

CHAPTER 4. LIFE IN THE INDUSTRIAL CULTURE: THE WILLFUL REFUSAL TO KNOW

“Freedom consists in knowing what [the unseen forces that affect us so greatly] are and how they work so that we have the option of saying no to the impact of their operation....People often are puppets, blindly danced by strings of which they are unaware and over which they are not free to exercise control.”

(McGee, Points of departure, 1975, p. 3)

Members of the PCCE reported that the industrial culture educated citizens in the ways to think, feel, desire, and act. This chapter explores how and where the industrial discourse surfaced in order to be consequential. In three parts, it interrogates *what* was the nature of the normative central reality, *who* were the actors involved in it, and *how* they generated, maintained and defended a privileged space in the community.

Construction the Central Reality and Learning to Comply

Sitting in Louise Calvin’s kitchen in the early days of my research she related to me that life in Palmerton was like living in an abusive relationship. Louise, as several other members of the Palmerton Citizens for a Clean Environment (PCCE), developed tropes to express what social relations felt like in the community. On this particular occasion, she elaborated on the metaphor of abuse. Although a relationship between a parent and a child, or between spouses, may have beneficial dimensions, a dark side can develop that is harmful to the dependent ones in the dynamic. She emphasized that silence is what keeps alive the dark side. To her, giving birth to a child and rearing it in its early development did not impart on parents the right to harm or to kill their offspring. Equally, one partner providing for a spouse, did not bestow the right on

him or her to violate the other. We talked a little about the meaning of “dependency” which led Louise, the president of PCCE, to muse that community life was not unlike the scenario depicted in the 1975 movie, “Stepford Wives.” She pondered, “We live scripted lives.” Her assertion in 1996 that residents existed in acquiescence to a scheme echoed what a local historian wrote more than 50 years before. Archpriest Father V. Gindlin, in 1944, penned, “Unlike most towns, Palmerton has been developed in obedience to well defined...plans” (p. 178).

The film “Stepford Wives,” based on the novel by Ira Levin, walks “the borderline between horror and social satire” (King, 1983, p. 165). It depicts “a perfect little village where kids wait good-humoredly for the school bus, where you see three or four fellows washing their cars on any given day, where [you feel] the yearly United Fund quota is not only met but exceeded” (p. 166). Yet, Stepford is a strange and unnatural place. The men work and play while the wives “all drive station wagons, discuss housework with an inordinate degree of enthusiasm, and seem to spend any spare time at the supermarket” (p. 166). In the end we discover the women have been murdered and replaced by high-tech robots, dummies with microchips in their heads at the hands of their husbands, carrying out programmed lives. The issues of patriarchy, gender, and the role of domesticity that Louise raised in her use of the Stepford trope will be discussed later in the study. Louise was painting a portrait of living within a community reality of social control, a community narrative or master script that directed the lives of Palmerton residents. The community script was an industrially based discourse constructed over time in a closed space where the dominant position was fixed--or attempted to be fixed--as a specific and irreplaceable moment. It was a discourse in the sense of Foucault (1972), that is, it was a system complete with its own rules of formulation and volition which had enormous control over what could be thought, said, felt, desired and acted upon. The industrial discourse authorized what was allowed to be true. Since it was about power, the script relied more on who was speaking the discourse, where it was spoken, and when, than what actually was said. The industrial discourse created what was “reliable and valid” environmental and human health knowledge, set the boundaries of what was speakable, and controlled the

possibilities of what new knowledge could be produced relative to it. The industrial discourse generated in the community an active fight to not learn about things “otherwise”--a willful refusal to know.

Those who held the narrative had their own individual agendas; however they were routinely at one with the zinc industry on multiple positions--the industry performed the function of hegemonic center for the sphere of dominant cultural actors. Courts (1991) remarks that “those in power will not belong to the same ‘club’...as much as they will, by virtue of their power and mutual desire to control others, share some unstated degree of consciousness. They will form an unincorporated repository of power” (p.62). There was a geography of power in Palmerton where those closest to the hegemonic center shared greater authority than those nearer to the periphery, often through community ascent. Unlike the proposition posited by Courts, members of the élan did not (at least overtly or publicly) seek “opportunit[ies] to destroy those above them in the hierarchy.” Historically the aim of the hegemonic forces was to coordinate social control for maximization of production of zinc products. However, in recent years the goal expanded to include the contest for public support as a result of the emergence of oppositional discourses in the public sphere.

The dominant social narrative in Palmerton was: people are privileged to work for the local zinc industry; the community is freely showered with voluntary gifts by the industry in corporate acts of unencumbered gracious benevolence; and where there’s smoke, there’s work and a healthy economy with attendant economic and other securities. Residents either worked for the company or were its boosters--there was no other viable option within the dominant narrative. Citizens often used labor or company loyalty to establish and maintain communal relationships. In fact, association with the zinc industry was the terrain where approval and favor were apprehended, and where cultural and material capital were harvested. It was held that social and economic health and individual security could be secured by endorsing the narrative. Those who had trouble conforming with the community script were “othered” as outlaws--outsiders, troublemakers, radicals, having a moral defect, and hysterical housewives afflicted with social pathologies. Although positioned as a behavioral narrative, it was in fact a

political one. The underbelly of the community script was social control; scripted lives; massive efforts at garnering public acclaim; environmental damage and threats to home, hearth, and children's and elders' lives. Learning to comply with the narrative was not the passive acceptance of domination, but rather was an active dynamic, largely of refusing to see otherwise, undertaken by many in the community.

Louise located the narrative in authority asymmetries when she reported, "a lot of it is about power and the power and influence [the company] had over this community. I think it's as much about power as it is about money" (7/30/96, lines 947-950). Her metaphor of "Stepford" raised serious questions and her observations about power pointed to ideological differences going beyond the argument that economic interests alone drive the industry to act in the manner in which informants reported that it did. Louise's notion that there was a powerful script--or grand scheme--with which borough residents routinely complied might have been easily dismissed if she alone held these feelings. But sentiments of this nature were not uncommon, although expressed in different metaphors. Tess Roberts, a key informant in this study couched the idea somewhat differently. In a phone conversation the day before her interview, she related to me that she would not have much to tell. However, during the night she reported thinking about some materials related to Palmerton which I had written and previously given to her. In these papers, I elaborated on the concept of a "master narrative" or central community discourse. In the morning when I met with her she began, "I wrote a little poem. That'll give you some idea...When I told you [that your writing] left me with no words, it [really] left me with lots of thoughts and words, so I put them down" (7/19/96, lines 8-13; see Appendix 3). To Tess, "a shadow" was cast over the community. Her poem goes on, "I could hear what was taught to me...the source of the shadow was a corporate giant standing between the community and the sun...the giant *designed life* in this community *and always watched to see that we followed 'its' plan*...all that we do in Palmerton is still greatly influenced by a corporate giant...I know that the giant never steps willingly to the side." Reflecting with Tess on life in Palmerton she added that folks were unable to see what was going on "because so long you've believed the way the plan was written for you that anybody else who presented a

different plan--perhaps unless you actually see--see it for yourself--you, you can't follow it" (lines 2385-2391). These and numerous other comments, related that more than just the streets of Palmerton were laid out by design in this industrial community arranged by Stephen Palmer in 1898. Lives, too, were lived according to a central, constructed reality, a blueprint of exploitative social plans and social control. If not totalizing, it was clear that the community narrative was, and remains, omnipresent.

Interviews with informants revealed a community script that was an epistemology of complex identities but with industry at the core, for the reciprocal benefit of the collaborators. In Palmerton there exists a "dominant system" with a minority of the populace participating as cultural producers. For the most part, residents' cultural concepts are not a result of conscious deliberation or premeditated collusion with the industry, but rather comprise an "anonymous ideology" that penetrates the multiple levels of the social sphere--a social sphere that is "inscribed in the most mundane of rituals, framing the most casual encounters" (Hebdige, 1979). It is this "ordinary sense of things" which largely goes unrecognized by most and which constitutes the uncritical and largely unconscious way of seeing, perceiving, and understanding the world" (Gramsci, 1989, p. 322).

Tess Roberts' poem is premised on the idea that this ordinary way of seeing is impeachable. The accustomed everyday lived reality, like water that seeks every corner of its container, flooded the lives of Palmertonians and created the necessary circumstances where they made sense of that lived reality. It is in this context that the residents infused meanings in their relationships to their selves, one another and the world, in a contestable way. On occasion, partners of the grand scheme took different, and mutually exclusive or sometimes opposing positions which resulted in contestation among normally unified allies.

Kada Rehrig expressed thoughts about the community narrative tersely, "if I can describe it--I guess I would think of it as the voice of the company. And, maybe that's something I've only recognized in the last couple of years. You know, I don't think I was aware of that too much growing up" (7/19/96, lines 209-215). She genderized the voice, saying it was, "that good old boys club in Palmerton" (line 442). Kathy Ozalas, a founding

principal of PCCE in 1990, related that in the beginning she “always tried to play the Palmerton game” (8/16/96, line 461) which she described as submission to the zinc company, “the patriarch of Palmerton [which] founded [the] town, they gave birth to this town...no one [spoke] out against the fathers” (lines 1287-1294). To her, through the script, community members were told by the company, “You’re supposed to do what I say, you’re supposed to think the way I think, you’re supposed to be happy” (lines 1303-1305). Sandy Peters, too, responded that the controlling force in the borough was “the industry. I believe it’s the industry. It’s just like the patriarch of the community” (7/22/96, lines 591-594).

Despite few signs of open collective contest, interviews revealed that privately some individuals shared anti-industry sentiments. A county agricultural agent, Ray Reitz asserted, “I never heard any [negative remarks], in my travels, I never heard anything disparaging against the zinc company” (8/9/96, lines 177-179). However, another informant, Sharon Milligan^{pseud.}¹ discussed a neighboring pensioner who never uttered a disapproving word against the industry in the many years that she knew him until “his pension got hammered by the zinc company. Ah, then the worm turned. Then of course he became very outspoken against the company and how they polluted all these years. And what they’ve done....What made him decide this, of course is his pocketbook, because now even though he knew the truth the whole time, he was being fed by the untruth...[then] he said he saw the light” (7/20/96, lines 755-768).

The most overt resistance to industrial hegemony was the emergence of the grassroots organization, PCCE. Early in their opening days, Kathy Ozalas reported that the industry’s power was leaky. She offered that several “mid-level management” (8/16/96, line 1577) would tell the nascent environmental movement of wrongdoing at the company. Apparently there were a number of individuals who “[report infractions to PCCE] without each other knowing it” (line 1580-1581). She related that “there [were] so many people calling and so many little hints and things” (lines 1597-1599)...men [came] with proof of what they were saying and show[ed] us the proof. Sometimes they’d let us keep it, sometimes they would take it with them. You know, [saying] ‘I can’t leave it’” (lines 1624-1626). When probed, it emerged that many of the

informants were “people within the community, normal workers from the zinc company” (lines 1656-1658).

Some individuals, it was reported, objected to the displeasing behaviors at the industry, and on occasion discussed their disapproving sentiments with family members or friends. Kada Rehrig remembered that her father in the late 1960s, a worker at the “Oxide East in the shipping department” came home one day remarking that “he couldn’t believe what had happened at work, that someone in the community had complained about large amounts of smog--and that was right when we first learned the word ‘smog.’ You know, the first time I think I ever heard it, it was in relation to Palmerton. And he said some of his supervisors were talking and they had discussed this that there had been a complaint...and this man said, and my father heard as well, ‘then we’ll just run the stacks at night and they won’t see it.’ [And my father] was very upset...I don’t think we discussed it anymore...and I don’t think he ever did anything...I mean what could he have done at that time? I don’t know. But I don’t think he ever...did anything about it other than stew over it” (7/19/96, lines 14-44). Despite reports of isolated resistance by individuals, Kada’s father’s inaction was most typical. Interviews revealed that through hegemonic practices, residents had learned to comply by giving spontaneous consent to a narrative imposed on daily life through the dominant social group in Palmerton. The community script justified the “what is.” PCCE, whose members dared to dream of ways to organize the community reality differently, was a rare public contemporary critique of the industry-oriented ideology.

During the course of interviews, as well as in informal discussions, members of the Palmerton Citizens for a Clean Environment often talked about a set of complex social interactions that were embedded in ideological differences between themselves and those who ascribed to important elements of the community script. Coded interview transcripts, too, display a series of opposing ideas, values, beliefs or acts which were most often associated with one or more of the cultural institutions of the community, set against the beliefs of PCCE members. It was clear to PCCE folks, although not articulated in this fashion, that the dominant ideology and the favor of power were associated with the industry in an alignment with other

social agencies. As expressed by members of the grassroots organization, Zinc Corporation of America (ZCA) and Horsehead Resource Development Company (HRD) were believed to be engaged in a cultural battle to fix the meaning of environmental hazards in a particular direction and for specific ends and goals, from a privileged narrative location. Excavating what PCCE members believed to be the dominant cultural narrative produced a list of practices that were central to the social struggle. Discursive constructions (meaning, ideology, culture) accomplished destructive functions, such as exclusion, repression, control, and contamination. The inventory of discursive constructions is legion, but includes: weakening environmental standards by privileging certain expressions of “environmental” discourse and delegitimizing others; legally challenging most government attempts to affect a satisfactory environmental remediation and therefore reduce company liability; thwarting, preventing, or diverting attention from the insufficiencies of knowledge about certain environmental hazards, i.e. policing the boundaries of learning and knowledge production, utilization and management through a set of behaviors, concepts and vocabularies in concert with a constellation of other cultural players; privileging selected scientific data against other equally scientific information, e.g. utilizing science for a particular ends that favored industry and positioning science as beyond critique; forestalling a safe, thorough, and effective clean up of all contaminants in the environment; engaging in diversionary strategies in an effort to stall or arrest clean up; engaging in the practice of marking PCCE members as different, and designating them as identifiable “others”--with associated negative “signifieds” such as “radical” and “extreme”; galvanizing the prevailing industry-based ideology and the social organizations that favored it; delegitimizing opposing views of social relations that voiced “life can be structured in a different way”; constructing discourses of “nothing is wrong here,” and “Palmerton inhabitants mature healthfully”; loading the signifier “Superfund” with the signifieds “economic loss,” and “community stigma”; infusing the signifier “USEPA” with the signifieds “meddlesome,” “out-of-control,” and “intrusive”; and blocking efforts for social transformation, and meaningful environmental reform, to name a few.

While in the past the zinc industry participated in social engineering to exploit labor and maximize capitalist production, practices today are more related to environmental liability and

the company's bottom line than labor exploitation and production. These practices include, contemporary efforts to fix meanings toward the company's interests; moves to reappropriate the sites and signifiers of resistance; behavior that directed the production of knowledge; commanding cultural authority; and organizing reality while cementing social relations in favor of an industrial discourse. This prodigious agenda could not be accomplished alone. It took place within the culture of an industrial clan.

Meaning is never fixed but is negotiated and renegotiated in a process of ongoing historical struggle engaged by agents. In Palmerton, this contestation developed an amalgamation of partners that constructed and then inhabited a cultural space of privilege. There is a constellation of industry surrogates that purvey the dominant ideology. In essence, there was an industrial presence by proxy on the social landscape. The industry at Palmerton has historically been able to exercise power in conjunction with an alliance that remains beneficiaries of material and cultural capital, from social arrangements that cause inequalities and sometimes suffering to others. However, the industry's coterie and its orb of influence is not monolithic and uncontested by members of the alliance. For instance, a limited number of examples arose during the course of the study where partners in the dominant discourse "broke ranks" with industry. For example, in early November 1991, Carbon County commissioners suggested forming an Environmental Council in an attempt to bring some light on environmental issues faced by Palmerton. Both the state and federal environmental agencies were in favor of this. When borough council denounced the idea it brought an industry backlash. The ZCA and HRD "criticized Borough Council for not supporting the formation of an environmental committee to address environmental issues in Palmerton" (McKee, 1991, B1).

Furthermore, in 1992, the ZCA threatened a law suit against the community "for its use of the [company waste cinder] bank as a town dump for several decades" (Fortney, 1992, p. 1) which strained the relationship between it and the borough. During informal discussions, some residents expressed the belief that this warning resulted in tighter self-policing by the borough, driving its discourse back into the industrial community script. Experiences such as this were the basis for the community's "learning to comply" with the industrial discourse.

Surrogates On The Landscape: Industrial Presence By Proxy

To understand the meaning of the social contest Freire tells us that we must first be aware of the agents of control, the form that domination takes, the nature of its presence, its location(s), and the problems that authority and control pose for those who experience it (Freire, 1986). This section describes the social institutions used to secure particular forms of authority by the hegemonic center of the community. It positions the context for the contemporary contestations that occurred during the study by looking at *who* were the dominant agents in the industrial culture.

Partners in this amalgamation-- multiple stakeholders in the contest to control the meaning of environmental contamination in the lives' of the people of Palmerton--included, the zinc industry; the Palmerton Chamber of Commerce; an alleged citizen group, the Pro-Palmerton Coalition; the Borough government; the industry-financed Palmerton Environmental Task Force (PETF) and the hospital, school administration and other minor players. These entities constituted a well-financed counter pressure coalition that attempted, at various times, to domesticate, cooped, impede, tarnish, and disarm both PCCE and the government environmental agencies.

Visitors to Palmerton and some residents comment that a palpable industrial presence shrouds the town. The devastated mountain looming over Palmerton is a symbolic icon of the legacy and constant presence of the zinc industry. Many of the community's private spaces (such as homeowners' barren yards, visually consumed by the observer), and its public spaces (like the Borough parks) are inscribed with the authority of the company. The constructed landscape, with scattered buildings and factories, both well-kept and abandoned, are reminders of the town's story, and the place of the corporate world in it. During interviews, the hospital and community health, schools and community education, Borough Hall, and other social

institutions were mentioned as synonymous with the company and its environmental discourse. One respondent pointed out that the seal of the borough is the same as the zinc company. In reality, the government's colophon is a profile of an antique-like "horsehead" adopted in 1912, while the logo of Horsehead Industries, Inc. is a similar but contemporary stylized stallion with a thick strong neck and fierce penetrating eye.

Today in Palmerton there is an informal alliance steeped in an industrial ideology whose members hold many values and beliefs in common. This alliance is a fabric of interwoven relationships through which members champion the corporate perspective while accessing some gain for themselves. The industrialism that informs the alliance consists of notions about social arrangements which organize the world and the lives of those who inhabit it. It is geared to maximize consumption and production from resource exploitation and profits and is power-laden. It promulgated social organizing principles premised on commercial imperatives. The corporate discourse was rarely interrogated by community members precisely because it was normalizing and based on common practice. It was the bedrock for sense-making.

Metaphorically speaking, residents noted that there occurs in Palmerton a form of "social and cultural incest" within the sphere of the dominant cultural producers. Respondants in this study cited as examples several members of the supposedly value-neutral Palmerton Environmental Task Force (PETF), allegedly formed to be a broad-based "community" vehicle for brokering government information, who had ties to the industry.² Task Force members were named as past and current directors of Horsehead's community grant fund--a company gifting program; an individual on the Task Force, also on the staff of the Palmerton Hospital, was reported to have selectively supported health studies that showed no impacts rather than those that indicated problems; one Task Force member's father was described by citizens as "a top boss of the company;" one, Mike Raub, was cited as a self-described co-founder of a national special interest group whose members are opposed to their communities' federal Superfund designations--a position clearly articulated by the company in the early days of the Palmerton contest. A former vice-president of New Jersey Zinc Company, J. Arthur Marvin, was reported by the local press as the Carbon County Housing Director (an agency with the

potential to shift the discourse from industrial metal contamination to one premised on lead-based house paint), as well as head of the Palmerton Chamber of Commerce's extremist Ad Hoc Committee; Rodger Danielson, Borough Manager, is facilitator of the PETF. Barbara Forslund was often cited by those I interviewed as an example of the "politics of relations" in Palmerton. Informants intimated that she originally was an employee of the company (NTH) hired by the industry to remediate the first 12 homes identified as contaminated. Later she was noted to have become a principle in a new business (Advanced GeoServices) that was contracted by the PETF to provide technical advice and to perform soil and dust tests as part of the Task Forces' lead abatement program. Peter Kern, a retired company chemical engineer (and reportedly a former Senior Vice President of research) is the Hospital Administrator, and during the study was elected to Palmerton's Chamber of Commerce. Citizens reported that Michelle Kattner, one-time president of the Pro-Palmerton Coalition (an industry support group) was married to an industry's officer. Dolores Ziegenfus was a member of the Environmental Steering Committee which later became the Palmerton Environmental Task Force where she assumed a paid position, postulated by respondents as industry financed. Respondents reported that Task Force member Don Shea's business was a location where residents redeemed company-provided purchase orders for supplies in the industry lawn revegetation program. Additionally, they claimed that the zinc company spends considerable sums of money on routine purchases at his small business. This relationship was sufficient to cause notice in 1993 when a press reporter (Blangger, p. D1) said of Shea, "[he] had a business relationship with New Jersey Zinc and maintains one with its successor. He's led a good life, thanks to that relationship, and he's been able to send his children to college." Thaddeus Evert^{pseud. 3} reported, [the company]almost got rid of their supply house completely. So he supplies...everything....He makes a great big buck. I mean [those town residents having dealings with the company] are not going to cut their necks off [by saying or doing anything contrary to industry]" (7/22/96, lines 1088-1101).

Exploring these and other assertions corroborated the presence of a community narrative, mutable and shifting, but one that spoke to a coalition of hegemonic forces whose

actions: subverted open dialog--despite verbal fiction to the contrary. It directed environmental discourse and persisted as a barrier to the establishment of nonexploitative social relations. It was within this sphere of social nepotism that the contest for cultural authority transpired, and where alternative discourses and ways of making sense of the contamination were disrupted and re-written by the grassroots group. It is here that PCCE mediated a terrain filled with conflict and contention. Probing the key elements in the industrial orb: the Palmerton Environmental Task Force, the Zinc Environmental Information Center, Palmerton community health care, the Palmerton Area School District Administration, and the municipal government proved to be valuable in assaying the forms which domination followed, the nature of its presence and location(s), and the problems that authority and control posed for those who experienced it (Freire, 1986).

Pedagogies of Distraction: The Palmerton Environmental Task Force (PETF)

The Palmerton Zinc Pile Superfund Site has been divided by the United States EPA (USEPA) into four more manageable components called Operable Units or OUs, as previously described. At the time of Superfund listing, a newspaper review shows intense opposition from a tightly woven circle of community entities. This cadre was loud in its enmity to designation and the subsequent processes of determining the extent of damages and evaluating various clean up options. A study of Palmerton and other Superfund Sites conducted by the University of Tennessee (Russell, 1991) succinctly states, "Horsehead Industries vigorously protested the inclusion of the site on the NPL" as did others including local residents, the County Commissioners (Hawk, 1984a), the Pennsylvania (State) Chamber of Commerce, the Economic Development Council of Eastern Pennsylvania, legislators including State Senator James J. Rhoades of Mahanoy City, borough officials, the school district personnel, and local health care professionals. Even the former state Secretary of the Department of Environmental

Protection, Clifford Jones--who after leaving that position became the President of the anti-environmental Pennsylvania Chamber of Commerce--weighed in, favoring the zinc company (*EPA finds zinc plant study unwanted*, 1984). Arguments and attendant discourses against the Superfund designation comprised cries of: “community stigmatization” (victim discourse); there were no known health problems evidenced by residents’ longevity (medical discourse); the zinc company that currently owned the site was not the owner during the polluting period (liability discourse); remediation costs would drive the company out of the community (economic discourse); culprits for the death of the mountain were forest pests and tree diseases, forest fires and logging (ecological discourse); the federal government helped build the plant and placed orders for war time materials (patriotism discourse); and bituminous coal emissions from the numerous railroad lines that crossed the area (scapegoating discourse). Although the anti-EPA sentiments from the original time of listing have been generally durable for the ensuing decade and half, volatile public opposition to USEPA has been episodic. For instance, when USEPA began preparation for the investigations that would lead to clean up action, and the studies to determine feasible choices, hostility spiked. At public meetings, especially the early ones, such as on October 11, 1984, protests against Superfund designation were resounding. USEPA quickly came to signify “meddlesome,” “unfair,” “Washington-victimizing bureaucrats,” “ludicrous and asinine” (descriptors first used by Senator Rhoades, see *Times-News*, November 17, 1984) and “over-reactive.” During this period, the community constructed Palmerton as “small-town America,” a signifier that coded for “righteousness,” “the underdog,” “rationality,” “patriotism,” and “tranquillity.” Borough officials were especially intent on depicting Palmerton “as the quintessential small company town” (Delffs, 1991, p. 1). The media appropriated these polarities, and helped to both fabricate and disseminate them.

In spring 1985, zinc company officials expressed an interest in leading the studies that USEPA was conducting (Delffs, 1991, p. 6). This strategy was given a blow when USEPA fined New Jersey Zinc for: violations of electric arc furnace (EAF) dust storage and disposal, for failure to position groundwater monitoring wells, and for dereliction in applying for required permits (p. 6). As a gesture of flexibility, USEPA consented to the company’s involvement in

the studies on a number of items including remediation of the cinder bank, contamination of valley soils, groundwater testing, and revegetation efforts on the mountain. By June of 1987, USEPA granted the company the right to take the lead on refoiliation of Blue Mountain. This was the first of several successful attempts by the company to take control of the situation from the hands of USEPA.

Citizen unrest again surfaced around in 1990 when the company sought a state permit for long-term storage of EAF dust. The succeeding two years were turbulent ones in Palmerton. In autumn, 1991, industry pressure escalated the conversation about a “company-supported environmental committee” (Fortney, 1991c, p.1) to explore compromises and points of agreements in the ongoing controversies. At first the Palmerton Borough Council rejected the idea, and was soundly criticized by the zinc industry (McKee, 1991a). In December 1991, Mr. David Carpenter, president of Horsehead Industries, a parent company of Palmerton’s two zinc companies, HRD and ZCA--and a PRP in Superfund cost recovery--seeded the Carbon County Commissioners with the proposal to form a committee to “aid” the community. Following implantation of the concept, which received USEPA favor, the Carbon County Commissioners worked actively to see that it took root and came to fruition. From the initial days, the Palmerton Environmental Task Force signified “industry” to some, and “arbiter” to others. In mid-1994, PCCE’s technical advisor criticized the formation and mission of the Task Force, alleging that it was created at Carpenters “request.” Swift reaction was initiated by the company for this and other faultfinding (*A message to the community*, 1994). The industry, having prompted PEFT’s formation, distanced itself from taking credit for its inception. Subsequent references to the Task Forces’ nativity by press reporters and official PETF documents cite its origin “at the behest of Carbon County commissioners at the close of 1991” (Collins, 1995i). This recycling of revisionist history accommodates the myth that the PETF is a neutral entity.

On May 27, 1992, a town committee, the Palmerton Environmental Task Force was formed to address ostensibly the abundance of confusing and conflicting “facts” surrounding Superfund. The PETF has few of the characteristics assigned to emergent citizen groups

(ECGs) or voluntary community organizations (VCOs), and more closely resembles a special interest group. For instance, VCOs frequently have tight geographic bases, are primarily driven by volunteers with paid staff virtually nonexistent, are initiated by local residents from affected neighborhoods, and define problem solving of critical problems as their sole issue (Florin and Wandersman, 1990). On the contrary, the PETF originated at a county level at the behest of a company executive, is well funded with a paid president, and originated with the intention of disseminating information provided to it by the industry, and government agencies (memorandum from R. Danielson to Palmerton's Mayor and Council, August 21, 1992).

After "months of internal wrangling" (Fortney, 1992a, p. 1), PETF's ten members released a mission statement that said the organization would transcend the interests of constituents in an effort to gather and present information to the community. PETF saw its obligation to be information brokers "by gathering news directly from state and federal government agencies as well as Horsehead Resources Development Co. and Zinc Corp. of America" (p. 1). This "information gateway" (self-description) was to facilitate open meetings, and increase access to data "instead of restricting it" (p. 1). However, there has been an uninterrupted history of doublespeak since its inception. On the one hand, the Task Force expresses concern for inclusivity, while on the other it communicates by its behaviors and actions, less than open dynamics. It is significant that from the outset, the Task Force desired to function as a gateway for information. In so doing, they would in effect control the distribution of knowledge and create a sphere for the narration of the industrial discourse.

Confusion reigned from the outset as to what the exact role, format, and functions of the group would be (McKee, 1992c). Two years later a steering committee member, Dolores Ziegenfus admitted that they were "trying to get reorganized and get refocused" (Jordan, 1994a). As an aside, allegations of closed processes were also leveled against PCCE. In May, 1994, the leadership of the grassroots organization voted to amend its bylaws so that membership applicants had to be sponsored by an active member, and barred any employee of a potentially responsible party or hazardous waste facility from sitting on their board (Collins, 1994a). Members felt it should function as: a "jury;" "a conduit for the two-way flow of

information;” and the first point of notification for state and federal agencies who would secondarily “release that information to the public” (McKee, 1992c, p. B1). The latter was immediately called into question by some in the community. Kathy Ozalas said after learning that all information would be filtered through the Task Force, “Ha! A little problem there, excuse me! No, I’d prefer not to have my materials censored!” (8/16/96, lines 1793-1795).

Early in the formation of the PETF, USEPA did in fact release data to the Task Force while not providing copies to the media (Laylo, 1992). By 1994 the PETF was meeting “once a month--almost always in private” (Jordan, 1994). The privacy was deemed necessary by them since USEPA was characterized as providing them with information not generally available to the public--a position denied by USEPA. At one point, USEPA withdrew from interactions with the Task Force due to this secrecy (Collins, 1994, p. 1, 3), condemning their “closed and exclusionary processes” (Jordan, 1994b). Privacy ensured that PETF’s narrative space would remain privileged.

Early efforts of the Task Force positioned it as a cultural authority in the community--a location that did not rest well with some borough residents who saw it as an arm of the industry. The filtering function of the Task Force caused one interviewer to report that the grassroots group PCCE had to behave as a “doorstop.” She went on, “basically the PETF--they try to describe themselves as a conduit for information. Well, they also want to censor information so at times we, as an organization, we have to get the data and release the data to the public just to keep a flow, just to keep that door open so the information can get out there, so there’s some channel....the industry always has strong opinions about things and financially backed opinions...but we may have little things we find here or there...that need to get out to the public....The PETF would like all of our technical assistance summaries to go to them before they...go out to the public...I kind of like being a doorstop!” (Sandy Peters, 7/22/96, lines 2452-2474).

Initially PCCE--founded a year earlier than the Task Force--attempted to mediate the terrain by placing a member, Tess Roberts, on the committee. As time went on, she articulated an inability to speak for the grassroots group, since PCCE’s decisions were made through a

sometimes lengthy process of consensus-building among its membership. After repeated attempts by her to open discussions beyond the PETF agenda, characterized as “narrow” and unwilling to examine the possibility that industry-based pollution was the root cause of Palmerton’s contamination problems, she resigned in August 1995. An additional reason was the closed meetings of a risk subcommittee that had formed in early 1995. Tess and PCCE objected to private discussions carried out with “four paid representatives from the company, including an attorney from Viacom [another party potentially responsible for the decontamination]” (Collins, 1995i, p. 4). In a letter to USEPA dated July 19, 1996, Tess reiterated that she had “tried to work within [the PETF’s] constricting framework.” She recounted, “we never got around to discussing the impact of the industry on the environment” (7/19/96, lines 3031-3032). During her tenure on the PETF she was harassed by some community individuals. At one point Tess was labeled the Mata Hari of the Task Force, and portrayed as a saboteur of its workings. Even though this was printed in the newspapers in a Chamber of Commerce article, neither the other committee members nor PETF as a body stood by her against the allegations. Roberts also stated that USEPA continued to receive “overwhelming disapproval” by the PETF (letter to Mr. Frederick MacMillan dated July 19, 1996 from Teresa Roberts). In fact, several members of the Task Force posted anti-EPA signs in the windows of their residences (Fortney, 1992b).

The sentiments of some PCCE members indicated strong feelings that PETF was a surrogate of the industry. Whether coincidentally or not, as more homeowners committed to federal remediation, the PETF decided to reorganize and a leadership position was established to more formally direct its activities, headed by a steering committee member, Dolores Ziegenfus. Kathy Ozalas, a PCCE member elaborated, “I did go to a couple of [PETF] meetings and I thought it was worse than meeting with the zinc company because the people that were there were extremely loyal to the company. They weren’t employed by the company but they were very, very loyal” (8/16/96, lines 1752-1760). In 1996, a news reporter posed the question, “How much influence do Horsehead Industries and Viacom International wield with the Palmerton Environmental Task Force, given that the two companies contribute a

substantial part of its \$200,000 budget?” (Collins, 1996). Ellen Colangelo postulated a similar question, “How do you [addressed to Dolores Ziegenfus, the compensated coordinator] posture yourself as a representative of the community at large, when you are paid by a PRP?” In answer to a letter of inquiry that I posted to her concerning the Task Force’s source of revenue, Dolores responded, “The [PETF] is an independent non-profit organization. Financial management is overseen by our board of directors. The PETF does not publish an Annual Report but our books will be reviewed for correctness on an annual basis” (letter from Dolores Ziegenfus to Robert Hill, February 13, 1997).

With the advent of March 1993 came USEPA’s announcement that it would start cleaning up contaminated homes, based on previously established criteria. In anticipation of the USEPA’s action to remove contaminated soil, in 1994, the agency sent questionnaires to residents of Palmerton (Collins, 1994c). USEPA posted 129 questionnaires in April 1994 and an additional 400 in June 1994 (Collins, 1994c). The survey is in part a means of assessing how residents were negotiating the contested terrain. It asked such questions as, “Are there older children living at home?”, “Age?”, “Do children...spend a significant amount of time at your residence or yard?”, “Does a pregnant woman reside or spend a significant amount of time at your residence?”, “Would you be interested in the EPA clean up described in the letter?”, and “Do you have any questions you would like EPA to respond to at this time?” The returned questionnaires showed that a significant number of residents were interested in the clean up (Freedom of Information Act request, 3RIN-2092-96, and posted on 11/12/96). Of the 99 returned questionnaires, nearly 40% said they were definitely interested in the USEPA help (n=39). Comments included, “Are there any precautions that we should be taking in the mean time?”, “...first of all, where can I get [my child’s] blood screened. How do I know her health wasn’t impaired during pregnancy--I lived here in Palmerton through the whole pregnancy???” One 73 year old woman was concerned for the health of small children who might be coming to live at her address. On the other hand, 53 respondents expressed that they did not want USEPA clean up. Some simply stated, “No.” Others were more expressive, “Absolutely not!”, “Get this work done and move on,” “Why after all these years my 2 relatives have lived

to be over 100 years of age--others are still alive and are over 80...I am 70 yrs. old. I worked at the N.J.Z., ate from the garden, drank of the water, and breathed the air for all of these years..." One person who answered did not desire clean up, but did want to know how contaminated her residence was. Some few were overtly hostile, "Why do you keep on wasting the taxpayers money on this project....No clean up is necessary. All you have done is divide the citizens, and lower the value of our homes." On the lines that asked if there were any more questions, one resident wrote, "Yes, why doesn't EPA pack up & get out of town?" Other comments included, "...This is the price you pay for civilization," I don't want any part of EPA!", "Pack up your trailer and get out. Leave us alone," Seven of the questionnaires were marked with ambiguous notations such as "???" or the word "maybe."

As the numbers of individuals desiring USEPA assistance rose, so did the amount of money for which the PRPs will possibly be responsible to remunerate. A way to avoid paying for the cost of clean up, besides diminishing corporate liability, would be to establish that some or all of the pollution was not linked to industrial practices. PETF then constructed a non-industrial cause for lead in the environment. Other sources might include homeowners' lead paint and automobile exhaust. Introducing a lead-paint discourse could significantly reduce clean up costs for the zinc industry, and other parties who are potentially responsible for the pollution, shifting the burden to home owners. At some USEPA sites in the US, clean up costs have been divided between PRPs and home owners when lead paint has been determined to contribute to industrial sources. In these scenarios across the nation, the efforts to expand knowledge about the origins of heavy metal problems to include paint have big corporate dividends.

Although the PETF positioned itself as the distributor of information, and as a gateway between residents and governmental agencies, within a brief time it assumed the tasks of a research organization, generating data rather than merely reporting it. This function, the production of knowledge, was the *coup d'grace* in gaining control over the definition of what was both true and real. The distribution of the knowledge was accompanied by building a narrative space from which to articulate corporate ideologies. Through the generation and

distribution of knowledges, the PETF became more an agency of socialization than a citizens group. LeCompte and deMarrais sum the process as it happens in general. “The ability to control the production and distribution of knowledge becomes one of the most important sources of power....Those who control production of knowledge also control the definition of truth, and, in turn, the definition of reality. This--the ability to define reality--constitutes the fundamental source of power within the structure of domination” (1992, p. 15).

At the same time, the federal USEPA commenced to claim a community mandate for clean up. USEPA had built a profile of achievement in the early 1990s. Clean up statistics started to mount: 12 homes decontaminated in 1992 (McKee, 1992d), more in 1993, and 24 additional in 1994 (Laylo, 1994). The war to discredit USEPA, conducted by the industry, PETF members, and other allies was being lost as USEPA gained authority in the community--in no small part due to the labors of PCCE members who supported the USEPA Superfund effort. The apparent success of the mountain revegetation effort also helped to make USEPA credible.

By 1994, USEPA could avowal a growing foothold cleaning up homes and yards in Palmerton. Concomitantly relations with the company were reaching an all time low over several issues including who would be responsible for cost recovery. One newspaper byline read, “Horsehead, EPA gird for battle” as negotiations went “kaput” over who would pay for clean up (Collins 1994l, p. 1). Interviewees reported that USEPA’s accomplishments and an USEPA spokesperson, Amy Barnett’s, forthright comment, “the negotiations have failed” (p. 5) appeared to raise concerns within company circles.

In 1992 the Task Force requested the Palmerton Chamber of Commerce to hire Dr. Robert Bornschein, a professor of Environmental Health at the University of Cincinnati. It was felt by some that this was to challenge USEPA’s low estimates of lead in paint which Bornschein suggested might be an underage. He was described by the Task Force’s Chairperson as “the technical expert for the PETF and the community” (Collins, 1994d) and as “the Task Force’s adviser” (Collins, 1994e). It was at this point that the PETF galvanized its position as more than an information broker. It was the generator of new data--information that

would favor the industry discourse, despite USEPA's understanding that PETF's mission would be "to maintain and encourage communication between EPA, Zinc Corporation of America/Horsehead Resource Development Company, and the community" (Fact sheet, EPA, 1992, p. 1). Conscripting the authority of science further strengthened the position of PETF as a cultural producer. Deflecting the discourse from industrial contamination to house paint served to elevate the community rancor. In May 1994, one news reporter called the issue, "the perennial disagreement between the Task Force and the EPA over lead paint" (Collins, 1994b).

PCCE gained much cultural capital and community standing by 1994. Too, USEPA was achieving some positive visibility with interim clean ups beginning in May, 1994. About this time the PETF decided to convene a Scientific Symposium, sponsored through the industry and coupled with academic patrons, on July 29, 1994. Its stated purpose was "to bring the best scientific minds together for one day to review the major issues facing Palmerton as a community effected by Superfund" (Ziegenfus, personal communication, November, 1996).

The idea to assemble a "panel of experts" to construct an authorizing place for a preferred scientific discourse was not new to federal Superfund program opponents. As a model, in 1992, USEPA assembled a group of experts at a contaminated site in Aspen, Colorado. The group determined "that EPA's plans for clean up of lead laden soil [in Aspen] was unnecessary because the lead [posed] no health threat" (McKee, 1993, p. B1). More importantly, USEPA "agreed to abide by the panel findings" (p. B1). In the 1990s, USEPA moved in the direction of strong public participation for environmental decision making. The behavior to abide by the desires of local residents stemmed from a then unnamed USEPA incipient initiative that by 1996 was formalized as "community-based environmental protection." In fact, a December 20, 1996 draft document from USEPA discussed their "new" community-based environmental protection project. It states that environmental protection issues are best resolved in partnership with the people who live in local communities, integrating environmental management with human needs, highlighting the positive correlation between economic prosperity and environmental well-being. Such an approach shapes community contest beyond language and discourse with notable consequences in the public policy arena. The contest was

for influencing decisions that directly impacted peoples' lives. As USEPA decisions for clean up in Palmerton are finalized in 1997, the stakes for cultural authority are enormous. The dominant group has the potential to drive the outcome of federal decisions. This trend has not gone unnoticed by the PETF who from its inception has been maneuvering into a powerful position of cultural leadership.

In January 1993, Mike Raub, a member of the Pro-Palmerton Coalition and foe of USEPA was involved in a petition that included support for a Palmerton "panel." In fact, Raub and three borough officials attended "panel" meetings in Aspen at the expense of the zinc industries. The call to convene a group of "experts" at Palmerton became a crusade, or *cause celebre*, for some in the community. The reward for mustering experts would be great. If the panel could alter the direction of USEPA's clean up efforts, it might achieve numerous results, not the least of which would be to reduce company liability and therefore financial obligation, and bring about a rapid (but inadequate to some citizens) end to Superfund status and the "stigma" believed to be associated with it. And, there was no dearth of "experts" who oriented their research within the narrow framework of an industrial discourse (see "Palmerton Zinc, Pennsylvania" in Wildavsky, 1995, pp. 177-179).

Some interviewees felt that there was a direct correlation between USEPA's growing success and the public interest in a Symposium. At an estimated price tag of upwards to \$30,000--HRD and Paramount Communications, Inc. reportedly paid the bill--the results of the symposium were hailed by Borough Council as a success (Collins, 1994). The technical advisors of PCCE blasted it in a 33 page document (Hosking, 1994) that set in motion a series of calls by the zinc industry for retractions and dismissals of the university-based collaborators of Hosking's report. Horsehead Industries, Inc. took out full page advertisements to contest statements of bias leveled on the symposium (see for example, *The Times News* (Lehighton, Pennsylvania), Friday, November 4, 1994, p. B5). When the tempest died down, important outcomes from the Symposium became evident. They included: a planned PETF-managed blood testing program, a PETF lead reduction program, and ultimately PETF involvement in the USEPA risk assessment process.

It is not insignificant to note that a decade after the industry proposed leading the risk investigation and feasibility study, its surrogate the PETF would be a consequential player in the risk assessment. In fact, Ziegenfus has written to the director of the USEPA waste management division that PETF would like to extend the special relationship so as “*to build on the progress...in making risk management decisions on the degree of remediation and form needed in the community*” (letter from PETF Chair to Mr. Thomas Voltaggio, January 25, 1996, italics in original). The Task Force had become an unofficial policy center, with connections and financial backup unlike anything the grassroots group could muster. So well constructed was the relationship between USEPA and the PETF, at one point Fred MacMillan, USEPA remedial project manager was quoted as saying if PCCE intended to not attend the Task Force’s risk subcommittee meetings it would not have a voice in the public process. This prompted Tess Roberts to write a strongly worded statement questioning, “How dare you say that because PCCE has chosen NOT to attend the subcommittee meetings...[our] scientific reports and reviews...may be left out [of the public process]?” (letter from Roberts to MacMillan, July 19, 1996).

The risk subcommittee of PETF was one additional attempt by the industry proxy to exert influence on clean up by penetrating the USEPA process of deciding what is safe or protective in the event of exposure to hazardous chemicals at a Superfund site. In November, 1994, Dolores Ziegenfus proposed that the PETF actually “manage” the assessment. One option was a “third party to study the risk that lead and other metals pose to people in town” (Laylo, 1994a). PETF strained to take part in the risk assessment, at least as a sponsor (Collins, 1994j). Less than three weeks later, the zinc company announced it too wanted “a third party to do a study that [would] help determine a final clean up plan for the polluted community” (Laylo, 1994b). Shortly after that, the Task Force, in late December 1994, announced that the information-gathering segment of their Lead Reduction Program was completed. Although not publicly expressed, this action freed the group to move onto the next battlefield in the contest for cultural control, the risk assessment arena. Despite USEPA’s refusal to allow PETF to manage the risk assessment, they granted the group unprecedented

powers to be involved as decisions were made along the way. Routinely this would have been done at the end of the process in Superfund cases. PCCE, after deliberating on the matter for several months, responded in March 1995, that it would not be a part of the Risk Subcommittee since the Subcommittee held private meetings, had goals inconsistent with PCCE's objectives of full clean up, and the group had members who were paid by the industries to protect corporate interests, namely, Bruce Conrad, an executive at Horsehead, John McAleese, an attorney for a potentially responsible party for the clean up, and a PRP technical advisor.

An example of the Task Forces involvement as cultural agents is clearly seen in the role they played in soil sampling for USEPA tests on the availability of metals to biological systems. In 1995, USEPA elected to use pigs as test animals to determine the bioavailability of Palmerton's soil lead. The pigs were butchered after being fed cookie dough laced with contaminated soil, and then their tissue was analyzed. In a record of a conference call (August 18, 1995) obtained under the federal 1966 Freedom of Information Act (FOIA), several PETF members are noted as participants in the sampling protocol, while PCCE was only invited to observe the soil collection, after negotiations were completed concerning the location of the sampling sites and other issues. During these negotiations, several sites were dismissed after the industry objected that lead levels might be too high for various reasons. The pig model was heavily endorsed by the Task Force. A document (from *Superfund Week*, July 28, 1995) provided by the PETF consultant, Advanced GeoServices Corp., faxed on August 21, 1995 to Task Force members and the Borough Manager reveals why. It states, "EPA's swine model eases lead clean up goals" and goes on to explain that when used previously, the lead thresholds were altered so that fewer homes met clean up criteria.

Citizens leveled significant charges against the Palmerton Environmental Task Force for a number of reasons in addition to accepting money from industries. Several of the most common are the role it has played in moving the community interest and conversation away from industrial contamination to blaming the victims for their role in causing the pollution by using lead-based paint. Most were also aroused at PETF's self-elected role as generator of

information, rather than the gateway for data to enter into the community. The narrative stating that lead in the environment is due to house paint is given legitimacy by programs initiated through the Task Force, and the “experts” that are a part of its group of advisors.

The PETF agenda was taken up differently by individuals. For some, it reinforced pro-industry and anti-USEPA feelings. However, it motivated others to delve deeper into Palmerton’s pollution sources. As Louise Calvin responded to an interview question concerning the action portion of her life, “I think specifically of the Task Force--the Task Force that was created, and the influence that the company, by supporting them with money, has tried to put the emphasis on lead paint. And I think the more they attempt to refocus what the problem here is, the more that just spurs me and others on” (7/30/96, lines 978-985). But a significant subterfuge of the PETF may well turn out to be not the success it has had in steering the discourse toward lead paint, but in their privileging of lead as the only significant heavy metal in the first place.

The Palmerton Environmental Task Force is not a voluntary community organization (VCO), nor a self-organized, problem-solving emergent citizen group (ECG) as defined in the sociology, political science or social work literature. It is, however, an *empowered* organization (Swift and Levin, 1987) which influences the community and affects the distribution of power and decision making in Palmerton. The Palmerton Citizens for a Clean Environment, its competitor for cultural authority, is on the other hand a *bona fide* ECG/VCO. PCCE is an *empowering* organization which facilitated self-confidence and knowledge competencies in its members and which sought to expand the range of knowledges open to meaningful analysis and deliberation.

Privileging Pollutants

The Science Symposium specified what knowledges were consequential. It bolstered the erasure of cadmium as a contaminant of concern in the imagination of the community and privileged lead--a metal with potentially non-industrial sources. Although Palmerton appeared on the first Superfund National Priorities List (NPL) in 1983, by the early 1970s people began to recognize that the environment was failing in the locale (Lenahan, 1971). At this time the US Department of Agriculture was conducting studies that showed cadmium levels “60 to 75 times normal” in the soil of Palmerton (Devlin, 1981, p. B1). Sick horses had alerted the USDA to potential problems. In 1981, Dr. Donald Reid, deputy state secretary of health was planning a \$100,000 study to determine whether there were cadmium related health problems in Palmerton.

Owing to the narrative space created for lead by the industrial players, it now commands the most attention, however, it was cadmium that produced the first conclusive evidence of pollution in 1981. At that time the United States Department of Agriculture released a study of neighborhood vegetation and soil samples which showed excesses of this metal in garden soil and crops (Delffs, 1991, p. 2). And, it is cadmium, that “is taken up in food chains much more efficiently than is lead” (Beyer & Storm, 1995, p. 603). The local press greeted the news with alarm. The headlines declared “Excessive levels of toxic cadmium found in Palmerton: NJZ suspected as source” (Devlin, 1981, p. B1). The article went on to state that the USDA study found excessively high cadmium levels 60 to 75 times the normal rate. In May, 1981, an USEPA study exposed the presence of cadmium in the Aquashicola Creek and in a drinking water well. The Palmerton Water Company, owned by the zinc company, was ordered to investigate for cadmium, and to ascertain the location of alternative water sources. Zinc and cadmium toxicosis in horses was the subject of investigations in 1982 (Gunson, et al., 1982), while cadmium and arsenic were believed to be the causative agents of increased cancer in the vicinity of the Palmerton smelter in 1984 (Brown, et al., 1984). In 1983, studies revealed that “cadmium levels in some deer livers were high enough to be dangerous for venison consumers” (Delffs, 1991, p. 4). The local press reported in October 1984, that six of seven wells used as water supplies were contaminated with cadmium and zinc (NJZ environmental

effects study to be explained, 1984). Although other metals, such as lead, were identified, cadmium was initially the contaminant of primary concern, especially for government investigators. Studies by Sileo & Beyer (1985) looked at cadmium and zinc only; the aim of Jordan & Lechevalier's research (1975) was "to study the effects of high soil zinc levels on the soil microflora" (p. 1856); zinc and cadmium effects on lichens were examined by Nash (1975); and in 1981 USDA Rufus Chaney--who would later alter his opinions--suggested, "It would be wise...to stop growing and eating root and leafy vegetables" (Lalo, 1987, p. 29) due to cadmium. Chaney and others had begun to look at cadmium and zinc as early as 1979 (Chaney, et al., 1988). At one point, a Cadmium Advisory Committee was formed to address the issue. This group made recommendations for a health study which was not supported by the PA Department of Health, and was never executed. Chaney and colleagues concluded that "several persistent agronomic problems in the Palmerton vicinity are caused by excessive zinc and cadmium in soils" (p. 275), offering advice on how to remediate them, rather than decontaminate the environment and prevent recontamination from current industrial activities. Chaney's position offered help in how to live with the problem instead of rigorously interrogating whether heavy metal contamination is persistent or ongoing. As is true of much in science, his research was conducted in an uncritical way. This can be seen in the release of non-native species to revegetate contaminated sites. Despite the primary threat to the region's biological diversity, he and others persist in using alien, exotic taxa to "greenwash" polluted sites. For example, the mustard, *Thalspi caerulescens* which is used by him is not found anywhere else in the Commonwealth. At a time when a major effort is occurring to restrict the release of foreign taxa, he and other "restoration ecologists" at Palmerton are deploying them, apparently uncritically.

The federal ATSDR in June 1994 wrote that environmental sampling for cadmium showed statistically significant elevations for air, water and soil, in gardens, play areas, drinking water, interior house dust, exterior entryway dust, and on the street, when compared to a neighboring town. And, this town falls within the Palmerton "halo"--a term used by foresters to

describe the concentric shadow of contamination that extends for dozens of miles from the town of Palmerton.

Positioning cadmium as a major potential problem is not to imply that lead and other metals were not looked for--and found. In the mid-1980s, lead was already showing to be a problem. In 1988, Beyer found “some evidence of lead poisoning in wildlife” (p. 249). By 1989, a full suite of metals was the subject of analysis (see for example Storm, et al., 1989) by government and academics alike. But initially--in the 1970s and early 1980s--it was cadmium that drew attention. Currently, little is said about cadmium in the public discourse. Most contemporary documents devote the lion’s share of text to lead. How can this be explained, since “any cadmium pollution of the environment is recognized as a potentially serious health hazard to man” (National Research Council, 1980, p. 94)?

There may well be several reasons why lead jumped to the fore in the list of contaminants, but clearly by the early 1990s it was the privileged pollutant. The Palmerton Environmental Task Force and other members of the industrial ideological machine were quick to take up the lead discourse. In spring 1991, USEPA pondered performing widespread soil excavation, stating that federal toxicologists wanted the “cadmium alert” extended. By fall 1992, the Palmerton Area Chamber of Commerce was calling cadmium concern, “the big lie” (*Times News*, November 4). If cadmium has been called the big lie, lead could equally be called the big distraction--not to minimize its significance, but to highlight the repositioning of attention that has occurred.

The lead paint conversation became the mantra of the PETF, the Palmerton Chamber of Commerce and the Pro-Palmerton Coalition. Despite the monofocal interest in lead paint, USEPA continued to assure residents that other contaminants would be considered for both interim and final clean up. In a letter to residents, USEPA reproved the Task Force stating that its Risk Subcommittee “wishes to focus on the lead contamination, but again the point must be made that the contamination in Palmerton is lead, cadmium, and zinc” (underscore in the original).

After the shift from cadmium to lead as the heavy metal of primary concern, the industry-supported Palmerton Environmental Task Force, together with the industry-run Zinc Environmental Information Center, positioned lead-based paint as the primary source of home contamination. Yet, the amount of lead from lead-based paint in Palmerton, a health problem of nation-wide proportion, is considered negligible by the federal government. USEPA has stated, “Lead paint is not a significant contributor to the lead dust levels in home or soils in Palmerton” (*Fact Sheet, Superfund Update*, February 1994, p. 2). This difference is of considerable importance in the contest that is occurring in the town. Lead has been positioned as a signifier, and it evokes contested thinking at least among federal decision-makers and the industry, since the cadmium discourse was marginalized.

The transposition of lead to the forefront, positioned industry proxies in the community to engage in a pedagogy of distraction, a process they have taken up with the fervor of zealots in a *battle royale*. To some, lead signifies industrial-based, human- and ecosystem-health damage, to others it denotes house paint and the acquittal of industry on USEPA’s demand for reparation for the eco-cide that has occurred. In addition to moving cadmium to the rear of the debate, arsenic has also been neglected. A 1992 report by USEPA showed about 8% of Palmerton’s homes had arsenic levels above 50 ppm. The community was told by USEPA that the recommended clean up level would probably be anything over 70 parts per million. Although attention was called to arsenic and the roles of other metals as recently as March 1995 (Collins, 1995), little discussion of it occurs in the public discourse.

The effects of the contest for meaning that surrounds lead has left Linda Holland angry. One day she opened the local newspaper to read that the dust on *her* porch was cited as due to the “deteriorated lead paint condition...[when, she reported, in fact] all [the] paint was intact...it was very unfair and very uncalled for” (7/22/96, lines 1297-1298, 1309-1310). She reported, “it made me sound like I was a sloppy housekeeper that let the lead paint just fall on my porch....These were their propaganda tactics” (lines 1310-1317).

Louise Calvin called the lead paint discourse absurd, stating, “even today this attempt to put the blame on lead paint [is] still not addressing the issue honestly. To blame the death of the

mountain and the environmental devastation here just on lead paint is ludicrous--and I still don't think they're addressing the issue honestly" (7/30/96, lines 926-932). Thaddeus Evert ^{pseud.} squarely stated in disbelief, "Yeah, lead paint, lead paint, lead paint is all that zinc company is talking about...They don't want to hear anything else about what's on the cinder banks...or what's coming out of the stacks or anything like that" (7/22/96, lines 823-830). His wife appended, "Do you know that some people took their family and got out because their doctors...said , "Nothing you can do, just get the hell out"? So they did, they got out" (lines 834-839). Some families have become refugees; were they fugitives from lead paint? Some folks in town believe so. One school teacher remarked, "The problem is in lead paint...that's possible" (Jan Sosik, 8/9/96, lines 236-237).

In an effort to educate Palmerton Environmental Task Force members to the powerful language of studies that dealt with the impact of industrial pollution on the environment, Tess Roberts, both a Task Force and PCCE member, made her personal environmental materials available to the Task Force. She reported "not a shred of it ever appeared in the pick up files [for availability]...and when I asked them, they said 'Well, it's on file in the Borough if somebody wants to see it.' But that's just my point. If you don't know what you're looking for, how's anybody going to ask to see it?" (7/19/96, lines 3049-3056). The PETF, founded on the principles to transcend the interests of all represented groups and individuals and to be a conduit for all information, didn't appear very open to ways of seeing otherwise.

The Authority of Science: Palmerton's Scientific Symposium⁴
(Good science...bad science...your science...my science)

"The people of Palmerton need someone to rescue them...every time there is information claimed to be conclusive on one side, a rebuttal stated with equal certainty appears immediately."

(Editorial, The Times-News, 1993, September 6).

The social construction of *scientific knowledge* now has a widely-accepted history. It is often framed in the context of the sociology of science. Since Kuhn (1970), scientific professionals have critically examined scientific knowledge and grappled with the provocation that science is only a “received canon” of information. Kuhn reported that the choices about what to observe, what data are to receive the most attention, and what conclusions to draw are all based on the researcher’s prevailing paradigm, or model of life. Contemporary philosophers of science recognize “that all observation is not only theory-laden but is also *Weltanschauung* [worldview]-infused” (Skolimowski, 1973, p. 100). It is now generally accepted that modern science has all along been involved in the “continuous creation of new areas of investigation and new realms of knowledge” (Price, 1973, cited in Mulkay, 1979). There is a growing body of scholarship that points to science as a human and social enterprise. This has led to the conclusion that problematizing scientific inquiry is never pure, and the research process is contextual, opportunistic, idiosyncratic, and has even been defined as fiction-building.

Science is often extolled for its value-free processes and neutrality. Miller (1992) puts it this way, “Scientists are supposed to be coldly rational and objective and not allow their personal beliefs and biases or outside pressures to influence their work. That is an impossible dream because scientists are ordinary human beings” (p. 53). They bring conscious and unconscious biases, attitudes, belief systems, opinions, values, and not unimportantly, financial and other needs into the research process. These factors influence what questions get asked, how research is designed and carried out, and how data are interpreted. Corporations have a large stake in the value-laden scientific enterprise since most research today is remarkably expensive, which is why more than one third (36%) of science is performed by corporations. The environmental critique that is undertaken by Highlander Research and Education Center is premised on the statement: “How we seek solutions has a lot to do with how we define the problems in the first place” (Highlander Staff, July 1993).

The Palmerton Scientific Symposium, held on July 29, 1994, at the West End Fire Company under the umbrella of the Palmerton Environmental Task Force, was premised on the notion that the natural world can be charted and that once mapped, analyzed, and securely understood, underneath it is a set of values, assumptions and beliefs familiar to Palmertonians. The Symposium was an example of Freire's admonition that dominant groups will always obtain strategies for maintaining their domination. The elite group has "no choice but to indoctrinate people in a mythified version of reality" subordinating science and technology to its own ideology, using science and technology to disseminate information and prescriptions that sustain the oppressor's views (1986, p. 86). In Palmerton this meant that the science of the Symposium supported the script, or central reality which voiced, "Palmerton is a normal small country town, industry has been good to the community, environmental problems are not enterprise-based, and progress is worth the cost."

In an effort to control the Symposium discourse and to marginalize efforts to interrogate the symposium presentations, at the outset, Dr. David Carpenter, an executive of Horsehead Industries, Inc., suggested, "I...want to emphasize that...the scientists who are participating...as well as community representatives have great expertise and certainly professional integrity that can not be compromised. None, none of these people are going to compromise their professional integrity in any way, and it should not be suggested otherwise" (quote transcribed from a video of the Symposium). The use of scientific elites of high status, coupled with the notion that science is disinterested and pure, has been called "fake science" by the educators at Highlander Research and Education Center (Merrifield, n.d., p. 18). It is used to assure common folks of their own ignorance, in contrast to the power-holders ability to seize the truth for their own application.

In a full page newspaper attack on Robert Hosking, a PCCE technical consultant, Horsehead Industries committed "the Company...to [finding] practical environmental solutions based on good science which [would] result in a benefit to the community" (*A message to the community*, 1994, p. B5). The struggle for cultural authority and power in Palmerton is intricately embedded in the value-laden nature of science, yet this remains formally unrecognized

by the parties in the contest. The call for “good science” implies that there is or can be “bad science.” And, there has been a surfeit of accusations of “bad science” leveled, especially when scientific outcomes of inquires are contrary to the desired results of the one making the charge. For instance this occurred in somewhat parallel development, when USEPA determined that lead in residents’ homes in Denver, Colorado was due to industrial processes, not lead paint. J. Arthur (Art) Marvin, a Chamber of Commerce official, declared, “We will do every thing we can to discredit the report. It’s not good science” (Fried, 1994a, A12). In February 1994, Borough Council was presented with a resolution by Marvin, former zinc company vice-president that “called upon EPA to use good science in dealing with items affecting the reputation and welfare of Palmerton’s industries and businesses” (from draft resolution). The language is analogous to that in the articles of incorporation of the anti-EPA organization Superfund Coalition Against Mismanagement, Inc. (SCAM). In the draft resolution, USEPA is admonished for “consistently [employing] bad science in their studies.” Borough Manager Rodger Danielson would not directly comment on my inquires as to whether similar resolutions were considered or acted upon by Council. He reported that the Borough Council files were “public information and open for...review” (letter to author dated February 12, 1997). Marvin’s resolution never surfaced for a vote, but three months later the Borough Council debated the merits of joining SCAM.

While not denying the possibility of scientific inaccuracy and error, in actuality, the contest in the community is more about “your science” and “my science” than it is about “good science” and “bad science.” To the industry, “my science” means a selective process of influencing what questions are asked, based on a corporate way of seeing the world, while “my science” to PCCE and its members means bringing other ways of seeing--ones different than the dominant discourse--to the community table.

The conundrum lies in the fact that so-called “good science” asks decision-makers to wait until definitive links are proved that show pollution causes sickness or death. “*Facts*” can not by definition include *potential* poisonings until such outcomes have already occurred. Concerns, prior to an adverse event are coded “hysterical,” or “unreasonably fear-based,” or

“biased opinion.” A policy that rests on unequivocal proof is a policy of experimentation on residents. Their are major ethical questions embedded in a position that communicates “The lack of scientific certainty mandates that nothing be done to prevent potentially dangerous corporate behavior.” The discourse of “the dangers have not been proved,” and “people should act strictly upon available facts” are historically used by industry to circumvent legitimate matters in an attempt to fix environmental decisions in a direction favorable to corporations’ bottom lines (see Montague, April 3, 1997 for a convincing argument).

Committing the company to find *practical* environmental solutions based on *good* science has two fundamental attributes worth exploring, namely, what constitutes “practical” and what defines “good.” Excluding for a moment any discussion of error, inaccuracy or imprecision in science, the “practical” and the “good” are more ethical valuations than they are scientific decisions. Brown (1987), an environmental regulator and philosopher, advises that such expressions are evaluative terms, and although a description of certain facts (e.g. scientific data) *may suggest* an ethical position, “one can not through a description of certain facts alone deduce an ethical conclusion” (p. 334). Herein lies the crux of Palmerton’s scientific combat. From a proposition that problem “X” creates a specific risk “Y,” one cannot conclude whether that risk is acceptable. Science alone can not answer the ethical questions that rise concerning what is practical and good. To add to the complexity and divisiveness, uncertainty permeates the scientific discourses surrounding problems and their risk in the first place. Discussions of science in the community, both before and after the Symposium, have been fraught with scientific uncertainty and multiple ethical positions.

It is only after a goal is selected, that science can be applied to achieve that goal. For the Symposium, the overarching goal that was chosen was “to formulate solutions for a responsible end to the Superfund program in Palmerton” (from material distributed to the community by PETF, p. 1). The science that was conscripted, not unlike the researchers themselves, held assumptions, values, and posed questions as to how the goal of a responsible end might best occur. Social questions, never overtly articulated, include, “Who defines

‘responsible? What criteria circumscribe the definition? and For what purpose(s) was the closure ‘responsible?’ ”

There is growing consensus, among social scientists (Ford, 1977) that knowledge produced for “policy-action,” known as “social action knowledge,” is fundamentally different than that produced for “academic” purposes, called “disciplinary knowledge.” Scientific knowledge derived for an academic discipline is explanatory knowledge, while policy makers and administrators *should be* concerned with knowing alternative actions and the consequences of their choices in order to achieve a given goal or to alter a situation that is considered undesirable (p. 506). In setting an agenda that only examined a limited range of “disciplinary knowledge,” the PETF effectively controlled the outcome of the Symposium.

The PCCE’s technical advisor criticized the way information was controlled, and denounced the goals of the Symposium, saying it “provides no indication that the organization was established out of concern for human health, that the organization as a whole supports a clean up of historical contamination, or that they are interested in monitoring industrial activities to evaluate the potential for additional contamination and or recontamination from current operations (Laylo, 1994c, B1). The Symposium dynamics were ones of “gaming” science. That is, the Symposium was based on procedures and strategies for gaining a preconceived end. Biased interests were given specific (selected) information, and then allowed a choice of moves with the object of maximizing their wins (privileging their ideological position) and minimizing their losses (the establishment of other ways of making meaning), in the process of “gaming” science.

USEPA was at first assigned one half hour period for making presentations in what appeared to be an effort to minimize information that might be contrary to the dominant industrial narrative. USEPA’s time slot was expanded after protest. The science that was presented by the largest aggregate of presenters was determined in a value-loaded arena--an arena constructed by the authors of the Symposium, the PETF--and consonant with the community script. Although the Symposium organizer claimed to have had a panel to assist with the selection of presenters, Hospital Administrator Peter Kern told the Chamber of Commerce

that Dolores Ziegenfus, paid by the industry, “almost single-handedly put together this roster of speakers” assuring them it was done by her “in a fair-minded way” (Collins, 1994o, p. 1). It is no surprise that the outcomes were profusely overworked versions of prior conclusions of the controlling voices that were in attendance. Processes of control and dominion such as these fostered disapproving feelings in some residents of town. One reported, “they [the industry alliance] do these things and make their conclusions to what they want [them] to say, obviously” (Linda Holland, 7/22/96, lines 1064-1066). In the ethical calculus used to arrive at recommendations for a “responsible” Superfund closure scenario, facts and prior studies were selected (and weighted as more valuable), while others were discredited (and weighted as less valuable).

Whether willfully or not, what a researcher sees is a product of the cultural ideologies that the researcher has taken up. Kasper (1972) notes that valuations are forever entering into the judgments of experts. There are no acts of pure perception that are not dependent on prior value choices (Brown, 1987, p. 335). Ideology often enters “problem solving at its very foundations through the cognitive apparatus of the scientific paradigm, by the way in which the problem is conceptualized, or through the analytical instruments by which quantitative inferences are made” (Krimsky, 1984, p. 247).

The Palmerton Scientific Symposium exemplified the canon that the decision of what to study is frequently a question of values, not of facts. It illustrated the degree to which a presenters’ epistemologically-loaded questions can presuppose a definition of the problem for which prior scientific/technological insights (the industrial discourse) are the only answers, therefore omitting alternative ethical, political, and social solutions. The Massachusetts Institute of Technology/Harvard University Public Disputes Program has established criteria to determine how democratic--and likely to succeed--a process is. A primary principle is that “technical and scientific data should be introduced in such a way that the value judgments, assumptions, and uncertainties underlying this data are made explicit to the deliberating parties” (Corburn, 1996, p. 8). The PETF symposium failed in this critical area.

In the Symposium's statement of purpose, a powerfully evaluative (ethical) term, "responsible" was deployed by the writer(s). Members of the community have asked, What might the Symposium have looked like if different questions had been asked and a different goal established? For example, setting the goal to determine what it would take to bring the multiple contaminants to background, or near background, levels. But of course given the cultural traditions and characteristics of the Symposium organizers, there was little chance that would happen. As Peter Kern, Palmerton's hospital administrator said "I just wish the two parties [in the community] could really look at what their goals is (sic) and say, OK, our goal is not to, to ah, ah have a community that is zero pollution. I think for anyone to, to state that, they'd have to be naive. I think they have to be able to say, we want to have a community that, that--clean community--that meets environmental standards, who want to correct risks where they are well defined" (8/8/96, lines 1192-1203).

The position of the Palmerton hospital administrator is in sharp contrast to the values that some townsfolk hold. Sandy Peters subscribed to a different view of the situation. Reflecting on scientific uncertainty and ill-defined data she declared, "What are you [rhetorical question to scientists] telling me? Are you telling me nine [$\mu\text{g}/\text{dL}$] is good for my kid? Are you telling me two is good for my kid--one [is good]? Lead is not good for your children! Zero lead is good for your children....Stop jerking me around with these mumbo jumbo letters and numbers and stuff" (7/22/96, lines 692-701). Although she may not have know this, nearly two decades ago it was shown (Needleman, et al., 1979) that any amount of lead diminishes mental power in children. While Kern expressed an interest in only resolving problems that are well defined, Peters wanted solutions to ill-defined predicaments. Examining Kern's position one must ask, "What is the community to do about problems that are not well defined?" In ethical terms, Kern appears to espouse a position informed by utilitarian/economic ethics, that is, one based on efficiency and the premise that questions can be reduced to quantifiable units. However, quantification of environmental or human health issues can rarely occur. Sandy Peters' statements, on the other hand, suggest a more Kantian approach, namely an ethic based on rights, justice and due process; referred to as "distributive justice." However, so long as the

value assumptions of each of these two approaches lay hidden or unexplored, alternatives to them remain overlooked.

David Carpenter said in a full page newspaper advertisement reportedly funded by HRD, what counts is to find “practical environmental solutions.” “Practical,” like many of the other words sprinkled among the scientific and technical language by the industry alliance, is an ethical not a descriptive (scientific) term. Likewise, in his opening remarks to the Symposium, Carpenter asked that the group arrive at “responsible, reasonable solutions.” The purpose of the Scientific Symposium was thus selected, and although science is immensely productive in helping to achieve an environmental goal by describing what is feasible, it can never answer the value question, what should be done. That is to say, science can never define what is responsible, since “no amount of descriptive [scientific] analysis can logically certify a prescriptive [value/ethical] course of action” (Brown, 1987, p. 334). Environmental decisions are a complex tapestry of technical issues and policy choices. Justice is not done to the decision making process when the two are elided in a solitary operation, or when only one of the two elements is present.

Although it is no surprise, it is unfortunate that Dr. Brian Murphy, program facilitator, in his opening remarks, directed the Symposium’s participants to avoid value based questions and solutions and instead enjoined the residents of the town to come together. Conflict of interest was charged against him since his corporation received previous contracts from the sponsoring industries. He retorted that his company had performed considerably more work for USEPA as well. Invariably since 1990, the industrial narrative called for “oneness” and “uniformity,” in contrast to PCCE’s position, held from its founding, that industry’s and EPA’s “views must [both] be respected and honestly represented. In this way people of Palmerton will be able to make clear choices about the Superfund clean up” (Collins, 1995m). Louise Calvin, President of PCCE has remarked, “Having agreement within the community is not our goal. If that had been our goal, we would never have rocked the boat. Our goal can not be to all agree” (Collins 1995n). If the industrial “unity” was achieved, it would mean that more then the mountain in Palmerton would be denuded. Eliding disparate discourses would denuded human experiences,

leaving an impoverished social text. Democratic processes support diverse interests and constituencies, as well as a plurality of positions. However, accomplishing decision making from the framework of “my science” (that is research from the perspective of the companies) meant a call for homogeneity.

“Unity” became a code word for a concerted effort of townsfolk to halt USEPA from fulfilling Superfund obligations. A key player in engineering the meaning of “unity” was the Palmerton Chamber of Commerce. For example, in an advertisement that appeared in the press, they wrote, “Only by sticking together as a community can we stop the EPA’s unwarranted invasion of our town” (*Community Report*, 1992a). The call for “oneness” by the industry and for homogenization is a call for the “others” to be like us, by the dominant group--to be a part of the specificity and particularity of the controlling interests--a call that is deeply problematic. That dissension or diversity might be healthy and lead to fuller understandings is a point not apparently appreciated.

Aside from consequential problems related to hidden values, the science of the Symposium was also contested, especially by PCCE. These issues are taken up fully by Hosking (1994) and will not be repeated here. Rather, it is important to emphasize that the “science” of the Symposium was problematic at multiple levels including ignoring the place of scientific uncertainty in scientific formulations, errors in levels of details, omissions of scientific data to the contrary of information presented, and in the quality of the data itself. Assertions were made that there were no direct effects of lead on children, but no one opened up the question whether the school district, for example, had correlated IQs and behavioral problems with lead burdened children (see the section of this dissertation, Paper Promises from an Iron Fortress). Gaventa (1991) raises the kinds of questions that must be asked (and answered) of the Palmerton Symposium, “what knowledge was produced, by whom, for whose interests and toward what ends” (p. 131).

Zinc was positioned as a nutrient and no mention was made of studies that show zinc toxicosis in humans and domesticated animals. The ecosystem was positioned as “basically healthy” and the devastated mountain was “coming back” yet the volumes of data on impacts to

the biology and chemistry of the mountain, air and surface- and ground-water was avoided (a summary of the ecotoxicological damage is found in Beyer & Storm [1995] who point out that lead has poisoned mammals and birds on Blue Mountain); zinc was lethal to plants as well as to decomposers vital in the nutrient cycle; and cadmium had impacted renal function in certain wildlife species [p. 603]; additionally, J. Gawel of the Massachusetts Institute of Technology has shown direct connections between metal particles carried in the wind from industrial sources and forest decline (see *Asbestos & Lead Abatement*, 1996 and Luoma, 1996). The suggestion by Dr. Carpenter that a person could get their necessary zinc by drinking 10 to 15 quarts of contaminated water from the Aquashicola was ludicrous, yet not disputed by any researcher present. Numerous comments that could have been challenged, remained uncontested, such as his assertion, “Ladies and gentlemen, to get your US government recommended minimum daily requirement of zinc, most of us have to take zinc supplements. It is almost impossible to be over exposed to zinc, but very common not to get enough.” Despite these assurances, studies show excessive zinc can cause medical problems (Ramadurai, Shapiro, Kozloff, & Telfer, 1993).

Jim Thorpe--a non-industrial town--was consistently paraded out as a comparable community with metal burdens at or higher than those of Palmerton. No researcher pointed out that numerous studies have located Jim Thorpe within the “halo” of Palmerton’s industrial contamination. For example Putnam, et al., (1986) showed industrial effects 60 miles in the direction *counter* to the prevailing wind, and forest researchers (Johnson, et al., 1982; Friedland, et al., 1986) found metals in soils on the forest floor many miles radiating out from Palmerton. In fact, at 12 miles away significant contamination occurred. Too, it is curious why Ms. Judy Wink of the Carbon County Environmental Education Center, a recipient of industry grants, was selected to present on wildlife issues. Dozens of scientific articles, research reports, theses, and other academic investigations have been conducted. And many of them by researchers at Pennsylvania State University, a location geographically closer than many of the presenters’ who were brought to the Symposium. Her discussions of “exploding wildlife populations” was an aggrandizement that no one challenged, and her language, that the mountain

was “coming back” interestingly appears on promotional materials from HRD. In fact, USEPA has taken up the language too. Fred Mac Millan, USEPA project manager, in his presentation said of the area “it’s coming back.” Citizens also use the phrase in conversations referring to the arrival of song birds, earth worms or garden insects after they replaced the top soil and revegetated the landscape.

In a conversation (notes, March 29,1996) Wink suggested that her comments were “not technically substantiated through statistics” and that her presentation was “just general...on what’s there...what was happening at a given moment on reclamation.” The reclamation to which she referred was the revegetation of the contaminated mountainside. In discussions of the efforts to revegetate Blue Mountain, sewage sludge was imported from sites outside Palmerton. The symposium’s scientists never mentioned the fact that Palmerton’s own sludge was too contaminated for use in remediation.

The uncertainties of risk assessment, a major source of scientific speculation rather than confidence, was not entertained. Issues around chronic rather than long term effects of metals, dose-response extrapolation from animals to humans, the reliance on complex models for exposure assessment and risk characterization are all encumbered with incertitude. As Brown neatly puts it, “Because theory is weak or data is incomplete, risk analysis must rely upon making many assumptions for which there is no *a priori* scientific basis that compels the choice of that assumption (1988, p. 188). The Symposium never approached these points.

Dr. Rufus Chaney, USDA scientist, persisted in dismissing, minimizing or explaining away concerns that townsfolk might have. When he undertook a similar performance in February 1992, a note faxed to him by a Horsehead Resources Development employee said, “Again, thank you very much. You did a superb job....Praise and compliments continue to pour in regarding your presentation last night. Kathy McKee’s [a *Morning Call* news reporter] article (following) is pleasing to all whom I’ve spoken with. I’ll send you a copy of the *Times-News* (Lehighton) article for your scrapbook as soon as I can” (fax transmittal from HRD to Chaney on February 20, 1992 obtained under FOIA).

Chaney's position at the 1994 Symposium is a curious one in that he and several other researchers concluded in 1988 that "individuals should restrict consumption of potato, and of leafy and root vegetables grown in Palmerton area soils because these crops accumulate much higher levels of Cd [cadmium] than do grain and fruit crops" (p. 276). At the Symposium he was assertive in assuaging citizens' alarm over kidney problems and assured the listeners that even if cadmium caused illness, it was more likely to be renal tubular dysfunction (RTD) which is "not kidney failure requiring dialysis, [RTD] is a much less dangerous effect on the tubule part of the kidney." His discourse was dismissive of heavy metal impacts to the environment. However, in a letter to Dr. Jeri Berc, one month after his presentation at the Symposium, he wrote that "at locations with high Zn/Cd emissions from smelters (Palmerton, PA; Monaca, PA ; Bartlesville, OK; etc.), the smelters contaminated square miles of soils, with a logarithmic decline with distance from the stack, and strong wind direction and velocity. Horses were regularly killed in these areas...(p. 4)" (letter to Dr. Jeri Berc, USDA-SCS, Washington, DC from Chaney, August 29, 1994).

Environmental science is a holistic science that uses and integrates knowledge from many disciplines in science and technology as well as economics, politics and ethics (Miller, 1992, p. 54). The Palmerton Scientific Symposium bypassed this all together. The recommendations made as a result of the symposium, although descriptive and rooted in the traditions of science in some places, leave many questions unanswered. By and large each of the concluding panel's ten recommendations have a prescriptive (ethical) dimension that ought to have been material for further community dialog, not for blind uncritical consumption.

So what really was the importance of the Symposium? The Symposium was a stepping stone in the ascendancy of PETF as a notable cultural player, which allowed the organization to come to signify "scientific credibility" in the minds of some, and coded for science's attendant cultural values. Positioned beyond critique, science is seen as quintessentially rational, and only involved in the pursuit of Truth. The call to the authority of science was political and attempted to protect scientific inquiry (and vicariously PETF) from scrutiny. It challenged the criteria of relevance for non-privileged knowledge. Perhaps most importantly, after the doors of the West

End Fire Company closed on July 29, 1994 and the experts returned to their desks and laboratory benches, PETF used the Symposium to define what was ethical, practical, responsible and reasonable as defined by industry. By eliding selected scientific facts with values, the event set the stage for the Palmerton Environmental Task Force to make ethical judgments hidden in technological terms. After the Symposium, as had occurred before it, particular researchers from the panel supported value-based goals, investing scientific faith in them, and floating them out to the public (and importantly to USEPA) for consideration in formulating clean up criteria. This was especially important when PETF's Risk Assessment Subcommittee later aided USEPA in risk assessment decisions.

The Symposium's conclusions provided a platform from which to directly contest numerous official government positions, including an April 1993 federal Agency for Toxic Substances Disease Registry "Health Consultation." This study suggested that USEPA should lower the action levels on lead and cadmium, not require that lead and cadmium be found in combination for removal from homes, and develop removal levels for arsenic and zinc. The significance of altering metal limits is clear. McKee (1992e, p. B4) noted that about 220 homes would need cleaning for cadmium levels of 100 ppm in house dust. However, if the threshold was changed to 150 ppm, only 120 homes would qualify or nearly 50% fewer. Similarly, more than 525 homes had cadmium in yard soil at levels of 100 ppm, but the number fell to 110 homes if limits were set at 150 ppm, more than 70% reduction of homes needing cleaned. Seemingly slight changes in federal clean up levels have dramatic socio-economic impacts, a fact not unnoticed by the zinc company, nor by the PETF.

The Symposium's conclusions were also an attempt to refute the federal National Enforcement Investigations Center (NEIC) study that attributed contamination to industrial sources, not home-based paint. Each of the three Symposium recommendations mentioned above positioned the Task Force as key agents of production. They championed signifiers that evoked contested notions, including community health, residents homes, and the natural and built environments. The Scientific Symposium effectively wrote off cadmium as a contaminant, never clearly addressed metal thresholds for decontamination--some of which are more

protective at other federal clean up sites, attempted to position zinc as a healthful nutrient in the human diet at all levels of exposure, and indirectly exonerated the industries from full responsibility for clean up. The symposium closed the range of knowledges open to serious debate.

PETF and PCCE were traversing different and unequal terrains of power on the social landscape. In the struggle to reinscribe alternative meanings, PCCE contested PETF's participation in all areas. In October, PCCE formally announced they did not support the lead reduction program because, they warned, it was "conceivable that the homeowners may be pursued by the industry as a responsible party for clean up costs [if they allowed] industry-financed testing of lead paint in homes" (Collins, 1994f, p. 1). They also felt that the program might only focus on lead paint instead of all possible contamination sources (Collins, 1994g; Laylo, 1994d). In response, the Palmerton Chamber of Commerce and the Pro-Palmerton Coalition took PCCE to task for its oppositional stance (Collins, 1994h). The Palmerton Citizens for a Clean Environment also opposed the blood testing program because they feared the PETF would have access to personal data that could be used against citizens by the industry; confidentiality was at issue (Collins, 1994i). News reporter Collins wrote of PCCE, "an adamant group of environmentalists in the borough declines to support any activities the Task Force tries to undertake" (1995o, p. 1).

The Scientific Symposium was in large part an authorizing place that modified the boundaries of what constituted a safe resolution to Palmerton's environmental problems in favor of the industrial discourse. It was an exercise in infusing authority into one way of interpreting the world through techno-scientific images, graphics, language, texts and symbols. It was science at the service of historical interpretation and social reconstruction in favor of industry. The Symposium was an opportunity to deliver a persuasive corporate-based message, normalizing the industrial discourse. When a Task Force member claimed that communities across the nation have contacted PETF for information on "How [participation in EPA's environmental decision making process] is done," a Palmerton concerned citizen responded,

“Knowing that others want to duplicate it...is enough to keep you awake all night--if you weren't so tired from fighting!”

Bankrupt Corporate Community Education: The Zinc Environmental Information Center

The industry has numerous arms into the community. One cultural institution that directly impacted the educational discourse in the town is the Zinc Environmental Information Center (ZEIC). It was used to secure the authority of industry as a credible educational agent. At the time of the study, the Center had undergone considerable downsizing. Originally it was located on the main avenue in Palmerton and was staffed by a number of company employees. Although few active employees at managerial levels or higher were willing to talk with me, a small number did consent to discuss issues under the condition of anonymity. One employee, wishing to be call by the number “34” illustrated the investment the company made in the ZEIC. He reported that the Center was maintained by “probably 40, maybe, 20 or more [staff]. You know, we had a regular daytime staff, but then...we operated that Center ’til 9 PM, five days a week. We opened it from 10 to 2 on Saturdays, and we had the people that were working here all day, going over there and staffing it at night, just to answer public questions. We wore [the residents who came for information] down” (8/9/96, lines 56-70). When asked who staffed the Center, the respondent said, “professional boys from the company. All had technical backgrounds, biology. You know, they could answer some of the questions. Any questions they could not answer, they immediately wrote down. The next day when they got to work, they found the person who had the answers, contacted those people, you know. We really made an effort to do that. There was seminar series where people were brought in, occasionally, maybe, even disparaging viewpoints were presented. But that’s what we wanted to do. And we continued doing that until the public was satiated and they stopped coming and then we cut the hours back to a couple of nights a week” (8/9/96, lines 96-114). Although this

was the report of a current employee, I could find no one in the borough during two years of discussions who regularly utilized the Center. In fact, few reported ever going there. A member of the Palmerton Citizen's for a Clean Environment, Kada Rehrig, responded to the suggestion that she might get information from the Center with a uncomplicated, "Wrong!" (7/19/96, line 1173).

During one visit to the Center, a staff member described the educational efforts in four parts, a Speakers Bureau, experimental turf grass plots, lawn and garden program including the major initiative Neighbor Helping Neighbor, and an information library. Although I informally requested information (request made to Center staff on August 21, 1995) on previous lecture topics and other educational material from the early days of the Center, I received none. In fact, formal registered mail went unanswered. At the time of my arrival, the lecture series featured subject matter such as local Canal history, rocks and minerals, lawn and garden care, wildflowers, recycling, water quality in the County, and fisheries in a nearby river. Topics that are a part of the Center lecture series are informative, but stripped of all relevancy to the technical disaster faced by the community. Thus, students interested in learning about local environmental situations would have to turn elsewhere. Here the topics include, Pennsylvania wildflowers, county water resources, rocks and minerals of the vicinity, recycling and backyard composting, and historical programs on local canals.

Although the general descriptions in the brochure are inadequate to fully evaluate the seminar content, during the study period no person reported receiving information from the ZEIC relative to local environmental issues, Superfund status, or the relationship between local environmental problems and human/ecosystem health and welfare. There was no reference to the locality; information was largely decontextualized and without identity. In fact, photocopied materials were subject-oriented in which the primary goal most often was to achieve delivery of specific value-packed content favoring the corporate discourse.

Numerous articles were densely technical and often biased to favor the industry script (There were only two exceptions at the times of my visits: Grum (1990) and Freeman, et al., 1991). When scientific articles on the shelves showed an association between environmental

problems and health, it was to disprove the relationship, rather than to prove a causative linkage (Anderson, et al., 1979). Similarly, heavy metal studies were displayed which indicated that zinc “prevented the development of clinical signs of [lead] poisoning” (Willoughby et al., 1972). One report generated by an environmental service and Atlantic Richfield Company purported that typical techniques used to determine the availability of heavy metals to animal tissue “overestimates” the actually amount of metal absorbed (Davis, et al., 1992). This publication was significant because absorption data are used to assess risk and therefore clean up guidelines, a process currently underway at Palmerton. One sheet suggested that composted sludge may reduce lead poisoning.⁵ Both mushroom compost such as that issued by the company to help restore damaged lawns, and sludge like what is applied in massive amounts to the surrounding mountain are controversial topics in the environmental movement today. The repertoire of educational and informational materials prompted the question, “knowledge for what?” The answer was to corroborate the industry discourse.

The environmental education that was offered ZEIC was like all education in at least one way. It “does not stand alone, a neutral instrumentality somehow above the ideological conflicts of the society” (Carspecken & Apple, 1992, p. 509). An analysis of the content, form and pedagogy at the Center reveals a curriculum, evidenced by distributional materials, that delegitimized government agencies through a discourse that portrayed them as inefficient, over-reactive, and excessively zealous in environmental regulations; privileged lead pollution over other alleged contaminants such as cadmium, arsenic, and zinc and then shifted the conversation of the primary source of lead contamination from industrial pollution to social factors such as automobile emissions (Articles that shifted the discourse from industry-based contamination to gasoline were Byrd, et al., 1983 and Olson & Skogerboe, 1975) and lead-based paint; constructed “environmentalists” as unreasonable, irrational, agenda-laden and anti-corporate America; and fabricated a locality in which both the natural environment and the constructed landscape were unsullied or were responsive to reconstruction through quick technological solutions when maligned. As Cervero and Wilson (1994) clearly point out, program planning is a social activity in which the educator negotiates interests in social and organizational contexts

structured by power relationships. Examples of the curriculum cited above are replete at the Center. For instance, the shelves offer visitors copies of an article that blisters USEPA's wetland regulations (Brookes, 1991) despite the actuality that wetlands are not an issue on the public agenda in Palmerton. This article is used instead as a means to discredit USEPA's name and therefore its Superfund work in the community

Numerous lawn and turfgrass factsheets and special circulars produced by Pennsylvania State University (PSU), College of Agricultural Science, Cooperative Extension were available that provided instructions on grass growing. The rows of multicolored sheets with the well recognized PSU logo add cultural and scientific authority to the visual appearance of the Center.

At the ZEIC, several photocopied sheets constructed environmentalists as "doomsayers" (Thompson, 1992) or fearmongers (Williams, 1991). Another positioned *corporate environmentalism* as "paying off" (Kennedy, 1992) in a process of resignification. In light of the failure of the company to completely assign pejorative meaning to the signifier "environmentalist," attempts were made to reinscribe it with an industrial meaning. Of special interest at the Center is the booklet for identification of the trees on Blue Mountain, an irony since over 2000 acres of the mountain are barren of natural vegetation.

The Center provided a HRD factsheet titled "The Health Study" opens with a collage of news articles, crying out with the lines, "What lead?" "Study may boost Palmerton's image," and "Palmerton lead typical, study finds" (HRD Facts, May 19, 1993). Yet, the study to which the factsheet refers has been described as explicitly not intended to function as a health study. Dr. McGeehin, Chief of the federal Agency for Toxic Substances and Disease Registry's Health Investigation Branch outlines its purposes as, "To *compare* lead and cadmium levels...in Palmerton [with a] comparison community [and] to determine factors...influencing exposure levels to lead and cadmium" (Science Symposium, June 29, 1994). The HRD document suggests that the lead from cigarette smoking, identified by the study as significantly correlated with lead in children's blood, may be due to lead arsenate pesticide on tobacco crops. It goes on to cite non-site specific health statistics indicting smoking as a leading cause of cancer and death in America today. It concludes by inference that heavy metal exposure in children is a

result of second-hand (passive) exposure from adult smoking in Palmerton. It constructs the argument with terms such as, “powerful new data” and “horrifying” scientific information on young children due to passive inhalation of cigarette smoke in an attempt to invoke claims to science which is presumed to be beyond the reach of critique. Not discounting the overall importance to any community of the significance of cigarette smoke health hazards, the extensive and intensive levels of lead in Palmerton soil and house dust are clearly not a result of tobacco fumes.

The contest to pilot knowledge production also takes place in Palmerton’s gardens. The Center distributes flower seeds, shifting the discourse from the vegetable garden where normally edible crops have been reported laced with heavy metals in toxic proportions. By providing flower seeds, the landscape discourse is sanitized and steered from potentially harmful crops to aesthetically satisfying blossoms.

Finally, the ZEIC offers a considerable amount of promotional advertisement for and about the companies, ZCA and HRD, including a fact sheet on their economic impact on the community; corporate mission statements, and charters, company profiles, and company “environmental” products and services. Petitioning scientific certainty, there is the rare assertion (usually embedded in a document) that states, “Although the designation of the Palmerton Cinder Bank as a Superfund site does not in itself mean that there is a health hazard, (and no studies to date indicate a health hazard; note that this is not an accurate statement, as early as 1984 a study showed twice the normal risk for lung cancer associated with living near the zinc smelter and in areas with heavy levels of arsenic and cadmium [Delffs, 1991, p. 4]) none of us as residents, or as responsible business people, want to let persist any environmental or health risk which may be known to exist as a result of the Superfund studies” (*Resource recovery from industrial waste*, 1990, p. 7).

In most ways, the Information Center paralleled some museums described by Hough (1990). They really “tell us nothing about the place and are environmentally and ethically bankrupt. They contribute instead to environmental ignorance, to a lack of context and identity” (p. 190). Despite this, a ZEIC employee who requested anonymity expressed in an interview

that they accomplished a lot. The respondent reported, “people are starting to calm down...it seemed like we always had something for everybody” (8/9/96, lines 305, 314). For PCCE member Tess Roberts, the “shadow” that is cast over Palmerton--her metaphor for the controlling community narrative--“made itself know” through social institutions such as the Zinc Environmental Information Center (7/19/96, lines 1272-1280).

In autumn 1996, the Zinc Environmental Information Center closed its doors due to company downsizing and ensuing staff layoffs. In a telephone conversation with a company employee in winter 1997, I learned that it was designed to be a five year program and had reached a successful end. It could boast of over 1,300 signups by home owners or residents for the Neighbor Helping Neighbor re-grassing project, which “possibly lead to over 1,000 actual lawns being seeded” (fieldnotes, February 1997). Although totted as successful remediation, both USEPA and PCCE frequently named “reseeding” for what it was not--it was not synonymous with decontamination.

Hand Lotion and Blood Pressure Screening: Health Care Responses to Toxic Contamination

“Why should you have to die of a disease because you want to work for a living?” Myles Young

(Lowry, The Morning Call, Allentown, Pennsylvania, 1985b, October 20)

The Palmerton Hospital was one of numerous social institutions that had a long standing relationship with the industry. From 1898 to the typhoid epidemic of 1905, Palmerton’s industrial accidents were attended by local physicians or in the hospitals of nearby towns. In 1908, the New Jersey Zinc Company gifted the community with a hospital, and hired the

institution's first physician and surgeon. Improvements to the hospital were made in 1911, 1912 and 1917. In 1912, the company doctor became the first burgess of the newly formed borough. This established a lasting link between the industry and the municipal government; to this day the two retain substantial ties. The hospital and the industry reciprocally conferred privilege on each other. Respondants periodically questioned whether this alliance compromised the residents in relations to environmental health.

The release of 1982-83 USEPA air toxic information by Congressman Henry Waxman (D-California) in June 1989 sparked controversies both nationally and in Palmerton. Zinc Corporation of America was on the list that revealed plant arsenic emissions purportedly liable for at least one cancer in 1,000 people. Information that indicated toxic exposure served to support residents' experiences. Interviewees frequently spoke to me about being subjected to chemicals while growing up in Palmerton. Tess Roberts recalled "I used to come in from playing and I'd have tiny black flecks--almost as tiny as your pores--embedded all in through here (pointing along her arms), and [when you would] blow your nose...that stuff would come out your nose" (7/19/96, lines 1372-1377). Tess' relatives related that in their lifetime the company would come through the community "and they knocked on the [residents'] doors and said, 'Keep your kids in today, we're going to release some stuff that's not all that healthy'" (lines 1385-1388). She recounted walking to the school bus some mornings, "and the tip of your tongue would just burn as you walked" (lines 1406-1408). Several other residents talked of breathing air that choked them, or burning sensations when outside of the home. Despite these experiences, seldom did anyone speak about them to each other in the community.

In the early 1990s, a professional woman who provided some (unspecified) services to zinc company employees passed a list of twenty-two names of individuals with cancer to Sandy Peters. Sandy recalled what this woman told her, "When she would even try to say in passing conversation that there may be health related problems, she was put in her place [by company officials] and told that...it was none of her business. So she felt totally...intimidated" (7/22/96, lines 245-252). It was in this climate that the medical discourses were taken up.

The biological significance of chronic increased absorption of lead, arsenic and cadmium “is difficult to assess” (Baker, et al., 1977, p. 271), yet researchers warn that exposure “may be causing undetected, latent disease that will be manifest in the future” (p. 272). Lead is considered to be one of the major environmental pollutants (National Research Council, 1980, p. 266). Anemia, bone demineralization, and kidney damage are the principal adverse effects of cadmium ingestion in “moderate” amounts (National Research Council, 1980, p. 94). Palmerton also has a zinc contamination problem. Cadmium, a toxic element, has a half life of 18 to 33 years in human kidneys. Concentrations of 5 ppm (parts per million) “are almost always associated with some adverse health effects; levels as low as 1 ppm have undesirable effects” (National Research Council, 1980, p. 108).

In 1983, immediately after being declared a federal Superfund site, a health study was proposed by USEPA, to be conducted by the Agency for Toxic Substances and Disease Registry (ATSDR). Yet it was never carried out. Tess Roberts like others, asked, “Why didn’t that get off the ground? That’s what I say. Why? It was all designed in memo form [by ATSDR]. I’ve never gotten an answer [to that question]...It was to do some work with menopausal women and cadmium uptake--the design was different [than the epidemiology study done ten years later]” (7/19/96, lines 1742-1773). The question remains why the study was never executed. Speculation circulates that it was because it had women as its focus. Perhaps, too, it was dismissed when cadmium disappeared from the public discourse.

Because of disquiet over heavy metal contamination, three important health-related investigations have been conducted in Palmerton since 1991: the Palmerton Hospital blood lead level investigation; a study comparing health issues in Palmerton with those in Jim Thorpe (a neighboring town) performed by the ATSDR; and the Palmerton Environmental Task Force blood lead level testing initiative.

The Palmerton Hospital’s free blood lead testing program began in 1991 according to the Director of Professional Services, Dr. Susan Garszczyński. At the outset, USEPA indicated methodological problems with the hospital study. In *Fact Sheet, Superfund Update Addendum* (September 1992), USEPA disclosed, “The Palmerton Hospital Blood Study was

not conducted randomly, and thus, any conclusions drawn from this study may be skewed. The definitive ATSDR study will provide the answers to the blood lead level question” (Fact Sheet, 1992, addendum). On several occasions citizens reminded me that USEPA, despite using the term “study” to describe the Hospital’s investigation, has suggested it was not a study at all. It had no proper protocol since it was voluntary. The question remains whether it will make its way into the risk assessment which will lead to final clean up actions and standards for the community.

The federal Superfund law prescribes an ATSDR “health assessment” as a preliminary indication of risks to humans health posed by contaminated sites. These are often based on the type of pollution, and potential pathways of exposure. The ATSDR conducted a comparison study in Palmerton in the summer and fall of 1991. It was released in two parts. Part I, in June 1994, concluded that both the target population (Palmerton) and the comparison population (Jim Thorpe) had roughly one in four children with elevated blood lead levels; all participants had cadmium below the World Health Organization occupational reference level; Palmerton participants over 40 years of age had urine cadmium levels significantly higher than in Jim Thorpe, a town used for comparison; and for children under the age of 14 years, there was a strong correlation between blood lead levels and distance from the smelters (*Biological indicators of exposure to cadmium and lead*, June 1994). The latter finding is enigmatic since the smelters ceased operating in 1980, more than a decade before the study began; lead is eliminated from the blood stream once loading discontinues. Part II, distributed May 1995, was a comparison of blood, liver, kidney, and immune system functions. Too, the findings were equivalent between target and comparison towns. For all populations, the study found that cadmium exposure “might affect the kidney system...The health significance of these findings is unknown...Further research is needed to confirm whether kidney impairment occurs in association with chronic, low-level environmental cadmium” (*Biological indicators of exposure to cadmium and lead; Final Report. Part II*, May 1995, p. 19).

Reporters remarking on the preliminary review of the comparison study sent out mixed signals to the community. ATSDR urged “cause for concern, not panic” at the their findings

(McKee, 1992f, B1), stating that some children's blood lead levels were high. Mike Greenwell of ATSDR was reported as saying, "the average blood-lead level...was above what the federal Center for Disease Control considers safe" (p. B1). Another reporter however told the community that ATSDR's findings, while a cause for concern, were not above the safety level established by the Center for Disease Control (Fortney, 1992c). The former news person, a day later claimed that the communities were not OK, but not in danger either (McKee, 1992g). Many in the community saw the study as reason for relief, erroneously claiming it was a "health study" and that Palmerton was declared safe; Jim Thorpe rests in a flourishing valley known for outdoor recreation and extolled for its forested slopes. The Ad Hoc Environmental Committee of the Chamber of Commerce sent letters to residents that declared, "no health problems related to lead in the soil" which USEPA quickly addressed in a volley of letters that reminded residents that 23% of those tested had levels over the acceptable range. PCCE's technical advisor called the ATSDR study "flawed" because of the choice of Jim Thorpe (McKee, 1993b). PCCE officially protested the use of this town as an experimental control prior to the study's commencement. ATSDR in general has been severely critiqued for missing the mark on public protection (Russell, et al., 1992). In August 1991, the US General Accounting Office (GAO) released a report that concluded the ATSDR assessments were of questionable value. Many health assessments were so incomplete that they could not even be used for determining whether follow-up studies should be undertaken. The ATSDR study in Palmerton and Jim Thorpe should be used with caution.

The Community Blood Lead Sampling program was PETF's response to the Symposium recommendation that steps should be taken to monitor and lower children's blood lead levels in Palmerton. The program got off the ground in September 1994 when a framework and general calendar were produced in "a marathon 16 hours of meetings" (Collins, 1994m) over a two day period. The format for the community project was built by the three scientists, Drs. Robert Bornschein, Mark Farfel, and Rufus Chaney who had taken up the lead-paint discourse at the Symposium, together with a host of individuals, reported in the press to include members of the PETF, borough officials, County Commissioners, banks, environmental

services companies, the Palmerton Hospital, HRD, Paramount Communications, state and federal environmental agency staff, and the Pennsylvania Department of Health. Its goals included to determine if children living in the borough were being unduly exposed to lead, to identify sources and pathways of exposure, to quantify the absolute and relative impacts of these sources, to assess any changes in lead exposure that might have occurred since the 1991 ATSDR study, and to recommend corrective actions in the event that there was excessive exposure.

The PETF program consisted of several steps, including a letter of introduction mailed to all residents, door-to-door community census looking for children under 6 years of age, blood screening and environmental screening to look for lead paint and house dust in the homes. Samples of blood went to Borschein's laboratory. At the time of strategic planning, the project was estimated to cost \$400,000; the Task Force asked two of the parties potentially responsible for remediation of the contamination to share the costs.

Concern for children's health is never once mentioned in the PETF letter of introduction. The lines of instruction speak of urgency--urgency to get the site de-listed from Superfund status. The rationale for the program is clear and unambiguous, stating, "As a community we must act responsibly to assist in bringing an end to the Superfund Designation. This is the first step in this process" (letter from Dolores Ziegenfus to "Dear Neighbors, October 3, 1994). In January 1995, the results of PEFT's lead reduction study were revealed by Ziegenfus: the lead level in children had dropped dramatically, from ATSDR's findings of 23% (children under 6 years) with high blood lead levels in 1991, to 6.5% in 1994--a figure that was lower than the national average. In June 1995 Borschein presented the results of the study to interested residents, concluding that "the Neighbor Helping Neighbor program [offered by Horsehead Resource Development Company through the Zinc Environmental Information Center to assist in damaged lawns] has had an impact in this lead reduction" (Collins, 1995p, p. 1). Interestingly, it was impossible for the researcher to determine if USEPA's soil removal and replacement had any impact since only two homes of the 100 that took part in the environmental screening had received USEPA assistance. But, he is reported by several accounts to have

ventured that had homes subscribing to federal clean up been included they would have shown lower contamination levels. As we have seen, designs of scientific experiments as well as the questions asked, determine the results of those experiments. Some respondents felt that by not including USEPA's initiatives (38 homes had been completed at the time) in the design, Bornschein's results may be less than accurate. Adding to the confusion, and contrasting with what Ziegenfus had reported to the community in January, Bornschein told the audience that blood lead levels remained above the national average. In the end, the world renowned scientist is reported to have said that, "his final conclusion is a hunch, but one he thinks will pan out" (Collins, 1995p): no single source of lead is responsible for all of the elevated blood lead levels. In the battle over whether USEPA remediation or Neighbor Helping Neighbor was the most effective procedure for lowering blood lead levels, the PETF announced it would test more children in July 1995.

In addition to the three important health investigations already discussed, the Palmerton Concerned Citizen's for the Environment conducted a door-to-door health canvas. The results convinced many members of the group that there was cause for further research on environmentally related health problems. "People were glad to share with us their health problems and to talk a little bit about what went on here and how the dust was thick in their homes because at that point the Pro-Palmerton Coalition and the Chamber of Commerce had not yet undertaken their campaigns to have the people's confidence in PCCE shaken" (Tess Roberts, 7/19/96, lines 463-472). Besides raising questions about community health, the PCCE survey shifted the environment in the minds of some residents from a personal to a collective "problem" that needed addressed. However, in the bid to take up official knowledge, PCCE abandoned their popular epidemiology studies. They ignored the value of grassroots toxicology investigations which has been reported elsewhere (Brown, 1993; Wandersman & Hall, 1993; and Clipp, 1994). In fact, there is a national trend of conflicts between community groups and officials over citizen-based studies. Folk epidemiology has become the battle ground "between self-taught citizen-experts (and their occasional mainstream-expert allies) and the 'official' experts" (Blumberg & Gottlieb, 1992, p. 7).

The PCCE health canvas was very memorable for some of those who conducted it because it showed the extent that industry's education of citizens impacted their feelings, longings, thinking and behaving. Sandy Peters recalled visiting many residents who felt that there were no wellness problems in the community. At one home, near to the plant, a resident adamantly told her "there was nothing, nothing wrong here!" (7/22/96, lines 2176-2177). Just a few doors down the street, however, she met a woman "sitting on the porch and she was so frail...she wasn't terribly old...possibly in her sixties, but she was dying of cancer and her husband had just died of cancer and he had worked for the company. And I talked to her a little bit about it. She actually was too weak to be having the emotional conversation with me that she had. I was in tears when I left there and it just seemed so ironic to me that this little old woman was sitting on a porch dying and two houses down this [other] woman was saying 'There's nothing wrong here'" (lines 2188-2206). Situations like this compelled her to continue searching for answers to the health question. Some members were equivocal on the issue, at times seeing reasons to believe while at other times doubting that a neighborhood might be a "little hot pocket" saying to themselves, "Is it, or is it not--I don't know...." (Ron Monty, 7/20/96, lines 196-198).

A growing number of official studies confirms what citizens already know, and what citizen-based research shows, namely, that pollution is making people in communities sick (Clipp, 1994). Yet, some regulators insist that there are times "when best scientific judgment indicates [an epidemiological study] is not appropriate" (Westrum, 1991, p. 593) for contaminated sites. Recognizing that citizens educate themselves very rapidly in hazardous waste issues, it has been suggested by government bureaucrats with industrial interests that "sometimes the community goes astray" (p. 593). The misdirected application of the community's power is termed "political epidemiology" by officials. In the event the citizens are recalcitrant, it is suggested that state regulators, "invite [them] to your office...and make your department seem as human as possible" (p. 595). Controlling the questions that are asked, and the problems that are selected, are primary mechanisms used to direct the construction of meaning toward the mainstream.

Many residents with whom I spoke believed there may be health problems associated with Palmerton's pollution. Kada Rehrig was typical of this group. She put it this way, "It seems like there are a lot of people with kidney problems....I think there's a lot of cancers in Palmerton" (7/19/96, lines 1085-1087). One interviewee reported that members of his church talked to him about lead poisoning, warning "if you say anything...I'll deny it" (Evert ^{pseud.}, 7/22/96, lines 1048-1049). Yet, health investigations in Palmerton have been ambiguous. Some are reported to have shown no clinical manifestations of human disease, while other studies have indicated higher than expected cancer deaths in people (Robinson, 1989, p. A3; Russell, 1991, p. 4), and definitive illness in livestock (Gunson, et al., 1982). A Lung Cancer Death study found twice the normal risk for lung cancer associated with living near the zinc smelters (1974-1977); studies suggest that those living near the plant are in peril of "unacceptably high cancer risks" were made by the USEPA (Robinson, 1989, A3); the US Centers for Disease Control (CDC) study on child metal loading that found elevated levels of cadmium in hair and blood; zinc company remediation studies; US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry health assessment (1994) and others suggest the possibility of a health dilemma.

In 1993, the Pennsylvania Department of Health issued a requisite Public Health Assessment that only added to the uncertainty (McKee, 1993). In an act interpreted as controlling the distribution of knowledge, it was initially sent by the Health Department only to a neighboring community, not Palmerton. It reported: an evaluation of 1,815 death certificates by the Palmerton Hospital over 22 years resulted in conflicting conclusions. One physician suggested that for those under 70 years of age there was an increase in liver cirrhosis, and increased prostate cancer for those over 70; and an ATSDR 1985 analysis found elevated rectal cancer rate mortality which may or may not be related to contamination (McKee, 1993). More perplexity arose when the ATSDR delivered a "Health Consultation" in 1993 that said: levels of lead, cadmium, zinc and arsenic may pose a health threat; the metal clean up levels are set "too high" and therefore may not be protective of the health of children and pregnant

women, and they recommended establishing health levels for zinc and arsenic (McKee, 1993a). Zinc, too, has been reportedly linked to Alzheimer's disease (*Morning Call*, 1993).

In the face of equivocal health studies--some indicating reasons for medical focus on industrial contamination--the hospital has chosen to take the position that, by and large, everything is satisfactory and acceptable in Palmerton. These were expressed by Dr. Garszczynski, in the comment "overall the Palmerton community is healthy" (Hosking, 1994, p. 4, and similar comments in our interview on 8/16/96). Perhaps one reason that residents take up the healthy discourse is because the zinc company had long been associated with fecundity. Several interviewees said that the zinc industry could rightfully lay claim to the healthy offspring and high numbers of scions in the community. Amelia Evert ^{pseud.} recalled a doctor telling her that experiments showed "if you treat somebody with zinc, they're gonna' start reproducing faster than they ever did" (7/22/96, lines 455-457). She was convinced this was true since the doctor informed her that the five in her family could be attributed to zinc (lines 461-465).

At the Palmerton Science Symposium, Dr. Garszczynski presented data from the hospital's blood lead tests for infants. The Hospital results showed that in 1991, from 109 individuals, 12% of males and 1% of females, aged less than 6 years, had lead concentrations at or above the federal community action level of 10 ug/dL (micrograms per deciliter). It is important to note that the toxicity of lead "is established across a spectrum of exposure concentrations starting as low as 10 ug/dL" (National Research Council, 1993, p. 4). Research shows that prenatal exposures of lead, corresponding to as low as 10 ug/dL, are associated with early childhood developmental delays (National Research Council, 1993, p. 41). Even more startling, in 1993-94, 5 Palmerton children of every 32, or one in every six, had levels greater than 11 ug/dL.

Dr. Garszczynski's remarks on the health of the community contrast sharply with those of Dr. Roy Smith, Senior Toxicologist with USEPA who stated that the gritty dust, familiar to all Palmertonians, could result in "horrendous exposure" of lead to children. He is quoted as remarking that levels of contaminants could constitute a "truly dangerous threat" (Fortney, 1991b, p. D1). At the same symposium where Dr. Garszczynski presented her finding, Dr.

Mike McGheehin, from the US Department of Health, stated: exterior porch dust was a predictor of high blood levels; cadmium was a metal of concern; and that nearly one of every four children tested had blood lead levels greater than or equal to the 10 ug/dL number.

In light of much medical uncertainty, it seemed reasonable to pursue the role of Palmerton Hospital in research that might help to resolve the ambiguity. The borough is an ideal setting for environmental health investigations. It ought to inspire curiosity and wonderment to the investigative mind. This curiosity would be neither oblique nor esoteric. Yet, regarding environmental health research, Dr. Susan Garszczyński articulated that there was no one at the Hospital who was “knowledgeable enough to talk about an environmental topic” (8/16/96, lines 247-254). Peter Kern said “there would have to be a purpose [for establishing voluntary patient environmental health studies] and you have got to remember that our role is as a community hospital, not as a research hospital” (8/8/96, lines 809-812). When queried about the National Institute of Health study that showed higher rates of cancer in the vicinity of the Palmerton zinc plant, the hospital administrator added, “I can’t comment. I’m not aware of that” (lines 1514-1515).

Dr. Garszczyński reminded me that the hospital did not rush into environmental health testing since “this is a controversial issue. There’s pros and cons [to] the whole thing” (lines 461-462). Resorting to economic concerns she added that someone would have to pick up the costs. When probed about the meaning of the word “controversial,” she reported that there was polarity, and that “there doesn’t seem to be anybody in the community that agrees” (lines 494-495). She mentioned that the hospital provided community blood pressure screening in response to questions I raised related to any community wellness programs at the hospital.

The hospital administrator urged caution, *vis-à-vis* environmental health education. Kern, flatly stated, “Palmerton Hospital sees it’s role not as a, not as a um, advocate in the environmental health field, but as a partner with [government agencies]” (8/8/96, lines 410-414). To go in the direction of environmental health advocacy would be to take the hospital mission “perhaps one step too far” (lines 424-425)--a mission that was not provided to me despite attempts to ascertain it. Kern mused, “start[ing] down paths which are, ah, perhaps,

well intended but turn out to be perhaps, ah, ah, not well informed from the standpoint of our ability to teach. So what we do is we take the lead from the experts. If the experts want us to help promote lead safety in the community by doing certain things, we will work with them. We will cooperate with them” (Kern, 8/8/96, lines 466-475). He emphasized that the Hospital was not into “really doing our own basic thing” (line 477). On education he elaborated further, “We’re not going out there and telling the community don’t let your children teeth on lead painted cribs or window sills where, where, it’s been coated with lead painted. Or any window sills for that matter. Ah, it’s not good, that’s hygiene. I don’t see that necessarily as health and I’m not sure that that’s our role as opposed to a public health role, if you understand what I’m trying to say” (lines 451-462).

Instead of conducting long-term investigations throughout the life span of statistically significant numbers of Palmertonians (longitudinal studies) in an effort to clear the uncertainty, key leaders of the hospital droned on about the good health of the town’s inhabitants. Whether it was in media reports, at the Symposium, in interviews for this study, or correspondence, the same response was given: basically Palmerton is a healthy place to live. For example, in fall and early winter 1993, the advisability of applying Iron Rich Material (IRM)--a Horsehead metal-laced commercial product for winter road anti-skid on borough streets--became a topic of debate. Tess Roberts asked at a Borough Council workshop meeting for clarification on several issues, including dangers associated with IRM. In a thoughtful three page letter, the Borough Manager provided multiple reasons why Council believed IRM was a superior product to other winter road-safety products. He included, “Members of our own medical community were also consulted and we were told there was no abnormal incidence of lead burden or related illnesses in our community to their knowledge” (letter from Rodger Danielson to Teresa Roberts, December 15, 1993).

Silence appeared to shadow some in the medical community in Palmerton. Commenting on the Palmerton medical profession, a physician who requested anonymity told me that “some years back” a doctor knew he had a case of lead poisoning which didn’t show in the hospital records because “nobody thought of it.” When probed about what this meant, it

was explained this way, “well, when I was in medical school I was taught, ‘the best diagnosis is made by thinking of it,’” then pondering aloud the doctor added, “[this] isn’t and wasn’t done here.” The interviewee went on, “I try to stay out of it. These people just hate each other mightily. It’s unfortunate.” The interview ended with the physician expressing the belief, “If I get into it [environmental health issues], the hospital will get on my back.” A resident, Thaddeus Evert^{pseud.} discussed the silence at the hospital in years past when workers were taken there for lead poisoning. “I know there was a lot of...people, they went up to the hospital, they had to get, they had to get examined every six months or what ever, they did. Or every three months, when they worked in the lead. But they see, they wouldn’t let it out up there....because it was the Zinc Company Hospital” (7/22/96, lines 996-1003, 1008, 1009). He added that even though it’s now the Palmerton Hospital, “it’s almost the same thing. I mean they’re working in cahoots, too” (lines 1012-1013).

Attitudes consonant with this were expressed by some residents. Sandy Peters, for instance voiced the belief that “the industry’s influence on our local hospital...” left her feeling that there were no “places to go to for an objective opinion [regarding health]” (7/22/96, lines 757-761). She too talked of a physician who treated a lead poisoned man, saying, “and the doctor would stand up in a public forum and say he’d never seen a health problem in this community” (lines 1568-1570). Like the Palmerton physician quoted above, Sandy suggested that doctors often missed diagnosing metal toxicosis “because they weren’t looking for a lead problem” (lines 1587-1588).

At the 1996 Palmerton Community Festival, I dropped by the Palmerton Hospital station to chat with the health care workers there. After introducing myself and my study intentions, I asked a few questions about health and the community. At one point, while glancing at the treeless mountain in front of me, I inquired why there was no information on the children’s blood lead level testing that the hospital offers. I was informed that I would have to go to the “Industry Tent” on the festival grounds for that type of information. So, I went. At the company’s tent, after repeating my question, I was directed back to the Palmerton Hospital table. When I mentioned that the hospital staff had directed me to them, they looked puzzled

and suggested that I go to the festival general information booth. At the general information station I was directed back to the Hospital table. At the hospital display, after probing with a little more intensity, the attendant said, “I was told all that I am to do is take blood pressures and pass out this hand cream!, Sorry!” When I asked who provided this guidance to her, the health care worker suggested I speak to Mr. Peter Kern, the Hospital Administrator. Actually, I already had, and he told me that the hospital “advertise[s] the free blood lead samples for children” (8/8/96, lines 438-439)--but apparently not at the single largest gathering in the community.

The hospital mediated the terrain of equivocal knowledge by distributing hand lotion and reading blood pressures. In the end, the sole most important community event--one that attracted many hundreds of visitors over an extended weekend, had no information on how to assist parents or guardians in childhood blood testing. I went away asking myself, how serious are the leaders of this community in protecting their children. I could not help but question if the only thing that did really matter was getting Palmerton off the National Priority List as a contaminated site.

The hospital, by assuming the “no problem” standpoint, created no need for routine inpatient voluntary screening for industrial diseases despite evidence that potentially severe health risks were present in the community. In an ironic twist, the Zinc Corporation of America’s publication, *News & Views*, gave the following advice to its readers, primarily workers at their operations in New York, Oklahoma and Pennsylvania, “A comprehensive plan for cancer prevention involves...avoiding cancer causing chemicals...” (Bloomfield, 1992, p. 4).

Paper Promises from an Iron Fortress: The Public School Administration

Like the Palmerton Hospital, the Palmerton Area School District mediated the contested terrain by circulating the “healthy community” narrative. School superintendent

Ronald Mihalko offered that they provided an impartial pamphlet on the precautions necessary to prevent lead and other metal poisonings. His comments during a conversation (December 7, 1995) paralleled those of the industry, the Scientific Symposium, and the Zinc Environmental Information Center's discourse; he asserted that lead in paint was the causative factor in children's blood levels, and leaded gasoline was the source of soil contamination. An industrial basis for the community exposure was never entertained. In the end, he recycled the findings of Dr. Susan Garszczynski, in virtually identical words, stating "really, Palmerton is a healthy place." In fact, he recommended that I speak with her to verify this position.

School personnel advocated the position that there were no environmental problems in Palmerton. For example, Mihalko wrote, "I fished in the Aquashicola for many years and I can tell you, there's no problem" (paraphrased by Roberts, 7/19/96, lines 1855-1857; letter confirmed at Palmerton Public Library in USEPA Administrative Record).

The superintendent reported that the school district intended to remain neutral in the community conflict (notes, December 7, 1995). The "neutrality" argument was offered by several district teachers with whom I spoke. One teacher expounded on the necessity of school district neutrality saying "[the school district must] stay as distant and neutral" as it could (notes of telephone conversation on 7/19/96). Because of the positionality of the district administration, some PCCE members attempted to insert competing knowledges into teachers' realms of plausibility. Challenging the claims of the industrial culture, Tess Roberts attempted to educate a friend of hers "who is a teacher in the school district." She went so far as to photocopy "[many] of the studies that [PCCE has]." She felt compelled to do this "because we never [got] around to discussing the impact of the industry on the environment" (lines 3031-3039).

Martin (1988) proposes that knowledge about the environment has been the subject of struggles concerning its validity, meaning, implications, legitimacy and accessibility. Education about the environment is far from learning neutral facts. Rather, "it is a political exercise at every stage" (p. 203). The superintendent's realization that environmental education was a social and political act prompted claims to neutrality. He stated that, in the spirit of neutrality, teachers

were not supposed to discuss Palmerton's environmental issues, according to School Board policy. He could not produce the policy, stating that it was verbal and understood by all. In an attempt to acquire this policy or at least learn more about it, I posted letters of inquiry to all members of the Palmerton Area School District Board of Education. In the correspondence I stated, "[After speaking to teachers and administrative officials] there seems to be some uncertainty as to whether there is a [district] policy on "neutrality" relative to teaching about local ecological issues." An iron silence followed; no board member responded to my inquiry. I managed to speak to a member of the Board, Mr. James Borger. After a cordial conversation, he penned a note to me stating, "I have no knowledge of any policy pertaining to the teaching of local ecology" (letter to the author dated August 22, 1996).

Despite supporting a neutral stance, several science teachers with whom I spoke, had no knowledge of a policy on neutrality or silence surrounding teaching about the local environmental devastation. Jan Sosik, a physical science teacher, related that the topic did not fit well with his subject matter. However, he agreed that "being neutral [was] probably the general feeling [among teachers]" (8/9/96, lines 484-485). He said that he would not avoid teaching about local environmental issues, saying "nobody ever said to me, 'Here's the stand you have to take on the subject' " (lines 492-493). Students reported to parents that some instructors discussed the topic, but usually located the cause of the death of the mountain on fires, train smoke, natural blights, and logging--all causes put forth by the Carbon County Commissioners, the Chamber of Commerce, industry, and others at the outset of Superfund designation.

Perhaps a reason for the confusion and sense that environmental contamination issues were not appropriate subject matter stemmed from an incident that occurred in the early 1990's. Tess Roberts recounted for me that some residents "wanted EPA to come in and present [a program] to kids in school about the clean up so that they would have a chance to ask their questions, to see the suits [USEPA workers] were going to wear, to see the [vacuums] they were going to use. As a matter of fact USEPA was going to --actually going to [do a brief pre-presentation] on land and water showing kids how toxic chemicals and pollutants get into

our streams and on to our land. And I mean the school board voted that down. Now what earthly reason...would the school board have for voting that down?" She answered, "[because] EPA had taken a stand that the industry had polluted...and [parents] were wanting [USEPA] to come in and talk to the kids, when--gee--the company's been so good to us" (7/19/96, lines 1222-1248). Amy Barnett, the USEPA public liaison during this time confirmed Tess' recounting in a conversation on February 25, 1997 (fieldnotes). During the study, Michael Towle, the USEPA On-Site Coordinator reported "I've never been invited to a school [in Palmerton]. I've never been invited and I've never offered. It'd probably be a neat thing to do. Whether the EPA has done it, I have no knowledge" (7/30/96, lines 481-487).

During discussions with Superintendent Mihalko, he stated that the district teaches nothing upon which experts differ. Martin's (1988) critique of traditional environmental education is applicable to the Palmerton Area School District's administrative leadership: "there is little discussion of social movements and the powerful institutions implicated in environmental problems....[The environment is presented] as a neutral subject cut off from political and economic controversy" (p. 213). Mr. Mihalko recommended that it was government's responsibility to study the conditions of the Aquashicola Creek--not school students. Children in the district were to go to the Carbon County Environmental Education Center for ecological education, or parents could provide that kind of information to them. It is interesting to note that the Environmental Education Center director, Judy Wink, presented an industry narrative at the Scientific Symposium in 1994. Too, the Center is the recipient of the largess of Horsehead through the company's Community Development Fund. In December 1995, the Environmental Education Center conferred an Environmental Award on Charles Campton, Executive Consultant of the company's Community Development Fund and PETF member. In 1994 the Environmental Education Center received \$3,000 from this fund, and \$5,000 in 1995.

I incidentally made the acquaintance of a Carbon County Environmental Education Center worker at a conference unrelated to Palmerton which we both attended in autumn, 1996. While there I inquired whether Palmerton pupils in fact went to the Center, and whether the ecological damage on Blue Mountain and the community was discussed with them. This

person replied, “Yes, we see Palmerton students. Some come and say, ‘Pollution is bad.’ But they have to remember that the pollution which killed the mountain, fed their families in years past” (notes, September 2, 1996). This unwitting behavior reinscribes the signifier “pollution” with the meaning “work,” thus shifting any negative connotations to positive ones.

The school district is failing in its mission to teach meaningful environmental education. The environmental educator, Ralph Lutts noted that each locale has its own uniqueness. “It is vital that environmental education [EE] pay attention to this uniqueness. EE has traditionally been very effective at teaching about generalized ecological processes and environmental hazards. Out of the particularized experience and understanding of our own unique places, however, grow personally meaningful relationships with personally significant environments. EE that combines both is likely to be especially effective in promoting environmental understandings, values and actions” (1985, p. 38). If Lutts is correct, as I believe he is, by privileging a nomothetic version of environmental education the Palmerton Area administrative policy is inadequate. Favoring general environmental commentary over specific local inquiry perverts action for democratic life. Environmental education begins with awareness and continues through knowledge to action (Gaughan, 1996). The school administration currently suppresses awareness, generalizes environmental knowledge, and forestalls action; leadership in this arena is insolvent.

Multiple times Mihalko stated, “Schools are to educate kids!” and assured me the district is responding to the community by *not* teaching about the local ecology which is a controversial topic. Inquiring about the kind of message this sent to learners, I asked, “How could the school system be developing leadership in students when they teach, by their actions, that the way to deal with controversy is to walk away from it?” To him the issue was different-- educational leadership is “following the community.” When I suggested that the absence of information was equally formative on curricula as what was included, he disagreed. He could not or would not entertain that silence in itself was an effective means of communication. Nor did the school administrator take seriously Freire’s assertion that “every neutrality contains a hidden choice” (1978, p. 78).

Despite claims of “neutrality” by the school Superintendent, a Horsehead staff member who wished to be known only as “34” for the purposes of this study, reported that Horsehead Resources Development Company, through the Zinc Environmental Information Center would respond “every time we were asked to do presentations (8/9/96, lines 274-275). He recounted that they would “regularly...let people know [about the local environment], people needed to know--[e.g.] high school teachers, grade school teachers, or whatever” (lines 257-262). He continued, “I’ve spoken at the ZEIC a lot of times--to all kinds of groups. Um, day care, girl scouts, boy scouts, elementary school, junior high, high school groups, [and]...adult groups” (lines 278-283). This particular company educator reported that “the kids could understand what waste water processes were [and]...why we got to the point where we’re doing what we’re doing on the mountain [referring to revegetation efforts]” (lines 317-325). Interviewee #34’s comments were confirmed in a letter from CEO and President William Quirk to DEP Regional Director William McDonnell when he wrote, “the Zinc Environmental Information Center [was established] to provide environmental information and free programs to the community and its educational system” (letter dated February 7, 1997). Several participants in the study confirmed that their children received instructions from the industry at some time or another in the course of their school years.

Kathy Ozalas mentioned that her fifth grade son came home and discussed zinc manufacturing information that he learned in school from a company representative and “all the wonderful things the zinc company was doing for the environment” (8/16/96, lines 2179-2181). For some, the fact that the school district purported to remain neutral, was not an issue. Sandy Peters, an activist member of PCCE, was “satisfied with the school district” (lines 480-481) even though she “[did not] “agree with the way they handle the environmental situation” (7/22/96, lines 481-483). To her the world is larger than this singular point. She voiced, “I really love this little community...if I didn’t like [it] I would have left!” (lines 483-486). For her, mentoring was more effective than the kind of environmental education conducted in the schools. Sandy expounded on one of her educational premises, “When I go to places [to speak about the environmental damage and public health concerns] and my children...see me

stand up and talk...and [ask] questions that I know--and they know I know--have to be asked--I hope that they will do the same in their lives” (lines 1730-1737). Ray Carazo took some ownership in whatever was happening in the School District, saying, “it’s just as much my fault as anyone else’s that [Palmerton’s] educational system isn’t up to the par, so to speak, comparatively with the rest of the world” (8/9/96, lines 288-292).

Whether there is an official policy prohibiting teaching about local issues connected to industry is largely immaterial. What is consequential is that the Palmerton Area School District administration has abandoned a leadership role in the unique opportunity to employ the community as a living classroom--a dynamic cultural and ecological laboratory--whose value to the arenas of social studies and environmental science is immeasurable. Ladson-Billings (1992) writes that culturally relevant teaching means that education is designed to fit the culture as the basis for helping individuals to understand themselves and others; to structure social interactions, and to conceptualize knowledge. In Palmerton, culturally relevant education would have been a pedagogy that included ways of seeing that were alternative to the dominant narrative with the goal of empowering learners to examine critically the place where they carry out their lives.

The literature shows that lead burdens in children are associated with developmental problems, reading disabilities, behavioral disorders, motor skill anomalies, and IQ variations. As early as 1943, researchers in the US reported serious impairments to children even mildly exposed to lead (Beyers & Lord, 1943). A recent study has linked aggressive behavior, delinquency, and attention disorders in youth between the ages of 7-11 with lead exposure (Needleman, 1996). The National Research Council (National Research Council, 1993) conservatively iterates, “most studies report a 2- to 4-point IQ deficit for each increase of 10-15 ug/dL in blood lead within the range of 5-32 ug/dL” (p. 59). Also, the NRC studies show that children with blood lead levels of 3-9 ug/dL earn lower cognitive test scores than children with levels below 3 ug/dL (p. 66). For every 10 microgram rise in each deciliter of blood, Rosen (1992) has shown a 6 point loss of IQ. Clear reductions in IQ can be measured when lead is as low as 7 µg/dL of blood (Rosen, 1992a).

During my interviews, several professionals, including two different registered nurses, suggested the possibility that some children might have learning and behavioral deficits due to metals. One stated, “There’s always gonna be a percentage that [have] learning problems or something. [But Palmerton’s] seemed out of proportion” (fieldnotes, 7/20/96, lines 1178-1181). Similarly, Louise Calvin noted that in 1997 a nurse contacted her to report on a neighborhood where environmental devastation is great, and childhood learning and behavior appear to be affected. In February, 1997, Louise called this to the attention of USEPA On-Site Coordinator, Michael Towle.

Silence attends much of the critical inquiry into information about Palmerton. Knowing about the learning and behavioral issues of metal toxicosis, I directed inquiries to the Palmerton Area School District elementary school administrator, Ms. Sara Stroup, and the Superintendent as to whether children were tested for lead-induced learning difficulties. I inquired, among other things, “I am interested in learning whether anyone, to your knowledge, has compared Palmerton elementary school students’ development, motor skills and IQs with those of regional, state and national learners.” Ms. Stroup never answered the letter, while Mr. Mihalko responded but did not address my probing on childhood testing for toxic exposure. It would seem that the school district should have an interest in student testing and comparing Palmerton’s learners with regional, state and national test outcomes but it did not.

March, 1995, was the first time that the Pennsylvania Department of Education conducted uniform math and reading testing of all fifth, eighth, and eleventh grades in public schools to determine the quality of education in the Commonwealth. The results, published in December 1995 are broken down into “quartiles,” or units labeled “High,” “High Medium,” “Low Medium,” and “Low.” An average school would receive a mark of “25” in each of the four quartiles. The results show that one quarter (25%) of the students are in each of the four groups. Schools earning larger numbers in the “Low” categories have more students scoring in those quartiles when compared to other schools in the state--an indicator of poor student performance. Palmer Elementary School received the following marks: (for reading) 18-“High,” 17-“High Medium,” 28-“Low Medium,” and 36-“Low;” (for math) 15-“High,” 19-“High

Medium,” 26-“Low Medium,” and 39-“Low” scores. This means that the elementary school has considerably *more* pupils in the *lowest quartiles* when compared with a representative sample. Similarly, there are considerable *fewer* students in the *highest* scoring ranges. Palmerton’s elementary pupils did not compare favorably with other public schools in the state of Pennsylvania.

Despite disturbing test scores for Palmerton’s youngest learners, there was no expressed intent to undertake comparative evaluations of child development and learning to determine if heavy metal contamination has impacted the youth of the community. Addressing this issue with several teachers, they purported to know--without citing studies or information--that lead was not the cause. They categorically attributed poor performance to recent migration of outsiders into the community, to social problems, and to family issues and other socio-economic conditions. Although the superintendent was aware that the 1995 Pennsylvania Department of Education “School Assessment” showed Palmerton elementary pupils performed significantly under expected values, he categorically ruled out the possibility that lead contamination played any role in it--providing no evidence. Education was evidently positioned in attempts to win learners to particular ways of seeing the world--of sense-making. And, like the community script, the educational system was an element in the industrial orb, evading competing versions of the way the world was.

The suggestion to investigate learning problems associated with metal exposure is not without foundation. In a nationwide survey of heavy metal absorption in children living near zinc and other metal smelters, evidence of external exposure to lead *and* cadmium has been found (Baker, et al., 1977). The hair of children living near zinc smelters had “significantly elevated” cadmium levels (p. 265). The highest levels were found at a zinc smelter in Bartlesville, Oklahoma, where an historic smelter operated. Zinc Corporation of America and Horsehead are both located in Bartlesville, where, for a number of years, lead concentrate, imported from Palmerton, Pennsylvania, has been the subject of community concern (McKee, 1992a, p. B4). The study by Baker and others determined that Oklahoma children had blood cadmium levels 2.5 times the control, and hair concentrations nine times the expected average. It also reported

elevated cadmium blood levels in Palmerton children (p. 265). The correlation between hair lead levels and distance from the Palmerton smelter were statistically significant, as were hair cadmium levels; Palmerton children hair lead levels were three times the control values, while the hair cadmium levels were seven times the comparison towns. Blood cadmium levels were also significantly elevated.

Betraying the Grammar of Freedom

The National Environmental Education and Training Foundation has a motto, “The most effective tool we have to protect the environment is education” (NEETF Annual Report, 1995). On paper, the Palmerton Area School District (PASD) agrees. The District Newsletter, November 1993 announced that 53 “requirements”--called learning outcomes--grouped into 9 areas were now guiding the districts teaching policies. They outlined the academic knowledge and skills students must have to graduate. “Environment and Ecology” and “Citizenship” were two of the nine areas. The former was defined in the PASD publication, “Palmerton Pride,” May, 1995, as “Understanding the environment and the student’s ecological relationship with it in order to recognize the importance of the quality of life in a healthy and balanced environment.” Citizenship, was defined as “[to] acquire and have opportunities to practice, in the school and in the community, the skills necessary for active participation in civic life.” Objectives in the PASD Strategic Plan are clear and straightforward. On May 9, 1995 the Palmerton Area School Board of Education approved the following academic goals for the topical areas of Environment and Ecology, and Citizenship, as set forth in the document, *Strategic Plan: A Special Report to the Community*. For the Primary Level, to “Identify the rights and responsibilities of the individual in relations to the family, school and community,” to “Identify and analyze problems in the classroom, school and community, interview and gather information from fellow citizens by asking appropriate questions” (p. 6-8), “Explore the effects

of society on our environment” (p. 6-18), and to “Identify environmental issues and the effects on the environment” (p. 6-19); Intermediate Level, to “use problem solving skills, setting goals, developing and implementing a plan, and evaluating the results to resolve conflict as an individual and as a group” (p. 6-9), to “Investigate the effects of human social systems, behaviors, and technology on ecological systems and environmental quality” (p. 6-18), and to “Identify various sides of environmental issues and evaluate prior actions taken” (p. 6-19); Middle Level, to “Analyze and explain the processes and methods where individuals and groups influence government” (p. 6-8), to “Demonstrate problem solving skills by identifying communal problems, considering alternatives, weighing options, implementing appropriate actions and evaluating their results” (p. 6-9), to “Illustrate and express the effects of human social systems, behaviors, and technology on ecological systems and environmental quality” (p. 6-18), and to “Generate and plan potential solutions to environmental issues” (p. 6-19). The environmental section ends with the goal for students to be able to “Explore and name examples of natural resources and practice basic stewardship of the environment...examine how behaviors and attitudes affect the conservation of our natural resources...analyze and examine implications of finite natural resources and the need for conservation, sustainable agricultural development, and stewardship of the environment” (p. 6-19).

The action plan to implement these environmental and citizenship goals, however, lacks any environmental component, however it does recommend developing a “Business and Education Partnership” that includes soliciting business to share knowledge with students and teachers in the workplace; increase job “shadowing” and paid internships for students; and create a Business/Education Advisory Committee, consisting of CEO’s and representatives from the School District Board, Administration, teachers and students.

One science educator, during an interview stated that he believed “under state guidelines environmental education doesn’t have to be taught in science” (8/9/96, lines 417-419). When asked “If you had to turn to some...resources for educational materials relative to the local environment [for use in] your classroom, where would you turn? He responded, “Where would I turn? I have no idea. Probably go to the zinc company [or] probably write someplace at the

state” (lines 442-450). His remarks are reflective of the problem which environmental education has experienced in becoming established in the school curriculum, despite paper promises from the School Board to the Pennsylvania Department of Education in their Strategic Plan.

Palmerton’s Chamber of Commerce and the Pro-Palmerton Coalition: Joining the Hegemonic Cabal

In efforts to prevent alternatives to the industrial narrative from gaining currency, holders of the dominant ideology in Palmerton continually reappropriate the sites and signifiers of resistance, in a process that reinvests them with hegemonic meaning. As a local news reporter put it while comparing Palmerton with Aspen, Colorado, another contaminated town, “[contaminated communities] have had their soils tested and retested, the veins of their children probed for blood samples. And they have fought about what the results might mean” (McKee, 1991b, p. B4). This struggle for meaning is part of the ongoing historical process in Palmerton. Two notable groups that engage in organizing reality in a way that averts seeing things otherwise are the Pro-Palmerton Coalition and the Palmerton Area Chamber of Commerce’s Ad Hoc Committee on the Environment (founded in 1991; it appears they were unclear about their name if not their identity since the appellation sometimes appears as the Ad Hoc Environmental Committee or variations on this). The lines between the two organizations are blurred. In fact, a normally astute reporter hybridized the organizations on more than one occasion, calling them, the Ad Hoc Environmental Committee of the Pro-Palmerton Coalition (See Collins, 1994p). The name of one of the groups invariably appears in printed propaganda together with the name of the other. Both use the Palmerton gazebo on their letterhead, and there is cross membership in both. In some instances letters posted to residents bear both signatures. It is the norm in the town that both are mentioned in the same breath.

The groups employ similar goals such as: to rescue Palmerton's reputation, route USEPA from town, recapture supposedly lost real estate values, and take up an economic discourse that recycles the myth of jobs vs. the environment. They use similar language in media releases and interviews; and share similar memberships. During the study, J. Arthur Marvin was chairman of the Ad Hoc Committee. Apparently he too was a member of the anti-EPA organization Superfund Coalition Against Mismanagement, Inc. (SCAM) since in a letter to USEPA Administrator Carole Browner he wrote, "We are sure you are aware of the formation of an organization called [SCAM]. We hope that you will work with us to reform the Superfund program...." (letter dated May 19, 1993).

Residents were quick to point out that the Michelle Kattner, President of the Pro-Palmerton Coalition is "married to one of the company accountants" (Ellen Colangelo, 7/20/96, lines 730-731). She reported that the President "pretty much toned down after we let it be know that she didn't really live in Palmerton" (lines 732-736).

In the early 1990s their primary tools were: periodic advertisements titled *Community Report*, that usually appeared on Wednesdays in the local press; letters to the editor; and showing up at public meetings to mouth corrosive speech aimed primarily at USEPA and PCCE. Advertisements and letters to the editors were unidirectional and did not allow for engaging debate. Ads especially are a tactic used by the rear guard who often have a surplus of funds and little "mass" base of members (Martin, 1988, p. 212).

Many of the *Community Reports*, although published under the Chamber's credit-line, were written by the Pro-Palmerton Coalition (from a letter to residents, August 7, 1992). Their discourse was one of "liberation" from forces of evil that had taken hold in Palmerton; they articulated the assertions of a victim. They also were involved in several "direct mailings" of "data" to residents in the community. To them, the town was an occupied territory. They constructed themselves as representing a community struggling to free itself from the yoke of outside bureaucratic oppression and inside treason committed by residents who cottoned to the USEPA invaders. Typical of their reasoning are the lines, "With your help, we can work together to reclaim our town from the groups working to destroy us" (*Community Report*,

1992b), and the frequent rallying call, “Join us!” A stratagem of theirs was to sporadically issue scare tactics concerning the consequences of association with the USEPA or PCCE. For instance, both USEPA and PCCE were unfairly positioned as “anti-industry” and wreaking “untold havoc” on the town. Not uncommonly, townsfolk were warned to “bear in mind a bulldozer could end up in your yard and all your trees and bushes could be cut down” (letter to homeowners, August 2, 1993). Throughout the time of the study, these two entities and other partners in the industrial alliance, reproached governmental environmental agencies and PCCE for the loss of jobs in the community due to over zealous enforcement of environmental regulations (*Community Report*, 1992d).

The Chamber published USEPA’s contractual terms with homeowners who desired clean up, and include warnings that before entering into such pacts, a property owner would do well to consult an attorney because of the problems that would result from signing a USEPA agreement. They were instrumental in inverting the meaning of the term “environmentalist,” and reading it otherwise to mean “radical” and “extremist,” then associating it with PCCE. The Chamber used the expression, “The Love Canal Syndrome” to refer to the foolishness of overreacting to supposedly contaminated communities and the federal Superfund program (*Community Report*, 1992c). Representations were used and circulated to delegitimize the work of PCCE as resisting intellectuals. In light of this, the grassroots group engaged in a constant struggle to maintain their narrative space.

In advertisements, letters to the editors and confrontatory behavior at public meetings the Chamber and the Pro-Palmerton Coalition freely used the names of individuals in the community who held contrasting views to theirs. Linda Holland remembered the time her “husband went to a Borough Council meeting and...said, ‘Gee, the Chamber [survey showed that nearly 57% of the people believed clean up actions were either necessary immediately or will be eventually]...and when the Chamber’s section in the newspaper [came] out, there’s my husband’s name in it!’” Numerous others expressed apprehension that they would be targeted publicly by name, but this fear did not deter future actions.

In August 1992, the Pro-Palmerton Coalition mailed packets to every resident in town containing a letter from organization president Michele Kattner and a cardboard “EPA” sign with a red line through the lettering--called an “EPA-busters” sign. It was part of a renewed anti-EPA campaign. It turned out to be less than a success; one newspaper poll of 643 homes reported that only 4% displayed the sign (Fortney, 1992). Several homes that sported the anti-EPA message included two council members, and Dolores Ziegenfus, a Palmerton resident who allowed USEPA to clean lead contaminated dust from her home (McKee, 1992) prior to her appointment as Chairperson of the industry funded Palmerton Environmental Task Force.

For Louise Calvin, president of PCCE, the behavior of the two council members was a turning point in her personal development--a trigger of transformation. As a council person she felt the need to keep personal opinions out of public life. But as a result of their behavior, she said to herself, “Now Louise is getting off the fence, too. Now I have a position and here it is! What I really regret [is] not taking a position sooner or feeling that I had to act neutral here....in retrospect that’s one [thing] I really regret now! But it was part of the silence. The silence that hung over everybody [which said taking a position] was not something we could comfortably talk about publicly. It would be criticizing the industry and you would be frowned upon” (7/30/96, lines 295-307). Louise’s prior behaviors were predicated on remaining objective. During a fight over the impropriety of Borough staff traveling to Aspen on industry money, as a council member she remained open to the possibility that the trip would be educational (McKee, 1992). Too, as a council member she was privy to a confidential executive staff meeting in which the presence of uranium in the cinder bank was discussed. Honoring the rules of non-disclosure, she did not divulge the contents of the meeting (Collins, 1995b). However, when the two council members posted anti-EPA placards in their windows, it freed her to see that objectivity is not achieved by neutrality. This awareness positioned her to engage in environmental advocacy; her response was not only “now I have a position” but included giving voice to it, “and here it is!”

Early in the debate, PCCE offered no resistance to the way it was being positioned by the industrial-alliance. As Linda Holland said, “[PCCE] just wants the [residents] to know

some facts and [let every one] make their own decision. Everyone's entitled to their own opinion and I think that's the difference between PCCE and the Pro-Palmerton Coalition. The [Coalition] was always into trying to shove their information down people's throats" (7/22/96, lines 1257-1264). The quest to create a space for thinking otherwise to the community narrative was a constant battle.

In August, 1993, while attending a business meeting of the Chamber, Margaret Shinsec asked to be heard. She powerfully spoke that, despite the Ad Hoc Committee's warnings, she had her home tested for lead contamination. "I didn't do it against ZCA [Zinc Corporation of America], and I didn't do it against anyone in this room who may feel differently. I did it for myself and my family and my grandchildren" (Collins, 1993, p. 1). Neither a member of the Chamber nor of PCCE, she challenged the argument that real estate values had dropped because of Superfund status, and asked the Committee to not tell her what to think. According to Margaret, her phone was ringing constantly with calls from folks who thought what she had done was "fantastic" and who applauded her courage. Yet, such signs of resistance remained underground since supporters would not allow her to use their names. Shinsec, however, expressed what numerous others were feeling. When news reporters took to the streets to poll residents' sentiments concerning Shinsec's comments, one individual noted that she had no comment, saying "you could get into a lot of trouble" if you talked about it. Not all residents, however agreed with Margaret Shinsec. Walter M. Zelinsky told a reporter, "I think she should mind her own business" (Collins, 1993a).

At the same meeting where Margaret Shinsec spoke a defiant voice, Chamber President Winston Scherer requested the Ad Hoc Committee to terminate publishing the *Community Reports* which had only fueled further division in the town. He counseled them, "the best thing to do at this point in time with this environmental issue is to say nothing" (Parker, 1993). In November 1993, the Chamber sent a questionnaire to its 86 members to determine their opinions on the work in which the chamber should be engaged. On environmental issues, it asked whether the "controversy" was hurting or helping the community, and whether the Ad Hoc Committees newspaper advertisements were effective in communicating information to the

public. Apparently the Chamber decided to move away from the Ad Hoc Committee newspaper strategy, but to tag along on the coat tails of the “successful” Scientific Symposium and to take up “science” in its battle to rid the community of USEPA. In August 1994, President W. Sherer said that an “obsessed” Chamber was not a desirable one, but rather the group should become one that was “much more active in showing Palmerton as a good place to live” (Collins, 1994o, p.1). While publicly attempting to soften its image, the Chamber quietly joined Michael Raub’s group, the Superfund Coalition Against Mismanagement in Spring 1994.

At an August, 1994 meeting, the Chamber heard presentations from Peter Kern, J. Arthur Marvin, and James Ord. Each extolled the virtues of parts of the Symposium--those in concert with the industry discourse, and marginalized USEPA’s position on the subject of Palmerton. Part of the strategy to show that Palmerton was environmentally safe was to subsequently enlist Symposium scientists whose “good science” indicated lead paint was the environmental villain. In 1995 the press reported that the Chamber agreed to underwrite a Palmerton Environmental Task Force study for upwards of \$10,000 to be conducted by one of the symposium presenters, Dr. Rufus Chaney. FOIA documents suggest that Chaney helped negotiate the money to a colleague of his at the University of Maryland. The purpose of the study was to “peer review” two primary documents that EPA was using that positioned industrial sources as the origin of contamination. Dolores Ziegenfus, chair of the PETF Risk Assessment subcommittee commented that she was thankful for the Chamber’s intervention since she “didn’t want it funded by the [potentially responsible parties] because of a conflict of interest” (Collins, 1995q, p.1).

During 1994, the Palmerton Area Chamber of Commerce changed its tactics from what was characterized by some as obstreperous and pushy to a more sophisticated approach. However, the Pro-Palmerton Coalition continued where the Chamber left off in hurling corrosive speech. In a letter to homeowners, the Pro-Palmerton Coalition, in an effort to thwart USEPA clean up, and to reposition the lead debate, informed residents that “[lead] is released to the environment every time that you open or shut a window or door which is painted with lead based paint,” prompting Louise Calvin, as well as others, to ask, “Exactly how many times

do we have to open and shut our windows to kill Blue Mountain?” In the end, Tess Roberts expressed that the schemes of the Chamber and the Pro-Palmerton Coalition, at least for a while, had shaken the people’s confidence in PCCE. She felt that they were the industry’s “mouthpiece to discredit [PCCE],” saying, “you didn’t hear it from the industry” (7/19/96, lines 1046-1057). Yet, she believed that despite the industrial cabal of power, “there were other people out there who saw through it. It’s just that they didn’t want to be in a position where they’d have to publicly defend PCCE and what we were doing because that’s a hard place to be--that’s really a hard place to be (lines 2704-2711).

Some Outside Players on the Landscape

The geography of power relations encompasses a sphere of dominant cultural producers, described in the previous section. Outside of the geographic center, researchers from institutions such as the University of Cincinnati, the United States Department of Agriculture and others are involved in a “ring” or “circle” of affiliation and consultation that includes efforts to coordinate story-lines. At least one member of the research ring has received and followed “instructions” from the local dominant group related to the industrial discourse. For example, in July 1996, the PETF requested a US Housing and Urban Development Lead-Based Paint Abatement Grant. In search of a letter of recommendation, the PETF executive director sent Dr. Chaney of the USDA a “sample letter” that he should send back to her (FAX transmission on July 12, 1996) providing him with what to say. Dr. Chaney’s note, included with his letter of recommendation, said, “Thanks for including an example with some good ideas for me to use for style and information. It made my support letter much easier” (FAX transmittal to Dolores Ziegenfus on July 26, 1996). In fact, Ziegenfus prompted Chaney to state, “Both the ATSDR study and the University of Cincinnati study indicate that lead-based paint is a significant problem in Palmerton as it is in any older community” (sample letter faxed

July 12, 1996). Dr. Chaney's letter of recommendation, on USDA stationary declares, "Both the ATSDR Study and the University of Cincinnati Study of children in Palmerton indicate that lead-based paint is a significant source of excessive blood Pb in Palmerton area children, as it is an [sic] any older community" (letter dated July 26, 1996).

Letters from Dr. Chaney to industry allies are at times hyper-critical of USEPA, his federal counterpart. For instance in a letter to Ms. Barbara Forslund, PETF's technical advisor, he wrote, "As I said in a letter to Ms. Ziegenfus, for EPA to have omitted citation of this voluminous and authoritative literature...was evidence of the shallowness of their review or interest" (letter dated February 1, 1996). Additionally, FOIA information revealed that this civil servant frequently was part of a triangle with the industry and Dr. Robert Bornschein. At one point, Chaney wrote to Bornschein that he planned to perform work for "Conrad," referring to Bruce Conrad, a Zinc Corporation employee, to test the effect of high soil zinc on the availability of lead in biological systems. In fact, Chaney suggested to Bornschein that "If your group is interested in [this line of research], please let me know so we can discuss strategies to obtain clear proof/demonstration [that zinc contamination actually retards lead effects]" (letter dated September 13, 1995). The results of the so-called "scientific" inquiry were determined before the experimentation would be carried out. The significance of this collusion is apparent. If zinc, a contaminant in high concentration, could be shown to block lead's dangerous effects, the lead levels that USEPA would set for clean up could be altered, meaning fewer homes would need cleaned, effecting financial savings to the PRP(s) when the federal government recovers its costs.

**Concluding Thoughts on the Industrial Alliance: A Sphere of Authorization That Is
Itself an Authorized Sphere**

The PETF is a manifest example of the principle of hegemony--the power of one group over others through institutions in society rather than by direct force alone. The crafters of the community script are actually links in a sphere of authorization that is itself authorized. A dominant voice, not a preponderance of dominant speakers, was largely responsible for recycling the community script, while the townsfolk acted it out. That is, the hegemonic center (industry) authorized the proxies, which in turn joined in authorizing meaning, beliefs and sense-making. This coalition was both authorizing, by this I mean it was the point of origin of actions, and was authorized--that is, legitimized by the result of those very same actions. For example, the Scientific Symposium functioned as a space of authorization. During the symposium, several researchers (harbingers of the industrial discourse and previous collaborators with the PETF) acted as authorizers who by their presence and witness gave credibility to the Task Force's scientific role. Later, the Task Force, growing in stature as a credible agent, would authorize the scientists by ennobling them, saying, "The commitment on the part of these scientists is just incredible. They're in such demand--not only at Superfund sites and not only in this country, but abroad--places like Australia and the United Kingdom," (Collins, 1994m) infusing them with authority for the consumption of town residents.

Although not turning over the risk assessment phase of Superfund to the Task Force, in January 1995, USEPA opened up the process by endorsing PETF's efforts to form a Risk Subcommittee that would "help make a decision on the form of a final clean up" (Collins, 1995j). By March 1995, the normally government-antagonistic Task Force was building bridges with USEPA (Collins, 1995k). This was done through a series of strategic maneuvers such as helping to privilege lead over other contaminants; teaming with the hospital and others to characterize Palmerton as a healthy place in which to live; informally pairing with the Palmerton Chamber of Commerce and the County Housing authority; positioning lead-based paint as *the* single most important cause of lead blood levels--a position later modestly modified to *one* important cause; drafting scientists who corroborated PETF's position on lead-paint from prestigious schools such as the University of Cincinnati and Johns Hopkins University--scientists

who would freely discuss the industry Neighbor Helping Neighbor (NHN) program--while not mentioning USEPA's actions which far surpassed NHN as a mechanism for decontamination--as reasons for the drop in children's blood levels; conceiving, and executing a Scientific Symposium at which PETF members amply controlled the agenda; enjoining the recommendations that flowed from the Scientific Symposium to include a blood lead level testing program that drew into question one conducted by the federal Agency for Toxic Substances and Disease Registry; devising a lead reduction program that ceaselessly kept the lead paint discourse alive; utilizing the cultural capital that they were amassing to capture a role in the USEPA risk assessment process; adjuring USEPA to reverse its own self-imposed rule (decided in 1994) forbidding participation in closed door sessions to participating in private meetings (in 1996, described as "reneging" and castigated by the local press in large headlines [Klick, 1996, A1; Editorial, *The Morning Call*, 1996]); and ultimately to constructing photographic opportunities with the USEPA Superfund On-Site Coordinator, Michael Towle. Each of the above events was a platform that allowed PETF to enter a new stage from which to disenfranchise the discourse on industry-based pollution.

Engaging in historical revisionism was one of the PETF's mechanisms in the course of its evolution to gaining cultural authority in the community. Much more than collaboration was happening when news reporter Collins wrote, "Task Force majority opposition to EPA turned to an attempt at cooperation with the government agency" (1995i, p. 1). PETF was effecting changes within USEPA, a process that one federal official, requesting anonymity, called "collegial co-optation." Presumably by this the agent meant that each party, USEPA and PETF, were accomplishing transformations in the other; an indefensible position for a regulatory agency. Underneath frequent words of openness, balance and equity, however, were behaviors that steered the discourse in a fixed direction which shifted Superfund liability, privileged lead and lead-based paint, and reconstructed public policy. And, all of this was done by a volunteer-turned-hire, with a board consisting largely of industry allies located in an office in Borough Hall, on money provided, in large part, by those potentially responsible for the contamination and clean up in the first place.

In 1991, Dolores Ziegenfus avowed no source of funds for blood lead screening, was uncertain about who would perform the more than 1,600 census contacts in the lead reduction program, and claimed to have pinned her hopes on an industry-endowed program that could have run dry at any one of several points each year. Five years later, Borough Council was seeking \$2 million dollars from the US Department of Housing and Urban Development (HUD) to remove lead paint from Palmerton's homes, at PETF's request, giving Dolores three more years of Borough Hall residency for the life of the grant. More importantly in the social arena, USEPA's singular stance that historic industrial defilement and ongoing company contamination were sharing the stage with homeowner-instituted pollution. If the dominant powers could not push USEPA out of the community, or speed Superfund to closure in a hastily constructed way, they had at least succeeded in transferring the possibility of liability away from industry and onto the community, something that PCCE had feared and warned the residents was going to happen.

The players in the orb stealthily disrupted and rewrote attempts to construct an environmental ethic that was balanced, sane, and open to interrogation and critique. They were positioned to influence USEPA's decisions on clean up and to inscribe what constituted safe decontamination standards, and they obstructed efforts to make alternative sense of the situation. PCCE was not naive about the uneven ways that power was deployed in and around the industrial alliance. Members, wittingly or unwittingly, struggled for an equal redistribution of cultural authority in a highly politicized atmosphere. For them, however, it was difficult to become authorizing and authorized.

The culture of industry had educated residents by establishing a prescription of what needed to be known to negotiate life in town. They defined--not uncontestedly--what counted as important in the lives of residents and in the dialog about environmental reform. They appointed the language that was to be used, the content of "what was to be thought about," using supporting science that was only partial (rigorous in spots and based on assumptions in others). What the residents were told they needed to know was that: the problem, if there indeed was one, was lead, not really cadmium...paint not pollution was the culprit...diet not the

safe responsible management of the environment was the resolution to environmental uncertainties...homeowners, not industry were likely responsible for what was happening...the Neighbor Helping Neighbor program was privileged over USEPA soil removal and replacement...special vacuum machines and particular soaps not USEPA's interim clean up were the antidote to a contaminated home...the US Housing and Urban Development authority not USEPA would assist homeowners with non-burdensome (and not industry costly) remedies...PETF not PCCE was the real voice of the community...the mountain revegetation was a success story, rather than telling that it has helped reduce movement of contamination, but has established a non-native, alien community in an assemblage that looks nothing like the original ecosystem and was in fact helping to make metals, bound in the soil, become biomolecules, thus injecting the toxins into the biosphere...uniformity not plurality and diversity was the best social condition for decision making...Palmerton was a healthy place to live not a site burdened by heavy metals...and the borough's air was pure, or at least vastly improved, not that environmental laws still allow the company to be out of compliance in multiple 24 hour periods as long as the quarterly average met environmental regulations.

Residents had the things that "really counted" defined for them: what counted was that the water comes from deep pure aquifers, regardless that the shallow groundwater was polluted and discharged into surface waterways...what counted was "our (the industrial alliance's) way," not responsible alternatives...what counted was setting the community dialog in one direction not allowing a vision of what could be otherwise to surface...what counted was getting off of the Superfund list, not a full and effective clean up...what counted was "our way of making sense" which gave "us" the right to police the boundaries of what "you" think, say and do--to patrol the perimeter of your neighborhoods so that you did not step out of line. What counted was that "we" remain in authority.

This was the sphere of authorization that was itself an authorized sphere. The company authorized the proxies, which in turn authorized meaning and belief. The coalition was both authorizing (generating actions) and authorized (legitimized as a result of those actions).

The Derivation Of Authority

The zinc company describes its founding in Biblical terms. In the Christian scripture, Acts 17:24-28, Paul is speaking to the people of Athens who are struggling to find the “right” God and to get on the right course in life. Paul encourages the Athenians to seek the One true God and to turn to Christ as their savior: “Since the God who made the world and everything in it is himself Lord of heaven and earth...it is in him that **we live, and move, and have our being.**” In 1948, the industry wrote a parallel creation/salvation story worth quoting at length, “Many, many years ago Nature was busily toiling in the world’s biggest metallurgical operation...with the sky as her hearth and hurricanes as her bellows, she worked a flaming, whirling mass of materials until it became largely a mixture of metals and slag....So all of us **live and move and have our being** over Nature’s slag pile...we are dependent upon the fortunate occurrences of ore bodies...from which we have woven the strongest fabric of our modern civilization (*The first hundred years of the New Jersey Zinc Company*, 1948, pp. 7, 9).

Historically the company was portrayed as God’s agent, deputized to carry out the Creator’s strategy for humans. Most importantly, work is offered by God as a means of achieving His grand plan of steady progress toward prosperity. Simply put, God is the “Master of all Good Workmen” (An Old Fogy, 1921). Laborers were to “[fill] out some magnificent scheme, co-operating with others to attain the grand end” (p. 4). Community members learned that only through a faithful relationship to the authority and working together with one another on the job could the divine scheme be realized. Employees were thus exhorted, “You...may find the shoveling of coal less distasteful...if you consider how essential it is for other work that your fellows are doing. By giving of your labor to help in the labor of others, you are indulging that effort through which mankind receives its greatest happiness. And if you shovel coal more deftly and more energetically than any other man, and take pride in this achievement, you are sitting with the gods, whether you realize it or not” (p. 4). Placing God in the center of the

company's origin myths situated the industry within the sphere of divine authority; a location not readily critiqued. It was used as a means to retain power and control.

Myths such as this one were only one means of establishing the authority of the industry as a cultural producer; others included fictions concerning work. The company put it bluntly, "So make up your mind if you're going to Successville on the train of Sound Thinking, by the Hard Work route, you'll get there. There are not other trains, the schedule is made up by God Almighty and if the pace is too fast, don't growl, don't complain,--just don't get on the train; or better still, jump off, for after all, the law of success is already made and the law is, '*As you give of yourself to the grand scheme of things, so you will get your return.*' There is no other way. Business--industry--didn't make the rule. Where is it in the Bible that we find a statement about "The sweat of your brow?" Well, that's the law. Don't dodge; recognize the law, spit on your hands and go to things with a fervor and willingness that knows no failure. Then, gradually, slowly, but none the less surely, your condition in life will change, advancement, recognition, responsibility, will be thrust on you. You won't have to look for them, they will seek you" (Woodward, 1920, p. 395). This *ethos* was fixed deeply in the minds of those with whom I spoke.

During the extensive interviews conducted for this study, various contrivances were identified as the means by which the hegemonic power accumulated, retained and reappropriated authority in the cultural contest for sense-making and meaning construction. These included, social control; threats of company closure or downsizing with concomitant loss of jobs and collapse of the community's tax base, a process described as "economic blackmail;" industrial charity, gift giving, paternalism and dependency; an industrial rewriting of history, dis-membering and dangerous re-membering, and industry's perpetual reinvention of itself within changing cultural contexts; marking those who envisioned life in the community "otherwise" to the dominant culture; scapegoating; acts of obscure communications or corrosive speech against opponents, behaviors which dissolved the social fabric; intimidation and exploitation of people's fears; rewarding silence and marginalizing voices of resistance; remunerating quiescence; sanctioning helplessness; and commanding loyalty. These tools were

plied by the hegemonic center and recycled by those who positioned themselves along the hegemonic axis.

During the study, respondents frequently recalled instances of “social control” performed by the industry or its allies. They reported happens both historical and contemporary. For instance, the Milligans^{pseud.}, reported knowing of zinc employees who frequented a local club and were told by the company, “we don’t want you going there. If you want your job, you’d better stay away” (7/20/96, lines 443-445). Hank Thomas^{pseud.}, a USEPA employee reported that individuals in Palmerton attempted to jeopardize his employment by discrediting his efforts to get popular support for the federal clean up (notes 2/27/96).

In the late 1980s, a handful of residents went to public meetings and asked penetrating questions in search for answers about potential contamination. In what they reported was an effort to thwart this behavior, individuals were invited to gatherings at the zinc plant, euphemistically called “company teas.” Tess Robert’s verbal reconstruction of the “teas” produced images of an intimidating boardroom with a long polished business table and a corporate ambiance. Out of fear, she took her husband with her when she attended. Tess and others who had articulated concerns about pollution were ushered into the room where dark-suited men sat focused on them. She reported, “when I got [into the room]--I mean the faces of the five of us who spoke up at the [government] hearing don’t even stick with me--it’s the faces of everybody else around the table, the executives of the company, the township supervisors, the more astute businessmen of the community” (7/19/96, lines 110-116). Members who were invited to the teas in small select groups, were told, “this is the way things are here...We would have appreciated it if you had come to us with your questions” (Kathy Ozalas, 8/16/96, lines 1399-1403). Kathy responded that she understood their concern, and she had no negative feelings against them, but the group needed to go to other sources as well since some citizens “want[ed] the whole wide picture” (line 1408-1412). Tess, recalled that after asking the self-appointed reviewers her questions, she felt, “Gee, I have a lot more questions, I just don’t know what they are yet!” (lines 181-183). She reported going to the

teas, “for my little hand slap,” saying, “that’s what it was. It was a subtle little wrist slap after I spoke at that hearing” (line 1253-1256). The “teas” occurred in 1988 and again after the group PCCE was formed in 1990.

Linda Holland expressed strong sentiments about the community script and social control, remarking, “I’ve always said to everyone this is the closest to communism I ever want to get. When someone wants to try and control your thoughts and the way you feel, [and] how you live your life” (7/22/96, lines 803-808). Her lines are significant because they show that she believed the industry functioned as a civil government, rather than the business enterprise that it was. She went on, “The thing that bothers me the most is how the company has to feel in charge of everything and have control over everything and when they don’t--that upsets them. I don’t think they should have control over everything. Why should they?” (lines 1559-1565).

Sandy Peters observed that during the PCCE health census, “there is nobody [who] walks around this community and asks the people what they think. You don’t do that in Palmerton. [In Palmerton the industry--the patriarch] tells them what to think....does [thinking] for them” (7/22/96, lines 582-586). Tess Roberts identified the information parceling by industry and its allies as one of the mechanisms of social control, saying that peoples’ understanding of what was going on “was not a good understanding, it was only the little bits and pieces that were fed to us over all these years” (7/19/96, lines 91-95).

Sandy Peters linked the lack of access to information in Palmerton to manipulation of public communications lines. She reported that when a federal toll free Superfund information number was established, “you could not dial that number from the Borough of Palmerton. We had people who went to work in [a neighboring community] and would dial the number...and get through, but the number would not go through the Palmerton phone company.” She related that the phone company was formerly owned by the company, and that surely the industry remained its “largest customer” (7/22/96, lines 180-197).

Mixing Lives and Livelihoods: Economic Blackmail

In 1992 a federal publication charged, “the community...is concerned about the financial well-being of the plant, prompting several residents to request that the site be exempt from further investigation [for Superfund clean up]” (*Superfund: Progress at National Priority List Sites*, 1992, p. 162). Interviewees suggested that the residents to which the statement referred included members of the industrial coterie. In time the company was issuing threats to pull out of town if regulators would not lighten up on the pressure for a clean up. This discourse has been labeled “economic blackmail” and is a well documented industrial ploy in environmental struggles (Kazis and Grossman, 1982). Economic hostage-taking is a form of material coercion within the persuasive power of industry to thwart democratic discourse and political action.

Tess Roberts remembered a time after USEPA “identified [the Cinder Bank] as a Superfund site...there were letters written that expressed, ‘Leave [the industry] alone, they provide a lot of revenue.’ [People didn’t want] even to address the environmental issue” (7/19/96, lines 1846-1852). From the outset, it appeared that most residents did not distinguish between their lives and their livelihoods.

Sharon Milligan’s^{pseud.} husband reported, “They make it sound like if the zinc company leaves, Palmerton is going right down the tubes” (7/20/96, lines 560-563), which he believed was not the case. Sharon expressed feelings that there were only a few who really profited by the company’s presence in the town anyway, saying, “a few individuals that have hardware stores or supply companies...a few individuals are probably making quite a bit of money but in general, how about the general population You have five people making a whole lot of money” (7/20/96, lines 637-646).

Time and again in interviews, informants would report that jobs and the economy were at stake in the clean up. Ron Monty said, “it’s been told to me verbally, ‘Why do you want...[to] have all these people lose their jobs?’ Of course I always hear, ‘Why don’t you leave, you know?’ ‘cause I was the outsider” (7/20/96, lines 1637-1643).

Thaddeus Evert's ^{pseud.} wife said, "[you could see the dying mountain] but it meant jobs-- Jobs, it meant jobs." Thaddeus piped in, "nobody working over there will get rid of their jobs [for a clean environment]. Mrs. Evert repeated antiphonally, "[smoke] meant jobs, they didn't care about the pollution" (7/22/96, lines 413-425). To them the economic influence extended beyond direct employment since "the company still feeds the businesses here" (line 1084-1085).

Some local residents, however, were quick to point out "the smoke wasn't a common occurrence." They argue, "we were always glad to see smoke coming out of the stacks. Where ever there's smoke, there's work" (Frable, 1982). In the 1980s, calling for relief from increasingly stringent government intervention, the company threatened that "the current environmental regulations do not allow this plant to survive" (Miller, 1982a, p. 8). This sort of lamentation was common across the US in the years following the "golden age" of environmental regulations--from 1970s through the 1980s. For example, in 1970 Lee Iacocca, then vice President of Ford Motor Company, warned if the US Clean Air bill became law, "auto production could come to a halt...[or at least] force huge hikes in car prices [doing] irreparable damage to the American economy" (Smith, 1992, p. 75). The Clean Air bill became law without his dire prognostication coming to fruition.

Tess Roberts recalled, "My son told me in school one of his friends whose father worked [at the company] said to him, 'Gee, what's your mom trying to do, make my dad lose his job?' So [it's] tough on my children, to explain to them that what I'm doing here is not--I'm not trying to close that industry down. I'm trying to bring some changes--some badly needed changes here to Palmerton" (7/19/96, lines 676-685). Tess also related an experience she had one day at the grocery store meat counter. Once at the Acme the clerk behind the lunch-meat counter [whose home was] for sale--and I knew her--we always talked...we always could pass the time of day. I ordered a pound of lunch-meat, and this is how it came across the counter [with her hand Tess slammed an imaginary packet down on the table with a thud saying] 'Whamm!' 'It's because of people like you that I can't sell my home!' And that was it! I

thanked her for my lunch-meat and I walked away” (lines 613-629). After telling this story she laughed and said lightheartedly, “I think it was ‘pressed’ ham I had ordered!”

The myth of Palmerton’s jobs against the environment is difficult to conceive since *Forbes* magazine in 1995 ranked Horsehead Industries as 354th (up from 473rd in 1994) of the more than 10 million private companies in the US (Kichen and McCarthy, 1995). Jan Sosik, a Palmerton teacher claimed the economic ties to the community have dissolved. He reported, “it was a whole generation that sent their kids through college on the money they made at the zinc company. I worked just one shift and I think there were almost 1,000 people on that shift, and there were three shifts. They employed 4,000 or 5,000 people at one time. Now [the company employs] a couple hundred and they’re laying off again.” He went on to explain that the company’s ties to the community were now more through gifting than through jobs, stating “[they] helped build a swimming pool and they did a lot [in the past], I see they’re trying to do some of that again. They’re trying to get some good publicity [by their giving]” (8/9/96, lines 315-333).

Gifting and Dependency: The Poisonous Potlatch

Major social functions of gift-giving include “establishing, defining, and maintaining...relationships [and] the ceremonial recognition of social linkages....”

(Belk, Gift-giving behavior, 1979).

Gift-giving has obvious economic and instrumental outcomes. It can be described in terms of both economic exchange and social/relational exchange, that is, giving gifts has dual roles as economic signals and social symbols (Camerer, 1988). “Gifting” mediates the benefactor’s intentions for future interest in the recipient. Gifts help to define and maintain social relations. In Palmerton gifting was an especially powerful tool in the struggle to locate and retain recruits and

sympathizers for enhancing the public's opinion of the company. The contest for control waged over "image" was a contest for public support. This directly affected both the ability of USEPA and PCCE to become established in the community, and was involved in the company's gaining rights of negotiation and consultation with the governments involved in Palmerton's environmental disaster.

The lens through which Horsehead Resource Development Company saw its gift giving was largely in economic and instrumental terms, that is, giving was helpful, useful and generous. Many of the residents, especially women, with whom I spoke saw the company's gift-giving in terms of its social and relational value. This general dichotomy along gender lines is not inconsistent with social research in gift-giving where economic and instrumental functions are positions of culturally conditioned masculinist behavior and the social and relational functions are positions from the social location of women (Rucker, et al., 1991; 1996). It is significant that I found the industry was associated with male images in the publics' conversation about it, for example, it was frequently described as patriarchal. Additionally, PCCE, founded by women, was still largely populated by them. Gender, a symbol system of social construction, signifies both power relations and social location of women and men. It will be shown in the next chapter how gender was a powerful force in the development and evolution of the grassroots group.

The trope of "father" (disciplinarian and provider) was a very common frame of reference expressed by nearly everyone I interviewed. For most it meant paternalism, patriarchy, provider and omnipotence. Some called the company, "the great white father of Palmerton" (Reitz, 8/9/96, lines 138-139 and 158-159); "the zinc company at one time was the bread and butter of the whole town and you didn't bite the hand that fed you" (lines 447-450); "the great gods" (Milligan^{pseud.}, 7/20/96, line 421); "big daddy" and "family master" (Peters, 7/22/96, line 979); "the patriarch of Palmerton" (Peters, line 594, Ozalas, 8/16/96, line 1287); and "[the companies] were very, very, very paternalistic" (Carazo, 8/9/96, line 476-477). Louise Calvin frequently employed the metaphor of an abusive father, questioning the right of the father to take the life of his children, or abuse his children merely because he also provided

for them. When referring to a company gift she would follow with, “Here, I’ve given you something, now take this slap and abuse” in mocking imitation of the company’s voice. Yet, the father image had multiple readings in the community. For some it coded for a sense that the company “was one of us.”

Kathy Ozalas described the father signifier this way, “[the company] founded this town, they gave birth to this town, they built it, hospitals, schools--they need to have their people on Borough Council, they essentially ran the town, the hospital--they were the fathers. [Before PCCE] no one had spoken out against the fathers. The fathers took care of the people and that’s the way they wanted people in the community to view them-- ‘[We’ll] take care of you.’” (8/16/96, lines 1288-1297). Yet like Louise Calvin, many resented that the company felt it had a right to take life, as well as give birth. Linda Holland directly stated, “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” (7/22/96, lines 740-743).

Industrial gift-giving is an historical tradition and a contemporary phenomenon. Gifts are both symbols of the uneven relationship the zinc industry has had--and continues to have--with the community, as well as tools that maintain the asymmetry. Gifting induces feelings of gratitude and obligation toward the gift-giver. The process of ingratiation modifies the sentiments of the gift recipient resulting in a changed attitude. Awarding gifts has led to a dominant-dependent dynamic in the community; recipients are incapable of material reciprocity, and therefore exchange social and relational goods for their monetary gifts. The effect of the company’s largess has been to foster a development of a community identity that tells individuals who they are, and what life should be like in the town.

Within the hegemonic framework operative in Palmerton, gift-receiving helps to confer status on the recipient, keeping the dynamic viable and desirous. In this context, the gifting transaction mobilizes the desires of both the receiver and the giver. The dependency on a patriarchal relationship drives many of the social and cultural decisions in Palmerton. Beneficiaries of the company’s endowments, such as the multiple social institutions in the town, self-monitor their appearances and behaviors in order to comply with the values, beliefs and

ideologies of the major gift-giver, Horsehead Industries. Gifting under these circumstances can nurture a twist in what is virtuous. So doing, recipients avoid sanctions including the termination of the gifting relationship. The industry's gifting programs, throughout a century of "generosity," have had multiple results. Their gifts were like "golden chains." They included the present-day company's direct financial assistance to Palmerton and neighboring communities' service organizations. This is accomplished through a project called the Horsehead Community Development Fund (HCDF). Between 1990 to 1994 the fund allocated more than \$1.1 million dollars in grants (*Horsehead Community Development Fund*, 1995). Fund board members included two individuals who sat on the Palmerton Environmental Task Force. Recipients of donations included, the Palmerton Library (The library was gifted a total of \$25,000 in 1994 and 1995. The library's main conference room, reportedly a present from the industry, is called the "Knight's Gallery" and evokes images of "chivalry," "valor," and "Camelot"), Borough of Palmerton, Palmerton Hospital (e.g. a \$50,000 gift to the hospital was announced in January, 1997 [*The Times News*, January 27, 1997]), Palmerton Meals on Wheels, Lutheran Welfare Service, Palmerton Shade Tree Planters, Carbon County Environmental Center and numerous recreation and sporting associations, many of whom carry out activities on metal-polluted spaces. Gifts have been both a message and a channel communicating authority and power. They have had a multiplier effect. Thus, when the Horsehead Community Development Fund grants moneys to a social service organization, the effect--and obligations--are amplified as the money is funneled to the multiple recipients. The social service organization receives cultural capital as well as economic capital in the process. As a gift-recipient it is indebted to the company, as are the receivers of the social services made possible through the gifts' redistribution. This multiplier effect, or cultural authority amplification process, results in strong incentives to keep the hegemony of gifting functioning. Tess Roberts reported that she could never go to the community swimming pool without hearing "at least five times [a year] 'Gees if it wasn't for the company we wouldn't have this big beautiful pool'" (7/19/96, lines 1289-1295). Gift-giving in the form of the pool ingratiated numerous individuals

In Palmerton, a community engaged in vigorous contest for cultural authority and the constant struggle for narrative space, gift-giving was an important relationship maintenance strategy, keeping the power imbalance in favor of the donor, Horsehead Industries. In a letter to the Pennsylvania Department of Environmental Protection, Mr. William M. Quirk, President and CEO of Horsehead Resource Development Co., Inc. listed the many gifts the company has bestowed on the community. They included six salient items: providing in excess of \$1.5 million from 1990 through 1996 via the Horsehead Community Development Fund (HCDF) for making programs, events and services available to the Palmerton community; spending untold millions of dollars on the revegetation of Blue Mountain; assisting over 1000 Palmerton residents with lawn and garden supplies and information at a cost of more than half a million dollars in the Neighbor-Helping-Neighbor Program; establishing the Zinc Environmental Information Center to provide environmental information and programs at a cost of \$600,000; donating property to the Palmerton Hospital for a new out-patient clinic; and having employees participate in numerous volunteer programs and events throughout the community (letter dated February 7, 1997).

The company's munificence displays its socioeconomic dominance; this in turn demands of the citizens an intense loyalty and deep appreciation. Gift-giving remains a means of social control, reflects power relations, and socializes the community by transmitting a set of values which bolster the industrial ideology. In reciprocal dynamics of dominance (industrial orb) and deference (townsfolk), the community has exchanged freedom of choice and environmental health for security and uneven economic gain. By and large, gift-giving to the hospital, library, Borough Council, community, Task Force, and other social institutions transmitted expectations and elicited values-adoption by the recipients. It returned rewards to the giver in the form of gratitude, obedience, and company boosterism.

Historically, the zinc industry left a legacy to the people of Palmerton in the form of employment, bequests, gifts, donations, and a contaminated community. Paternalism was the standard of the central defining reality. Its effects are still felt today. Paternalism is characterized by the comment, "we didn't make much money; but, we had everything we

wanted; the company gave to us. We were happy, our kids were happy. That company [referring to New Jersey Zinc company] did more for the town of Palmerton than any four companies would ever do” (Styles Butz quoted in *The Times News*, 1980, p. 15). One individual, a member of the business establishment who has dealings with the zinc company, has remarked, “All I can think of is all that this company did for the town” (Fortney, 1991b, p. D5). Many of the citizens I interviewed idealized the past.

Residents expressed that working for the company “was more like working for a caring father who was primarily concerned with the welfare of his children,” and that “the company always responded like a loving family.” One employee opined, “When I think about all the things that the company did, I get tears in my eyes” (Mihalik, 1982a, p. 9).

The Power of the Purse

Like so many things in Palmerton, the Horsehead Community Development Fund has a contested history. Some residents reported that the HCDF was a substitute for the dollar a ton hazardous waste fee which the Borough could assess the industry. Numerous residents were quick to point out that there is a substantial difference in the thousands of dollars a year that could go into the Borough treasury, rather than money “gifted” to projects deemed worthy by the industry. It is also a means of providing both cultural and material capital to privilege the industry’s elite in communities where they live outside of Palmerton. For instance, at the outset of their funding program, the industry provided the HCDF with “a community profile where the employees lived” (letter from Charles Campton, February 17, 1997). Using employees’ communities as a criterion of eligibility meant that grants were awarded to towns outside of Palmerton, especially where industry’s upper management has roots or interests. The Fund is a

tool of class relations; from the list of HCDF-recipients, PCCE members could only identify communities where the company's elite had connections outside of Palmerton.

Although beyond the scope of this study, it is interesting to note that in Rockwood, Tennessee, another contaminated Appalachian town where the industry owns metal operations, the company also has a Horsehead Community Development Fund. Between 1986 and 1992 they have given away \$300,000, prompting some residents to claim that the industry has "bought the entire town" (McKee, 1992b, p. B5B).

Additional gifts from the company to the community included continuous donations to the Palmerton Memorial Park Association, which in 1995 received \$18,000. In 1996, the Palmerton Area Recreation Committee dedicated a new "Play Village" for youth, in the northwest corner of Borough Park. Although a community effort, the sign at the dedication during the Palmerton autumn festival read, "Built...with generous assistance from the Horsehead Community Development Fund, Ronald McDonald House Charities, Pencor Services Inc., Commonwealth of Pennsylvania and Pennsylvania Department of Health, and through the support of many other Palmerton businesses, churches, service organization and foundations, community residents and friends." The litany of contributors positions the HCDF as an ally and associate of many meaningful social institutions in the community. Since the site of the Play Village is the contaminated Borough Park, the positioning of the Pennsylvania Department of Health with this initiative helped to delegitimize the discourse of PCCE who petitioned for clean up of the Park and USEPA who offered assistance to decontaminate it.

In certain Native American cultures, especially those of the northern Pacific coast, the ceremonial bestowing of gifts in excess is called a potlatch. The term is a metathetical variant of the Chinook word for gift, *potshatl*. Participants gain status by "giving items away." To some of the residents of Palmerton, the potlatch is a poisonous one. It demands a "belonging" and compromising freedoms that some are not willing to readily assume.

Gift-giving also tells the community, "we are one of you" and dissolves the "outsider" mark that could be placed on industry executives and professional staff who did not normally originate in the community. David Carpenter said at the June 1994 Scientific Symposium, "We are the

new old timers.” The company’s contemporary gift-giving to the community reflected this time-honored tradition, and established links to an idealized past, a past reconstructed to the industry’s preference.

Whether by design or chance, the social exchange function of gift giving included the modification of the recipients sentiments toward the industry. Since residents felt that fidelity was naturally expected by the industry, the recipients’ inability to reciprocate in an economic fashion heightened their desire to be loyal. Conversely, recipients’ failures to meet the industry’s expectations mobilized a sense of betrayal. Ellen Colangelo recounted, “I did have arguments with the kindergarten moms...they’d be there, ‘Look at everything the company’s done for this town!’ And I’d point at the mountain and say, ‘Look at everything the company’s done for this town!’” (7/20/96, lines 1092-1100). Again, she repeated their claims, “but that company built this town. If that company wasn’t there, there wouldn’t be a town!” (lines 1128-1131).

Louise discussed “social shunning” as a punishment, and a tool that kept folks from speaking out, from “betraying” their fidelity to the industrial discourse. She put it this way, “It’s like...being afraid of an abusive parent who never hit you...I think for anybody who might say, ‘Oh, I was afraid to speak out,’ when posed with the question, ‘What were you afraid of?’ [Their answer would be] ‘Well, I’m not sure.’ But there was just this umbrella that was just there that you knew you weren’t supposed to talk about [environmental and health concerns]” (7/30/96, lines 318-330).

Linda Holland, like Louise Calvin, focused on democracy. She related an experience that happened to her husband, but which had a strong impact on her. After he spoke out at a public meeting, his name and criticism of him appeared in a Chamber of Commerce advertisement. She went on, “this was one time the poor guy [went and spoke] what he thought and, boy, he got brought right down. [Public criticism] is very intimidating for some people. It really...didn’t bother him [but] it...bothers some people and that’s why everyone’s afraid to speak in this town. The minute you say something people don’t like, they’ll put you six feet under. For me, that’s not a democracy” (7/22/96, lines 1886-1894).

In Palmerton, gift-giving inscribed what a person was to be like, how they were to behave, and the kind of social dynamics they were to expect as normative, natural, and immutable. The company's selection of gifts affected the community's formation of values regarding the environment and human health. Such socializing functions of gifts are powerfully strong, communicating appropriate identities onto the recipients. Linda Holland felt that the Horsehead Community Development Fund was a form of social bribe attempting to coopt concerns for the environment and human safety. She stated, "They'll hand their community fund grants out all over the place, [saying] 'Here, here's some money--shut your mouth!'...I'd rather not have that money and none of that dirt" (7/22/96, lines 1671-1675).

Louise Calvin said, "I think the influence of the hospital has affected what the hospital's going to report....Because of their--the financial giving to the hospital--and that's unfortunate if you're giving someone a gift that in turn carries those kinds of strings with it" (7/30/96, lines 414-421). She expressed strong feelings that the industry's gift-giving produced anti-democratic results, "When you see the influence they have with every organization in town--and their financial contributions are certainly wonderful. Any community knows that any gifts you get for the fire company and any gifts you get for the library and any gifts you get for the hospital are wonderful. But when they are given and then those people can never speak up or honestly address what surrounds them--that's kind of extortion. And it tells me, we're not a free people in Palmerton" (7/30/96, lines 954-966).

Frequently residents listed the historic "Neighborhood House" as a chief example of the company's beneficence. Between 1898 and 1911 more than 400 social settlements developed across America where adults and children alike could attend classes and recreational opportunities; Palmerton was one of the sites. They were based on a complex agenda of combating industrial disease, promoting neighborhoods, organizing the underclass, improving housing for the poor, establishing Kindergartens, combating child labor, fighting for trade unions, organizing for workers' rights and fostering adult education (Bryan & Davis, 1990). In addition to these direct social causes, settlement workers taught domestic sciences, health, reading,

sewing, music, art, gymnastics, and drama in working class neighborhoods and near industrial centers.

The first settlement house in the US was New York's Neighborhood Guild, opened in 1886. The most famous of the settlement houses, however, was Chicago's Hull House, opened by Jane Addams the same year as the founding of the zinc company in Palmerton. A model in settlement work, it combined domestic classes with citizenship lessons, and English language instruction, yet it was "the haven of every unpopular movement of its time. Its halls were open to every new idea, its heart to every losing cause. Young mavericks of every shade took refuge under its wings...including...John Dewey" (Mayer, 1938). Dewey was instrumental in infusing ideals of democracy into Hull House's work. It taught organizational skills for trade-unions, defied railroad barons, sheltered "anarchists," protected striking women, and lobbied for worker protection legislation.

Ray Carazo said, "They provided the Neighborhood House, the building is still here out on the main drag. In there they had bowling alleys, a gymnasium, showers for boys and girls, a library with a librarian, game room with pool tables, ping pong table, shuffleboard, all kind of games for the kids. This was all provided by them" (8/9/96, lines 563-577). The Neighborhood House held, and still holds, the imagination of virtually everyone with whom I spoke. At the turn of the twentieth century, "A new department was needed [for the zinc industry]. On the well-proven ground that a well-trained, right-thinking, contented human being makes a well-trained, intelligent and contented workman, the Company, represented by a few men in position and broad-minded enough to realize the situation, decided [to support] an institution that would offer fuller opportunities of life to their workmen and their families" (Hughes, 1907-1909). So, in 1907, the zinc industry joined the settlement movement, hired social workers and opened Neighborhood House, a welfare initiative--and a tool of domestication. However, unlike the bed of radical ideas that flourished at some settlement houses such as Chicago's Hull House, the Palmerton welfare work was geared specifically and overtly toward building the community script and social control.

In Palmerton, gift-giving remains one of the single most powerful tools of hegemony, and Neighborhood House looms as a legend of the company's good will in the minds of most residents. There was a correlation between the industry's giving and townsfolk's construction of dangerous memory--memory that selectively excluded attributes that encumbered them.

Gift-giving furthered the "adult (industry) to child (community) dynamics of social control. The patterns of giving reflected the morphology of the community. In time, giving itself has become a major social institution. As acts of resistance, many members of PCCE expressed strong feelings of independence from company-inspired gift giving. The Milligans^{pseud.} were proud of their well landscaped yard, and emphasized that "we paid for all that ourselves, the whole thing--over the years, we did it gradually" (7/20/96, lines 235-239). Thaddeus Evert^{pseud.} said that he qualified for the company's Neighbor Helping Neighbor program, but he did not want it because it was not as effective as replacing the topsoil, and because he preferred to "pay for it myself." (7/22/96, lines 1429-1465).

Not all acts of independence are acts of resistance. Jan Sosik, a teacher who was not a member of PCCE, restored his own lawn, but not as an act of distancing himself from the industry. He had the company test the lawn; after he was presented with the results he claimed, "It [was] a lot easier getting the bag of Scotts and putting it on myself" (8/9/96, lines 341-343).

Some residents pointedly told me that they took it upon themselves to have their soil tested at the Pennsylvania State University or other laboratories for analysis. This was done because they did not trust industry or government to do it for them, and because they did not want to "accept handouts." Kada Rehrig's outside property met the criteria for federal clean up, but her inside did not. However, based on the extensive contamination outside, USEPA suggested it would be advantageous to allow them to do the inside of her home. She reported to "worry over that" because she did not want anybody "to ever say I did something I didn't deserve" (7/19/96, lines 861-876). For her, not accepting gifts was more than an act of resistance, it was avoiding being "othered" as a fraud or as someone who "just wanted a new [free] carpet" (lines 874-876).

Assembling Dangerous Memory

Palmerton Citizens for a Clean Environment and those within the shadow of the zinc industry competed for the power to define environmental events and the right to assign meaning to them. In this contest, the company was notably engaged in a process of re-membering events, applying them to their advantage, especially during times of social duress. For the dominant group in Palmerton, the past was a social construction shaped by ideological positions in the present. Such memory was not given, but rather was socially constructed (see for example, Kuchler & Melion, 1991 and Bodner, 1992).

Coupled with the active act of refusing to know, assembling dangerous memory guaranteed particular forms of culture in the community--forms associated with the industrial culture. Hungarian writer Gyorgy Konrad reminds us, "most people have an interest in losing memory" (1991). The ideological position of the present fosters the amnesia of the past. Faced with the denuded mountain, dead lawns, potentially poisoned vegetables from their gardens, and possible human health effects, erasing the memory of exploitation and re-membering the historical past in a way that positioned industry as benevolent was a compensatory operation. Self-exoneration from complicity, silence, quiescence, and company boosterism resulted; there was a direct connection between the loss of memory and failure to be accountable.

Residents looked to spaces, such as the company buildings scattered across town, Borough Park, the swimming pool, the Borough Hall, the library and hospital to embody memory. They employ objects and images such as the horsehead symbol to actualize memory in a nostalgic reconstruction. Palmerton's residents' memory was not a storehouse from which images and feelings were retrieved at will but rather was an aspirational reconstruction where the present was denied and the past took on the authority of being. The past has been represented, revisited, and commodified in certain ways that authorize industrial power asymmetries. Some examples of the role of idealized memory in everyday life comprise the

denial of the death of the mountain at the hands of industry, inscribing fire and blight as causative agents. Idealized memory, too, evoked sentiments of the “healthy community” discourse, and disallowed even the potential for human health problems. Dangerous memory directed the school administration to reject context-based, hands on education and application of the local environment as a living classroom. It consigned environmental education to general nomothetic content-based information that was ahistorical, decontextualized and depoliticized.

An example of assembling dangerous memory relates to the company’s construction of self-descriptors. Early in the storage permit application process, in the late 1980s, “[industry] showed [at a public meeting] a movie about the company...and it was one of those ‘everything the company did for Palmerton [movies]--[it was about] their process, what they make and how good they are to the workers--and all that crap” (Kada Rehrig, 7/19/96, lines 513-518). Kada was responding from a position that recognized the company’s acts of remembering as romanticizing and neutralizing the dominant narrative of social control and the obligating dynamics inherent in gift-giving. She was reacting, too, to the myth that the industry “gave” jobs and benefits to the workers, as opposed to the workers toiling for what they received. Kada did not take up the justifications and rationalizations inscribed in this act of memory-making.

The Palmerton Neighborhood House was another example of memory rewritten for a social purpose. Although it was openly “regarded as an investment, not a philanthropy” by the company, and one that “had proved its value, otherwise, no such sum would have been sunk in it” (*The North American*, 1911), residents remembered it as a gracious gift. Florence Hughes, the house’s director wrote that “sociological or welfare work in connection with any corporation should not be gone into as a form of philanthropy, but rather as a good business proposition” (*Hughes*, 1914, p. 49). That such endeavors were social exchanges for labor and not gratuitous offerings were not recollected by most residents.

Reinventing Self: Politics at the Hegemonic Center

The hegemonic center routinely shifted contrivances for social control, contingent upon the contemporaneous cultural context. The industry's history and image in the public imagination was contextually defined and repeatedly constructed. For example, in autumn 1996, the company engaged in "downsizing" at the Palmerton facility. By early winter of that year, nearly fifty laborers and twenty management lost their jobs in several waves of layoffs. The first round of unemployment was accompanied by corrosive speech acts on the part of a company spokesperson who refused to be identified, blaming the downsizing on PCCE's "gut hatred." The statement argued that "obsessive harassment by the PCCE, a very small group of individuals with their own agenda having nothing to do with the environment...clearly affected decisions about future jobs and operations for [Horsehead Resource Development] in Palmerton" (Klick, 1996a, p. B4; Collins, 1996b, p. 1). The caustic language linked the signifier "environmentalists" with the signified "job loss." It was immediately contested by PCCE who reversed the harassment discourse by stating that it was HRD, not the environmental group who engaged in harassment. PCCE then released a rebuttal, a primary mechanism to reinscribe meaning in the signifier "environmental" which had been appropriated by the industry. In the constant struggle of asserting knowledges, PCCE's retort, backed by copious amounts of data from the state DEP and industry trade magazines, listed numerous reasons for the layoffs, including growing competition (that was diminishing the available supplies of raw materials); technology and regulatory changes that allowed industrial land-filling of the company's raw material rather than placing it in more costly hazardous waste land fills; poor customer service/customer relations by an arrogant company that disregarded clients' interests; and competition from Mexico.

A weakness with linking "environmentalism" to "economic problems" is that such an association had the potential to cripple worker compensation under the federal Trade Adjustment Assistance funds and the Pennsylvania Dislocated Workers Program. The United

Steelworkers of America Local 3317, the union that represented the workers, was furious at the allegations that environmentalists were the cause of the layoffs. Karl Stern, president of the local, said “it made him...angry for fear [the environmental accusation] would jeopardize the help he [was] trying to get for laid-off workers” (Collins, 1996c).

During the contest, Louise Calvin made an observation about the company that numerous others also claimed. She contended that “it seems to be very coincidental” that HRD is laying off more people when the federal Environmental Protection Agency “is on the brink of coming up with a decision that could affect clean up of every home in town” (Klick, 1996b, p. B3). These comments suggested that the company was manipulating its bottom-line so as to appear less able to pay for clean up, in an effort to alter decontamination decisions by USEPA. On at least two other occasions, individuals charged HRD with similar tactics. A former USEPA official and onetime regional executive for the state environmental agency, reported that USEPA negotiators were often frustrated with the company; they speculated that when the price of zinc was low and the company’s financial records looked less inviting, industry would want to negotiate penalties for violations and would allow the government to examine their books. It was also USEPA’s suspicion that industry would move stock based on the price of zinc so as to minimize the appearance of financial security. The DER executive remembered that federal regulators were angry during the time the company allegedly juggled numbers on paper to avoid responsibility for violations, because they were giving huge “six figure” bonuses to executives (notes, 11/16/96, p. 5).

A former DER attorney independently reported suspecting similar behavior (notes, October 28, 1996, p. 4). He went so far as to suggest that an investigation should be conducted for improper trading. When a major document was to be filed or a “big hearing” was scheduled, “a lot of stock would move” and the prices plummet. After settlements, “big moves would occur and the stocks would be bought back.” He asked the question, “Was such actions a major fraud of investors?” citing that to the best of his recollection, stock prices dropped during such transactions. Like Louise Calvin, some residents discussed these and other allegations during interviews.

Within a month after HRD's original claim that environmentalists were to be blamed for the layoffs, the company re-announced the reasons for downsizing. This time they stated that the layoffs were due to foreign competition *as well as* from turmoil and negative publicity created by PCCE about environmental issues (Klick, 1996b, p. B3). Louise Calvin, President of PCCE, called the charge, "blaming the victim." However, company recognition of foreign competition assisted in garnering relief for dislocated workers through government programs.

In an extraordinary move, in early January 1997, the discourse shifted from "obsessive harassment" and "turmoil and negative publicity" to attacks by HRD on one of the parties equally liable for pollution clean up, Viacom. In a letter mailed to 2,100 residents, HRD attempted to shift the notion of "onerous" from PCCE to Viacom and "victim" from PCCE to HRD. A company spokesperson, Art George, said, "We want to put out the information who the victim is (HRD) and who the responsible party is (Viacom)" (Ayers, 1997, p. B1). To George, the company was the victim at the hands of USEPA and the other responsible parties. Because HRD was the current owner, he charged it had been asked to carry the cost of clean up. The dialog shifted from "obsessive harassment" by PCCE to calling Viacom a "billion dollar bully" (p. B5). The next day, Viacom "fired back a blistering attack" (Collins, 1997, p.1).

In an even more bizarre turn of events, Horsehead Industries began cautiously courting PCCE--the group it had just three months earlier publicly shamed through accusations of harassment and ill-behavior. In several telephone conversations and a meeting with Louise Calvin, Art George endeavored to win PCCE to HRD's position that Viacom was the responsible party. In an attempt to pull Viacom into the economic picture, HRD became the most unlikely "suitor" of the environmental group.

Scapegoating, Othering and Cultural Representation

As we have seen, PCCE was used as a scapegoat by the zinc industry when it charged that downsizing and job losses were attributable to environmentalists' "obsessive harassment." "Othering" was a tool that some members of the industrial orb utilize in establishing and maintaining an unlevelled playing field in the contest for cultural authority. In Palmerton, taking up a language different than that prescribed by the industrial culture invited the label "social outlaw" upon oneself. The most common cultural representations that marked difference and negatively label members of PCCE were "outsider," "troublemaker," "extremist," "emotional housewives," and "hysterical women who exaggerated the facts" (Ozalas, 8/16/96, line 1184-1185). Name calling was a common practice. They included terms like "EPA puppet" and "radical activist." Othering involved blaming the victims of contamination twice. As the discourse on the source of pollution reassigned the responsibility for exposure to non-industrial origins such as lead-based paint, the victims of exposure were "blamed" for their contribution to the problem. Then, the emotional stability of the individuals was challenged by such terms as "emotional" and "hysterical." A similar pattern was identified by Vyner (1988) for the psychological effects of invisible trauma due to contamination (p. 167-173).

Linda Holland reported that the industry and its minions attempted to construct PCCE members as "fanatical, crazy housewives who didn't have anything better to do than test porch dust [for contamination]" (7/22/96, lines 1174-1176) in public discourse. And Tess Roberts 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 2475-2478). Troublemaker and outsider were the most common designations. Too, there was occasional character assassination by innuendo, some even appearing in the press.

The signifier "environmentalist" was the site of particular struggle. Louise Calvin owned the term in a reserved manner, but quite proudly identified with the term "activist." She put it this way, "I don't know if we'd qualify as 'pure' environmentalists. Which has, I think sometimes, become a nasty word, the same way people have made the word 'activist' sound like it's a nasty word....I think that ['activist' is a] wonderful [term!] You're 'active'--you're doing something. This is wonderful! You're not sitting on the sofa. But people have almost

made it into a dirty word” (7/30/96, lines 466-475). Whether consciously or not, the annual PCCE-sponsored environmental poster-art contest for school children on Earth Day helped to reclaim the word and inscribe it with new meaning.

Through this event, the word “environmentalist” took on a renewed significance in the community, evoking contested meanings. In 1995, Patty Passik, the competition organizer said that it was “a way kids [could] become aware of the environment and learn to give their support to [it]” (Collins, 1995r). In an attempt to reappropriate the meaning of Earth Day, the Zinc Environmental Information Center distributed “free tree seedlings” to the “Watch Me Grow Daycare” youngsters after Earth Day presentations at the Center (notes from a company poster at the 1996 Autumn Festival). In addition, they repeated the distribution of seedlings during Arbor Day celebrations at the end of April some years.

In an effort to reinscribe PCCE with re-coded positive (but non-environmental) meaning in the community, members performed ordinary day to day interactions as intentional acts of similitude. During a conversation with several members of PCCE concerning the Palmerton Community Festival, I mildly reproached them for not employing this event to educate the residents to PCCE’s issues and struggles. It seemed to me that the PCCE booth could be used as a place to distribute environmental literature as well as to sell their usual chicken wings for fund raising. Sandy Peters quickly retorted that they *did* use it as an educational venue. To her, keeping the environmental issues out of the festival gave festival-goers an opportunity to learn that PCCE members were ordinary people just like themselves, and not horned brutes as they were made out to be by the dominant narrative. PCCE’s educational strategy was a pedagogy and politics of presence. It provided the grounds for finding a speaking position that they would capitalize upon at a later date. Acting like everybody else furnished the basis for speaking across differences.

The motif of “horned” emerged several times during interviews. Louise Calvin said that the commonplace behavior they enacted was both genuine “and functioned so [the dominant group in town] could see that you don’t have horns. [They can say], ‘You’re the girl I see...all the time in town.’ It’s our hometown, we love it...When they realize [you’re the one concerned

about human and environmental health] and they see you [donating blood] at the Bloodmobile, and they see you at public meetings--they know you're not a kook....[Name calling] was a real effective tool of the industry supporters for a long time" (7/30/96, lines 1245-1256).

PCCE members self-policed their behavior and membership ranks in an effort to: resist and transform pejorative code words; to articulate the marginalized referents of environmental reform; and to generate a new position on the front line of the cultural contest. PCCE members developed an intuitive understanding of identity formation from the practice of everyday life. Knowing that the industrial orb was engaged in constructing their (PCCE's) identity in a negative manner, the grassroots leaders patrolled the borders of their group tightly, although they allowed free individual expression of members acting on their own behalf. They used acts of dissimulation to accomplish resistance to the master account. PCCE group dynamics had a "tempering effect [disallowing anyone] to run off and sound crazy and somehow hurt the group." This was important "because people will judge you by how responsible you are acting." To Louise Calvin, "we've acted real responsible" (7/30/96, lines 1058-1063).

Kada put the group's efforts at dissimulation this way, "We've always tried to do things with some class--with some measure of dignity rather than reacting to the things that have been said about us by the industry...or the industry stooges. I don't think we've ever gone off half-cocked. There's no point in that as nice as it might feel some times--to downgrade them a little bit. I'm sure they think we have [deprecated them]. But, boy when I think of some of the things we could have done, I mean we could have been chained across the East Gate, we could have had Greenpeace in here [but] I don't think that would have done us any good. I don't think that would have been prudent for us....It would have made a statement, but [I doubt] whether it would have done any good for the town, the children, [and] the environmental problems" (7/19/96, lines 1320-1357).

Kathy Ozalas advised the women of PCCE in the early years of the organization with this council, "I think the [stress and violent threats] will pass as long as we remain unemotional [and] continue with our intent and purpose [which is] to ask questions and get information and then notify the community of the answers....If we keep to our purpose, nobody can come after

us and say you're trying to close the company down" (8/16/96, lines 611-618). She acknowledged during the interview that she was correct on the latter advice to stay focused and not escalate the rhetoric, but she admitted that residents still made claims that PCCE was trying to vanquish the industry from the town.

PCCE members responded to being marked as "the other" by maintaining a professional group attitude, sticking to the goals, and taking extreme care to not make mistakes in communicating with the public. Under the circumstances, proper behavior was deemed necessary and no outside groups that could be called obstreperous, such as Greenpeace and the Citizens' Clearinghouse for Hazardous Waste, were invited to work with them--although PCCE used information generated by some radical environmental organizations.

A significant claim made against PCCE members that helped the industrial sphere to image itself as a coherent unite was to call those with environmental concerns, "outsiders." The myth that the "troublemakers" were not native Palmertonians was ubiquitous. Louise Calvin discussed this mechanism of marginalization, "[We're called] outsiders even though some of our members have lived here for 70 years. [Industry sycophants] call people outsiders--outsiders with radical ideas because we want the company cleaned up. Well the [only] radical idea is we live in homes and [have] properties that are contaminated and to me that's not too radical" (7/30/96, lines 1256-1263).

Investigation findings suggested that the historical residency of individuals had little to do with their environmental position. An interview question that I posed was related to individuals' places of origin. I found that some who held a position similar to that of PCCE's were from families who lived for several generations in Palmerton. Some were not originally from Palmerton, but lived there from a few to many years. Some who wanted to see an effective clean up came from nearby communities, while others from variable distances away. Most were from the state of Pennsylvania, but not all. Some self-identified as natives, yet were senior citizens who moved to Palmerton as children. Equally, those from the industrial orb were of similar heterogeneity. Dr. Sue Garszczyński told the scientific symposium that she was a native, although numerous informants referred to her as an "outsider."

Sandy Peters of PCCE discussed the “old-timers” and the “new-timers” in the community. She pointed out that some of those engaged in “othering” PCCE members as “outsiders” either associated with industry-oriented outsiders or were themselves actual outsiders. Although she was labeled an outsider, which she readily avowed, she reminded me that “[name deleted], a leader on the Task Force has lived in this community less than I have. And so has [name deleted]. He was here as a kid, shipped out for high school. His father didn’t stay in the town. Yet [he] needed a place to live and he came back here and is raising all this hell” (7/22/96, lines 1614-1621). To Sandy an individual’s birth in Palmerton did not give him or her the right to claim more ownership in community affairs than anyone else. In fact, she insisted that she was “actually the old-timer” (lines 1628-1629) relative to some who were born in Palmerton, moved away, and returned.

Although there was no correlation between environmental position and nativity, interviewees believed that those who were not born in Palmerton were more likely to be intolerant of the pollution, wanting clean up. Michael Towle, USEPA On-Site coordinator, corroborated residents’ intuition. Although he reminded me that he had no statistics for confirmation, he reported “a lot of people are moving in...they’re more concerned about getting clean up” (7/30/96, lines 309-313). Those interviewed expressed the belief that it was easier for outsiders to see the problems than it was for those who lived in Palmerton all of their lives. Sandy put it simply, “[old-timers] become unable to see the forest for the trees” (lines 477-478). Another class of individuals whom some felt could easily discern the environmental problems were those who were no longer depended on the company for their livelihood. Several PCCE members declared that the only true outsiders were the scientists who never lived in Palmerton, but who dropped in to proclaim their wisdom and depart, and the company executives who came to exploit the workers and folks of Palmerton. Sandy was most vocal on this point, she questioned the right of “some high falutin’ big wheel from New York City or fancy schmancy scientist from somewhere with page after page of numbers that don’t mean squat to me [coming in] and making a statement about my community” (lines 1687-1693).

Corrosive Speech Acts and Obtuse Speech Performance

In Palmerton the power asymmetry is maintained by those at the hegemonic center, in part, by forceful invectives that erode the stability of the community. Most frequently corrosive speech denounced an environmentally friendly position through reproachful rebuttal or by *ad hominem* arguments against those who held beliefs contrary to the dominant narrative. Throughout the study period, PCCE and individual members were charged with creating contention, dishonesty, exaggeration, ill-judgment, instigation of problems, betrayal of the community, fanaticism, and misguided judgment. Corrosive speech acts had the potential to force those to whom they are directed to retreat from the privileged sphere--and precluded some from occupying it in the first instance. Examples of corrosive speech have already been cited, but several that eroded the social position of PCCE are mentioned below as further examples of this hegemonic tool used by the makers of the dominant discourse.

Corrosive speech acts as performed by members of the dominant social group in Palmerton were events, public performances, deeds, words or gestures that impaired or worked to deteriorate PCCE's cultural authority. They aimed to erode the gains made by environmentalists in their effort to amend power imbalances. All of the organizations and the institutions residing in the industrial space which opposed USEPA clean up, and challenged PCCE's place in the cultural sphere, at some time or another engaged in corrosive communications. Distance from the hegemonic center was inversely correlated with the frequency, caustic characteristics and amplitude of the utterances. For instance, industry at the

core engaged in corrosive speech much less frequently than did the Chamber of Commerce Ad Hoc Committee which held a peripheral position on the industrial web.

Examples of corrosive speech include statements by the Palmerton Environmental Task Force, presumably an organization that was to act as an information broker between government and the community, publicly denouncing PCCE's concerns as hypocritical (Collins, 1995s).

In messages to the community (*The Morning Call*, November 4, 1994, p. B5), Horsehead Industries engaged in both *ad hominem* attacks on PCCE's advisor, and leveled accusations against the grassroots organization that marginalized the group. Advertisements stated that PCCE undermined community cooperation and shouldered a single minded agenda. They alleged, in an effort to discredit PCCE, that the group improperly spent money granted to it by USEPA for community work.

The Pro-Palmerton Coalition and the Chamber's Ad Hoc Environmental Committee in November, 1994, issued a joint press release that "blasted" PCCE (Collins, 1994h). In the press release they said, "PCCE's programs have all been destructive to the Borough of Palmerton" and that PCCE is "afraid of the TRUTH" (p.1). On another occasion, the Chamber mailed to Borough residents copies of a physician's letter (Dr. Leon E. Leshock) that was previously published in a local press. The missive stated, "Since the establishment of the PCCE, the community of Palmerton has been a vortex of a storm of sensational announcements in the [press] which all implied or overtly stated [environmental and human health problems]. These broadsides had the direct effect: of markedly reducing the citizenry's self-image; of producing extremely high levels of anxiety...real estate values have been depressed and new properties coming on the market remain unsold....Palmerton's reputation...as a favorable place to live and raise a family have (sic) been adversely affected" (mailed May 7, 1992).

In 1992 and 1993, in a series of "*Community Reports*" in the Lehighon, Pennsylvania *Times News*, the Palmerton Chamber of Commerce attempted to rob PCCE of the modest gains it had made during the first several years of existence. PCCE was blamed for creating a hostile anti-industry environment (November 25, 1992) and members were portrayed as

impostors who purveyed information based on “rumor, assumption, and deliberate distortions” (January 13, 1993).

The public record is replete with corrosive speech acts that attempted to marginalize PCCE members and others who strove to insert alternative ways of knowing to the industrial discourse. In addition to corrosive speech acts, individuals who were engaged in the dominant discourse often held or maintained power by virtue of speech that made obscure, rather than clarified their position or the information they were presumably communicating. In a telephone conversation with former USEPA public outreach staff person Amy Barnett, she listed “obfuscation” as one of the primary behaviors in the community used to thwart or stall progress toward clean up (notes, February 27, 1997, p. 2).

Paradigmatic of blurring conversational lines is the comment by Peter Kern in response to an inquiry concerning parties engaged in intimidation in Palmerton. He reported, “it’s not really--it’s not really as black and white as saying, ah, that, a, a--let’s say a major employer, who might have been a single employer in the community 40 years ago and a non-union shop who had the ability to hire and fire at will. Ah, that is you said something contrary to their interests, your husband, or your spouse, or whatever, might lose their job. I think that, that is perhaps, that would be overstating, overstating the intimidation....On the other hand, ah, there are people who feel that the, ah, the counter position, mainly the position of the, ah, shall we say--let’s call it--I’m not going to try, to try, to put my--into such vague terms as to be obscure, but let’s just, let’s say for purposes of the discussion, that, ah, that the, ah, the, ah, group thesis...there are people who, um, take counter to the thesis, that you feel the thesis that he had to have felt. That they control--that they dictate. That they, that they, by virtue of their--shall I say politically correct position--and I put that kind of in quotes--have more power than they should. And so the question is who’s intimidating whom?” (8/8/96, lines 93-133).

Exploiting Fear

Some grassroots activists sojourned in a milieu of fear. Several members of PCCE reported company officials or members of the hegemonic periphery would engage in what they described as “alarming gazes.” Ellen Colangelo reported, for instance, that she resented “[name deleted] coming up and staring at ya--but he pretty much has backed off now, but in the beginning, I mean he would really try to intimidate ya’, you know, and stare ya’ down!” (7/20/96, lines 1035-1039).

Daunting, bullying, and coercive behavior, such as intimidating gazes, summons to company “teas,” advertisements ridiculing people by name, coupled with vitriolic public speech generated much fear in some residents of Palmerton. Kathy Ozalas reported that originally members of PCCE were “terribly, terribly frightened” (8/16/96, lines 977-978). She stated that she was more alarmed by what some members were saying to her, than anything that was said to her by others outside of PCCE. She recognized that the hegemonic authorities would exploit individuals’ fears. She listed the kinds of things that caused alarm for the women who were speaking out about the contamination in town. “They were afraid that somebody would hurt our children, that somebody would vandalize our homes, that physical harm would occur....For quite a few years my children were not allowed past this part of the house [indicating a space beyond the view of her windows] because I didn’t know if anybody was gonna say anything to them or throw something at them. But actually, I have never experienced anything like that--nothing. Nothing like that at all” (lines 987-1000). Kathy reported a range of intimidation and oppressive behavior from “people who were very pro-company.” They were frequently “trying to argue...asking us rhetorical questions [and even delivering] death threats, harassment--we

were told, you know--Peggy [a founder of PCCE] picked up the telephone one time [and someone] said 'Die!' I picked up the phone once and it was, 'You're gonna die!' ”

Louise Calvin and Tess Roberts shared some of the notes sent as acts of opposition to them. One person returned the organization's newsletter, *Clean Up Times* with “If you don't like it here move, the zinc company was here before you...we are getting tired of your shit...I have children and their blood is fine so move out or shut up” scribbled across it in large letters from an unsteady hand. One letter to Louise requested that she change her goals of social transformation from environmental reform to addressing the problems of “young people killing each other...no respect for the law...weapons [in school]...drugs, alcohol, rape etc. etc.” (signed “Sent in love [not hate]”). Kathy Ozalas received a letter in which the author stated he was tired of PCCE “shooting your mouths off.” He went on, “I know this is a rude letter, but maybe it will change those stubborn minds of yours. I plan to do everything in my power to see that you (sic) organization is abolished. I'm only 15 and believe me I have enough steam to take care of your organization this is not a political threat its a promise” (name deleted by author, April 19, 1992).

In a discussion with the Palmerton Chief of police, he reported that to his knowledge, there has never been any action taken against a resident for harassment or threats related to environmental hate crimes (fieldnotes). Even a case of blatant vandalism to a resident's newly sodded lawn went unresolved. Palmerton's environmental strife was omitted from the police report on this incident. The lawn was one established by the USEPA program, and most of the informants with whom I spoke felt the defacement of the property was related to what the lawn signified. By employing USEPA's assistance, the landowner had broken the industrial covenant; the defilement of the lawn was a threat and message to those who entertained similar thoughts.

Linda Holland reported bitter feelings as an outcome of being “personally abused.” She said, “I feel I have been in the newspapers [as a target, by name], I've been [publicly] called a liar all the time and I knew darned well [I was innocent]” (7/22/96, lines 1813-1816). The Milligans^{pseud.} stated simply that they intuited fear in the community, “[although] there are new

people moving in, people have fear that we can just pick up on...people are--they're still afraid" (7/20/96, lines 540-543). Thaddeus Evert^{pseud.} attributed the fear that people felt to anxiety about "losing their jobs...[and] the company shutting down" (7/22/96, lines 1057-1060), adding "they've threatened [to do that] a couple of times" (lines 1060-1061). He added, "they even threatened when they went on strike they'd shut down...Yep, they threatened!" (7/22/96, lines 1057-1066).

Palmerton Hospital Administrator Peter Kern dismissed the fear in the community by saying, "you're going to have [fear] when ever you have, ah, polarization on issues. You're going to have perhaps either or both parties feeling that the other party has more power, more ability to intimidate..." (8/8/96, lines 84-91); Kern is not a resident of the Palmerton community.

Fear also surfaced in the form of company-spawned threats to sue residents. For instance, in 1992 after Palmerton zinc company agreed to clean up 24 lead-laden homes under pressure from USEPA, the industry issued a notice saying they would keep open their option to sue the home owners to recover clean up costs. Again, in May 1994, the company sent letters to area residents, identified by some interviewees as an effort to instill fear, claiming that those residents who requested clean up would be taken to court by USEPA. Since Superfund did not cover lead-based paint issues, anyone using clean up for that purpose could be issued an independent cost recovery assessment. In response, Amy Barnett, a USEPA spokeswoman said, "I feel that [the company] is trying to threaten people" (Laylo, 1994e, p. B6). It wasn't until autumn, 1996, that USEPA protection from industry law suits finally arrived, basically eliminating this form of harassment from the company. At that time, in an unprecedented action, USEPA offered legal protection from industry litigation for clean up costs (Klick, 1996c; Urban, 1996).

Likewise in March, 1995, when the company charged that PCCE had misused its federal grant, it announced plans to sue (Laylo, 1995a). The press conference held by industry at the time declared they were giving the required 60 day notice of intent to take legal action. Six months later the environmental group claimed the imputation was merely to intimidate its

members (p. B1). Earlier, in 1993, a resident wrote to USEPA claiming that PCCE had misused federal funds and violated federal rules related to a community grant that the organization was awarded by USEPA for technical assistance in unraveling Superfund issues. The federal Inspector General, after an investigation of the allegations, exonerated the group, finding no misdeeds. He wrote, “We have found no merit to any of the allegations” (memorandum from P. Ronald Gandolfo to USEPA Acting Regional Administrator, Stanley Laskowski dated March 30, 1993). These and numerous other actions by the cabal were perpetrated against the members of PCCE as they sought environmental reform, and struggled for cultural authority in Palmerton. Such pressure kept PCCE from straying too far beyond well defined, safe boundaries.

The Architecture of Silence

The lived world produces everyday practice and everyday practice, in turn, produces the lived world. For most in Palmerton, the world they occupied in fear, social control and economic blackmail produced a code of silence; the everyday practice of that silence then reinforced the lived world as a hostile location. Freire positions silence as the result of the structural relations between the dominator and the dominated, and not a result of the imposition of a constructed culture by one group over another (1986, p. 72). Silence gives rise to “different forms of being, of thinking, of expression to those of the culture of silence and [to] those of the culture that has a voice” (p. 76). For the Palmerton community, this meant that a world of normalized silence commonly produced behaviors that reinforced muteness and secrecy. All the while, the daily practice of silence constructed the lived world of constraint. Some interviewees linked the silence that permeated much of the community to fear described in the above section. Sharon Milligan^{pseud.} claimed, “everybody basically...[is] either afraid to speak up because they have families or maybe have some kind of contact through the company

in some way” (7/20/96, lines 769-744). Others linked the silence to “gratitude” as a result of the company’s gifting to the community. As Ray Reitz said, “You didn’t mention [environmental problems and pollution] because the zinc company supported the hospital. The zinc company was supporting the school system instead of taxation and they were the great white father of Palmerton” (8/9/96, lines 134-139). Breaking the silence meant breaking the social contract established through gifting.

Gifting produced feelings of appreciation that invited loyalty in return. The Milligans^{pseud.} put it this way, “You just feel as though, oh, the wonderful zinc company doled out money again for this or for that. You know, aren’t they wonderful” (7/20/96, lines 598-602). Amy Barnett, former USEPA community liaison, recounted “strange gratitude” in some residents. She said that once a person, extolling the graciousness of the company, told her that the industry was “so kind” at one point in history for providing residents with milk so that the heavy metals had a less harmful effect on their bodies.

Sharon Milligan^{pseud.}, at one time a self-identified outspoken critic of the company, reported that there were folks in the community who, “told me I should be quiet. I should not say anything because my grandfather made an excellent living [from the company]” (7/20/96, lines 408-413). She went on, “We [speaking, too for her husband] just don’t feel there’s enough openness with the company....You always feel like what are they pulling now? What are they doing? Why are they doing this?” I mean, there seems to be no openness with the company...we always call them the ‘slick one.’ They’re slick! Here we go again, what’s the motivation? And why? Things go on and on” (7/20/96, lines 953-963).

Related to the silence on environmental and health issues that permeates Palmerton, Ellen Colangelo’s comment was to the point, “The community--they’re apathetic!” (7/20/96, line 1172). The option remains open, however, whether the apparent apathy was actually resistance in the form of inattention or disrespect to the authority of the industry. If this was an operational principle, it was never revealed to me as an outsider to the community and I gathered no evidence to affirm this.

After the death of her father and Aunt Annie, Kada Rehrig called a local nurse whom she knew from childhood to ask about the seemingly large number of cancer deaths in the neighborhood. She went on, “I was just asking her about a couple of different people on the block, and she said ‘Yeah’ that [a relation] was living with cancer....I said, ‘Gee...didn’t you ever think that was a lot of cancer for one block?’ ‘Well, Kada,’ she said, ‘cancer’s a fact of life--you know how it is.’ Well, OK, you don’t want to talk about it, I understand that....But I wonder--I wonder how many other families this has happened to” (7/19/96, lines 1123-1143). Paradoxically, constructing phenomena as “facts of life” made them common place, and less likely to be uttered.

Tess Roberts claimed, “I sort of had an idea how the reaction would be here [to breaking the silence] because for so long we could never walk down the street and talk about these things--that’s how I always felt if someone mentioned pollution--or in high school when I one time mentioned the pollution that was in the valley, my friend turned to me and said, ‘But my dad works there, we have to accept the pollution or my dad will lose his job’” (7/19/96, lines 764-775).

Historical documents revealed what Paulo Freire calls, “castration of curiosity” (Freire & Faundez, 1989, p. 35). Yet, from this loud silence and the history of learning not to speak--Freire’s “culture of silence”--emerged the critical questions which challenged the community narrative. The silence began to be broken when residents interrogated their lived reality. They were a living witness to the assertion of Freire and Faundez that “all knowledge begins from asking questions...only when we begin with questions, should we go out in search of answers” (1989, p. 34-35).

Kada Rehrig raised the question of how the silence came to be, asking “Did the community silence itself?” She reminded me that the silence had a component larger than the industry. She said, to many in Palmerton, the Blue Mountain “insulates us against the rest of the world and how we shut our eyes to the things we don’t want to see. I think...that’s very true of Palmerton. People don’t want to see....And maybe it doesn’t even have anything to do with the way the company has raised the town. I mean, that’s just the way people are--everywhere--I

don't know. I'd like to find out, but I don't know" (7/19/96, lines 163-176). Tess Roberts pointed to the internal pressure that residents placed on one another to remain silent. After a local television station broadcast a report that featured Tess, a friend called and said, "How in the world will I ever re-mortgage our home when it's time for our kids to go to college? Nobody will want to give us a re-mortgage on our home--What-are-you-doing?!' 'You can't be doing this! Palmerton is a great place. You can't be letting things like this come across the TV" (7/19/96, lines 664-672).

A final note on the power of silence is exemplified by a scenario surrounding the 1996 annual conference of the Society for Ecological Restoration (SER) held at Rutgers University, June, 17-23. One field trip, promoted as an opportunity to experience the "Restoration of a Heavy-metal Poisoned Landscape," was scheduled to tour Palmerton, Pennsylvania. Since this site was the subject of my dissertation, I registered as a participant and received a confirmation letter. On May 20, 1996, a letter came from the society that stated, "Thank you for registering for the 1996 SER conference....Field trip #9, Restoring a Poisoned Landscape, has been canceled due to complications with the host [Horsehead Resource Development] company." Probing the nature of the cancellation, I was told that the company had denied access to one of the SER participants. Seemingly this referred to Robert Hosking, the technical advisor for PCCE. Further inquiry revealed that a university faculty member with research ties to the company expressed concern that the ensuing controversy would "hurt his dialog [and] jeopardize his relationship" with HRD (fieldnotes, 5/24/96). However, during a discussion with an HRD employee, I was told that the reason for cancellation was "not enough sign-up to pay for the bus. That's the honest to God's truth" (8/9/96).

Quiescence and Helplessness

One effect of the community script, supported by gifting behavior was quiescence--the induction of behavioral “stillness” and acceptance in the community. Sharon Milligan’s^{pseud.} husband reported, “There’s a lot of indifference in the community where people don’t care one way or the other and you know, they have no opinion. Who cares?” (7/20/96, lines 777-781). A former County Extension agent, Ray Reitz, recalled an incident that involved an individual who requested assistance in restoring a dead lawn. Ray offered to him, “Well...what do you see between here and the zinc company? I can even taste the smoke in the air!” Ray responded to his own question. “The smoke in the air is obviously what’s killing your lawn....You know now that man knew that...he wasn’t an idiot....I guess he...needed somebody to verify what he really knew” (8/9/96, lines 201-215).

For many residents, talking about the contamination, and potential health effects was wearying, “when I would try to talk to people in town I would get like, ‘this is boring stuff, we don’t really want to hear this,’ or they would have questions, but they didn’t really want to know the answer” (Kathy Ozalas, 8/16/96, lines 109-114). Ron Monty felt the same way about many residents’ lack of interest in learning answers to questions. He reported that people “depend[ed] on the government...to pay for all these studies and grants...and you’d think they’d partake in some of this knowledge, [but] nobody wants to hear ‘um--if it’s affecting them’” (7/20/96, lines 1347-1354).

Louise Calvin reported that the interest dwindled from the initial appeal, saying, “at that first meeting, I think a good 300 people must have been in...the high school auditorium....Interest was real heavy. And I don’t know what happened to the interest after that” (7/30/96, lines 167-173).

The quiescence was identified at first as ‘apathy’ by Jan Sosik, a teacher in Palmerton. After a few moments reflection, he described, “I don’t know if it’s [really] apathetic. I mean I can say the same thing, if anybody asked me what I thought. I wouldn’t defend the company....but I’m not gonna go out and picket the company. I mean, I’m not even--for a while I though I might go to some of these meetings, but I’m not even--I always seem to find something better. You know?” (8/9/96, lines 258-268).

For some, their social position in the community was the reason for remaining quiescent. One person who struggled with taking a position, but who later became effective in organizing PCCE in its early days, reported that the tug toward quiescence was strong. She said, “I only tried to stay very low keyed because [of our] established family in the community. My husband’s [a] professional. I had in-laws [who worked for the company] and we had a big extended family” (8/16/96, lines 448-453).

Linda Holland defined quiescence as “ people [not speaking up] because they don’t like to hurt this person’s feelings or they don’t want to offend this person or that person--and hey-- [they hang] in the middle [and] everybody likes ya’.” [If] you don’t say anything, who’s gonna find fault with you?” (7/22/96, lines 1677-1683). The silence had a powerful effect in that it prevented certain issues from arising and particular cultural workers from gaining access to the public sphere. Morrissey (1993) has identified this as one of the faces of power, termed a “mobilization of bias” (exemplified in the work of Bachrach and Baratz [1962]). It operates to legitimize and protect dominant interests (see Schattschneider, 1960; Bachrach and Botwinick, 1992).

Fostering Neutrality

“Neutrality” and “objectivity” in knowledge production and its legitimization function to secure the forces of privilege. The myth of scientific neutrality dominated the discourse of all factions of the community at the time of my arrival in Palmerton. For instance, PCCE accepted USEPA’s arguments that risk based assessment could be based in neutrality and in the objectivity of scientific truth. Members were surprised to learn that these analyses were not, in fact, value-neutral. The group labored under the misconception, described by Thomas (1993, p. 16) as a gross inaccuracy of the sciences, that “methodological precision necessarily [translated] into more sophisticated research.”

Similarly both the hospital staff and the school district administration, as previously discussed, evoked “neutrality” in their positions. Such neutrality served to open up a space where the industry discourse could infiltrate. It also was a dimension of power to prevent conflict from arising in the first place, a use of power identified by Gaventa (1980) and Lukes (1974) in their studies of environmental conflict.

Loyalty: Ties that Bind

It has been noted that “many residents’ lives were tied, directly or indirectly, to the company [New Jersey Zinc] and its successors, Horsehead Resource Development” (Fortney, 1991b, p. D5). Numerous informants linked these ties to privileging the industrial discourse. For example, Linda Holland reported, “I think what [many residents] say is, [the pollution’s] not hurting us. Most of the older people especially, many maybe worked there, many didn’t, they just have ties that they feel the company built this town. I don’t feel the company built this town. I feel we built this town. My father and my grandfather worked there and I feel they built the company....Without the workers the company wouldn’t be!...to say the company built this town I think is unfair” (7/22/96, lines 706-717, 720).

Louise Calvin reported that the company inflated its own self-importance well beyond the community. She offered that the industry positioned itself in a way that made the success of all Pennsylvania dependent upon it. She exclaimed, “there were people [at a meeting in 1988] from the steel industry throughout Pennsylvania, saying if we can’t bring this material here you’ll put the steel mills out of business in Pennsylvania. Now they don’t only want to make [the residents of Palmerton] responsible for keeping this industry going, but now it’s the another burden to keep all the steel industries in Pennsylvania going” (7/30/96, lines 226-235).

Tess Roberts claimed that people don’t see the situation because of “loyalty” (7/19/96, lines 577-583). Tess reported miscalculating the impact of this loyalty when organizing PCCE.

She had felt that “a lot of the people my age or in the 30-something bracket would really rally to our support” (lines 559-561). However, she attributed the lack of embrace to “loyalty verses facing the truth that there really was something wrong [in Palmerton]” (lines 556-557).

Ray Reitz, during many years of work in Palmerton as a County Extension agent saw the effects of devotion to the company, including community silence. He reported that “the people were very loyal to the zinc company...obviously to anybody with two eyes you could see that there’s something wrong here” (8/9/96, lines 181-184). Casualties resulting from learning to comply included, the shutting of democratic possibilities, dissolution of a safe climate for expressing alternate views, the death of the local environment, and possible human health impacts.

¹ This superscript notation is used for all pseudonyms. Several informants signed permission forms for interviews but requested anonymity. They granted explicit permission to use the data they provided. Care has been taken so that their identity has not been revealed.

² The issue here is not whether the allegations are true or false, although that is significant and needs to be addressed. Rather, the point is that once held as true, beliefs such as this alter the meaning of signifiers such as “PETF.” In this instance, assuming that PETF is the recipient of large amounts of industrial money translates into “company puppet.”

Throughout the study, the term, “industry” is often used in a functional manner and is sometimes synonymous with formal entities in the historical period in which it is referenced. The use of “company,” unless stated otherwise, likewise refers to a series of historical organizations that engaged in metallurgically activities in the community of Palmerton.

³ The superscript ^{pseud.} denotes the use of a pseudonym. Permission has been given for the use of data, however anonymity has been requested.

⁴ A special note of thanks is due Mr. Fred Mac Millan of USEPA for providing significant portions of the Symposium on videotape, as a response to my Freedom of Information Act request.

⁵ The complete citation is missing from the sheet. Present is, “Composted sludge may reduce lead poisoning, *Water Environment and Technology*, p. 78, and the handwritten note, 10/2/92.