meeting on the storage permit. Unsheltered questions, interrogatives no longer consealed, were used as a means to excavate specific knowledges anathema to the dominant discourse. Tess said, “I had an inkling...of what would transpire...I wasn’t naive enough to think that it wasn’t going to

create controversy because we just never talked about these things in this community. We never could go down the street and say, 'Oh, look at that mountain.' You know, I had an inkling that once we did this there would be a lot of feedback. This would generate a lot of stirring in the community. And it has, and it has" (lines 26-82-2700). One result of that stirring was women-leadership in Palmerton. For Kathy, the meeting began an experiential process on how to prevail in the face of an angry public. She recalled, "I got my lesson in how to handle hecklers!" (lines 397-399); the trials of activism were a source of strength.

At the DER meeting in 1990, the women "each spoke loosely. We took our turn....[Before hand] we each decided what topic we would pursue--one would pursue the waste topic by itself, the other would present the health survey--and we all spoke, and their faces...all our faces were the same dart board. [All the women] moved out of the comfort zone. We had an incredible amount of energy...an incredible amount of energy and a desire to get some environmental justice here. But what happens as with any environmental cause, it gets bigger and tougher and the red tape and the legalities of it made some people sick and some people scared, and that's what happened, not to mention the health problem....And all those women, all those women who met at the park, all took their turn in 1990 at the public hearing, and some have stuck with us and others haven't" (7/19/96, lines 1992-2022).

During this time, information was becoming available that was "more than the average person could read" (Ozalas, 8/16/96, lines 236-237). One reporter from the *Times News* provided an enormous amount of data which was too voluminous for a single person, so, Kathy related, "we broke it apart--each of us tried to read it just to get an idea of what had happened--what was going on" (lines 250-253). By necessity learning became a social activity. The process transformed singular resisting intellectuals into connected activist educators.

More meetings followed, in the fire hall, at a local church and in other places. The meetings were announced through newspaper articles, word of mouth, and by distributing flyers. Results were surprising. For one meeting they "made coffee and bought donuts [hoping that] 30 or 40 people...would show up...We had two hundred [come]!" (Ozalas, lines 341-346). At these meetings they invited government agents including those from the poison control center

and the environmental agencies. The meetings were conducted in the “Question and Answer” style. They also sponsored “workshops” where visiting professionals would present information on relevant topics, such as public health and lead contamination. Presenters were pulled from outside of the Palmerton area to ensure that they were not “politically related” (line 1163) to the industry. The question whether to invite groups like Greenpeace, who “were very, very interested in coming” (lines 1358-1359), was discussed. In the end the women “pretty much didn’t want to use [Greenpeace’s] kind of tactics” (lines 1363-1366). As is often the case in grassroots struggles (Highlander Research and Education Center, Community Environmental Health Program, n.d.), the “Big Ten” mainstream environmental organizations (including, but not limited to Audubon, Sierra Club, National Wildlife Federation, Natural Resources Defense Council, Environmental Defense Fund, The Nature Conservancy, Isaac Walton League, Wilderness Society, World Wildlife Fund, and Friends of the Earth) did not offer significant assistance, although the local press reported that Audubon and Friends of the Earth issued a press release critical of the industry in early 1990. By 1996, neither organization had any knowledge of the contents of the press release and had dropped Palmerton from their agenda; the women had to create and maintain their own narrative space. However, it is not unusual to find “tough women against toxics” (Edwards, 1995, p. 38) in the grassroots environmental movement. More often than not, women with little or no prior political experience lead local antitoxics groups (Krause, 1993b). “They are not motivated by political ideology, aesthetics, or *avant garde* eco-philosophy. Rather, this self-described movement of housewives has organized around a variety of local issues...out of concern for the health and well being of their families and communities” (Edwards, 1995, p. 38).

After the meetings, the women had “so many people come up...and ask ‘Now what are you going to do--you ladies, what are you going to do?’” The questioners encouraged them, saying, “You gotta keep up. You can’t stop now. You have to carry this through...go on” (Ozalas, 8/16/96, lines 740-751). It was during this phase that they decided to have a meeting to discuss organizing as a formal entity. They met at the local firehouse, and were surprised at the number of people that attended. Kathy Ozalas recalled addressing the gathering with the

question, “OK, people have asked us to do something. What do you want us to do? So we listened to the people...just people who lived in town, who had kids. And the consensus [was] please form an environmental organization [and] you ladies run it, you...know what you’re doing” (lines 761-777). The emergence of PCCE was rooted in macrostructural, organizational and cultural factors, for example, industry’s request for a storage permit, coupled with the previous listing of the locale as a Superfund site by the USEPA, created the potential for broad changes in political relations and an awareness of state and corporate power insertion into the public sphere. These two moments can be viewed as “disorienting dilemmas” (Mezirow, 1991, p. 168ff)--creating a threatened lifeworld--for some members of the community which led to the search for (new) meaning. Learning dynamics in order to better understand these dilemmas were both intra-individual and intersubjective.

Not knowing where to turn, Kathy who was president of the Palmerton Porpoise Swim Team, “took the constitution and the by-laws [of the swim team] and used that as a basis of ...a constitution...for PCCE.” This provided the outline, and others “put their two cents in” (8/16/96, lines 806-822). After drafting a charter, the women “[called a formal meeting, followed] the rules of parliamentary procedures and adopted the constitution and laws” of PCCE (lines 825-829) in late 1990.

A significant affiliation after organizing PCCE was with the Lower Anthracite Project at Hazleton, Pennsylvania who helped the women apply for and receive a grant from the Jubilee Committee of the Episcopal Diocese of Bethlehem, Pennsylvania. This created a furor of controversy from the local Episcopal congregation, many of whom inhabited the industrial culture as officers or management at the zinc company.

(5.) Making the commitment to confederate in sisterhood and solidarity; individuals depended on the organization to fulfill basic needs of support, information, education and challenge to the hegemonic center. To ask previously shrouded questions was the foremost reason for coming together (Kathy Ozalas, 8/16/96, lines 16-25), as well as to disseminate the information derived from the process to the community. PCCE sponsored

open monthly meetings for dialog in the public sphere. Throughout the development of the group, the women, “continued with our intent and purpose [which was] to ask questions and to get information and notify the community of the answers [that we got]” (lines 610-615).

Individuals, like Ellen Colangelo, joined the group because they were weary of living in an information vacuum, saying “that was a way to get information” (lines 916-917).

As both teachers and learners, the women worked together to investigate their own reality, to test the validity of what they knew to be true, to analyze what they were learning, and to create new knowledge. They formed a “sisterhood” in which the women confirmed their shared oppression and created new relationships with common goals. They became aware of their situation by learning to speak openly about it. The validity of their concerns for their children, homes and yards was affirmed as more than a character flaw. In the process of conscientization (Freire, 1970), they were becoming critically aware of their condition, and its causes, transforming their relationship to the dominant powers, not so much by the frontal assaults of direct accusations, but through relentless public questioning. Their narrative space was built with the mortar of interrogatives. This interrogation functioned as a kind of inquisition and seeded some of those who attended the meetings with subversive doubt about the validity of the community script and the privilege of those within the dominant culture. Although residents had been conditioned to serve the interests of the dominant group, PCCE members trusted in individuals’ potential to overcome that conditioning. The women were aware of the intersubjective nature of meaning-making. And, they had the capacity to understand experience in terms of increasingly inconclusive, discriminating, permeable and integrative perspectives, elements present in transformative learning theory (Mezirow, 1991).

Sandy Peters asserted that she met good people through the organization--people like herself who explore areas of themselves unlike in the period before affiliation with PCCE--(lines 1865-1878). Tess Roberts called this a period of “very much meetings and research...very much!” (lines 423-424). She reminisced, “there was no debate about the seriousness of the situation, because...after we had started reading...we were quite sure” (lines 950-953).

Gardner (1991) has noted that there is tremendous energy and knowledge in citizen groups. This knowledge, termed “personal knowledge” is seen as a valuable corollary to the “processed knowledge” of experts (Friedmann, 1984). PCCE members too held both personal and processed knowledge. Kada Rehrig remarked that after joining the formal group, “I was awakened to the facts....I was impressed with their knowledge of the [local] situation” (7/19/96, lines 966-970). Many reported that without the group, they probably would not have become so involved in the environmental issues. Ellen stated, “I think by myself if there was never a PCCE, I might not have been aggressive enough [to raise a voice against the dominant situation]....with [PCCE] available, it was a lot easier!” (lines 762-769). She added, [it’s] safety in numbers!” (line 779). PCCE functioned as a means to mobilize the small contingent that constituted the core group. It helped to draw attention to the seriousness of the local contamination and the failure of governments to protect citizens and the environment.

Kada felt that she could have voiced her opinion without PCCE, but she “wouldn’t have been able to do it with any kind of a plan or finesse” (lines 1275-1277). Tess Roberts explained her beliefs about the role of the organization in public articulation this way, “I think it’s highly unlikely in this community [that anyone would take a stand without knowing there were others who felt similarly]. I think it would have been highly unlikely...although not impossible, just from the mere fact that someone like myself stood up that first time and didn’t know anybody else [felt like me]” (lines 2412-2431).

(6.) The journey into praxis; discernment and performance as pedagogical practices.

During this phase, PCCE, functioned to increase individuals’ engagement in civic life. This fostered the transformation of detached residents into public citizens--a vital and potent service to democratic life in Palmerton. Members, too, became empowered, gaining mastery over their informational and educational needs. Many were engaged in individual and group (collaborative) learning projects. This empowerment was both a consequence--and a cause--of actions taken (praxis) in a cyclic-reciprocal or dialectic relationship. That is, taking an action

elicited feelings of empowerment and feelings of empowerment, it was reported, meant an individual could *do* something about the situation.

PCCE leadership encouraged people to report potential environmental violations, especially in hazardous waste transportation and air emissions to the state DER. They published agency telephone numbers to facilitate the reporting. They also trained residents on “what to look for in a violation [and] if they [saw] one, what to do” (lines 1504-1506). Kathy Ozalas pointed out that the two groups, the Palmerton Environmental Task Force and the Pro-Palmerton Coalition, both emerging on the scene *after* PCCE’s success at informing the public, had identical purposes of making information available, and of sponsoring knowledgeable people to speak on selected topics. One difference, however, was that the latter two groups created the need for the type of information--lead paint, and auto exhaust pollution--that they provided; it was not an incipient component of the community’s interest.

Freire (1992) reflects that transformation of unjust conditions requires movement beyond simple awareness and verbal denunciation of oppression. It requires a journey into *praxis*. However, the action is not blind. It must challenge the social structures that marginalize, and be performed in combination with reflection. Louise Calvin expressed similar sentiments. In a conversation she paraphrased one of her favorite inspirational quotes, she said, “The poem goes, ‘I slept and dreamt that life was joy/I woke and realized I had duty/When I acted, duty became my joy’.” To her this poem meant that “the possibility to be able to act is such a freedom” (notes, January 25, 1996, p. 1). For members like Louise, there was a clean distinction between “knowing what” and “knowing how.” Discernment and performance had to inform each other for teaching and learning to occur.

(7.) *Animation to contact potential “sympathizers” outside of the (largely) women’s group.* Interviewees stated that the group made forays into the community to enlist the support of non-member allies. For example, Louise Calvin reported that they undertook home deliveries of their educational organ, the *Clean Up Times* to those individuals whom it was believed would be inclined to entertain its contents. This venturing into the public sphere was a

development from public acts which had either questioned the contamination or responded in an explanatory or defensive manner to the industrial discourse in the security of formal meetings. It was both a cautious and a conscious effort to become pro-active, but initially only with potential “sympathizers.”

(8.) Integration of the “girls” (a self-descriptor) as the group crystalized into an organized band devoted in their quest for environmental reform and eco-literacy. This involved the maturation of the group as a democratic organization with a matured sense of resistance, and methodical designs to reappropriate hegemonic meaning construction. Informed consent became the hallmark of the group. A number of individuals recognized that “power” came from being organized. In one instance, a member described how joining the group foiled efforts to isolate and intimidate her, extolling the “power of us being together” (Colangelo, lines 789-795). It was here that the grassroots organization was most effective as a social pressure group, forcing differences of vision and voice to be taken seriously, at least by some including decision makers. PCCE’s gift to the community was to redouble the breadth and depth of knowledges for public consumption.

So strong was the loyalty to PCCE, Sandy Peters claimed “I would have to be very hard pressed to leave PCCE....I would have to have like something devastating happen to one of my children that [would require I] devote my life to them [only]” (lines 1243-1250). Kada Rehrig knew from the outset that building capacity in the community would not be an easy task, but rather would be one that required steadfastness. She reported that one day while cleaning her porch banisters looking at the “filthy” and “disgusting” rag, she called over to a neighbor, “and the people are telling us there’s no pollution problem in Palmerton? Look at this!” Kada recounted that the neighbor “look shocked that I would say anything like that,” adding “her shock shocked me!” She immediately thought, “Uh, oh! This isn’t going to be something that people will rally behind” (7/19/96, lines 386-405). In the absence of large scale mobilization, the group plied relentless accountability to the few points they considered susceptible to pressure such as government agencies and elected officials.

Tess Roberts recalled her intense dedication at the beginning of PCCE this way, “to tell you how much enthusiasm I had when I started, PCCE [was nearly one year old]--and it was the day of our [wedding] anniversary--I pinned the corsage on and went to a meeting! I wouldn’t do that anymore. But that’s the original six of us, you know. We had so much enthusiasm here. I’ll never forget, the man sitting next to me said, ‘Why are you wearing that?’ [and I responded] ‘Celebrating my wedding anniversary!’” (7/19/96, lines 2121-2138).

Through this “we all learned to compromise--because we all believed in what we were doing...No one was allowed to be extremist” (Colangelo, lines 292-296, 303-304). For Ellen, the methods of similitude, dissimulation, respectability and gentle persuasion however, were signs of timidity. She lamented, “the things that we *could* [with emphasis on this word] we *could* have done--the things we *could* have done, but no...[the group] wanted to stay politically correct...we couldn’t be misquoted at all--nothing was left to the imagination--we had to be absolutely correct in everything we said--or we couldn’t say it. We couldn’t give the appearance of attacking the company either--of being against the company. We could not do that!” (7/20/96, lines 268-283). The decision to remain respectable is one of two typical strategies (Martin, 1988, p. 209) used by social movements to utilize arguments and information at their disposal. Respectability and authoritative behavior are means to certify that what is said is true. The other is to be known to speak on behalf of a formidable pressure group--something that has never emerged at Palmerton.

Kada Rehrig reported that the strengthening of the group, and her participation in it, was transformative for her. “It absolutely changed my life...for the better...It’s made me think more about a lot of things...[be] more aware” (7/19/96, lines 894-899). For Kada, involvement has enlarged her horizons beyond awareness, too. She reported that because of the group, she now could not feel strongly about an issue without doing something about it. Commitment gave a deep sense of hope as the practice of choosing life. It was a denunciation of the existing order found in the dominant narrative, and an embrace of how things ought to be. Thus members moved into the fourth arena of classical philosophical questioning, “What may I hope?” Many answered “For a future free from contamination!”

Some members of PCCE, distant to the core group, were resistant to this stage, saying “sometimes, sometimes PCCE [is] a little over zealous--they’re a little overwrought with things” (the Milligans^{pseud.}, 7/20/96, lines 535-538). But Tess Roberts insisted, “there’s some silent support out there for PCCE,” lamenting the fact that the support remained hushed (lines 1680-1686).

(9.) *Confidence in their educational outreach to possible adversaries and antagonists--those who thought “otherwise” to them.* At a point, the group moved from defensive public performances and posing intimidating questions, to communicative actions that were pro-active educational encounters to possible antagonists. This stage gave evidence of a new level of heart and nerve. For instance, Louise Calvin reported that hand-delivery of the organization’s *Cleanup Times* expanded to homes that clearly needed information, based on the appearance of their yards. At an earlier period, the precious few copies that they had were distributed to those whom members felt might be “more sympathetic” to their cause. In retrospect, she questioned the wisdom of their initial attempt to mobilize allies from amongst potentially like-minded individuals rather than the unconverted.

More on Sisterhood and Solidarity

Although the women never expressed their solidarity in terms of sisterhood or feminist language, they functioned as a cohesive group consciously aware of their marginalized status as women, both housewives and for some, as professionals. Yet, they constructed a space where

hope was possible. Kathy Ozalas put it this way, “the women envisioned the future” (7/19/96, line 1309). This women-vision included environmental reform which resulted in protective environmental policies and regulations as well as agency enforcement against violators. Their women-vision included an industry that operated safely and a landscape--both constructed (lawns, play areas, streets and homes) as well as natural (the mountain, valley, and neighboring creek) that was free from contamination. Talking about this vision, Tess Roberts spoke that the emergence of the women placed the community at a “crossroads, because it was the first time that there was an organized effort to question the industry and the officials...in Palmerton. And that basically...was the turning point....It wasn’t just one speaking--it was organized--just the way we [women] had our [presentations at meetings systematized]...we wouldn’t overlap. [One person spoke on] health, one [on] the industry, one [on] the Superfund, and so forth” (lines 2647-2659).

For some, PCCE was an important women-space where identities could be reconstructed and personal feelings expressed in a secure climate. The women freely referred to the group as “the girls.” One of the women who established PCCE reported that her involvement was both a transient estrangement on her relationship with her husband, as well as an opportunity to exercise independence and freedom from assuming his identity. She spoke that her “husband was aghast [when I talked publicly]. [He saw it as] terrible, you know, [saying], ‘Did you really think this through?’ and ‘I’m not sure I want you to do that. You should have talked with me first and I would have told you how to handle it,’ sort of things--the control issue. [He indirectly was saying], ‘You’re doing something and I’m not controlling you,’ and ‘it looks bad on me.’” (lines 487-497). By assuming the role of leadership, she opened up new areas for both personal growth and for a fuller development of her married life. She reported that leadership in PCCE resulted in a renewed commitment to dialog with her husband to “work things out.” However, she emphasized that she remained firm in her dedication to the other women and the goals of the group.

Kada Rehrig also discussed the impact that involvement had on her life. In addition to making her think a lot more about things, she reported that “it’s affected my relationship with my

husband to the better” (7/19/96, lines 916--919). The support that he gives her means “so much” to her (line 928). In addition, her mother’s encouraging words, like “be careful, be careful,” “that takes a lot of nerve,” and “that was really good” sustain her. The favorable comments from a brother who lives in Chicago, or friends from out of town, such as “that’s a lot of work,” “good work!” and “good job” are very consequential (lines 1026-1050).

For Tess Roberts, PCCE was a welcome opportunity, as well as painful one, to become involved in what was happening. Taking up a defiant voice was distressing for her in that it moved her out of her “comfort zone.” However, it was a desirable chance to do what she always enjoyed most--“reading, and researching and meeting with people” (lines 2087-2088). She disdained what she characterized as, “from a women’s perspective, [sitting] all day long and watch[ing] the [TV] ‘soaps’...and talk shows” (lines 2084-2085).

One individual remarked that in the early stages of involvement in environmental issues in Palmerton it affected her marriage, saying “it’s difficult when you’re going to one or two meetings a week and it’s time away from your children...but now that I’m sitting past the emotional upheavals that I’ve experienced, it all seems oh so wonderful [knowing I’m doing what’s right]” (notes 7/22/96, lines 1811-1822).

In addition to the support the “girls” gave to one another, they were also an inspiration to some individuals in the community who were not part of the formal group, apparently mostly women. Tess Roberts recalled, “After I spoke [once], a women in the community sent me a very nice letter and said, ‘It had to be said--somebody had to stand up and say it. You did a good job!’” She reported that the lady’s letter “wasn’t the first time” she received encouragement and support from non-members (lines 1643-1650). Of course this support was not unanimous. Tess referred to the outspoken members of the women’s group as “the dart boards” for community criticism.

After one Board Meeting, during which I presented some of my preliminary research results, a founding leader said as she was donning her winter coat, “Amazing! *I am* (her emphasis) important! I’m going home and tell [husband’s name] that I’m not just a housewife cleaning toilets and scrubbing floors--I’m important!” At times the women even impressed

themselves with what they accomplished. Kathy Ozalas marveled, “it’s amazing [that] six women can get around the entire town [when they had to distribute fliers]” (lines 335-338). Such increased self-perception within women who participate in adult education has been noted elsewhere (Luttrell, 1989, p. 34). Changes in a “sense of self” accompany transformation of a meaning perspective (Mezirow, 1991, p. 167).

Early on, when fear for their safety would surface, Kathy Ozalas would “[tell] the girls, nothing’s gonna happen--it’s fine--don’t worry” (lines 653-656). Louise Calvin, not a founding principal of PCCE, told me that she seldom consciously thought about being a woman or about being from Palmerton until “PCCE formed and I saw the stand some of these women took...over great protest locally by a lot of industry supporters--[despite] personal attacks, [I] realized how proud I was to be not just a woman, but a woman from Palmerton! That’s a real proud thing to be....I think these gals who didn’t expect to be in that kind of limelight--to stand up and make a statement, just made me really proud to be affiliated with them” (7/30/96, lines 1176-1191). But sisterhood and the “girls solidarity” were not the source of political action, rather they were the context for it. As we will see, domesticity was a substantially stronger antecedent for action that enabled the women to build the notion that they could challenge power relations, values and beliefs of the dominant culture in Palmerton.

Self-directed Learning In the Absence of Mentors

“We have been forced to educate ourselves, and the final exam represents our children’s future. We know we have to ‘ace the test’ because when it comes to our children, we cannot afford to fail.”

*(Terri Swearingen, Environmental activist, East Liverpool, Ohio;
Rachel’s Hazardous Waste News, 1997, issue 542)*

The history of women who have struggled for a safe environment, fair working conditions and equitable wages has been erased from Palmerton's memory. Although not reported here, historical analysis revealed several women who asked threatening questions to those in Palmerton's industrial culture. In the absence of pathfinders to mentor, the journey of contemporary women in Palmerton focused on the empowering impacts each have had on the other. The "girls" looked to each other as guides and models of self-respect, courage, and justice--in the face of high stakes. They knew that the outcomes of the lessons they would learn directly affected them and their children.

Kada Rehrig remarked, "I was just so impressed with [Tess Roberts]. I remember how well she articulated her feelings [at the meetings] (7/19/96, lines 502-507). Sandy Peters remarked how much she admired Tess saying "she's always placing herself in the lion's den way before the [others] were willing to do that" (lines 1388-1391). Sandy went on, "I know Tess Roberts and I admire her and she's the epitome of a product of this social...dilemma....She was one that traveled through the [industry] narrative. She was raised to stay quiet, the most influential people in her community she respected--and her family respected--were upper echelon zinc employees and for her to have questioned is like a miracle and is an incredible example of strength, I think, on her part" (lines 1898-1910). Too, each offered strong comments about specific individuals concerning one's ability to be tenacious, another's talent at bringing ideas out from the group, or a person's knowledge about a specific topic. It was common for one of the women to mention another's "vision" or someone's "way of operating" that she admired. Of Linda Holland, Tess Roberts once simply and profoundly remarked, "That Linda--she gives us energy!" (line 3126).

A unique feature of Palmerton's grassroots collective was that members focused on keeping the seams of the social fabric intact. Linda Holland reported, "All my good friends have remained my good friends. And I might add, not all my friends agree with me. It's just they overlook what I do. Many of my friends work for the company. We don't talk about it, that's all. And those are the friends I feel are good friends. They can overlook this and still be

friends. Those are the kind of friends I always wanted to have....[They support me] as a person. We don't bring up the subject at all" (7/22/96, lines 1703-1717). Later in the interview she went further to add that the desire to preserve the social structure was not shared by all members of the industrial alliance, "If somebody doesn't agree with us, you can still be on friendly terms and--OK--you're entitled to your opinion, but you know, if you don't agree with [the company or its surrogates]--boy, you'll see your name in the paper, you'll be blasted....!" (lines 1899-1904). Louise Calvin, too, remarked, "I can have an opinion and still feel I'm friends with...people [I'm close to who might differ with me] (7/30/96, lines 334-337). Sandy Peters stressed that the group, as a collective, avoided behaviors that were anti-relational. She offered that they assiduously avoided anything that would further fractionalize the community (7/22/96, lines 920-937). She often spoke affectionately about Palmerton in language such as, "our beautiful little community....It's such a nice place to live" (lines 1215-1216). It is not irrelevant that the motto of Palmerton is, "A Nice Place to Live." The frequency with which she and others used this phrase indicated the influence of the borough narrative on them.

During the study, the goals of PCCE included having Palmerton de-listed from federal Superfund National Priority List through meaningful clean up and environmental reform in Palmerton to ensure both strong and protective environmental laws that are enforced for past and current pollution events.

Domesticity: The Role of Home, Hearth, Lawns and Gardens

"...women [are] agents of cleanliness...."

(Hoy, Chasing dirt: the American pursuit of cleanliness, 1995, p. xiv)

In her commanding book, *Chasing dirt* (1995), Hoy convincingly reconstructs the triumph of middle-class ideals and habits related to cleanliness. She asserts that the domestic woman has been an agent of cleanliness from the mid-century 1800s to the present. Hoy shows how women have been responsible for “creating clean and comfortable quarters for their families” (p. 16) often at great personal costs. Such behavior meant ending life-threatening epidemics of cholera and dysentery, sewerage a fast-growing country, eradicating hookworms, teaching immigrants and African-Americans along with the rural white majority about the dangers of dirt, and turning indoor plumbing into a national necessity. The women of Palmerton illustrate that the march of women as agents of cleanliness has not ceased, however, the progression has moved to a phase beyond biological germs, and pathogenic microbes. The latter part of this millennium has witnessed technological disasters, more than natural epidemics, as a growing menace. Women’s responses have been commensurate. Women in the past have integrated beliefs about cleanliness (first relative to dirt, then germs) into their own self-definitions and life-worlds, so too, some contemporary women have integrated freedom from environmental contaminants into their views and representations about themselves, others, and their social context.

Political Action: A Consequence of Domesticity

“I’m barefooted and the bottoms of my feet are black from walking across the floor.”

(Betty Meyers, The Morning Call, Allentown, Pennsylvania, 1985, p. A1)

The meaning of “home” in American society is extremely complex. Home represents a private space separate from the public sphere. Our home “centers” our lives (Hayward, 1977); is a place we expect to be safe (Goffman, 1971); encodes a variety of messages that are reflective of us (Ruesch and Kees, 1956); mirrors how we are viewed by others and how we view ourselves (Edelstein, 1973); expresses social achievement; and is a cultural signifier. For many, home is a space where they are independent and in control of their lives. Edelstein (1988) reminds us that the home for many folks is a place where no one tells them what to do.

In many locations the home is a place of security and permanence; in Palmerton, this was not always the situation. A number of interviewees were angered that their home had been invaded by alien toxic dust. The soil in their gardens and yards, as well as the grime that coated the interior of their homes was for them unsettling. Their everyday life unmasked the ideology that hide the relationship between the public and the private. The private experience of pollution became a public, political issue. It was this unwarranted and unwelcomed intrusion that seemed on the surface to motivate them to challenge community norms.

During a conversation in one of the feedback sessions with which she was involved, Tess Roberts suggested I had mischaracterized her motivation to become involved in social change. Tess reminded me that she did not set out “to raise a defiant voice”--a behavioral portrait I had painted of her and other PCCE members. Any transgressive acts by her were secondary to the real purpose of involvement, which was the protection of her (and all of the community’s) children. She was primarily concerned with family safety, not conduct resistant to hegemonic discourses. Opening a narrative space for the articulation of new knowledges was a motivating factor. Tess said that she entered into what amounted to defiant behavior very subtly, “it wasn’t even a conscious effort, like when I read your piece about transgression--[my involvement] had nothing even to do with that. It was just my kids. I’m raising my kids here [and] we’re bringing hazardous waste in, we need to make a change--we need to do it right. Especially because in the back of my mind I knew about the Superfund issue” (7/19/96, lines 226-236). Tess reiterated this later in the interview, “that’s important for you to get! I didn’t wake up one day and say (gently plunking her hand on the table), ‘I’m going to be an activist,

I'm going to bring this company to its knees....I never woke up with that kind of an attitude, no!" (lines 1693-1703). She emphasized that although she now saw a "grand scale and design" to what the company does, she never thought of it that way, nor that she was going against a community script" (lines 1705-1723). She went on, "I knew we were going against the grain, but--how can I say this?--it wasn't as if I looked at this and said, 'Here's the plan in the beginning--here's the plan they laid out for us. I don't like it, we're going to walk the other way. We're going to walk cross-grain.' It came to that, Bob. Because the more we read...and the more we saw--we saw some of these things were deliberately--deliberately arranged" (lines 1725-1739).

Kada Rehrig, like Tess, reported that engaging in transgressive behavior was not a primary motivation. She said, "I don't think there were any thoughts about rebellion or going against the company....It was strictly me doing something for my family, for my property and for my neighbors, and I think that's all it was" (7/19/96, lines 844-851). The "doing something" meant learning to construct, and then articulate knowledges alternative to the industrial discourse.

The remarks of Tess Roberts and Kada Rehrig were the first intimations that I needed to be cautious about "othering" PCCE members into a category of resistance and marginalization at the expense of seeing their fullest expressions of self, and the reasons for their behaviors. She reminded me what I already knew, but had overlooked, namely that people are "more than the identities created by oppression" (Welch, 1990 p. 139). Tess readily acknowledged that behavior which seemed disobedient to the community script was not what motivated her. Rather, any defiance was a *consequence* of her concern for family and environmental health and safety. This was a distinction she made very clear.

Although "coping" with stress is a complex phenomenon, gender-related characteristics have been described (Hobfoll, et al., 1994). Researchers have found that women are more likely than men to approach community stress through pro-social behavior, and "active" (assertive) coping strategies, rather than anti-social and aggressive ones. They frequently seek social support as well as offer it to others. Women have been found to customarily use

emotion-focused and problem-focused social strategies. The examples provided above from Tess' and Kada's experiences show how they related family (emotion-centered) concerns to problem solving.

Tess Roberts was attentive to the fact that she and the others were marked as "different" by many members of the community. They were genderized in a demeaning way. And, she saw that the difference was rooted in secondary notions of women who work at home. Tess reported, "at first the industry would mock us saying we were radical and hysterical housewives. There was nothing hysterical in me!" (7/19/96, lines 2474-2479). Linda Holland also spoke of the "othering" which she and fellow members experienced, "the industry people-- and a lot of people--try to make PCCE [members into] fanatical, crazy housewives who don't have anything better to do than test our porch dust [for contamination]" (7/22/96, lines 1171-1176). Sandy Peters also felt the impacts of being marked as deviant, saying, "Talk about being patted on the head. They kept using the word 'housecleaning' and stuff like that, it's just like housecleaning problems we're having down there, ladies, you know" (7/22/96, lines 1346-1351). They treated her with the attitude, "Go home and bake something...go bake some cookies or something" (lines 1384-1387). Environmental consciousness became a sexually coded word linking women with an anti-industrial discourse.

The "hysterical housewife" discourse was reversed in 1996 when Dr. Bornschein--a technical consultant to the Palmerton Environmental Task Force--presented findings from a children's' lead blood level study that he conducted in the community. He found that the lead levels in children were dropping, a fact he attributed in part to better housekeeping behavior by the women of the town. Bornschein failed to mention extensive air quality data indicating that stricter environmental regulations and enforcement had helped to clean the air. His line of inquiry prompted a local news reporter to ask, "Could Palmerton housekeepers be the best on the East Coast?" (Collins, 1996d). That cleanliness would help lower body burdens of metals was not news. As early as 1990, shortly after establishment of PCCE, Kathy Ozalas identified her role as "to do preventative health care by teaching people about the effects of lead and cadmium, and also...having [people] clean their homes" to reduce the incidence of exposure

(8/16/96, lines 16-25). The point here is that Bornschein questioned USEPA's research findings which showed high lead levels. He subsequently conducted research asserting he proved USEPA incorrect, and then explained that the lower blood lead levels were a result of several factors, including good housekeeping, but not more stringent pollution control. It was no longer fashionable to call the women of PCCE fanatical, crazy or hysterical housewives. With the new news of lower blood levels, it now fit the industrial discourse to call them conscientious homemakers.

Although not directly articulated, most of the women in PCCE agreed that their concerns originated in domesticity, that is, making and keeping the domestic sphere a protected and salubrious place in which to live. The emerging citizens group center of gravity was the home and hearth. Their lives consisted of domocentric patterns; the home, therefore, became the arena in which they were conscientized to contamination. Self-identity was not only rooted in living out "scripted lives"--it was centered in the world of domestic expectations. Sandy Peters related having good feelings when she "would [drive] down the street and [look] at a [decontaminated] yard that another little kid is gonna be able to sit in and not [get] exposed to heavy metals. To me, that is the greatest reward of participating in [PCCE]" (7/22/96, lines 2365-2372).

Kathy Ozalas, as well as other PCCE members, frequently used the term, "clean up" in our conversations. She and others extended the concept from personal homes to the local milieu since for them the home was a part of the social and cultural surroundings. Once when asked by one of her children, "Mom, where ya goin'?" She responded, "[To a] PCCE meeting! I'm gonna clean this town up yet!" (8/16/96, lines 2443-2445). Every respondent offered comments on the dirt that was a daily occurrence in Palmerton, and the daily cleansing rituals with which they had to contend. Ablutions were a fact of life. Linda Holland reported, "You live here, you cleaned and you cleaned black dirt and you didn't much question what was in it" (lines 437-439).

Before the industry installed modern pollution control equipment, the dirtying events were predictable and recurrent. Sharon Milligans^{pseud.} recalled, "there were times when...I could

sit on that front porch and I don't remember the exact time...in the afternoon...when [the company] would leave all that stuff out...a cloud would come over like a grayish brown ugly looking [thing]. It was so acrid...my Grammy would say, 'Come in! Come in!'" (7/20/96, lines 809-828). For Louise Calvin, the seemingly ceaseless rain of pollutants made her "feel like a prisoner" (7/30/96, line 987). Nearly all folks mentioned their porches as the most obvious and memorable site of contamination. Some of the earliest press headlines highlighted the plight of Palmerton residents' porches. For Linda Holland, whose porch was "a big focus of attention," the porch--functioning as her children's play area--motivated her to ask questions and eventually to take actions to stop the contamination (7/22/96, lines 200-207). She expressed, "everyone should be free to speak what they feel is right and everyone should be able to live a nice, clean life" (lines 799-802).

Car washing rituals were also mentioned by numerous respondents. Louise Calvin gave a litany of ablutions that she would perform in the late-1980s and early 1990s, even *after* the smelter had closed, saying, [I would] wash the car twice a week, wash the porch three times a week, [and] wipe the window sills" (lines 125-129). Ritualized cleansing behaviors were reported by Sandy Peters, too. She claimed, "You could wipe your window sills off with a tissue every other day and the tissue would be black. Every other day!" She even considered at one point, "putting the tissues in a plastic bag, putting them in an envelop and mailing [the dirty tissues to members of the] Pro-Palmerton Coalition or [Borough Manager]" (lines 2020-2030). Kada Rehrig reported that the On-Site federal coordinator in 1996 said to her, "You wouldn't believe the dirt these people [at Little Gap near to the contaminated Cinder Bank] have in their window wells!" (7/19/96, lines 640-642). Of course, she exclaimed that would not be hard to imagine, since she too had experienced dirt and grime in the house from ongoing events, after the cessation of smelting activities. Her reaction was, "Hell, this is stuff we've been tellin' ya' for the last six years! Why haven't ya' listened?" (lines 666-669). She went on, "I can remember Edwina [one of the founding PCCE women] bringing a dirty rag to meetings [with government officials] and saying, 'Look at this! This is from my window sill on the inside--what is this?' And, you know, we were just kind of patted on the head and [told] 'Oh, run along and

clean the rest of them now” (lines 642-650). With some satisfaction, Kada mentioned that Edwina sent the dirty rags to a state legislator in a plastic bag.

The women with whom I spoke only infrequently talked about pollution impacts to the physical structures of their houses. As Hayward noted in another context, most women embrace the idea of “home” in a wide variety of ways, particularly related to rootedness, intimacy and personal jurisdiction--a place for “personal concerns, aspirations, motivations, and values as well as personal well-being and life-style issues” (1976, p. 3). The idea of the home as a physical fabrication (in contrast to a relational one) was rare, but occasionally occurred. For instance, one respondent reported that her husband would paint the railings white and within months they would be discolored from the pollution. Linda Holland told me that she painted her porch with a “special [heavy duty] paint used for the seashore that hold up in all weather” that had a “nice glossy [finish], but which turned “dull” and unattractive rapidly under the assault of pollution. (7/22/96, lines 162-173). The black soot that was collecting on the finish was tested and determined to consist “of course, lead, zinc and cadmium.”

Thaddeus Evert^{pseud.} and his wife discussed discolored aluminum house siding and stained cement on porches and house foundations. They also talked about the impact of pollution on washed clothing that was hung out to dry. She said, “people were hanging their wash out and the smoke from the stack was coming over. It was just yellow and they couldn’t keep white wash out on the line” (7/22/96, lines 1200-1211). During a tour of the town with a group of college students, Ed Schoener, a former DER regional director and former USEPA official, was quick to point to the tarnished foundations of homes near the soil line from metal contamination. Ron Monty, too, spoke about the red metal stains in his concrete bird bath from air deposition of contaminants.

Louise Calvin reported that endless tidiness was indispensable for those who desired clean clothing, saying, “It was terribly dusty all the time....I always had to wash my wash line before I hung wash out” (7/30/96, lines 1066-1070). Tess remembered, “[her] mom re-washing [the clothes]--she’d hang her clothes out and that black stuff--that fine stuff would come up through the valley...and she’d have to take her stuff back in, and God bless her, re-

wash it again” (7/19/96, lines 1396-1402). Ellen Colangelo reported that a neighbor “was always complaining to his wife [that the] inside of the collar of his shirt was always so black...and she’d tease him saying, ‘Well, wash your neck!’ And they’d go out west [on a trip] and he’d say, ‘Not a thing on my collar!’” and then it dawned on them, it was air pollution that would lodge between his collar and neck making the shirt dirty (7/20/96, lines 710-718).

Pollution was not only found on porches, window sills and outside structures, it was inside the residents’ homes as well. Linda Holland told about her attic where she would store toys and other unused household items. She said, “every time I would go and get one, I’d [have to] wipe this black dust off....I hated to store anything up there” (lines 553-556). She had the attic tested and cleaned after learning that the dust was contaminated with heavy metals. The workmen from NTH, a group hired by the zinc company to perform the tasks, told her that her attic was “filthy,” which Linda found humiliating. She continually asserted taking pride in a clean safe home, and was embarrassed at pollution which was beyond her control.

During the course of the study virtually all of the PCCE members discussed gardens and lawns as indicators that there were serious contamination problems in the community. In the late 1970s, Louise Calvin’s “garden...was part of a study that was done.” She reported “when I got [the results of] that study back and saw the cadmium levels in my garden, I was horrified and stopped having a garden” (7/30/96, lines 58-63). Others, too made similar remarks about vegetable gardens, and aesthetic home plantings of flowers and shrubs.

Palmerton has been influenced by both rural and ethnic elements. Many residents, like Ray Carazo, used vegetable gardens “to live off of” (8/9/96, line 266). He reported, “we all ate from the garden. We froze a lot as a matter of fact” (lines 266-269). The retired County Extension Agent, Ray Reitz reported that the area around the industrial center was no longer productive owing to pollution, although “back in the 50s some of those farmers had pretty good crops” (8/9/96, line 82-84). He noted a change in the mid-60s or early 70s, saying, “from that point on, the valley was no longer a productive valley” (lines 219-221). During his tenure on the job, no one was asking questions nor conducting research into the effects of pollution on gardening. He reported, “[although I] did a lot of promotional work on vegetable gardens

and...would have meetings all around the county on vegetable gardening, in the Palmerton area...I had a reason not to do [that] because I didn't have enough information to be able to answer some of the questions [that were asked of me]" (8/9/96, lines 914-924).

Motherhood: A Significant Antecedent to Political Action

One of the more powerful forces shaping PCCE members attitudes and beliefs were children. The role of "traditional" motherhood was the significant antecedent to political action. The grassroots members who were mothers often expressed that they were insulted when the quality and integrity of their motherhood was called into question. Sandy Peters reported that the community discourse on health was related to care given to children. If there was something wrong with a child, popular wisdom, based on information provided by the official makers of knowledge, was "You have to change [the kid's] diet. He needs a multivitamin. He has poor hygiene." "What's the doctor doing?" she asked rhetorically. "Addressing lead exposure?" was her query. Sandy's answer was, "straighten out his diet, give him a multivitamin and clean his hands a little bit more and he'll get better" (lines 1576-1588). Although there is evidence that certain minerals found in vitamins may retard the absorption of contaminants, and good hygiene can prevent oral pathways of toxic exposure, her criticism was more leveled at the idea that prevention was the focus of concern, not the remediation or the ultimate sources of the contamination.

Sandy related that she was driving "down the road [one day] and [her] daughter was in the car seat going 'Tch!' 'Tch!' She asked her, "Honey what's wrong?" Her two year old daughter responded, " 'There's no place for the squirrels, mom 'cause there's no trees'." This stimulated Sandy to say to herself, "There must be something we can do about this!" (lines 1049-1063).

Kathy Ozalas felt an obligation to her children to amend the false notions that they may have had about what constituted a “normal” mountain. She recounted that one day she “took the kids on a ride to the other side of the mountain [saying to them] ‘Do you realize this is the way our side of the mountain used to be?’” (8/16/96, lines 2494-2507). She expounded about what was “normal and abnormal” and told her children, “What you grew up with was abnormal” [pointing to the green mountain] saying “This is normal, OK?”

Tess Roberts wrote a poem about her experiences (Appendix 3). In it she relates how a giant shadow stood between her and the sun, and the shadow was the industry. She reported that nothing was driving her to be vigilant, to watch the giant, and to observe its vulnerability, but then “with motherhood and my children” (lines 49-50) the scales dropped from her eyes and she caught a glimpse of the giant moving and the sun shown for a brief moment. This powerful trope expressed the vital role of motherhood and children in awaking in her an awareness of the situation in Palmerton. She reported that “learning to watch the giant” was directly related to “being a mom, and raising my kids” (lines 88-89). When asked what motivated her to speak out loud for the first time she responded without hesitation, “I already had children then, and I think that’s what drove me to stand up and make some comments despite the fact that I was undereducated....I attribute [speaking out to] being a mother and to being very concerned about what was best for my children” (lines 1576-1583).

Tess claimed to have “lived [in Palmerton] through some of the worst pollution, and so had my parents...[my concern now] was what actually is here? What actually [is the company] bringing in? And, how might this impact my children? And I need to know...’cause I think those are three valid questions....What’s here? What’s left over from the past? Why are we a Superfund site? Why? Why? What are you doing with hazardous waste? How’s it going to impact my kids?” (lines 2481-2497). Tess did not want her children to have to engage in the struggle for a decontaminated community, because “they’ll battle over other things, and that’ll be fine” (lines 802-808).

Linda Holland was adamant about “dust falling on my kitchen table where my children would eat...[and] on my porch where my children would play” (lines 1636-1639). During her

home clean up she was pregnant with her third child. She reported, “it was not a fun pregnancy, my whole time I was fighting to get my home cleaned and in decent order to bring a new baby home and it didn’t get done” (7/22/96, lines 1352-1364). This led her to call her congressperson, the federal and state agencies and others, “very, very often for months,” in an effort to have her home remediated. The focus on home dust reached the point that USEPA--with residents’ permission--even tested the contents of vacuum sweeper bags! The front page of the local section of the Allentown (Pennsylvania) *Morning Call* on May 31, 1991 showed a respirator-clad USEPA official scooping samples from a home electric sweeper (McKee, 1991c).

Children’s pets were frequently a point of concern for grassroots members. Sandy Peters was told by her veterinarian that pets in the area had an unusually high incidence of cancer. In fact several of her dogs had died with cancer as did her rabbits. Sandy, who lives close to the zinc company’s East Plant, related it this way, “the mother and father to my dog now [both died of cancer]. The mother died when she was six and she was riddled with cancer, and the father died when he was seven and he was riddled with cancer....And then [I watched] this neighbor put hundreds of dollars into having his dog’s tumors operated on, and [another neighbor] put hundreds to have [his] dog’s tumors operated on, and the people in the back here have spent, I think it was close to \$400 having a tumor checked on a dog, and they said, ‘Yeah, it’s cancerous.’ That kind of stuff has had a very large impact on me” (lines 2108-2127).

Domesticity moved beyond private attempts to have a safe home and hearth. In a seeming challenge to home makers to chase more dirt, the Palmerton Environmental Task Force purchased a special vacuum sweeper and unique soaps which they loaned to residents for domestic dust control. In 1992, the Borough of Palmerton received \$18,000 to purchase a new street sweeper to suck up dust and dirt from the streets of the town. Vacuuming was elevated to an art form in 1996 when USEPA utilized a specially designed vacuum cleaner mounted on the back of a truck to vacuum boulders on the landscape in a contaminated area known as Little Gap. Vacuuming rocks became the quintessential obsession with cleanliness;

USEPA assumed the image of new handmaids in white decontamination suits tidying up the natural environment.

The relationship between domesticity and environmentalism was voiced by Sandy Peters while reflecting on the talks she would give at public meetings at the beginning of the struggle, “basically I just made the plea for everybody to start being an environmentalist in their own homes!” (7/2/96, lines 895-898).

Vision and Voice: Empowering Acts of Seeing and Speaking

Of the nearly one hundred fifty code words that emerged during the analysis of the transcribed interviews, “voice” was a commonly expressed category. From this it was easy to witness that PCCE was not voiceless, neither publicly nor privately. In fact, they spoke in two major voices: publicly, in terms bounded by the industry-influenced community rules of social intercourse; and privately, in terms of what bell hooks terms “talking back” (1986/87). The latter was defiant speech constructed by a group struggling for cultural authority to insert new meaning into hazardous experiences. In terms of “defiant speech,” I believe much more was said “intersubjectively” than to what I was given access. I base this suggestion of several behaviors, including the fact that at public meetings, members would comport themselves in an irreproachable manner. However, after public meetings, whether at someone’s home or on the sidewalk outside of the meeting location, members would assume more antagonistic articulations.

Certain speech acts were reported as empowering. Ray Reitz, who was not a PCCE member, mentioned that once “the cat was out of the bag [a metaphor for articulations that indicted the industry for Palmerton’s environmental devastation]...everybody could say pollution” (8/9/96, lines 419-420). For PCCE, vocalizing the problem and potential solutions meant talking to people at every opportunity in the day’s ordinary intercourse, conducting public

meetings, participating in interviews in front of television cameras, delivering quotes to press reporters, and telling friends, relatives and neighbors about the situation in Palmerton.

Louise Calvin felt that as PCCE's "political chairperson" for six months, and then president for the past several years, she has helped to create a space within the grassroots organization where raising a defiant voice has been possible. Straightforwardly she reported, "I would like to think that I helped to get [PCCE] more vocal, and more open! And more defending of our position when it was challenged or stated [incorrectly] by someone else" (7/30/96, lines 1359-1363). Prior to this period, "voice" was expressed by many individuals as "menacing questions" rather than as rebuttals to mis- or dis-information.

Sandy Peters attributes her ability to stand up and be heard to participation in PCCE where it was a necessary activity. Her convictions were so strong she reported, "I can remember if I had to speak in public forums I would get terribly flushed and I would start to perspire and [feel] like, 'Oh my God, I'm gonna fall!' But I was never like that from the first public meeting [at which] I stood up and spoke for PCCE--I never felt it, never! When I stood up and read those statistics, I believed--I believed in what I was doing and I just stood there and did it!" (7/22/96, lines 1700-1710). She appended, "I probably should have been a public speaker or something" (lines 1726-1727). Additionally, PCCE provided a space where non-members could verbalize their feelings. Tess Roberts was proud that the organization allowed others "to speak to us" (line 518).

Correspondingly, "vision" surfaced as a code word during ethnographic analysis. Linda Holland exclaimed, "I looked out on the town and said, 'Oh my God, I was walking around with blinders on'" (7/22/96, lines 463-464). Tess Roberts in her poem about life in the shadow of the industrial giant frequently referenced "seeing." She explained that a slight shift in the industry allowed her to have a whole new vision. Previously she had not kept vigil, otherwise she "could have seen this before [now]" (lines 40-42). And, it was motherhood and children that drove her to watch. She frequently referenced watching and keeping vigil as a behavior that would allow her greater clarity. The end result was "from an environmental point of view to really [do more] looking now" (lines 2034-2048). She concluded, "That's where in my

poem...that ‘seeing so acutely’ comes in. I lived here all my life and I saw the mountain die-- and I saw the smoke, and yet wasn’t really seeing it for what it was....And, boy, once I really saw it--and once I really looked at it, it just made me so aware of, of every other place I go--of looking, of actually looking” (lines 2050-2061).

Tess Roberts’ narrative is important for several reasons. It encapsulates at a personal level, what Freire calls “cultural action and conscientization” (1986). The “dominated consciousness does not have sufficient distance from reality to objectify it in order to know it in a critical way”--a state he calls semi-intransitiveness (p. 75). The “before” state of Roberts parallels Freire’s “semi-intransitive consciousness” wherein “this consciousness fails to perceive many of the reality’s challenges, or perceives them in a distorted way” (p. 75). In the process of emerging from silence, “the capacity of the consciousness expands so that men begin to be able to visualize and distinguish what was not clearly outlined” (p. 77). This is what, at a personal level, Tess reports. A state that Freire calls “naive transitive consciousness.” The challenge of the newly emerging consciousness stimulated cultural contest as the dominating forces sought to maintain the *status quo*. The results of the contest were cultural action for freedom and cultural action for domestication--each taken up by the different parties in the relationship. Tess’ and others’ “visioning” puts them on the road to a critical consciousness--that is, participating critically in transforming acts (p. 106) of freedom.

The Emanation of Cultural Action Through Experience

For the inhabitants of Palmerton, the lived world was both a product and a producer of everyday practices. Linda Holland’s comments are illustrative, “I was going about [my] business and [not] worrying about anything. People are still doing [this], even [with] all the publicity that has been brought up” (7/22/96, lines 462-468). How people lived was an *outcome* of everyday routines, and how they lived also *constructed* daily habits. For most,

everyday routines circumvented worrying about pollution; the lack of disquietude about contamination precluded taking steps in their daily habits to address it. As Freire asserts, “the only data that the dominated consciousness grasps are the data that lie within the orb of its lived experience. This mode of consciousness cannot objectify the facts and problematical situations of daily life” (1986, p. 75). Kada’s observations paralleled this awareness, “the Blue Mountains insulated us against the rest of the world and how we shut our eyes to the things we don’t want to see” (7/19/96, lines 162-170).

It was through various experiences that “cracks” developed in the closed, sequestered lives of Palmertonians. Specific experiences nurtured individuals to no longer see their previous conditions as unalterable givens. The experiences of “non-natives” were fundamentally different than the experiences of “native born” residents of Palmerton. Sandy Peters reported that in a home where she *once* lived, “cherry trees and apple trees and tomatoes in the garden and lettuce...and grass and flowers and hedges [that] were always green and...even the tree-lined streets” (7/22/96, lines 796-808) gave her a great basis to compare what she experienced in Palmerton. The Everts^{pseud.}, also new comers, suggested that their ability to see otherwise came from “our own education [and] what we’re used to. We’re used to things being different...We used to have grass in our backyards” (1996, lines 782-793). The pattern of *comparative* inquiry was invariable for all non-natives that I interviewed. Although Louise Calvin was raised in Bowmanstown, Pennsylvania, a community only four miles from Palmerton, she said “everybody had lawns” (7/30/96, line 90). It was for this reason that she knew that the zinc was affecting the vegetation, since metals were not a problem in Bowmanstown.

On the other hand, native born residents reported that the intersection of local experiences provided them with the awareness that present conditions were not acceptable. Linda Holland exemplifies those who were native born, even though she moved away for a period of time, and returned later. She familiarized me with her situation this way, “I would always notice on my front porch would be a black coating of dust that I’d go out daily and wipe down. But still we were raised with this so I really never much thought about it. Finally, I’m thinking, [my daughter] has a nine [$\mu\text{g/dL}$] blood level, I’m wiping this black stuff up, [the

company is] processing hazardous waste, I'm gonna start wondering what's in this stuff" (7/22/96, lines 135-145). She ask herself, "How can I go about [finding out]?" (line 145). She learned about [PCCE] getting organized. She was interested in the collective because "my child's blood lead level, and what's going on down there [at the plant]" so she "got involved" (lines 155-158).

For Linda, it was a journey from experiences to questions, and on to cultural action. Hers, like most of the native born inhabitants, was a *synthetic* inquiry process. She engaged in combining constituent local experiences to arrive at a position of action. Although Linda had experienced another way of seeing the world when she moved away from Palmerton for a period of her life, it held a weaker grip on her than did her earlier developmental experiences. She had relocated to a place that was "farmland" where "you couldn't keep up with mowing [the lawn, it grew so fast, quite unlike in Palmerton] even without fertilizer." She depicted the new location as "very nice and green and great" (lines 390-396). Yet, her interiorized past constructed in the industrial culture, even after experiences that differed from it, conditioned her vision and actions. Processes of comparative inquiry were less compelling than synthetic ones. She added, "I was raised here so I knew that there was a dead mountain and stuff. I didn't much pay attention to why. I was not very environmentally conscious at all. I was like, 'Well, I know it's dead'" (lines 371-385). Native born residents corroborated what Seamon has noted, "the insider's world is one of processes and events normally unnoticed and unquestioned" (1980, p. 192). During an interview, Linda asked, "[As] I think back now, why didn't I look and see this stuff?" answering, "I guess I walked around pretty blind!" (lines 396-399). Tess Roberts, a native, also referred to "desensitization" to the conditions of Palmerton because of growing up in the community (lines 2062-2064). Freire believes that "residues" such as Linda's and Tess' must be expelled by means of culture (1986, p. 54). PCCE provided the cultural space for these women, and others like them, to commence the process.

Experiences led to more than just questions for Sandy Peters, and others--they led to lay-experimentation. She recalled an experiment that she labeled "mildly scientific." "One day I had these canisters out on the back porch and they had bubble wands...and chalk for the kids--

you know how [canisters] are graduated sizes. Well, I put a piece of masking tape on the bottom and I dated it and I had [the canisters] all sit there and then two days later I wiped three of them off. And then three days later I wiped two of them off. And two days later I wiped the next one off to see the graduated levels. Well nobody would believe me because I didn't keep a little journal or anything but gosh darn...I was doing my own little things like that all the time....So that was one of the little experiments that I did" (7/22/96, lines 2070-2100). Sandy also experimented with what she called her "little reclamation project" which entailed observing naturally invasive metal-tolerant plants and then replanting them on barren areas on her property (lines 1960-1969). Ron Monty, too, discussed searching for plants sympathetic to a harsh environment and using only them in his home landscaping (fieldnotes, 7/20/96).

Beyond Fear

In Palmerton there are multiple origins of fear. Grassroots members wrestled with uncertainty about how they would be received by fellow citizens. Both past and present exposure to contaminants, pollution loads and the effects of heavy metal body burdens, the impact to future generations, coping and financial uncertainties all contributed to individuals' disquietude.

Although fear was a substantial emotion with which members dealt, especially in the early days of organizing, they also reported experiencing other feelings such as anger, frustration, as well as hope and happiness. Some emotions enabled them to challenge a system that subordinated people for economic gain and material progress; other emotions had an opposite effect and encumbered the process of democratic mobilization. Kada Rehrig positioned it this way, "maybe in Palmerton more than anywhere else we're raised not to go

against the master!” (7/19/96, lines 418-420). However, when her father came home one day to tell the family about the dilemma that he faced--knowing the company was engaged in ethically bankrupt behavior yet yoked from doing anything about it--she experienced anger. Kada reported, “that just ticked me off to no end!” (line 1235). Linda Holland expressed “rage” at the behavior of the company and some community individuals who suggested that she “spiked” pollution tests so that the results were positive for high heavy metals. She used the same language as Kada, saying, “That really ticked me off!” (7/22/96, lines 196-197). Linda went on, “I don’t feel because you think you helped a town out, you have the right to kill two mountains and pollute us and then deny that....That’s why I have very bitter feelings!....It makes me bitter to [see the company] spend more money fighting than just admitting [they] made a mistake. [This] is really an injustice to the town” (lines 740-744, 787-792). She expressed feeling personally abused by pro-industry supporters who called her a liar and posted her name in the press. Thaddeus Evert^{pseud.} said, “I get mad, I even get mad at EPA because I think they’re going along with the company half the time” (7/22/96, lines 1268-1272).

Emotions in addition to fear and anger that were expressed, included anxiety and nervousness; pain; distress; frustration; embarrassment both at being called inferior or deficient housekeepers and mothers, and embarrassment for company executives and their sycophants when they stood up in meetings and made fatally inane remarks; fatigue; hope; and happiness. Ellen Colangelo simply stated, “we do what we can with the time that we have, and hope for the best” (7/20/96, lines 1194-1196).

Many expressed feelings of being worn out and tired. Ellen Colangelo bluntly stated, “in the beginning we had a lot of energy, but we’re all getting older” (lines 1199-1203). Tess Roberts also expressed feelings of weariness from the fight. She stated she felt that she was “running out of steam” (line 2139). She went on, “[the industry and its supports wear you down since] they have the money and the means to [hire personnel who will take up the fight and] replace them with somebody that’s fresh and lively and who’ll beat the tom-tom they want....And here we [PCCE] are --I’m into the sixth year--I mean, I need someone to beat the tom-tom here (Tess laughs at this point)--just to give me a little respite!” (lines 2150-2164).

Landscape as a Primary Site of Cultural Struggle and Contest

*“...all landscapes ask the same question in the same whisper.
I am watching you--are you watching yourself in me?”*

(Durrell, 1971, Landscape and character, p. 158)

“Tell me your landscape and I will tell you who you are.”

(Ortega y Gasset, Quoted by Silcox, 1996, p. 1)

The women in Palmerton were constructing two different types of landscapes--the surfacescape of residents' imagination of what could be, as well as the topography of the physical terrain.

Those who chose to transform the contaminated, barren landscape have accepted that this position places them in the cauldron of conflict and the sphere of hoodlum status . Both the “natural” landscape (of the desolate mountain looming over the town), and the constructed landscapes (of the revegetated mountain side, public parks and private lawns and gardens) evoke contested notions. The built environment tells the builder and the world about the desire to transform the topocide (annihilation of “place”) that has occurred--or to engage in the illusion of transformation. The constructed landscape in Palmerton, although largely situated on private land, is public space in so far as it is consumed by the onlooker. Evoking the dynamics of reconstructing the mountain and lawns offers insights into the contest for fixing meaning in a given direction.

Greenwashing Ecology

“You can not hide the land--it tells the tale”

(Louise Calvin, President of PCCE)

Aerial photographs from the 1930s began to show death on Blue Mountain (Lowry, 1985b). The trend accelerated between the 1960s and the 1970s, a period that correlates with high zinc production at the facility (Ditzler, 1986, p. 16). Ray Carazo recounted, “when I first came into Palmerton, February 1935, this mountain was as pretty as any area you can pick” (8/9/96, lines 30-33). Reinforcing his contention--which seemed almost unbelievable in light of the present

situation--he added, “and I’m not lying to ya” (lines 41-42). His memory stored vivid pictures of “300 to 400 kids, teenagers [and also some old women and old men], up there picking huckleberries. They were plentiful. I mean huckleberries up the ying yang! To give you an idea of how many huckleberries we used to pick, we’d start about the last week in June....The early berries were the small ones...Those would last about three weeks. Then in August we would start the taller blueberries. We had a...Jewish fella used to come in from Brooklyn [New York] with a panel truck and he would take out on a daily basis including Sundays and holidays from 2,000 to 3,000 quarts of [berries]...and that didn’t count the berries that we used to peddle locally” (lines 45-94). Ray believed the community narrative that pests like Dutch elm disease and chestnut blight contributed to the demise of the mountain, but was not convinced that fires added to that, saying “Nature has a way of recovering [from fires]...in fact the soils need [fires]” (line 147). When he realized that plant emissions were causing the damage, he “cried a lot” and was “bitter” saying, “I [publicly]cursed the zinc company up and down like nobody cussed it” (lines 406-419). During the interview Ray used the phrase, “it’s coming back now” like so many others in Palmerton used--an expression tied to the industry discourse. The former county agent, Ray Reitz reported, “you don’t have to be a nuclear scientist to see that there was something killing the vegetation. When I first came here in ‘50, it wasn’t as bad as it is today. The vegetation today is practically all gone” (8/9/96, lines 105-111). Jan Sosik, didn’t remember the mountain ever being vegetated, recalling from the late 1950’s (8/9/96, lines 36-42).

It was in the 1980s that large tracts of trees were showing signs of decline and death. In the early 1980s the US Soil Conservation service began investigating ways to revegetate Blue Mountain using sewage compost to recondition the soil. Earlier proposals for a 13 year project to remove 6 to 12 inches of soil from 2000 acres, estimated to cost \$484 million, were scrapped (*The Morning Call*, 1987) due to the tremendous cost and no certainty that the plan could be fully executed. Experiments to revegetate the cinder bank, conducted from 1971 to 1979, proved fruitful (Collins, 1995d) and prompted the “revegetation” discourse for the entire Superfund site. After years of discussion and controversy between USEPA, the State

Department of Environmental Resources and the industry, final agreement was reached on the cinder bank revegetation work in 1995 (Collins, 1995e, p. 1).

In 1991, 60 acres of the Blue Mountain were seeded for vegetative growth (McKee, 1991, p. B1). The process involved cutting roads across the mountain, then applying sewage sludge, fly ash, and limestone, in a mixture formulated by Horsehead Resource Development Corporation, called ECOLOAM. The intent was to adjust the earth's chemistry, stabilize the metals in the soil, and provide nutrients for growing plants (see *HRD, ECOLOAM*, October, 1992, p. 2).

Despite the discursive and anecdotal comments of the naturalist from the Carbon County Environmental Center at the Scientific Symposium in 1994, the results of the mountain ecological restoration have been less than expected. Evaluation of the efforts were conducted by US Army Corps of Engineers' experts from the Vicksburg, Mississippi Waterways Experiment Station and the Hanover, New Hampshire Cold Regions Research and Engineering Laboratory at the request of USEPA. They found that tree cover establishment was not successful. More significantly, some of the trees that were growing on the revegetated sites were weedy invaders tolerate of hazardous metals. Plants absorbed cadmium from the soil and, in the autumn, lost their leaves, now contaminated with metals, and returned the contaminants to the soil. "Birds, rodents, earthworms, and other members of the recovering ecosystem are then exposed to the contaminants, making the problem worse" (p. 2, 3). Dr. William Sopper, Pennsylvania State University, was engaged for 3 years in revegetation research on Blue Mountain beginning in 1986. In a telephone conversation (notes, April 5, 1996) he reported that USEPA terminated his incomplete research in 1989, and turned the regrowth studies over to the Zinc Corporation of America (ZCA). His is the claim that ZCA "overrode EPA," convincing them that the industry could conduct the investigations at that point. Dr. Sopper's access to the research plots was withdrawn. He reported "They didn't want me to see what was going on."

There is the unlikely event that the forest ecosystem will resemble the natural landscape that it once did. Yet, the success in greenwashing the environment has given the industry much needed cultural capital, helping to rewrite them as environmentally sensitive.

In an effort to aestheticize the devastated site, one formula for revegetation consisted of a seed mixture, water, green coloring and newspaper mulch which were sprayed on top of sewage sludge. It was reported that “the dye used in [the] ‘hydroseeding’ process [produced] the oddly colored, light-green patches on the mountain” (McKee, 1991, p. B1). As it turned out, the green dyes applied to the revegetation material were not the only illusions on the mountain. The newly established plants with their concentrations of metals were also greenwashing the environment.

The industry, ever intent on good public relations and an enhanced bottom line, has engaged in green marketing practices. The direct-marketing of ecology by such maneuvers as the development of ECOLOAM, are attempts to persuade retailers, remediation clientele, and consumers that using the waste concoction is equivalent to having an environmental conscience. In standard business form, the HRD has turned the pollution for which they are a potentially responsible party into an economic endeavor. In the course of attempting to restore the mountain, they formed a “Remediation Service” and have proprietary rights to the sewage sludge mixture that is marketed by them as ECOLOAM. Their advertisements, offered at the Zinc Environmental Information Center, stated that Blue Mountain is a “biological wasteland” due to exposure to decades of smelter emissions. The area is appropriately described as “totally defoliated, and littered with rocks, boulders and dead trees.” It pronounces, for promotion of their business adventure, that the once irretrievable site is “on its way back to ecological health.” The ancillary services that HRD provides to prospective clients are listed as “permitting consultation for work with federal, state, and local regulatory agencies, peer review, expert witness testimony, legal advice, site analysis, environmental assessment, and international services and joint ventures.”

The ecological restoration on Blue Mountain was not apolitical. There is a political use to which it has been put by the industry through the corporate appropriation of the restoration.

The “greening” of the mountain increases the positive image of the company with respect to Horsehead’s relation to nature. It is a means to satisfy a capital end, as well as a mechanism to increase the cultural capital resulting from the image of the company as a friend of nature. Those who view the mountain are seeing more than grass where trees once stood--experiencing more than a lesson in ecology. They are viewing indoctrination into the relationship between Horsehead and nature that best serves the interests of the industrial culture. Too, the industrial language surrounding the remediation authorizes what a “good restoration” looks like by (self) proclaiming it as such. In return, the product of this restoration, authorizes the company as environmentally friendly--something to which numerous residents take exception.

Jan Sosik, a Palmerton teacher’s remarks are typical of many concerning the revegetation project, “[the mountain] is definitely better. It’s better than it’s been for years...I never thought I’d see accomplished what’s being done up there now” (lines 44-47, 211-213). During an interview, a company employee who asked not to be identified reported that the process used on the mountain--spreading waste sludge and industrial fly ash over the environment--was so good that it was “the answer to civilization” (notes, 8/9/96, lines 701-702).

Pebbles in the lawns

“One of the most attractive occasions of the year [in Palmerton] was the May Party given by Mrs. Dodd on her lawn....The May-pole colors were pink and white, and the children wore pink and white apple blossom caps and rosettes to be in harmony with the apple trees which were in full bloom on the lawn. After the May-pole dance...the children scattered to gather flowers in the woods and play on the lawn....”

(Hughes, Neighborhood House report, 1907-1909)

“The stacks [of the New Jersey Zinc Company operations] expel an acrid yellow smoke that lays a yellow coating over everything”

(Pennsylvania: A guide to the Keystone State, 1940, p. 505).

Palmerton's sites of ideological struggle included the interior of homes, lawns (places that are at once privately possessed and yet publicly read), and the surrounding mountain. Lawns were the primary sites of community contest. Soils in the valley are contaminated with cadmium, zinc, lead and potentially other materials. The federal government has written, "many areas of Palmerton are devoid of vegetation, a factor which increases the likelihood of contaminant migration and uptake....Residential yards have varying amounts of ground cover. Some of the yards are bare or have sparse vegetation, some have rock gardens and some have had sod installed" (*Public Health Assessment*, 1994, p. 40-41).

Residents and municipal officials were faced with two significantly different "clean up" scenarios. The zinc company, through their Zinc Environmental Information Center (ZEIC), provided soil amendments and grass seed so that new lawns could be established on contaminated sites in a project labeled Neighbor Helping Neighbor (NHN). The revegetation that resulted did not remove the metal contaminants from the area, however, the movement of pollutants was restricted by stabilization of the soil. The USEPA program, on the other hand, was an actual remedial initiative. It involved removing one to three inches of soil, together with the loaded metals, and planting sod over newly replaced earth. The Palmerton Environmental Task Force claimed to provide information on both options to those who inquired. The Palmerton Concerned Citizens for the Environment (PCCE) promote the USEPA clean up, the cost of which ultimately will fall on the potentially responsible parties (PRP) in the Superfund case. The NHN program, while not removing the pollutants, will cost significantly less in the long term than USEPA's soil removal, replacement and sodding efforts.

The state environmental agency has questioned the action level set by the federal government for clean up. To qualify, USEPA has fixed levels of 1,500 parts per million lead, 10,000 ppm zinc, and 100 ppm cadmium--"levels significantly above the national average" (*Update [DEP]*, 1995, p. 8). These levels, too, have been challenged by the US Department of Health and Human Services as not protective enough (*Public Health Assessment*, 1994, p.

50, 51). The question “Why are the thresholds that trigger remediation too high to ensure public safety?” is in need of a meaningful answer. Although raised by PCCE, none was forthcoming. USEPA informants confided that the decontamination levels were a political, not necessarily a scientific decision.

The lawns of Palmerton are socially and politically constructed places in which community conflict was lived out. In the autumn of 1995, a home owner who had USEPA remediation with a sodded lawn discovered that something had been “poured on it that killed [the grass]. It smelled like gasoline. The pattern in the killed grass spelled [an] obscenity” (Collins, 1995f). The lawns have become political space and a part of the process of “ideological mobilization”. Lawns have become a part of the spatial geography of contest.

Lawns contributed to the establishment and delimitation of “communities of resistance” who opposed the powerful industrial culture. Re-lawned private properties rescued some people from corporate expropriation of their yards through pollution. And, restored public sites became “borrowed space” filled with possibility and longing for a healthy future. Louise believed that residents were coming to “understand that [USEPA’s] program is one that works, that it’s a program that’s being done to protect them and they’re participating.” To her USEPA lawns signaled “the [residents are] commenting, without going to meetings, without writing letters. It’s commenting in the public way by having the yard remediated--that they can’t hide. They’re publicly making a statement. The yard speaks for them” (7/30/96, lines 762-782). To her and several others, a request for USEPA’s clean up was tantamount to reclaiming the land from industry’s “ownership.” Habermas (1981) writes that “ascribed characteristics...even neighborhoods...contribute to the...creation of sub-culturally protected communications groups which further search for personal and collective identity. High value is placed on the particular, the provincial, small social spaces, decentralized forms of interaction and de-specialized activities, simple interaction and non-differentiated public spheres. This is all intended to promote the revitalization of buried possibilities for expression and communication” (p. 36). In Palmerton, “lawns” were the basis of that sub-culturally protected communications group. Owners of USEPA remediated lawns spoke a powerful message without words.

Lawns in Palmerton were used by some PCCE members as “benchmarks” to community responses and to deliver social messages. Kada Rehrig held that “the first people who had [USEPA clean up] showed they cared about what was going on. They cared about their families, and they wanted to do something about it, even though [taking an action] was difficult to do” (7/30/96, lines 803-818). To certain individuals, lawns were about the authentication of PCCE or defiance to the community script. As fabricated landscapes, lawns and home landscaping were signifiers that had multiple readings. For Louise Calvin viewing sodded lawns during her routine walks around the community signified that the owner or resident had heard the message “heavy metal contamination is a problem that can be truly corrected.” Most often USEPA remediation was linked to the feelings of a better, more thorough job of clean up.

On the other hand, to some, the industry-subsidized Neighbor Helping Neighbor was a program that achieved more than lawn repair. It was an initiative that transformed space, reinscribing it with the authority of company allegiance. For them, clean up of lawns not only prevented exposure, but also signaled fidelity to hegemonic forces in the community when NHN was used.

Narratives about lawns revealed the intersection of class and gender relations in the community. For instance, the Palmerton Annual Community Festival is a major social ritual and public celebration for the town. The zinc company erects a large tent for the distribution of industry related information. At the 1995 Palmerton Festival, a self-identified staff member of the zinc industry reported that the “idle talk” concerning the difficulty in establishing lawns and plantings around homes was a myth. He claimed the fable was generated by the men of Palmerton so they could avoid nagging wives and go fishing and hunting instead of doing yard work. The “nagging wife myth” was steeped in class and gender relations.

In 1996, at the Palmerton Festival the industry raffled a “lawn mower” as a “door prize.” Placed at the opening of their promotional tent in full view, this machine was a commodity that functioned to distribute the industry’s ideology and authority in an attempt to fix

the meaning of contamination in a favorable direction. It was an act of reinforcing the central narrative which said, “there is no problem here.”

The Everts^{pseud.} mentioned that “there’s the Residence Park crowd, and the people who always had gardeners to take care of the lawns. They always had the nice lawns compared to people on Lehigh [and] Franklin, (less affluent neighborhoods) who don’t have nice lawns--they had nice lawns--they were rich, they were better educated” (7/22/96, lines 231-263). Kada Rehrig, too, believed that “if you had a nice lawn that meant you had the where-with-all to tend it--the money, the brains.” She now sees the situation “really turning around, because now if you have a nice lawn...you have the knowledge and the guts to do something about not having a nice lawn” (7/19/96, lines 772-782). The role of “guts” meant “you were able to call--to make that phone call to EPA and say, ‘I want my property tested,’ and by doing that you were saying, ‘I don’t care what the company or anyone else thinks’” (lines 784-792). Ray Reitz reported, “I observed early that any lawn that was green in Residence Park...you could say ‘that’s a new lawn and they had brought topsoil in.’ Where the lawns were dead or poor, that was an old lawn” (lines 114-120).

Those who did not fully reap the benefits of the industrial culture competed with those who did for green lawns. In past times, money and education were not the only factors that would yield a green yard. Kathy Ozalas’ father-in-law, whom she identified as an immigrant and an “extremely intelligent man” knew that “zinc binds with iron in the soil.” He would remark “you have to continually add iron to the soil in order to keep the grass green.” Kathy added, “We use it, that’s one of the little things we always knew” (8/16/96, lines 1879-1898). Ray Carazo, a skilled gardener, also knew, “if you don’t have iron in the soil, everything turns yellow” (lines 695-697).

Residents engaged in creative alternatives to the devastated lawns that dotted the community. Some few lawns consisted of green grass, mostly a result of excavation and replacement of top soil, followed by sodding or seeding. Other ersatz “lawns” were Astroturf, or green-painted asphalt. A number of residents used landscaping stones colored pink, gray or white. A select group has resorted to xeric landscape designs, imitating the yards of the US

desert southwest. One reporter described the situation this way, “In some yards, valiant efforts had failed, and the dead grass [looks] as though someone had sprayed it with motor oil...something is forcing people to fashion lawns of stone” (Carpenter, 1993).

Since the trouble began, over three hundred and fifty people have inquired about USEPA decontamination, while 337 homes were tested by the end of 1996, and 14 in the early days of 1997. One-hundred forty nine homes and yards qualified for clean up and have been decontaminated. For them, the choice to accept federal protocols, in the face of legal threats by a PRP, and in the pressure-chamber of community disapproval, has unearthed buried possibilities. In light of community opposition to USEPA, PCCE members attribute the success of the federal clean up to their grassroots community education efforts. Louise Calvin directly stated, “These numbers are a real success story!” Their labor has resulted in a substantial group of individuals participating more effectively in society. Community development has been described “as community involvement in the search for solutions to local problems” (Lovett, 1988, p. 146). From this definition, PCCE has been a key force in Palmerton’s community development. Yet, all residents are not happy with the growing contingent of home owners using USEPA assistance. In April, 1997, four individuals--three from the upper-class neighborhood of Residents Park, and one out-of-towner, threatened court action to stop clean up in an action targeted against USEPA.

The majority who pay no heed to the contamination, resign themselves to pebbles in their lawns. Those who have not joined the community of resistance continue to expose themselves and others to potentially harmful situations. The many who have not learned to trespass the community narrative remain at dangerous risk and place others there too.

The Value of Abandoning Their Stories

Cultural production often means encroaching on taboo territory, struggling against forces that tend to "colonize" the lifeworld. It includes resistance to oppressive intrusions that attempt to alter the terrain where people define themselves, their beliefs and values (Habermas, 1984). Learning is essential to this resistance. People are not "cultural or structural fools....all social actors, no matter how lowly, have some degree of penetration of the social forces which oppress them" (Giddens, 1986, p. 72). Every day understandings do not always hide or distort contradictions; some times they illuminate them. One type of emancipatory knowledge that illumines everyday knowledge, I have called *fugitive knowledge*.

Fugitive knowledge is knowledge that is based on every day experience. It is unsupervised and therefore outside of the control of knowledge elites or professional knowledge makers. Fugitive knowledge is the "common sense knowledge belonging to the people at the grassroots and constituting part of their heritage. Common sense knowledge "[is not normally codified, but is] practical, vital and empowering knowledge which has allowed them to survive, interpret, create, produce, and work....[It] has its own rationality and causality structure....It remains outside the formal scientific structure built by the intellectual minority of the dominant system because it involves a breach of the rules, and hence its subversive potential" (Fals-Borda, 1982).

Gaventa (1991), Russell, Lewis, & Keating (1992) and others propose means for citizens to wrest knowledge from the monopoly of the experts and to reappropriate knowledge from the knowledge police. Although citizens "look to public officials for thoughtful decisions and protection...they often find...that state and local officials have neither the technical ability nor the political will to enforce existing laws, much less seek and carry out more comprehensive...solutions" (Highlander, 1993). Others have pointed out that legislative inaction is the result of government officials and policy makers "asking the wrong questions" (Flournoy, 1991, p. 327).

Most contemporary studies of environmental conflict cite the government and industry as obstructing the construction of popular knowledge by citizens and often delegitimizing the concerns of popular movements (Gaventa, 1980; Highlander Working Paper #14; Highlander,

n. d.; Highlander, 1989; Highlander, 1993; Kroll-Smith & Couch, 1990; Israel, et al., n. d.; Merrifield, n. d.; and Edelstein, 1988). In fact, in a series of 10 monthly meetings held at Highlander in 1989, grassroots groups identified “the biggest victories” they had were, in part, victories against government (Israel, n.d., p. 8). Szasz, (1994) found that both industry and government are intimidated by grassroots activism and local organizing. He discovered that popular education and community development “threatened [officials’] control over policy implementation” driving agencies to “find [ways] to secure communities’ consent, or at least, their acquiescence” (p. 103).

Once aware that they are the target of government manipulation, environmental groups react with outrage. The public has little trust or confidence in environmental agencies’ abilities to solve problems. Illich (1987) noted the massive rebellion that has occurred against “professions which disable” as “thousands of individuals and groups...challenge professional dominance over themselves and the sociotechnical conditions in which they live” (p. 38). However, in Palmerton, especially in the first two years of USEPA’s arrival on the scene, the federal government basked in the warm reception that it received from the grassroots group, PCCE. In fact, many members felt that USEPA “used” PCCE as a means of getting a foothold in the community only to later distance itself from them. Particularly in recent years, USEPA has warmed up to PCCE-antagonists such as the Palmerton Environmental Task Force, a group that initially called for USEPA’s expulsion.

Merrifield (n. d.) writes that “people’s knowledge” is based on experience, involves those affected, is appropriate to the needs of its producers, is passed on orally (often but not exclusively), and is a part of the people’s culture. Fugitive knowledge shares these characteristics with people’s knowledge. Fugitive knowledge is often produced by emergent citizen groups contesting environmental hazards in their communities (Hill, 1995a; in press-a). The makers of the dominant discourse often delegitimize, or at least attempt to, the knowledge of grassroots groups. One of many ways is by attacking the credibility of the makers of alternative knowledge (Martin, 1988, 1991; see fugitive knowledge in the glossary, Appendix 2).

Because of the failure of scientific knowledge, and government's inability to protect the environment and human health, popular or fugitive knowledge that belongs to the people--and is a part of their cultural heritage--is often put to use by them during local struggles. Palmerton, however, presented a very different picture. Here, PCCE's discourse was not based on the "citizen research movement" that reappropriated official knowledge, nor was their discourse based on knowledge of their own construction.

In Palmerton, the members of the town who supported federal Superfund designation asked the question, "In a company town, when you need help, where do you turn?" For them, the answer was in part embedded in behaviors learned in response to the community script, that is, within patriarchal relations and in an attempt to avoid being marked as "the other." The federal Environmental Protection Agency and to a lesser extent the Pennsylvania Department of Environmental Resources assumed the position of authority for them. These agencies, with their positivistic techno-rational knowledge were promoted by the grassroots folks. Throughout the study I asked myself whether PCCE's subscription to a scientific paradigm was due to their fear of falling into error and becoming discredited. Some respondents suggested this was the reason. Clearly, fugitive knowledge was recognized as "legitimate" knowledge by many, yet I pondered the extent to which they labored under the spell of "modern scientific rationality [as] the privileged discourse...[relegating] all others...to the margins" (Aronowitz, 1988, p. 8-9). Experiences are contradictory and I tended to focus only on the radicalizing potential of experiences. Yet, I came to believe that PCCE members were responding to the sedimentation of domination as they looked to authority, albeit this time in the patriarchal figure of environmental agencies.

Official knowledge became PCCE's primary source of struggle, hope and possibility, despite the advice of several environmental policy experts to the group. One individual, a former government official and now a consultant, told them at a gathering I attended, "Part of the problem in activism is getting too smart--too willing to accept the explanations. This contrasts with, 'I'm mad as hell--Fix it! Don't weigh me down with details and data.' Don't fight the company on a dollar for dollar basis. Use your dollars to organize! Show up at

meetings and raise hell so government agencies are afraid to issue a permit! The company wants technical arguments--it's on their turf. They have unlimited resources, technical expertise and dollars. Use your money for organizing" (notes, November 16, 1996, p. 6).

A former PCCE activist, no longer involved with the group, agreed with the consultant's position. While she had no interest in an interview for this study, she passed to me a note during a PCCE open meeting--the only gathering that I saw her attend in more than two years of meetings. The note stated, "One of the problems for me, in talking further with you, is I'd have to say some negative disappointing things about my group." She expressed longing for past times when the discourse was much simpler. This estranged member of PCCE wrote that there was low community interest in environmental issues because, "[for] common folk...the meetings drag [and are] very boring, [and] over their heads. Simplify, simplify, simplify. See, I feel the basic questions like 'Why?' and 'What does the study say?' are overlooked." For her, the price for a seat at the table, that is, the toll for taking up the voice of the experts, had been too costly. She ended, "[We need] questions that visitors could understand, take home, tell their spouses, neighbors, etc. Generate conversation within the community. We very often [now] miss the mark [by not staying simple for commoners to understand]." Whether she was correct or not, I am uncertain. I know that attendance dropped considerably from the hundreds of community members highly interested public meetings in the early days of the organization, to a few dozen people during the period I worked with the group.

Many members whom I interviewed believed that the scientific data concerning Palmerton corroborated what they intuited and gave it a language. For them, this made official knowledge a tenable option. Apple (1992) has pointed out that "the kind of knowledge that is considered high status...is strongly related to those groups with economic and cultural power in the larger society" (p. 785). In the social context of dependency, and ideological colonization, PCCE did not produce a strong counterhegemonic discourse based on local wisdom nor on ways of knowing alternative to that which was generated by federal and state bureaucrats, as do most groups. Kanpol (1994) cites that counterhegemony "or cultural production [is] a source of struggle, hope, affirmation, and possibility for...meaning making" (p. 35). Although, PCCE

struggled to construct ways of seeing otherwise to the industry-shared discourse and the community central-reality generated by the zinc enterprise, official knowledge was used as a counter pressure. Official knowledge became oppositional knowledge and facilitated the deconstruction of dominant meanings; PCCE showed the necessity of establishing a relationship between science and social action.

In Palmerton, the grassroots folks promoted the knowledge that USEPA brought to the community. Members evoked one type of authority (from scientific canons) as an act of resistance against another form of authority (the cultural authority of the industrial sphere). They critically appropriated unclaimed moments in official knowledge, which gave to them what they needed to transgress the community script. While domesticity raised the necessity for social struggle, elite knowledge provided them with the tools to counter the dominant voice. One reason for turning to official knowledge was the grassroots group's aspiration to avoid controversy and to inculturate rather than to be marked as different--characteristics I have labeled as part of the sedimentation of domination. Louise Calvin put it this way, "PCCE is only supporting the data that's there and that's in sync with what you see. If all the data was contrary to what we were seeing, then there'd be some true controversy here....[Scientific data are] so in sync with what we're seeing" (7/30/96, lines 1090-1099). The "data that were there" included numerous elements that showed environmental fatigue: a barren mountain, exhausted and poisoned lawns, the black rain of contaminants, historical reports of fish death in the Aquashicola, elevated blood lead levels in children, raised cadmium levels in adults, a 33 million ton smoldering slag pile of heavy metals in town, few evidences of typical urban wildlife such as earth worms and fireflies, suspicions of inordinate numbers of cancers in residents, animals with bone and abortive diseases related to metal toxicity, and informal reports from school nurses of possible learning difficulties in children from selected neighborhoods situated in highly polluted areas.

The dominant narrative in Palmerton was the product of selective pruning from experience, those events that did not fit the evolving stories in the community--stories often authored by the hegemonic center or those near to it. This community script was often a

powerful force that “wrote” the choices made by Palmerton’s residents. The hegemonic process--in Palmerton as elsewhere--resulted in, over time and of necessity, much of a community’s lived experience going untold or unexpressed. PCCE’s quest became how to expand the range of knowledges that were open to serious consideration for making environmental decisions.

Well-storied narratives have well-developed themes and successful language to express them. Boundaries, difficult but not impossible to breach, are erected by often narrow, but well-storied narratives. PCCE used “official knowledge” to build a counter-narrative because it illuminated the underbelly of the master script. It gave a language and story line to the downside of the dominant discourse in a more authoritative way than fugitive knowledge could--at least in the halls where environmental decisions would be made.

I am not implying that PCCE was in full agreement with the elite producers of supervised knowledge--they were not. However, PCCE’s primary strategy was entrenched in the knowledge produced by privileged environmental specialists. Although PCCE took up mainstream knowledge, often associated with hegemonic powers that oppress communities, codified knowledge was not the first way of knowing for them, nor was it the exclusive basis for learning. Relying on official knowledge, nonetheless, came to displace the desire for fugitive knowledge--knowledge that was at the center of community silence and which was used to other as “errant” those who dared to trespass. In Palmerton, the voice that defied the dominant community discourse ultimately was not through a powerful counterhegemonic standpoint rooted in the vernacular. Instead, it was by the distribution of government ideology and codified knowledge that their struggles were directed.

Recounting Undervalued Stories

As resisting intellectuals, much fugitive knowledge concerning the local environment was mentioned by residents during interviews, even if not effectively used by them for social action. To Louise Calvin, fugitive knowledge--the people's stories--was information that residents "intuitively knew by living [in Palmerton]" (7/30/96, line 1065). Anecdotes surrounding the absence of animal life were most frequently cited during interviews. For instance, numerous individuals commented on the paucity or total absence of earth worms in Palmerton's soil. Kada Rehrig remembered her father "getting loads of topsoil and there being worms in it. And we [would exclaim] 'Oh-o-o, earth worms!' and the next year , 'Phe-e-w!' no worms!"(7/19/96, lines 685-689). Tess claimed "I've never seen an earth worm [in Palmerton]. If Kada has, 'Good for her!'" (lines 2227-2228). She called out to her husband who was in another room, "Have you Tom?" He responded, "Yeah." She retorted jokingly with laughter, "Did ya'? Oh well, good! He must of been as excited as Kada!" (lines 2241-2243).

Sandy Peters "liked to play in the dirt" and made numerous observations about "visually obvious things that were wrong [in Palmerton]" including the paucity of weed types, but not weed density. She called the proliferation of a few types of plants "the tenacious weeds" (7/22/96, lines 1960-1974). Observations such as Sandy's were sometimes reported in the scientific literature, a fact unknown to local observers. Others, have been neglected by scientific experts; the information that residents hold surrounding these should stimulate new areas for investigation. For instance, one locally-abundant "weed" is the branching sandwort, a metal-loving plant known only in Pennsylvania from Palmerton. It was described as a novelty in 1954 (Pretz, 1954) and has been shown to concentrate zinc in its leaves as high as 13,000 ppm. Several metal-tolerant mosses, unique to the area, have been the subject of research, Too, the lichen flora has been investigated. Beyer and Storm (1995) briefly review the literature on lichens and mosses (p. 598). On the other hand, the presence of plume poppy, a naturalized species found in few locations in Pennsylvania, has yet to be explored by plant specialist.

Informants frequently made reference to "lightening bugs" during the study interviews. Kada Rehrig recalled, "going to my cousin's in New Hampshire and catching fireflies at night--

and how gorgeous they were ‘cause we didn’t have any.’ She suggested that she may have “just thought they were indigenous to New Hampshire” since they were not a part of her childhood experiences in Palmerton (lines 717-727). Ray Carazo reported, “No bugs! No birds! The birds wouldn’t come into this valley because the smoke used to be so thick--the birds don’t go for any pollution....Pigeons seem to thrive, seem to stay in it. I think they stay in it because they’re dumb” (8/9/96, lines 735-742). He added, “even hedges had a tough time growing in this town” (lines 759-760). There was a modicum of fugitive knowledge concerning lawns. It mostly revolved around common simple remedies to keep green the limited amount of grass that would grow. Kathy Ozalas believed that the knowledge about iron supplements for grass her father-in-law “learned from co-workers” at the zinc plant (8/16/96, lines 1904-1905).

Tess reported that the founding women of PCCE “brought a lot of fugitive knowledge” while she offered to the group “official knowledge” (7/19/96, lines 293-300). To her, fugitive knowledge meant nothing more than “[the women’s] stories” She said, “They brought their stories. They brought their stories of what happened here in the past. I had heard some of those stories from my great uncle and some of those people, but I was very reluctant to put those on the table. I wanted to rely more on the official knowledge--I felt more comfortable relying on that” (lines 320-329). She added, “for me I felt that the official language told such a story that I didn’t even need to hear the fugitive stories” (lines 402-406).

She enumerated many scientific studies that supported her contention, adding that she “didn’t even know that it was ‘official knowledge’” To Tess, “this in itself tells...as much as the fugitive knowledge...and it’s based on scientific research.” She claimed, “it leads me to the same conclusions that I had before I even had this official knowledge--based on the stories that I heard, and based on what you could just see” (lines 410-420). She added that the fugitive knowledge was buried for a long time because for a very extensive period, “you just didn’t speak out...it’s just how it was” (lines 861-862). Official knowledge gave the women a “safe language” to voice their opposition. It was authoritative and allowed them to break the silence of the past surrounding fugitive knowledge. To them, there was value in abandoning “their stories” in the public sphere.

In the end, Tess spoke convincingly about the superior quality of codified knowledge, “The point about official knowledge...I felt...was that [it was] so great--that the impact of it was so great--that we had to get it out to the people....And I felt that the fugitive knowledge [had less] impact--and I guess that’s because I heard it all these years--I heard stories all my life--and I believed them--it’s just that I felt they weren’t getting us anywhere. People were telling them like folk tales here and where was that getting us--in getting some environmental justice? I felt that the community would be better served by having the official knowledge given to them.” She listed numerous examples of fugitive knowledge then added, “That [so called fugitive knowledge] was all published officially. It was all in [scientific] papers!” (lines 2870-2919). Codified knowledge was superior in that it was expressed in a language which privileged it within the arena of the powerful. Although “common sense”--especially as it related to caretaking and domestic skills--affirmed and validated Tess’ (and other PCCE members’) experiences, she (and the group) judged that official ways of knowing would have more currency in the contest for cultural authority. The grassroots group took up a grammar which allowed them to unlock the stock of cultural capital available in scientific discourse. They were unaware of the challenge they posed to the often quoted lines of Audrey Lourde, “The tools of the master will never be used to dismantle the master’s house?”

Ray Carazo vouched for the results of years of intense efforts to restore the local environment. After much toil he reported, “we got a lot of insect life [now]--from June bugs to butterflies. Lot of birds, various varieties. I’ve had birds here that were practically extinct [in the area] years ago” (8/9/96, lines 787-791). Beholding biological life in spaces where it previously was absent engendered considerable excitement for some residents. After her yard was remediated by USEPA, Louise Calvin reported, “even the first year in ‘94...just to see worms and slugs--even those slugs--it was so exciting because it’s a life form! [And], I’m seeing fireflies [for the first time] since [I moved here]...I’m here 27 years and [1996] was the first time!” (7/30/96, lines 786-796).

Staying Playful: Christmas Parties and Other Ludic Acts

To some extent, the destruction of the local environment has meant that certain forms of leisure have been lost to the community. During one interview, a resident showed me photographic albums that depicted recreational gunning and target shooting on the mountain, an activity long since past. Certainly hunting is no longer possible on the mountain above the town, and there are neither huckleberries nor blueberries to be picked there. Most residents spoke about the unnatural appearance of the local landscape. To all but a very few it was less aesthetically pleasing than neighboring valleys and mountainscapes.

PCCE core members, the dynamic collective of dedicated activists, reported that they had little time for many of life's necessities, let alone pleasures. They all spoke of wearisome hours expended for reading about toxic waste or environmental regulations; phoning; "chaining" new material; "processing" information individually and collectively; distributing fliers that announced coming meetings, or circulating their own newsletter; planning, attending and evaluating their own meetings as well as going to those of the Borough Council, USEPA, DER, the Palmerton Environmental Task Force; performing administrative activities associated with the organization; selling Christmas Cards or making chicken wings as fund-raisers to help finance their struggles; writing letters to government agencies, to members of the industrial-based alliance; rebutting letters to the editors in several local newspapers or initiating letters to them; scrutinizing and reporting (to appropriate authorities) apparent violations of environmental laws; assisting wayfarers like me and the infrequent interested outsider, sometimes a college professor with students, who would call upon them for an expedition through the community-- which they seemed to particularly enjoy; and many other activities.

I often asked myself, "What keeps them going?" The answer lied in several places. One buoy was an ethical dimension to their lives, which was a common theme that many shared with me; it is discussed in the next section. Another was the firm conviction that their actions were essential and imperative. Louise put it this way, "We're all here on this earth for a visit--

it's a short visit. So make a point! Get involved! Do something while you're here!" (notes, 10/30/96).

Another similarity that members shared was the ability to be playful with each other when they met. This is not to imply that they were not serious, for there was a fierce monofocal attention to their goals. Yet, they knew how to "lighten up" and laugh frequently. It reminded me of an interview I read some time back with William Glasser, where he reported that everyone is motivated by needs for power, freedom, love *and fun* (Gough, 1987). PCCE gatherings were punctuated with ludic acts, undirected and spontaneously playful behavior and activities. Two pertinent examples, from among a pool of many, illustrate this point.

Each year the Board of PCCE held a Christmas party. According to reports, it was an opportunity to soulfully vent penned up anxiety, frustration, and anger in creative and colorful ways. This was usually accomplished by a "center piece activity" that functioned as the axis about which the social gathering unfolded. As the years progressed, the number of ritualized activities increased since the "good ones" were recycled and new ones added. One year a member constructed a "board game," *Getting to Superfund Cleanup*, that was a parody on the game "Monopoly." The chance cards poked innocent fun at nearly all of the members of the industrial orb and government bureaucrats. One card read, "Sludge slid off the mountain, slide back three spaces."

At one Christmas party, Clement Moore's 'Twas the Night Before Christmas' was lampooned. The festal poem was prefaced with a note indicating that the year was 2092 AD, and the lampoon was "unearthed during a historical dig on a heavily-forested mountainside south of Palmerton." In the farce, the meaning of a found poem, '*Twas the Night Before Christmas in the Hamlet of Palmerton*' was lost since records were no longer available from the era in which it was penned, 1992. However, Tyler Holland, "son of the infamous activist, the late Linda Holland" offered that the family attic--in their home "named to the *Guinness Book of Records* for having the oldest 'For Sale Sign' in the world" might give up some clues. But, alas, Mr. Holland at age 101, did not have time to search the storage space since he and his neighbors were preoccupied "mowing their lush tropical-like lawns daily" and participating in the

“Home Guard,” a group of volunteers “[organized] to fight their way through mice and snakes in the heavily-forested area to chop back the giant tomatoes¹ that have threatened to overtake the town.” The poem proceeds,

‘Twas the night before Christmas, When all through the house
Lead covered us all, even the mouse.

The stockings were hung by the chimney with care
In hopes that our clean-up soon would be here.

And Mama in her gas mask (I had none, like a sap)
Had just settled down for a long winter’s nap.

When out on the lawn there rose such a noise,
I knew right away it was Hal ^{pseud.} and Boys.

Away to the window I flew like a flash
Scrapped off the dust and threw up the sac.

The moon on the breast of the soot-covered snow
Gave a picture of grayness to objects below.

When what to my hopeful eyes should appear
But a bulldozer crew shouting “we’re here.”

With a fat little driver, my old friend and pal
I knew right away it was our “Winking Hal.”

Less rapid than snails his bulldozers came.
And he winked and he shouted and called them by name.

“To the top of the porch, to the top of the walls
Go every place where all the dust falls”.

As dry soot that before the bulldozers fly,
Meets with (the name of an industry surrogate)--here’s mud in your eye.

So up to the house-tops, the bulldozers flew
With a bag full of goodies and St. Hal too.

And then in a twinkle, I heard on the roof
 Ole Hal mumbling "I'll just make it go poof."

As I drew in my head and was turning around
 Down the chimney came Hal screaming "Bad ground!"

He was dressed all in plastic from his head to his foot
 And he was all tarnished with lead and with soot.

A bundle of gifts he had flung on his back
 And he looked like a victim just off of the rack.

His eyes how they twinkled! His dimples how scary
 His cheeks were like zinc! His nose like a cherry.

His droll little mouth was drawn up like a bow
 And the beard on his chin was as gray as the snow.

The piece of respirator held tight in his teeth
 And the dust encircled his head like a wreath.

He had a broad face and a little round head
 That shook when he laughed like a big bag of lead.

He was chubby and dirty, a real government dear
 And I said when I saw him "We've been waiting all year!"

A wink of his eye and a twist of his head
 Soon gave me to know I'd be rid of my lead.

He spoke many words, took forever to work
 But I knew from the past that's a government quirk.

He set down his bag and as it became slack
 I saw IRM² marked for Harry^{pseud.}, Bill^{pseud.} and Jack^{pseud.}

And laying his finger aside of his nose
 Then giving a wink and wiggling his toes

He sprang to his 'dozer, to his crew gave a scream
 And away they all crawled; was it only a dream?

But I heard him exclaim as he drove out of sight
 “Don’t give up,
 just keep on,
 you’re right.
 Oh, so right!”

Merry Christmas - 1992

This poem, like members’ other playful acts, was an expression of expectancy and self-justification in the face of overwhelming difficulty at the hands of both government and the industrial clique. The composition is partly a resistance ballad and partly a reassuring Psalter. The opening two thirds are a light and, on the surface, simple narrative of events in the community. Yet, the lines comprise a rich alternative history of the town and are a raid into what was formerly unspeakable terrain. The closing, on the other hand, has deeper meaning. With a theme of redemption by a patriarchal figure (government), it became part of PCCE’s ritualized holiday behavior. The ending lines are both sighs and signs--sighs of longing for a day yet to come, and signs to the group of hope and encouragement. As a motivational device, it is meant to teach members to not loose heart.

Another ludic act occurred in 1996 when Louise Calvin was awarded a prestigious citation from the Pennsylvania Resources Council for “educating, alerting and mobilizing her community to the dangers of an environmental hazard” (from the Annual Awards Dinner Program, December 3, 1996). The event took place at the Sheraton Society Hill in Philadelphia, Pennsylvania with a rather prestigious gathering consisting of the Secretary of the Department of Environmental Resources, and numerous CEOs from business and industry, state legislators, and law firm attorneys. The ceremony transpired in choice, well-heeled surroundings. To many in Pennsylvania’s environmental community, the Pennsylvania Resources Council is seen as a positive expression of otherwise guilty and burdened consciences of the social elite, many from industrial cultures, who sustain the system’s *status quo* and encumber fundamental environmental change. PCCE members appraised the PRC

Award as an additional opportunity to tell their story without regard to the social location of those listening.

Louise was accompanied by a car full of precious and essential cargo--her women-compatriots of PCCE. According to narratives recounted by those who traveled to Philadelphia, the event created quite a rousing and delightful stir in their lives. Half in jest, they teased each other about what clothing was appropriate for an expedition into the uncharted territory of "high society." One laughed at the thought of retrieving her deceased aunt's venerable fur coat from its closet-tomb, musing whether there would be any "animal rights" advocates at the award ceremony who might be offended. Their intentionally over-dramatic behavior was as much a spoof on the high-brow life of the big city as it was relief for their apprehensions about voyaging into the unknown and pretentious world of ritualized public acclaim. Several reported that the experience was a jolly escapade not to be soon forgotten, despite heading south in the late evening when "home" was in a northerly direction. It reinvigorated their sometimes sagging spirits after more than six years of contest and struggle. However, the joy of preparing for and attending the PRC liturgy was not intrinsically embedded in the experience, it was brought to it by women of earnest convictions and beliefs with a dedication that only seemed to grow with each new personal sacrifice asked of them.

Education Born In Political Struggle: Unlearning And Relearning

"True learning can only take place when people are given the opportunity to construct knowledge for themselves, on their own terms, so that they can act to change their worlds."

(O'Loughlin, Emancipatory knowledge construction, 1992, p. 337)

“One day as I watched my two small children, a sadness overtook me. I was helping another generation learn, as had I, to live comfortably in the shadow of a giant, unable and afraid to seek out what was really around them”

(Tess Roberts, “In the Shadow of a Giant,” Appendix 3)

At some point in her life, through the unintentional agency of her children, Tess Roberts was on the way to breaking the chain of learning to comply (see Tess’ poem, Appendix 3). Questions about environmental and health safety set her on a process of evaluating received opinions, beliefs, values and assumptions that were circulating in Palmerton. Her work with other women was teaching her that the dominant community knowledge was impeachable.

Louise Calvin, reflecting on the industrial-social construction of knowledge, stated that she believed people would have to engage in a process of “unlearning” and “relearning” (her terms) to piece together a more accurate picture. Like Alexander (1994), she found that cultural attitudes and behaviors were the product of past learning. When they are determined by an individual to be “counter-productive, they must be *un*learned and/or new lessons learned” (p. 27). While the concepts of critical theory were unknown to her, like Welton (1991) she believed that adults--at least in Palmerton--would have to “unlearn their adherence to unfreedom and learn to be enlightened, empowered and transformative actors” (p. 22) for life to improve.

As a discipline, environmental education is born in political struggle and can never be meaningfully separated from politics--in fact, it is by nature political intervention. Like Tess and Louise, PCCE members were learning how to learn, and learning how to “un-learn not to speak” (Piercy, 1973). PCCE’s educational strategy was, in part, about resisting imposed meanings and breaking the silence that surrounded potential or real problems. As Edelstein (1988) has noted, “toxic exposure is a politicizing and radicalizing experience [and] gives [subjected citizens] an unsolicited *de facto* critical environmental education” (p. 164). This was strikingly true for members of PCCE.

The educational dynamics of the grassroots community in Palmerton encompassed four arenas: (1) personal learning projects, (2) organizational self-education, (3) community development, and (4) education of federal, state, and local government agents to the lived experiences as expressed by some of Palmerton's residents. The first two arenas were about education *within* PCCE; the latter two were education *by* PCCE. Most learning was informal. It was intentional, self- and group-directed, but not carried out by trained or professional facilitators or teachers. Incidental learning, an activity which took place unintentionally, was derived from daily tasks and behaviors in themselves. The way tasks and events were organized within Palmerton's setting provided "lessons" derived from members' living, working and recreating. PCCE was a creative and dynamic "learning network" that utilized multiple educational resources, and merged the competencies and gifts of local non-professionals with those of largely outside science specialists.

Personal learning projects most often centered on words and concepts to capture individuals' lived experiences. Organizational self-education was an effort based on collaborative learning, engaging in cooperative articulation and interpretation of experiences, which according to Lindeman (1929) is the quintessential educational activity. At this level, members of PCCE applied collective pressure at points deemed appropriate to effectively influence decision making for strong environmental and health protection.

This last effort encompassed networking, incorporating environmental awareness into everyday speech acts, the production of a newsletter, sponsoring presentations and speakers at PCCE public meetings, speaking out at gatherings convened by others, and similar means to disseminate the products of their personal and collective endeavors. They waged a campaign to educate the community, each member contributing what she (or in a few instances he) could. Not all of these public performances were assumed by every member. For instance, many described inserting environmental elements into their daily intercourse.

Area three was an effort to grow a grassroots community, to mobilize people and to effect social transformation. The educational goals in all three areas were in the spirit of Lindeman: "To teach people how to live" (1929, p. 37). It was "social education for the

purposes of social change” (1929, p. 116), through programs of emancipatory and democratic practice as “instrument[s] of action” (1937, p. 76) and it sprung from “the grass roots of life” (1945, p. 123). The fourth area focused on educating environmental agencies to knowledges that PCCE generated and circulated within the community in the hope of influencing environmental policy.

We will take a brief look at these four dimensions of education taken up by members of PCCE. Again, these dynamics had an initial linearity related to the chronological unfolding of events in the community. However, they also recurred in nonlinear cyclic patterns throughout the study. Louise summed up the algorithm, “we read it [new information], we learn it [individually and collectively], we share it [among ourselves and with the community], and people should not be afraid to know the data!” (7/30/96, lines 401-408). On more than one occasion she could be heard saying, “Information yearns to be free!”

(1.) Personal learning projects. Personal learning projects were driven most frequently by a desire to know more, to uncover new information--facts not revealed to the community. In an Email to me, Ellen Colangelo bluntly stated, “first we had to educate ourselves...we couldn’t just be ‘dumb housewives’” (April 15, 1997). Tess Roberts, in a letter to USEPA Remedial Project Manager Fred Mac Millan wrote, “I have read and studied for countless hours so that I would have a much better knowledge of Palmerton’s contamination and the Superfund law” (July 19, 1996, p. 1). Instrumental learning (Mezirow, 1985) involved testing the validity of local statements against the world of empirical facts and established knowledge. Before the genesis of the grassroots organization, information-gathering was the most common form of learning. However, after organizing, personal learning was a complex component of collaborative learning. Members utilized a “division of labor” process wherein each person would select a topical area in which to become proficient, similar to Habermas’ (1971a) description of instrumental action as action directed toward results. During meetings the knowledge gained would be shared, with others invited into the process of building knowledge

and meaning-making based on personal experiences. Their task was to design the means for alternative knowledges to gain currency in the environmental conversation in the community.

Interviewees reported that the need for more and different (other than the industry's) information mobilized their desires to learn. A college environmental policy course field trip to Palmerton was the occasion of a striking juxtaposition of motivations for learning about environmental issues. After a tour of the devastated landscape, a conversation arose between a student and Tess Roberts concerning the federal Resource Conservation and Recovery Act (RCRA). Regulations issued under this Act specify the ways that industries may handle and dispose of their toxic wastes. The young college student offered, "During a recent exam, I didn't know what R-C-R-A meant, although we studied it in class." Tess immediately responded, "That's funny, I lose sleep over those initials" (notes, 11/16/96, p. 4). Comments such as this revealed another layer of learning that was occurring. It was akin to Mezirow's dialogic learning (1985). This type of learning required acts of interpretation and judgment, which in some instances created "crises" in the lives of the learners. Interpreting and judging were often disturbing activities that even produced insomnia. Learners struggled to accept claims to truth, sincerity and legitimacy as part of the process of meaning-making.

Learning was most often embedded in concerns about motherhood or domesticity which became "generative themes" to use the words of Freire (1986). Once organized, these themes became the substance that raised an individuals and the group's consciousness of their situation. For instance, in 1988, before Sandy Peters joined the group, she would lay awake at night, pregnant with her second child, "haunted" by the industrial noise that was emanating from the plant. She used to think, "Is there anything here to be worried about?" (7/22/96, lines 131-141). Such enigmatic musings were a motivation for her to begin to look for answers. The drive to learn whether there were reasons for concern motivated her to "[start] talking to [others] about [whether they thought] there were any health problems around here" (lines 213-215). When in a group, she reported that this concern frequently surfaced. Here members singly and collectively engaged in self-reflective learning (Mezirow, 1991), identifying the disabling or disempowering barriers that were often both structural and psychological in nature.

These barriers stood in the way of personal health, achievement of a safe domestic space and community place, and fulfillment of environmental justice, with an eye toward a healthy future.

Ron Monty, although concerned about children's health, suggested that his interest in education was somewhat different than his fellow PCCE. He recalled, "Most of the other people were more intent on child welfare or health problems and stuff like that. I was more concerned to grow grass and to use the property for what I bought it for" (7/20/96, lines 163-169). Whether this was the reason or not, Ron reported he was "not a hunter of information" like the others--calling the material "mundane" (lines 207-220). His position was the exception to the pervasive centrality of domesticity and parenting and the drive to engage in personal learning projects.

Tess Roberts stated that in the early 1980s around the time of Superfund designation, she would "go out and clean my ledges off and there would be this reddish-brown dust, and I'd yell in, 'Tom (husband), what do you suppose this reddish-brown dust is that's always on the front of the house?'" (7/19/96, lines 1339-1344). Although there was a whisper "always in the back of [her] mind, [saying] '[You] gotta find out what this is'" (lines 1359-1363), it was not until 1988 at a public meeting when her lingering question was answered. It was EAF dust, a hazardous material recycled by the industry. Breaking the community silence by questioning was engaging in socially treasonous acts.

In addition to seditious speech acts with others inside the community, individuals would seek assistance from sources outside of the town. For instance, Sandy Peters learned about Greenpeace, an international environmental rights organization and the Citizen's Clearinghouse for Hazardous Waste, founded by Lois Gibbs after her national campaign to clean up industrial waste at Love Canal, a suburb of Niagara Falls, New York. She reported, "If I had a question about cadmium I could call them and ask them about cadmium and they would send me literature on cadmium" (7/22/96, lines 949-953). Tess Roberts reported that speaking at the first public meeting made her aware that she needed more information. Afterwards, she had "lots a questions" so she wrote them "in question form and asked [USEPA] to answer them in just that way, not in a letter, but answer each question specifically" which gave her "a better

idea” of what was going on in her community (7/19/96, lines 256-266). She found the federal agency “very, very open” after they sent her a letter and flow chart that respected her wishes for systematic answers. Numerous interviewees reported that much information was ascertained by them through USEPA, both by direct inquiry and in time through Freedom Of Information Act requests.

Reading, studying and then meeting together led those who would become the core PCCE membership to conclude, “there was no debate about the seriousness of [the situation]” (Tess Roberts, 7/19/96, lines 950-953). They also “were quite sure that it was by design that a lot of this information was not out to [the community]...it was by design that this information was not available to us” (lines 953-960). The industrial culture had constructed an elite narrative space where a limited vocabulary was used. Tess reiterated what others had claimed, “We just asked lots of questions before we were incorporated as PCCE” (lines 967-969). One technique was to “trade” information, either verbally at meetings or on the telephone, or to exchange actual hard copies of material that they uncovered. The purpose however was not to unearth more data, it was to intentionally inject alternative knowledge into the community discourse--a discourse constructed from fragments “fed” to the community in “little bits and pieces over all these years” (Tess Roberts, 7/19/96, lines 89-95). It was reported that the level of trading would elevate in preparation for a public meeting or an environmental agency hearing.

Linda Holland reported that she engaged in a vortex of learning “once you start getting this information that [contamination is present] you start looking further and further and further and [you find] something’s making these children’s blood levels go up. And when you immediately accept it, and you see your own children’s blood levels going up, it makes you concerned” (7/22/96, lines 1178-1186). Tess Roberts was motivated by her self-identified “under-education.” She contemplated, “that bothered me!” Being disquieted by her lack of information meant that she “couldn’t give it a rest” repeatedly saying she needed to know more” (lines 1615-1625).

The generative themes of child health, the need for clean home and recreational areas, and property owner rights raised participants’ consciousness levels, sparked thinking about the

causes of their concerns, and debate over what actions might effect a solution. The result was the development of a “critical consciousness” which led to greater sophistication concerning the constraints and barriers to implementing resolutions of the problems. This in turn ignited strategies to overcome these barriers. The entire process was executed in very informal and fluid ways. That is, there was no “strategic planning” or other formal organizational devices. It flowed naturally, as the group made the road by walking it. Unbeknownst to the participants, they were engaging in “education as radical pedagogy,” but to them it was simply “asking people questions, telling them why we were asking them, and letting them speak to us” (Tess Roberts, lines 516-518).

In 1996 some members of the group subscribed to on-line computer services from commercial suppliers. This became a new source of information and significantly broadened the members’ ability to access information which was then often shared at meetings or passed along the “chain” for reading; Email was used to communicate internally. Kada Rehrig remarked, “we just got on-line--Boy! Is that a fountain of information!” Eager to extract more data, she concluded, “I wish I was brighter about my computer...I just learned how to send Email...that was an accomplishment” (7/19/96, lines 1193). Her hunger for environmental data ushered her into an ancillary informal learning project related to computers. Ellen Colangelo, who also used “on-line” electronic communications during the course of this study, excavated information from cyberspace that became material for others’ learning. Frequently she would Email or fax data to me that she retrieved from the Internet. Those who learned electronic communications mentioned feelings of regret that others in the group had not done so.

(2.) *Organizational self-education.* PCCE members, while not stating that differences are *necessary* polarities, took pride in what I call an ecological model of interdependency which they adopted. On the one hand, they built on the strengths of individual members, forming a collective unity. On the other hand, they treasured the differences that each brought to the organization. Louise Calvin remarked, “It’s one thing to talk with one member and have [a

similar] opinion. But, in the group, somebody has another idea--and a light bulb goes off, and there we are in another direction altogether different” (notes, January 14, 1997).

Tess Roberts felt that the collaborative learning dynamic hastened what would otherwise have entailed slow and painstaking research. It was in the social practice of learning that more was accomplished than in individual learning dynamics. Group learning was collaborative in that it allowed all members to immediately become active in sharing information and interacting in order to learn (especially in a supportive environment); it allowed “authentic” knowledge to be shared within the group, unpoliced and uncensored; it engaged the learners in thoughtful inquiry on topics of vital interest to them; was based on dialog and open discussion; it allowed for the transformation from “passivity” into involvement; was--as will be seen in the next chapter--democratic; it developed skills for the execution of solutions to group-defined problems such as writing, speaking, reading, critical thinking, analyzing, and problem solving; and it allowed the learners to make choices in a supportive and informed atmosphere. The dynamics were collaborative in that they allowed the integration of multiple fragments of the members’ lives. Each person would “go out and gather information and put their feelers out” and then they “informed each other,” which Tess described as “working together,” reiterating, “that works so much better--that works so much better” (7/19/96, lines 2439-2449). Experience of their local world, and team reflection on that experience, allowed for the construction of new meaning. This, in turn, opened the possibility of conscious human agency to transform their immediate world. Collaborative learning was therefore social learning (Harris, 1984 and Friedmann and Abonyi, 1976); it occurred in the group’s practice after reflection on the feasibility of social change.

Board Meetings, consisting of a core of grassroots (predominantly women) activists, were an essential component of the learning collective. During the meetings, many of the women asked questions of each other about the environmental situation. This arena also provided a space for emotional support. At an early meeting of the nascent organization, Linda Holland reported, “I sat with [the other women] and asked a lot of questions, ‘How can this be? How can this be going on?’” (7/22/96, lines 488-490). From the learning collective, new

knowledge was made available to the broader community, a result of their commitment to responsible civic life. Kathy Ozalas commented, “it was extremely important that I know [the levels of contamination and whether it was past or ongoing] and that the community would know [this information]...other mothers and children and medical people” (lines 75-79). Most of the core members of the grassroots group emphasized that the additional information was provided for the community to make more informed environmental decisions. Linda Holland’s remarks were typical of this attitude, “It’s important to at least make people aware [of alternative knowledge], then let them make their own decision. We never tried to influence people’s decisions or the way they think. We just wanted them to know some [additional] facts [to] make their own decisions. Everyone’s entitled to their own opinion” (lines 1253-1259).

Sandy Peters energetically agreed with the expressed belief that giving people information while letting them decide for themselves was a statement of PCCE’s faith in the learner. She jumped up from a limp posture, exclaiming, “Yes, yes, I mean [our strategy] says something, it says, “Give them the information!” “Yes, yes!” she agreed, it means treating people like adults--something that was not done under the closed paternalistic regimen of the industry. The agendas of Board Meetings of PCCE, as well as pre-PCCE group gatherings of community women, paralleled Brookfield’s informal sites of learning which he called “Community Action Projects” (1986). Like Lindeman before him, Brookfield suggested that these could evolve into community action groups, which is what occurred in Palmerton. In fact, the collective learning process became a kind of collective protest where critically reflective learning took place. Members explored the various mechanisms used by the industrial cadre to obstruct, confine and suppress social consciousness.

At times, the collective learning was stimulated by the release of a new document by the federal government. For instance, in 1994 when the National Enforcement Investigations Center released its findings, one news reporter wrote, “People in Palmerton have been meeting this week in small groups in each other’s homes. Together they’re working to interpret the dense technical language of a long-delayed report” (Collins, 1994q). Such “study circles” arose

out of necessity to process new information in a timely fashion. It was recognized that “many heads” made the task of understanding information more thorough.

Many of the grassroots members each kept their own archival material, including scrap books and files consisting of news paper clippings, photocopied documents, community ephemera, video cassettes of televised proceedings, letters, and more. Additionally, there were organizational files which formed an organizational memory. The files categorized the various topics of interest. Tess Roberts related it this way, “We have a binder for OU3 (valley soil and home cleanup); we have a health binder; we have a lead chloride binder [and so on]; that’s how we have our things filed so that if we want a particular topic we can go to that binder and just search it out--we have them just filed by date, the oldest to the newest” (lines 2927-2935). The systematic filing system was operational; when I requested a document that I learned about during an interview, word would go around and inevitably someone--or some ones--would locate it from among their holdings.

(3.) *Community education/community development.* It was a short step from organizational self-learning events and collaborative education to community development for PCCE members. Attending meetings meant not only asking questions, but for some, “speaking out” meant getting the message out!” (Ellen Colangelo, 7/20/96, lines 909-910).

Once the group became comfortable with a certain level of understanding, it was a logical step to offer it to the community. Linda Holland put it simply, “People don’t have the time sometimes to read up on all these things, and if we find something important I feel, why not share it with everyone else? We put out a semi-annual Newsletter [*The Clean Up Times*] and we try to [include] the most important [timely] information we’ve gathered in that period and we’d flier door-to-door many times. We share information we found [by putting it] in the [*Clean Up Times*] hoping to get it out that way” (7/22/96, lines 1233-1242). Louise Calvin reported that in summer 1996, she and Kada Rehrig single-handedly distributed 1,600 copies of the *Clean Up Times* to residents going door-to-door (7/30/96, lines 837-847). She shrugged her shoulders and said, “Well we were walking anyway” referring to her routine nightly

exercise with Kada. In a matter of fact tone she ended, “It’s important that you get the information out for everybody to be educated” (lines 854-856).

The *Clean Up Times* functioned as an alternative press. When items deemed newsworthy had received insufficient attention or were ignored by the mainstream media, the *Clean Up Times* provided an opportunity to elaborate on them. In January 1997, PCCE planned to feature an article on research done by the Pennsylvania Public Interest Research Group (Penn PIRG) on the zinc industry’s toxic releases. Louise Calvin was not aware of its appearance in any local news paper when it was first released in the autumn of 1996. She reported that its absence from the news media was not a major concern, stating, “Well, it’ll get to more local people through the *Clean Up Times* than the news paper, anyway” (notes, 2/17/97).

Some members argued that they were community role models by their actions rather than through direct educational programs. For instance, Sandy Peters felt that she had only to do what she thought was “right,” noting that, “people are looking when you don’t think they’re looking” (lines 2575-2577). She reported that at the community swimming pool, during a conversation with a parent and child, the “little girl said, ‘And we’re gonna go camping for a weekend, we’re having our home cleaned [by USEPA]’ ...And I never spoke to them about that, having the home cleaned” (lines 2563-2568). The teaching moment for her was inscribed in actions, not necessarily in words or explicit teaching performances.

(4.) *Education of federal and state environmental agents.* In a parallel process, PCCE members kept both USEPA and DEP officials updated on occurrences in Palmerton. As a part of the Technical Assistance Grant that PCCE received from USEPA (largely for the purpose of aiding the community in understanding clean up), PCCE posted news paper clippings to the federal agency which detailed not only the events, but how the events were constructed in the media, for USEPA’s review. Additionally, citizens reported that they frequently were in contact with USEPA appraising the agency of community happenings as well as suspected polluting incidents.

Ellen Colangelo and others talked frequently about the role of distributing fliers, especially before the organization became a community fixture, as a means of mobilizing the community often to support USEPA's efforts. Typical of the remarks were the lines she related concerning the first public meeting, "the girls had fliers made up and put out--and they flied the community...urging everyone to go...to come out [to the meeting]" (7/20/96, lines 47-52). Government sponsored meetings were a dais from which to articulate alternative knowledges.

Other devices used for community education were printed and broadcast media. Louise reported that news paper reports were often twisted and convoluted in such a way that few could make sense of them. This was part of the reason for "going to the community" with information. In the beginning, the nascent grassroots members were "learning...and we made sure that [the two local] papers ran [accurate] articles...and we invited television stations. By this time we had a little bit of working knowledge [concerning] the press. [We went] to the press first and let the press do the talking [with our alternative information]" (Ozalas, 8/16/96, lines 671-680). One outcome of this process, was attacks by the industry and its surrogates on the press.

The contrivances of the industry, the Borough Council, the PETF, school administration and others were not disinterested, nor interest-free. PCCE struggled to reconceptualize environmental education for problem solving and decision making and to create science as a social process. To PCCE members the issue was not a matter of excavating some hidden or "true" knowledge--official or fugitive--which laid unearthed beneath the "untrue." It was about adding multiple positions that breached the narrowly prescribed boundaries of an industrial discourse. They were asking for a fuller analysis of the situation and they fought to invite into the community's dialog, competing understandings. This helped to push the borders of what counted as authentic and true.

In mediating contested terrain, the adult education efforts of PCCE were born in the political struggle to see otherwise, to alter the community's industrial discourse, and to embrace new avenues of sense-making concerning the environmental conditions. The grassroots

organization sought better access to a variety of environmental information which was alternative to that promulgated by the industrial alliance.

Asking Menacing Questions

*“All knowledge begins from asking questions...
only when we begin with questions, should we go out in search of answers....”*

(Freire & Faundez, Learning to question: A pedagogy of liberation, 1989, p. 34-35)

*“[The] repression of questioning is only one dimension of a greater repression--
the repression of the whole person, of people’s expressiveness in their relations
in the world and with the world.”*

(Freire & Faundez, Learning to question: A pedagogy of liberation, 1989 p. 36)

The founding women stated that the original purpose of the grassroots organization was to ask questions and then notify the community of the answers. To succeed they had to construct both an interrogative- and a narrative-space. When it was pointed out by industry-interests to Kathy Ozalas that questioning was a disruptive process, she simply replied, “Well, all we’re doing is asking questions and there’s nothing wrong with asking questions” (8/16/96, lines 505-506). In the early years of the organization, the members’ strategy at public meetings was not to provide alternative information. The “goal was to [publicly] introduce some questions to everyone, the zinc company, EPA...[we would say] ‘These are the questions we have, let’s get some answers’” (Ozalas, lines 732-736). When they felt “sandbagged” by corrosive speech, obfuscation or silence to their questions, they would “occasionally...show frustration and anger” (lines 1193-1195). It was apparent that this public questioning was creating a menace to

members of the industrial discourse when, in response, the company arranged private “teas” to chastise them. Linda Holland stated that questioning was an unfamiliar process in the community, saying, “You lived here, you cleaned and you cleaned and you cleaned black dirt and you didn’t much question what was in it [before the formation of PCCE]” (7/22/96, lines 437-439).

Sandy Peters claimed that asking questions was much more effective for her than attempting to compete with the scientific experts. She reported, “I’m never gonna stand up and make an official statement about some scientific data...What I can do is ask the right question at the right time, and demand an acceptable answer. That’s what I feel my job is to do as a concerned citizen in the community” (lines 324-332).

There was a circular relationship between questioning and education. Asking questions led members into new learning situations, while on the other hand, once educated on an issue, previously unexplored areas for investigation emerged. Sharon Milligan^{pseud.}, commented “It’s only when people go out and become educated that they ask questions” (7/20/96, lines 984-986). Ellen Colangelo first needed information about the environmental situation. She claimed, “first you have to find out what the heck [the industrial hazardous materials are]” (7/20/96, lines 190-191). Only then could she ask the question, “Should we, do we want this stuff?” (lines 192-193). Regardless where a member entered the process, persistent questioning led to illuminating insights which in turn revealed possibilities beyond their current understandings, and often to action. This algorithm was performed both individually and during group processing. Questions encouraged individuals “to achieve a deepening awareness both of the sociocultural reality that [shaped] their lives and of their capacity to transform that reality” (Freire, 1986, p. 7).

‘Girls’ on the Chain

PCCE's internal organizational learning process consisted of the links: Chaining, Reading, Dialoging, Discussing (especially at official Board Meetings), and Acting (after "Informed Consent" of the collective). Core members repeatedly reported the importance of the technique referred to as "chaining." New information was "put on the chain" and passed along from one key member to another. Louise Calvin described the chain this way, "We pass everything along on the chain. When we have something that we all want to read we have a chain and it's all passed around so everybody gets to see it" (7/30/96, lines 503-513). The exception is when time constraints require making photocopies and distributing them to the core group, which she does as President of the organization. The chain was a venerable institution by the time I entered Palmerton. Tess Roberts affectionately reported that even when the first women were meeting at the swimming pool prior to PCCE, "we had the chain even back then. The [reading] chain was alive...that's how we [distributed material to be shared]. We gathered and we'd share what we had and then we'd start it on the chain. And, then when we'd re-gather, we'd talk about what we'd read....The chain was the fundamental transfer of information" (7/19/96, lines 918-927).

The chain was a tool for democratic processes within the grassroots collective. Linda Holland remarked, "we...set our priorities by matter of voting. We're very democratic and no,...a letter will not go from the group without at least being passed through the chain most of the time" (7/22/96, lines 1413-1418).

Dialog geared toward group "consent" was the hallmark of the decision making process for PCCE. Louise explained it, "Maybe anybody's one memory of everything isn't there-- however, there's a collective memory [here]....By that I mean even when we're discussing some of the data, everybody won't always have the whole picture, but somebody else has a little clue [from] something they've read, to fit with the whole--with the whole picture" (lines 517-526). Consensus, as it refers to general agreement and concord, especially through argumentation to convince, was rarely engaged. Instead, "informed consent" was pursued. After discussions, an individual who did not necessarily agreeing with a position, would nonetheless consent to the organization publicly holding that proposition, without offering opposition. Discussion and

dialogue were forms of interactive learning. They revolved around multiple foci, including questions raised; experiences shared; visions of hope in a future of justice; technical (official knowledge) data; and belief statements.

Informed consent allowed for a complex self-disinterested democratic process. An affirmative vote on a motion meant that a member agreed it was good for the group, even if she personally disagreed with the declaration. Linda Holland explained it this way, “We always share personal feelings and if one person says, ‘I think we should do this,’ we’ll take a vote. ‘OK, that sounds like a good idea. Who thinks we should do this and who doesn’t?’ And, many times what I feel we should do is knocked down. No they didn’t vote in your favor, fine!” (lines 1395-1405). She explained at other times, some will agree, others disagree, but not block the motion, giving informed consent to hold that position despite having some personal misgivings about it. She believed the process of “informed consent” was vital to the organization’s survival, commenting, “we always pass a [decision] through a voting process which...has kept us together for six years” (lines 1424-1426).

All core PCCE members extolled the outcomes of their involvement in educational terms. Kada Rehrig reported, “I don’t think there are words to describe how I feel about the education I’ve gotten in the last 6 years. I don’t think there are words to describe the profoundness of this experience” (7/19/96, lines 1294-1299). Searching for a language in which to express her feelings, she came up with the phrase, “a mountain of enlightenment” to describe her journey. Sandy Peters, too, remarked about her involvement in the environmental discourse, “I just feel enlightened, and I feel happy, and I feel good about...what’s going on here” (7/22/96, lines 2352-2355). This resonated with others’ tropes of “seeing” and gaining a “vision.”

During a field trip with college students, Tess Roberts exclaimed, “We’ve all gotten \$300,000 educations, and didn’t even want [to get] them [this way]!” (notes, November 16, 1996). In the end, PCCE’s educational endeavors were ethically-centered and clearly counter-hegemonic. Their educational leadership was a cultural practice that resulted in both ethical and political consequences. In a Christmas card sent to me from PCCE members, they simply

scrolled, “You have made us keenly aware of educational opportunities at every turn and that, of course, is what always offers hope for the future” (December 1995).

¹ Members of the community speak about “giant tomatoes” on the otherwise barren mountainside above the town, and dens of rattlesnakes inhabiting the exposed boulders. The source of the myths about rattlers remains undocumented. Perhaps it is local lore that has kept people from going onto the site, thereby preventing exposure to dangerous metals. The origin of the tomato stories is not a mystery. Sewage sludge trucked to Palmerton is applied to the desolate earth in an effort to aid revegetation efforts. Apparently tomato seeds from kitchen waste pass through sewage processing systems unharmed and are spread on the mountain during remediation work where they germinate in the freshly applied biosolids.

² IRM is the acronym for Iron Rich Material, a controversial product manufactured by the zinc industry containing varying amounts of heavy metals. Although now banned for certain uses, IRM was freely spread on road surfaces as an anti-skid material in winter. Some residents expressed fear that this practice may soon be ruled acceptable by government environmental agencies, to their dismay.