

COMMUNITY VERSUS COMMODITY: ENVIRONMENTAL PROTEST IN TAIWAN

Shih Jung Hsu and John Byrne

In the post-Cold War era, business and technology are increasingly considered as the superior instruments for directing societies toward a more prosperous and freer future. It is argued by many that the role and scope of public policy should be narrowed to those initiatives that are consistent with industrial economics and globalization of technology. In this New World Order, the fate of communities is thought to be best determined by their exchange value (i.e., their capacity to promote economic activity), rather than their local value as places of shared activities and commitments. Cast in these terms, communities are largely reduced to commodity status in an economic game whose primary goal is to achieve higher economic growth.

The reduction of local communities to commodity status is increasingly being challenged. A particularly potent source of challenge is the rise of urban-based environmental protest. Movements throughout the world are resisting the use of urban communities as dumping grounds for hazardous and toxic wastes, and as sites of health - and even life-threatening pollution. In reaction, governments and industries charge environmental protesters with selfish NIMBY (not in my background) motivations. It is asserted that if local communities are permitted to exclude unwanted facilities, larger societal benefits will be lost.

In this article, we argue that NIMBY is more properly conceived as an expression of conflict between community and capital and between community and the state. The activities of environmental movements in Taiwan to protest petrochemical industry development are used to illustrate our argument.

The Petrochemical Industry in Taiwan

Taiwan is famous for its economic development. Often cited as one of the "miracle economies" of the late 20th century, the country has experienced continuous double-digit economic growth since 1980 (CEPD 1992) (Republic of China, 1995. Statistical Yearbook of the Republic of China, 1995. (Taipei, Taiwan: Chen Chung Book Co.)). The petrochemical industry has played a critical role in the achievement of the country's "economic miracle," contributing 20 to 30 percent of Taiwan's GNP. Chang, Kwang-shih, former Vice Minister of Economic Affairs, signaled the sector's high-profile role in the early stages of Taiwan's rapid industrialization when he declared that the petrochemical industry will be "of the utmost importance to the continued economic growth in Taiwan" (1977: 4).

The industry has been a major sector in state economic planning since the 1960s. The government is the major promoter of this industry, owning all five naphtha cracking plants in Taiwan, which produce the major feed stocks for the petrochemical industry. Chang (1977:3) points out:

[T]he largest single investment in the petrochemical industry is from government funds. State-owned petrochemical enterprises are involved ... in the production of basic petrochemicals, such as products from naphtha crackers, aromatic processing units and ammonia plants.

Most of the intermediate petrochemical industry in Taiwan is entirely or partially owned by the state and

the ruling party - the Kuomintang (KMT). These petrochemical intermediates produce the material needed by downstream manufacturers. Chang observes that, in addition to outright ownership, "the government has also participated as a minority shareholder in joint ventures with local private and foreign investors" (1977:3).

Vertical state involvement in the petrochemical industry is complemented by horizontal involvement in oil imports and distribution. The state controls oil imports to Taiwan, enabling it to take full advantage of its position as the single source of the primary input to petrochemical production. As sole owner of all naphtha cracking plants, and a major actor in intermediate and downstream production activities, the government controls all of the significant value-adding steps. As a result, the state and KMT garner a high proportion of the profits of petrochemical production (Cheng 1991; Lin 1989).

With the Taiwanese state controlled by the KMT since the nationalist retreat to the island in 1949, there can be little doubt whose interests were served by these arrangements. Indeed, the matter has long been taken for granted, as evidenced by the fact that directors of the state-owned Chinese Petroleum Corporation (CPC) have been routinely transferred to equivalent positions in the petrochemical intermediary corporations after their retirement from CPC. Conversely, leaders of CPC have always been former chairmen of the intermediary corporations. Hence, the petrochemical policies crafted by CPC benefited, by design, the intermediary corporations and vice versa (Lin 1989: 178-181).

In this state-directed framework, the petrochemical industry has become one of the few fully integrated industries in Taiwan. It supplies the basic raw materials to two of Taiwan's important export industries - plastics and synthetic fiber. Petrochemical output is also essential to basic industries serving the domestic market such as textiles, building materials and plastics-based consumer goods. Thus, by 1988, 24.1 percent of total manufacturing production in Taiwan came from this industry. This industry also contributed 21.8 percent of total exports. There were approximately 669,000 people employed by the petrochemical sector, which amounted to 23.5 percent of total manufacturing employees in Taiwan. This is why Premier Hau, Pei-tsun asserted the petrochemical industry is essential to economic growth in Taiwan and insisted upon the construction of a fifth naphtha cracking plant, despite strong opposition from

the local community (The United News 1990, September 15).

Local opposition to petrochemical industry operations grows out of the serious air, water and noise pollution associated with it. Measurements of pollution from plants in the Kaohsiung region (where Taiwan's petrochemical industry is concentrated - see below) indicate that they are at high enough levels to cause harm to human health. Since the late 1980s, numerous environmental protests have taken place by communities adjacent to Taiwan's major petrochemical complexes.

The Polluting of Kaohsiung

Taiwan's petrochemical industry is almost entirely located in metropolitan Kaohsiung where a natural harbor offers the benefits of import and export of materials and goods essential to the industry's growth. Kaohsiung, which includes Kaohsiung municipality (KM) and Kaohsiung prefecture (KP), was designed by the state as a major industrial area in the early 1950s. Kaohsiung is presently the largest metropolitan area in southern Taiwan and Taiwan's major industrial estate. The refineries of the Chinese Petroleum Corporation (CPC) were moved here in the 1950s. In the early 1970s, a large number of government-owned, capital-intensive industries were added, including the CPC petrochemical complex and its upstream naphtha cracking facilities and downstream petrochemical production plants.

With Taiwan's rapid industrialization in the 1970s, Kaohsiung became both the most industrialized and polluted area in Taiwan (Hsiao 1987: 30). In terms of air pollution, Kaohsiung has had total suspended particulate (TSP) concentrations above the national standard of 130 $\mu\text{g}/\text{m}^3$ since monitoring was begun in 1979. The amount of particulate with a diameter of less than 10 microns (PMIO) has also been consistently higher than the national standard of 65 $\mu\text{g}/\text{m}^3$. The TSP and PMIO levels in Kaohsiung prefecture have also been routinely above the healthy air standards set by the country.

Between 1979 and 1990, the concentrations of sulfur dioxide (SO) in Kaohsiung municipality were continuously higher than 0.03 ppm the national standard. The situation in Kaohsiung prefecture is similar to that in the municipality. Ozone, another serious air pollutant, also has been at elevated levels in

Kaohsiung municipality since air quality monitoring began. According to Taiwan's EPA (1992b: 105-106), the metropolitan area of Kaohsiung is seriously polluted by ozone, with 1,094 recorded instances in 1990 where ozone levels were higher than the national eight-hour standard.

Metropolitan Kaohsiung has experienced serious noise pollution because of the many heavy industries located in and around residential areas. In 1990, there were 1,744 citizen petitions in Kaohsiung municipality alleging noise violations. The number of complaints in Kaohsiung prefecture was 562 in the same year (EPA 1992b: 121-126).

The Kaohsiung metropolitan area has endured a water pollution crisis, as well. The Houchin River, which flows through the northern region of Kaohsiung, is filled with industrial wastewater. A large number of industrial factories are located along this river and directly dump their untreated wastewater into it. Unbelievably, the dissolved oxygen level in Houchin River was recently recorded at zero (CPC 1988:4-54). According to national standards, dissolved oxygen levels under 2.0 mg/ltr are classified as "very serious." In addition, biochemical oxygen demand (BOD) is at dangerous levels. The country's standard designates levels above 15 mg/ltr as "very serious." The measured BOD in Houchin River is routinely around 600 mg/ltr. The pollution in the Houchin River reached such alarming levels that the EPA announced a special regulatory plan in 1990 to deal with the river's pollution problems. However, according to the EPA's own plan, dissolved oxygen in the Houchin River will not reach 2.0 mg/ltr (a level that still indicates a "very serious" pollution problem) until 1998 (EPA 1992b: 149).

The Kaoping River, the largest river in the Kaohsiung area, also has been seriously damaged by wastes coming from the petrochemical complex (a well as other sources such as pig farms). The river flows through the southern part of the metropolitan area and supplies approximately half of the drinking water for Kaohsiung. Pollution in this river is so great that most of Kaohsiung's citizens do not drink tap water, importing spring water from other areas of Taiwan instead.

The coastal waters around metropolitan Kaohsiung area are also polluted, both because of the filth flowing from the Houchin and Kaoping Rivers and the direct discharge of wastewater from industrial estates. The river mouths of the Houchin and Kaoping Rivers are

seriously polluted, with measured BOD and heavy metals well above accepted health standards (EPA 1992b: 157; and 1992a:356-358). In addition to river-borne pollution, there are two direct sewer lines from the petrochemical complex that release industrial wastewater into the Taiwan Strait. One is located in northern Kaohsiung to discharge wastewater from the Kaohsiung Refinery Plant (KRP) and the Jenwu and Tasheh petrochemical complexes. The other line is situated in southern Kaohsiung and discharges wastewater from the Linyuan petrochemical complex and the Taliao and Linhai industrial estates. None of the industrial wastewater is treated. The coastal waters around metropolitan Kaohsiung are so badly polluted with heavy metals that fish taken from these waters are not fit for human consumption. The threat to the coastal ecology of metropolitan Kaohsiung has brought complaints from fishermen who claim that their catch even in more distant waters has greatly decreased in recent years.

Three Cases of Environmental Protest

In response to decades of pollution and related health problems amid rapid industrial development, communities of southern Taiwan in the late 1980s sought to change their situation. Organizing to challenge political support for the polluting industries of the area, the communities of Houchin, Linyuan and Tasheh launched protests and other forms of collective action to demand change. Below, these protests are briefly discussed. Their importance in redefining the relation between community and political economy in Taiwan is then examined in detail.

In 1987, angry residents of Houchin mounted protests against the state's plan to build a new large naphtha cracking facility inside the Kaohsiung Refinery Plant. Protesters declared they would resist the plant's construction in an effort to stop further environmental abuse in a region that had suffered for more than four decades from pollution coming from the KRP. The protest continued for three years. Finally, the government agreed to pay monetary compensation to the residents, to improve environmental pollution controls at the site, and to relocate all refinery and petrochemical plants in the following twenty-five years.

In 1988, the Linyuan complex, which contains two of Taiwan's four naphtha cracking plants, was shut down by angry residents for four days. Protesters forced the closure following a breakdown in negotiations over pollution from the complex's water treatment plant. Because the complex is the largest petrochemical

compound in Taiwan, the government quickly tried to solve this impasse. A costly settlement finally was reached through emergency talks among residents, companies and the Ministry of Economic Affairs' Industrial Development Bureau (IDB). Twenty-one districts in the Linyuan area received a total of US\$ 50.8 million in compensation from the companies in the complex, and the companies were given a year to construct a water treatment plant.

In May 1993, the Tasheh petrochemical complex was forced to close because of its air and water pollution. Residents demanded that all petrochemical plants move out of their region within the following ten years. The reaction coming from the government was the same as with the Linyuan case. The chief of IDB and the Economic Affairs Minister tried to negotiate with the community and asked plants located in the Tasheh complex to supply compensation.

Importantly, these protests employed tactics of collective action rarely seen in Taiwan. Residents used force to block operations of the petrochemical complexes and refineries, and tried to shut them down. Violent conflicts between citizens and police occurred in all three demonstrations.

Why did citizens resort to disruptive tactics toward such powerful institutions as the CPC and the state to express their grievances? From interviews with community leaders (Hsu, 1995), one clear reason was the widespread feeling that citizens had been systematically excluded from the political structure. Economic disruption was seen as the only effective way for communities to register their discontent. Many members of the three communities had concluded that action through "normal" political channels - seeking to affect the positions of politicians and political parties, filing complaints with local governments and industry officials, and enlisting the media to expose problems had not and would not work. All had been tried and had failed to bring satisfactory responses. In this regard, direct community action was seen as the only worthwhile response to prolonged abuse and a state indifferent to community needs and conditions

For the state, these protests raised important problems of social control and threatened its ability to commit the society to rapid economic growth. The government initially sought to defuse environmental protest by insisting that pollution from the petrochemical complexes could be controlled by newly developed technologies. Protesters were attacked for irrational behavior in rejecting economic progress and

for failing to allow scientific and technological expertise to define the path to solution. According to the state, the most important thing the polluted communities needed to do was to support new technologies including the construction of a new, state-of-the-art cracking plant.

But this tactic failed. The failure of the government's technology rhetoric could be traced to massive community distrust of the purposes of technology development. Their experience (Hsu, 1995) overwhelmingly supported the conclusion that technology's master was industrial profit. It was profit that decided which problems technology was selected to address and which technologies were developed.

The government then sought to buy support for its overall program by offering to compensate the victims. This tactic was chosen to limit the "red ink" from industry shutdowns caused by community protests. It proved to be successful. Each community, in turn, accepted a compensation package, although it was also insisted that the government eventually relocate the complex, as well. Compensation succeeded because in each community, leadership divided over the issue, with the result that the protest movements broke up into factions and were unable to sustain pressure on the government and industry.

Community or Commodity

Industry's and the government's position at bottom assumed that environmental pollution was not a real problem for society. Indeed, pollution was seen as the necessary outcome of economic growth. With increased wealth from such growth, it was argued that it would be possible to improve production methods and reduce or eliminate the accompanying pollution. The real problem from this perspective was a practical one - how to maintain societal support for a growth-oriented economy. Seen in these terms, the appropriate response was clear: create new conditions for communities to invest in commodity production as a means of meeting their needs.

This conclusion, at least from a systemic point of view, is inescapable. The processes of commodity production and exchange are basic components of the capitalist system. The state depends upon capital accumulation through commodity production and, for this reason, must stand ready to help capital accumulation through political intervention, if necessary. As Claus Offe puts it, "state actors must be interested - for the sake of their own power - in guaranteeing and safeguarding a 'healthy' accumulation

process" (1984:120). Thus, capitalist enterprise and the state are jointly committed to imposing commodity and exchange relations on local communities and individual citizens. As Offe argues, the structure of the capitalist state becomes problematic if "economic units of value fail to operate in the commodity form" (1984:121). He further points out that:

The link between the political and the economic substructures of capitalist society is the commodity form; the stability of both substructures depends upon the universalization of this form.

To preserve its power, the capitalist state intervenes in order to facilitate the transformation of social activities into commodities. The capitalist state's policy is termed by Offe as "recommodification." In this policy, the fate of local communities, especially in urban areas, is to be determined by their exchange value (i.e., their capacity to promote economic activity), rather than their social value as places of shared activities and commitments. A local community is destined to be reduced to a commodity in the larger economic picture and often may have to be sacrificed to achieve higher economic growth. Lewis Mumford warned of the problem during Europe's and North America's era of rapid industrialization (1934:168-169).

In this [industrial] world the realities were money, prices, capital, shares: the environment itself, like most of human existence, was treated as an abstraction. Air and light, because of their deplorable lack of value in exchange, had no reality at all ... the reek of coal was the very incense of the new industrialism. A clear sky in an industrial district was the sign of a strike or a lock-out or an industrial depression.

The Houchin, Linyuan and Tasheh movements demanded that their communities not be treated as dumping grounds for the waste and pollution of industrialism. In reaction, the state and its corporate allies charged that environmental protests were selfish NIMBY responses. They asserted that if local communities are permitted to exclude unwanted facilities, larger societal benefits will be lost.

But, as Lake and Disch have pointed out, NIMBY often represents expressions of conflict between community and capital and between community and the state (1992:671):

The basic assumptions of hazardous waste regulation define the hazardous waste problem as a

locational problem for the state rather than a *production* problem for industry. This transformation enforces the eternalization of wastes from the production process, translates an economic problem for capital into a political problem for the state, and insulates capital from the negative consequences of accumulation.

Some in Taiwan's environmental movement understood their situation in these terms, calling for petrochemical production to cease and a new development strategy to be adopted that would build upon community interests, skills and existing organization. But in the face of compensation offers from the government, community solidarity suffered.

Compensation took a variety of forms. In Houchin, KRP set aside many small construction contracts for local business in the wake of the protests. Those construction projects were named Mu Lin Kung Cheng MLKC), and Houchin businesses who got those contracts were called Mu Lin Chang Shang MLCS). To gain MLKC contracts, Houchin businesses went to KRP to register as an MLCS. Once registered, they were qualified for construction bids. Likewise, in Linyuan and Tasheh the government and industries provided contracts for local businesses. The contract set asides were typically awarded to organizations headed by members of the local elite. Not surprisingly, once elite members had received substantial contract sums, their assessment of the problem and of government or industry efforts to address the problem changed.

In addition, the government and industries supplied monetary compensation directly to local communities in exchange for their immediate termination of the protests. In Linyuan, the government supplied US\$ 50.8 million in monetary compensation to local residents. Money was directly distributed to each villager in the Linyuan rural township. For example, each Shanwei resident received US\$ 3,200 after the Linyuan protest. In Houchin, the government deposited US\$ 60 million in local banks as an endowment, and Houchin residents established an Interest Management Committee to distribute the interest on the principal. According to one resident interviewed about this scheme, "most of the interest is used to help Houchin citizens to buy gas and to pay their electrical bills" (Hsu 1995:266).

Whatever form of compensation used, its administration had a particularly negative effect on local politics. In virtually all cases, local elites had complete control of its disbursement. For example, the

compensation of US\$ 480,000 provided annually to the Linyuan township government is entirely controlled by a top local official and there is no way for ordinary citizens to monitor how this money is spent. In addition, this official earns money from the industries. He not only routinely receives set-aside contracts from the industries but also has been funded to help the complex expand the number of industries at the site, a direct conflict with the terms of negotiated agreement. According to the Linyuan agreement, a moratorium on new factories inside the Linyuan petrochemical complex was to be observed. But this official has helped the industries to build new factories anyway. As one resident observed (Hsu 1995:266-267):

[This official] contracted construction business from one petrochemical industry, which was responsible for a lot of pollution. [This official] also was the key person to help the Shinchung Petrochemical Company to build a new factory. Shinchung not only gave [this official] a great amount of money, it also tried to buy agreement for its construction from the politicians in every village. As I know, the price was NT\$ 300,000 (US\$ 12,000) per agreement.

The politics of compensation in the aftermath of the protests seriously undermined citizen trust in local leaders and officials. The government and industries tried their best to meet the demands of local representatives in the belief that, as one interviewed official put it, "everything would be fine if the people's representatives kept silent" (Hsu 1995:269). The motives of local politicians are now widely regarded with suspicion. Combating the politics of compensation has become one of the most daunting challenges to Taiwan's environmental movements.

The money supplied by the central government and the industries bred corruption at the local level. Government cooptation efforts also led many in the local communities to doubt the motives and/or staying power of their fellow residents. Rather than expressions of community solidarity, protests often became little more than political posturing to gain "compensation." Divisions within the communities are now deep, as are the suspicions of many residents toward local leaders. As a result, the central government and industries find it easier to defy community anger over environmental conditions. Environmental organizations do not command the respect they once did and, most troubling,

local politics appears to have been seriously compromised.

But alongside these negative impacts on community politics are several positive ones for community autonomy: greater community awareness of environmental issues; the willingness of many to challenge the ideology of economic growth; increasing calls for community participation in environmental affairs; and a healthy distrust of industry and government motives. These features suggest that environmental protest and organization-building have increased the capacities of the affected communities to question the role of technology and capital in their futures. It is not yet clear whether the positive impacts can be built upon or whether the divisions and conflicts that have accompanied environmental protest will overwhelm local efforts to address significant pollution problems.

Although the impact on local communities has been mixed, the effect of the rise of these environmental movements on civil society in Taiwan can be stated more clearly: these movements, directly or indirectly, emboldened many Taiwanese to protest against the authoritarian state and, in this respect, have been a motivating force for political liberalization. Protest is no longer regarded as taboo by Taiwanese society. The sheer number and continuity of environmental protests is partly the reason for their influence on the larger society. Environmental protests occurred 12 times in 1988, 32 times in 1989, 50 times in 1990, 258 times in 1991 (Hsiao 1993).

Out of the political activity of the environmental movements during the 1980s was born a national opposition. While political opposition, such as the Tangwai movement (which formed in the 1970s and became the Democratic Progressive Party - the principal opposition party - in 1986) existed prior to the environmental protests of the 1980s, it is the early environmental protests that led the way in forming a national civil opposition to the Taiwanese state-capital alliance.

Although environmental protests took place in local communities, they had direct impacts on the entire country. The protests in Houchin, Linyuan, and Tasheh seriously disrupted the manufacturing of upstream and intermediate production of the vital petrochemicals industry. National growth and profit were undeniably

threatened because of these protests. This was the reason why the state and industry so aggressively sought to repress environmental protests and, when intimidation was not sufficient, chose sizable cash "compensation" payments to end the momentum of dissent represented by the environmental movement.

The changes wrought by environmental protest include an increasingly more active civil society and moderation by the state in some of its more overt authoritarian tendencies. But Taiwan remains non-democratic with massive power wielded from the center. If anything, the political transformation has been from authoritarianism to corporatism in which the state increasingly relies on close alliances with large industrialists to mediate environmental and other conflicts.

In the new corporatist state, major capitalists have been elevated from their earlier status of clients to junior partners (Wang 1993), while the political reins on civil society have been loosened. Environmental protest and politics has been a key area of dispute on which the state and capital have attempted to reconstruct their power. While those in Taiwan's environmental struggles who are committed to fundamental change in the society-environment relationship are far from happy with what has been achieved to date, they have succeeded in demonstrating the central importance of this relationship to the institutions of state and capital. This, in itself, is an important result for Taiwanese society.

Conclusion

The state and industry, as in the case of Taiwan, often try to divert attention from the environmental and social consequences of the country's rapid industrial growth strategy. Pollution and threats to community health are frequently treated as "normal" risks of development with greater importance given to expanded production than the needs of community and the values of equity and environmental sustainability. The challenge of environmental movements on a worldwide scale is to resist the paradigm of "normal" pollution (Byrne, Hoffman and Martinez 1989) and to assert the values and aims of communities over those of commodity production and capital accumulation. The case of Taiwan illustrates the importance of environmental protest in challenging the paradigm of normal pollution. It also demonstrates the problems such community-based movements must confront in their efforts to redirect the processes and redefine the purposes of development.

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Shih Jung Hsu may be contacted at the Department of Land Economics, National Chengchi University, Taipei, Taiwan.

John Byrne may be contacted at the Center for Energy and Environmental Policy, University of Delaware, Newark, DE 19716.