

Local governance and environmental conservation: gravel politics and the preservation of an endangered bird species in Taiwan

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Abstract. Despite its many promises, devolved governance may pose great challenges to environmental conservation, especially in the context of newly democratized polities where local communities tend to be dominated by place-bound clientele networks that pursue developmental interests at the expense of conservation. In this paper the authors examine how a conservation movement in Huben Village of Yunlin County in Taiwan has successfully been organized to save the endangered bird species Fairy Pitta (*Pitta nymphia*) against gravel extraction activities that were backed by local clientele networks of politicians and business interests. The case illustrates how challenges of devolved governance can be addressed not necessarily by centralized authority but by connecting grassroots victims of environmental degradation with broader conservation movements supported by networks of civic organizations that transcend narrow geographical interests.

In the past two decades there has been a worldwide movement to shift environmental conservation responsibilities from central government to local communities (Bernard and Young, 1997). As observed by Gilbert et al (1992, page 24), devolved environmental governance has taken shape “through constitutional reforms in Brazil, through decentralization programs in Columbia and Norway, and through national environmental legislation in Indonesia, New Zealand, and Zimbabwe.” In the USA the federal government has increasingly emphasized partnership with state and local governments as well as local civic and private organizations in designing and implementing environmental conservation programs (Lester and Lombard, 1990). In Europe, the Local Agenda 21 participatory programs reflect an enthusiasm for local involvement in environmental conservation (O’Riordan and Voisey, 1998; Stewart and Hams, 1992; Young, 1997).

A move toward more local control in environmental conservation is compatible with the subsidiarity principle (Golub, 1996) endorsed by such international organizations as the United Nations and the World Bank, which posits that “power should always be exercised at the level closest to the people affected by the decision” (Shuman, 1998, page 125). Local control enables the design and implementation of programs that can draw on local knowledge and be better tailored to local circumstances (Ward, 1996). A polycentric system of governance also facilitates the emergence and diffusion of innovative solutions to diverse types of environmental problems (Ostrom et al, 1993). Numerous case studies have indeed shown that local governments and community organizations have been successful in conserving many local renewable resources for sustainable use (Agrawal and Gibson, 2001; Baden and Noonan, 1998; Donahue, 1999; Ostrom et al, 1994; Singleton, 2000; Swanson, 2001; Tang and Tang, 2001; Thomas, 1999). Empirical studies are also available showing the contribution of

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devolved governance to regulatory enforcement (List and Gerking, 2000; Scheberle, 1997).

Is devolved governance an unconditional blessing on environmental conservation? The answer appears to be a 'no' as one can easily identify several challenges devolved governance may pose for conservation. One challenge concerns cross-jurisdictional externalities. For instance, a jurisdiction may produce air pollutants that affect not only its own residents but also those in jurisdictions hundreds of miles away. Or, by preserving the ecological characteristics of a geographical area, a community may benefit not only its own residents but also those who enjoy the option of visiting the place once in a few years. In both cases, the externalities may cause either an overproduction or an underproduction of the environmental bads or goods, respectively, in question.

Another challenge concerns the potential for a 'race to the bottom', meaning that government officials in local communities may have an incentive to adopt lax environmental standards in order to attract industries that help create jobs and tax revenue (Revesz, 1997). Many scholars dispute the general validity of this concern by arguing that, because of the varying geographical features of the jurisdictions, as well as the differing characteristics of the local economies, sources of government revenue, and preferences of residents, local government officials may not be equally motivated to welcome polluting industries into their jurisdictions (Harrison, 1999; Revesz, 1997). Despite this argument, one may suggest that a 'race to the bottom' is more likely to exist among communities at the lowest level of economic development in which residents tend to care more about increased economic opportunities than about environmental conservation.

A third, and related, challenge of devolved governance concerns political dynamics in many communities that tend to favor the dominant business interests in the community. This is especially the case in communities where political leaders see their own fortune and that of their community as being dependent on support from the dominant business interests. Although the public may favor many conservation measures, collective action problems often prevent it from mobilizing in support of those measures. In contrast, business owners and real estate developers, whose economic interests can be severely constrained by local conservation measures, tend to be more organized and better connected with the local political establishment. These place-bound actors are more willing and able to mobilize to influence local policymaking.

It has been a major theme in the urban politics literature that business and pro-growth interests tend to dominate local governing arrangements, especially among cities in the USA. One of the earlier statements included Hunter's elitist theory that small groups of power elites consisting of businesspeople, elected politicians, and trade union leaders jointly determine a community's future (1953). Peterson (1981) built on this power structure literature by stressing the disproportionate influence of economic elites, originating from the primary interests of cities in maintaining and enhancing local productivity. Unlike the national government, local governments are less capable of protecting their economies from external forces through control of capital and labor movement. Thus local governments have stronger incentives to carry out various developmental projects to retain those taxpayers contributing disproportionately to the local economy and government revenue.⁽¹⁾ Although Peterson offered a convincing

⁽¹⁾ Peterson's argument about the "primacy of market forces" (Lauria, 1997, page 79) posits that local governments with limited policy jurisdictions and smaller spatial scales are impelled by competitive forces to commit to developmental objectives based on efficiency criteria. Other objectives, such as redistribution and egalitarianism, tend to be kept to a minimum by local authorities (Peterson, 1981, page 69). Related theories about the effect of local economic competition on municipal policies include Tiebout's (1956) famous 'voting with feet' thesis and Lyons and Lowery's model (1986) on citizen responses to dissatisfaction in metropolitan areas.

explanation for the prominence of economic issues in local politics, his focus on the macroinstitutional contexts of US federalism has left out much of the internal dynamics of urban politics—namely, how different stakeholders within local political arenas interact with each other to produce specific pro-growth policies.

Molotch's (1976) 'growth machine' thesis focuses more on the internal dynamics of urban politics by arguing that "place entrepreneurs have an interest in maximizing the exchange value of urban land" so that they "coalesce as 'growth coalitions' and seek to mobilize powers of local government in order to structure an environment conducive to growth" (Wood, 1999, page 165). In a similar vein, Pincetl (1999) proposes that a handful of economic elites could harness governmental powers and resources to manipulate such land-use policy tools as zoning, redevelopment, and annexation for private profits under the legitimate title of economic growth. As such rent-seeking activities profit heavily from a steady increase in real estate value, economic elites are interested in urban policies that enhance local prosperity and related opportunities for speculative investments.

Researchers have more recently sought to examine the temporal and spatial variations of such pro-growth governing coalitions, and the concept of urban regimes has taken center stage in many discussions (Dowding, 2001; Logan et al, 1997). By treating local political balance as a variable subject to various influences, Stone (1989) explains the striking continuity of the coalition between political and business leaders in Atlanta, Georgia that helped to shape the city's developmental agendas for decades. The development regime was sustained as political leaders sought to ally themselves with the business community to overcome the lack of public resources, the fragmentation of local power structures, and conflicts among electoral segments.

In recent years, a number of other scholars have also examined how various factors may give rise to different types of urban regimes or models of urban governance. Their research highlights how various geographical, institutional, and socioeconomic variables may lead governing arrangements away from an exclusive pro-growth focus to other concerns such as welfare and conservation.⁽²⁾ Yet the durability of the growth machine and hegemony of politicoeconomic coalitions in many local arenas remain a fundamental challenge to devolved environmental governance. With respect to extraction of natural resources, many regions in advanced, industrialized countries have developed political strategies that are premised on consultation among various economic and civic interests and on negotiated solutions to contentious issues. Yet many of these strategies still "face political constraints that ultimately limit their ability to deliver socially and environmentally progressive outcomes" (Bridge and Jonas, 2002, page 765).

These political constraints are even more formidable in some non-Western countries that have attempted to devolve governance as part of an overall democratization process (Lim and Tang, 2002). In these countries, despite democratization, 'authoritarian enclaves' exist in which clientele networks of political and economic elites dominate local government decisionmaking (Diamond, 1999). The act of increasing local autonomy without enhancing civic traditions may actually exacerbate clientelism in these enclaves, leading to policies that promote the economic interests of local clientele groups at the expense of conservation interests.

These potential challenges certainly are not reasons for abandoning local governance in favor of centralization of all environmental protection efforts, as centralization carries its own problems—lack of knowledge about local conditions, lack of opportunities to

⁽²⁾ For example, see Storm (1996) for the German case; see Houghton and White (1999) for the British case; see Broadbent (1989) for the Japanese case; and see Zhu (1999) for the Chinese case.

fine-tune solutions according to local circumstances, susceptibility to making large and irreversible errors, etc (Ostrom, 1990; Tang, 1992; Wunsch and Olowu, 1995). A meaningful question, instead, concerns how challenges to devolved governance can be overcome by means that are compatible with its original principle of solving problems through local and citizen initiatives. Our case study of Huben Village in Taiwan is an attempt to find clues to the answer to this question.

As one of the newly industrializing countries in East Asia, Taiwan adopted a 'grow first, clean up later' strategy in the initial decades of its industrialization after World War 2. It was not until the late 1980s, when the economy had moved beyond a mid-income level and the polity had begun to undergo democratization, that governments, civic groups, and economic enterprises began to undertake more rigorous environmental conservation efforts (Chan, 1993; Tang and Tang, 2002; Yeh, 1996). Yet despite an improvement in the island's overall environmental records, regions at a lower level of economic development tend to lag behind in terms of environmental conservation compared with those regions at a higher level. Huben Village is a small agricultural community located in Yunlin County in Taiwan (for the location of the village see figure 1); it has a low level of economic development⁽³⁾ and less public demand for environmental conservation.⁽⁴⁾ The county is also famous for its traditional clientele networks, which have dominated the county government for decades and have sponsored many environmentally destructive businesses, including gravel extraction from riverbeds.

Our case study begins with the residents of Huben Village protesting against government-supported gravel extraction in the area. Initially, their protest appeared

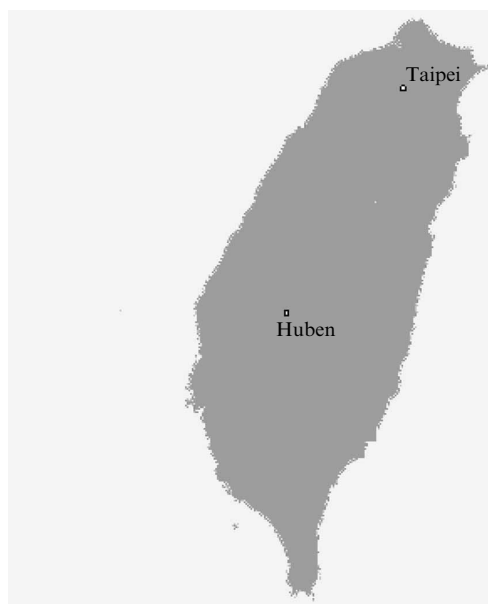


Figure 1. Location of Huben Village, Taiwan, Republic of China.

⁽³⁾ According to official statistics, in 1997 Yunlin had the fourth-lowest household income among twenty-three local jurisdictions and the highest rate of agricultural population (about 49.5%) (UHDD, 1998).

⁽⁴⁾ One indicator of such environmental demand is public attitude toward the establishment of polluting industry. In 1991, the Formosa Plastics Group received a warm welcome for locating the Sixth Naphtha Cracker Plant in Yunlin, whereas the same investment project had encountered violent protests in other counties (Tang and Tang, 1997).

to be ineffective, as the villagers were up against strong political and economic interests sponsored by the dominant clientele network in the county. The fate of the protest, however, changed after the spotting of a Fairy Pitta (*Pitta nympha*), an endangered bird species, in the woods of the nearby Pillow Mountain, which would be a potential victim of gravel extraction. The protest gradually transformed from being a typical not-in-my-backyard (nimby) protest, which most Taiwanese have learned to ignore in recent years, to one concerning a larger conservation issue with an impact that would go beyond the confines of the local community and involve government and non-government actors from outside the community. Although the Huben case owes its success partly to some idiosyncratic factors that might not apply in many other cases, local environmental activism in many places of Taiwan has experienced a similar transition from 'nimbyism' to appeals to more broad-based interests. For example, the movement against the Seventh Naphtha Cracker Plant in Chigu, Tainan County, shifted the focus from protesting against possible pollution to protecting the habitat of Black-faced Spoonbills (for a history of this incident, see Y-F Chen, 2002). Similarly, the protesters against the construction of a reservoir in Mei-Nung, Kaohsiung County, also changed their focus from residents' property rights to the conservation of butterflies in the designed valley (for details of this case, see Yao, 2000). The Huben case can be seen as part of this nationwide trend.

The case

As a tiny agricultural village with about 1000 residents,⁽⁵⁾ Huben had seldom been the object of any media report in Taiwan until its residents, led by its warden Ms Yin Lin-in, mobilized a campaign in 1999 to save the endangered bird, Fairy Pitta, residing in the nearby Pillow Mountain, from gravel extraction activities supported by the Yunlin County government (see figures 1 and 2). Pillow Mountain was designated as a gravel extraction area by the central government as early as 1995. But the Yunlin County

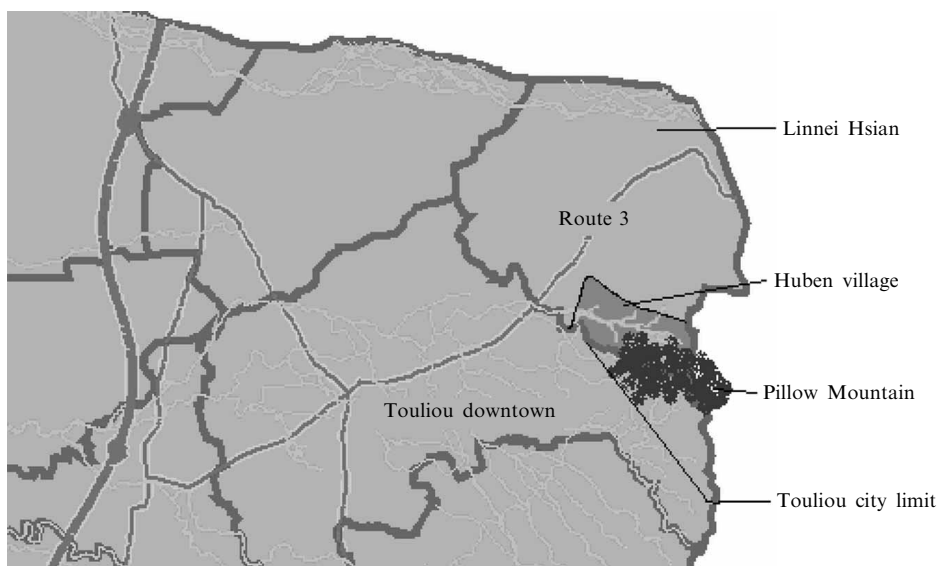


Figure 2. Relative positions of the city, the village, and the mountain.

⁽⁵⁾ Strictly speaking, Huben is located on the outskirts of Touliou City and thus can be considered as part of the largest city in Yunlin County. For relative positions of the city, village, and Pillow Mountain, see figure 2.

government did not actually process the application for extraction and grant extraction permits until August 1999, three days after the acting county magistrate, Mr Lee, assumed the office left vacant by the unexpected death of the incumbent magistrate, Mr Su.

Gravel politics in Taiwan

Behind the sudden issuance of extraction permits was a complex nexus of local political and economic interests in the face of a nationwide shortage of gravel. In addition to being a major mining resource in Taiwan, gravel is a basic material for most infrastructure and construction projects on the island.⁽⁶⁾ As demand for gravel has been tremendous, a shortage in supply is expected to have adverse effects on public investment, real estate, transportation, and, consequently, economic growth and employment. According to an official estimate, a 10% reduction in gravel supply would lead to a 1.6% drop in GDP.⁽⁷⁾ Although governments, both central and local, have long recognized the economic importance of maintaining a stable supply of gravel, they have for a long time turned a blind eye to the fact that most gravel is made available each year by illegal extraction activities—it is estimated that only 30–40 million m³ of the 70–110 million m³ of gravel used each year are extracted with permits. Illegal extraction from riverbeds has created various environmental and public safety problems, including the destruction of river and estuary ecology, the illegal dumping of poisonous waste on extraction sites,⁽⁸⁾ air pollution (dust) in neighboring areas, increased traffic accidents, and damage to public infrastructure, such as bridges and riverbanks. A tragedy, with twenty-two casualties, involving the sudden collapse of a famous bridge drew nationwide attention to illegal extractions from riverbeds and triggered some serious government efforts at a crackdown island-wide.⁽⁹⁾ Against this backdrop, the supply of river gravel has dropped and its price has soared (for an analysis of the shortage in supply of gravels, see C-Y Chen, 2002). As gravel is taken either from riverbeds or from mountains,⁽¹⁰⁾ the extraction of gravel from hillsides has intensified to make up for the shortfall.⁽¹¹⁾ Many land gravel extraction sites are designated by government, including Pillow Mountain in our case study.

⁽⁶⁾ Concrete is the main construction material in Taiwan because of the susceptibility of the island to typhoons and floods. In addition, owing to the high population density, most commercial and residential buildings are large-scale, requiring concrete as the basic building material.

⁽⁷⁾ Related statistics are available on the official web page, at http://www.mine.gov.tw/02/02/04_3.htm (in Chinese).

⁽⁸⁾ The operation of illegal extraction is quite similar to that of illegal dumping of industrial waste—both require secretive transportation, and measures to evade law enforcement. Thus, it has been a common practice in Taiwan to combine the two businesses. The illegal extractors can bid on waste-management contracts with extraordinarily low prices but still make large profits simply by dumping the waste into the holes created by illegal extraction. These combined practices can create not only large profits but also help to cover up the illegal extraction activities by leveling the holes.

⁽⁹⁾ The sudden breakdown of Kao-Ping Bridge on 27 August 2000, and Chung-Hsing Bridge on 2 December 1986, were caused by illegal gravel extraction activities.

⁽¹⁰⁾ Gravels may also come from seashores. Nevertheless, because use of seashore gravel involves extra costs to remove salinity, it is not popular in the Taiwan construction business.

⁽¹¹⁾ As land gravel extraction involves higher costs, mainly in the form of payment or compensation to landowners, it has not been the preferred choice in Taiwan. Until the ban on riverbed extraction, most local governments had not handled the process of issuing land extraction permits. The issuance of such permits follows mining laws that allow some additional rights not associated with regular landownership. These additional rights include the extraction of valuable materials beneath the land surface and changing the contour of the landscape on a large scale.

The legal issues surrounding gravel extraction have had a great impact on local political ecology. Gravel extractors, both legal and illegal, usually have good connections with all levels of governments that possess the authority to issue extraction permits and with the personnel that enforce crackdowns on illegal extraction.⁽¹²⁾ In many local jurisdictions, extensive patron–client networks exist between them. In particular in rural areas, politicians themselves actually own oligopolies that control vertically integrated businesses, from gravel extraction to construction and real estate businesses. Their businesses often support large groups of faction followers.⁽¹³⁾ Political patrons not only can help with obtaining and renewing extraction permits but also can help extractors to cover up illegal extraction activities in riverbeds. Indeed, extractors usually start their work outside the designated areas, preserving gravel within legal boundaries for use during times of harsh government crackdowns (Lin, 1998). When heavy equipment is confiscated or personnel arrested during crackdowns, legislators, councillors, and, sometimes, county officials have convenient channels to help arrange their release.⁽¹⁴⁾

Gravel extraction businesses often involve mafia organizations, as illegal extraction activities on riverbeds are not based on ‘property rights’ backed by the law. The ‘rule of the jungle’ prevails; that is, the strongest survives. Gravel extraction companies often are run directly by gangsters who are not hesitant to use violence to protect their business interests. The mafia forces also play a role in deterring the zeal of street-level bureaucrats during crackdowns.⁽¹⁵⁾ The credible threat of violence retaliation by mafia gangsters also deters the possible testimony of witnesses in judicial processes. This triangular network of politicians, local businesses, and mafia organizations constitutes the basic structure of Taiwan’s rural politics.⁽¹⁶⁾ Once a crackdown on riverbed gravel extraction is enforced and the interests of the gravel coalition are threatened, local politicians will be pressured to make arrangements to compensate their coalitional clients. One such arrangement is to help the extractors to continue their operations on hillsides or farmland.

This explains why the acting county magistrate, Mr Lee, issued the extraction permits in such a hurry—three days after assuming office. On the one hand, there was an increasing demand for gravel because a pan-island highway system was under construction. On the other hand, a serious crackdown on illegal riverbed extraction was looming nationwide. Both factors combined to escalate the price of gravel—whoever

⁽¹²⁾ Permits for extracting gravel from riverbeds are issued by local offices of the central agency, the River Basin Management Bureaux of the Water Resources Agency, Ministry of Economic Affairs. Nevertheless, the Bureaux have only a few patrollers and guards and therefore have to rely on the local police force for crackdown operations. Extraction permits for land gravel are issued by local governments.

⁽¹³⁾ Before the 1990s, when the real estate market was prosperous, construction businesses played a key role in local clientele networks not only because they could bid on public construction projects but also because they were connected to a wide range of stakeholders, including raw material (gravel and cement) suppliers, labor, and brokers.

⁽¹⁴⁾ A well-known scandal surfaced in 2002 in which a huge amount of confiscated gravel was stolen and led to the prosecution of a handful of public officials, including Bureau chief Chen Chun-Tsung, for taking bribes. Details are available at http://www.ttn.com/cna/021001/s02_b.html (in Chinese).

⁽¹⁵⁾ It was reported that guards dared not approach riverbeds without company and bearing arms. Frontline enforcers are often criticized for being slack in guarding against illegal extraction activities on riverbeds (Local News Center, 2002).

⁽¹⁶⁾ In earlier years of democratization, there was no restriction on people with criminal records to run for public office. Many publicly known mafia leaders ran for elections and actually got elected as councillors or legislators. In some rural places, a large number of council members might have criminal records. It is not difficult to pinpoint a number of council members with known mafia backgrounds who run gravel extraction businesses in different localities in Taiwan.

can gain access to gravel stands to reap huge profits. Both the former magistrate, Mr Su, and the acting magistrate, Mr Lee, belonged to the largest local faction, the Lin Faction, which has for a long time been the most powerful clientele network in the county and owns a vertically integrated network of businesses, ranging from gravel extraction to construction companies and real estate brokers (Chen, 1995, page 286). When magistrate Su died unexpectedly and his position came up for a make-up election in the near future, the best thing the acting magistrate could do for his faction was to have extraction permits issued before facing the uncertainty of the upcoming election.

The emergence of a protest movement

In February 1999 villagers in Huben were shocked by the piles of gravel set up along hillsides by extraction companies. They were especially furious as they believed that governments, both central and local, had approved the work without any consultation and notification in advance.⁽¹⁷⁾ A pan-village meeting was subsequently called in which villagers expressed concerns about the project. First, they were worried that the high frequency of truck traffic associated with the gravel extraction would threaten the safety of schoolchildren. Second, mudslides resulting from extraction might cause damage to nearby properties. Third, the village warden, together with other villagers, had a vision of building Huben into an 'eco-village' by presenting the natural beauty and sociocultural features of a typical rural village—including such points of interest as a famous Tibetan Buddhist temple and a rich ecological system of nearby creeks and woods. Gravel extraction would certainly ruin the landscape, thus destroying their vision. Fourth, less openly stated but no less important to the villagers, many of them believed in the importance of Pillow Mountain in Chinese geomancy (*fengshui*). As the mountain is located in front of the community religious center, a Taoist temple, it is believed that to level the mountain is a form of blasphemy and would create misfortune.⁽¹⁸⁾ Villagers expressed their concerns by issuing official notices to the county government, hoping by administrative procedures to challenge the extraction activities (interview with Ms Yin, May 2001).

With all these issues unresolved by August 1999, villagers in Huben were further shocked by the sudden announcement about the extraction permits approved by the acting magistrate. Under the leadership of the village warden, a nimby-type protest was mobilized. Similar to other nimby protests in Taiwan, legal and extralegal tactics were deployed. Villagers organized an 'anti-gravel-extraction association' and appointed cadres to manage their protest efforts, including fund raising, public relations, and street protest logistics.⁽¹⁹⁾ In addition to a street demonstration in front of the county government, they also filed a malfeasance suit against the officers in charge. Their main

⁽¹⁷⁾ Village residents suspected that some elites in the village had obtained the information in advance because the designated areas were sold earlier to outsiders at above-market prices. The village warden, Ms Yin, also had her suspicions as the last village warden election was unusually competitive, with three candidates running for the post. She explained in retrospect that, once the gravel extraction project was launched, the village warden could easily secure various benefits such as coordination fees and public relations expenses from extraction operators by acting as a liaison between them and the village residents. Those who knew about the project in advance would have strong incentives to fight for the warden position (interviews with Ms Yin, May 2001 and Mr Liao, 5 January 2002).

⁽¹⁸⁾ Chinese geomancy is a system of doctrines that explains the fortune and destiny of a given person by geographical factors such as the running directions of wind (*feng*) and water (*shui*) and the locations of nearby hills, trees, and buildings in relation to one's home and ancestral tombs.

⁽¹⁹⁾ The association did gather some US\$2000 but had not used up funds after two years of activities.

argument was that the county government approved the permit application even though the extraction company had failed to fulfill the requirement of the Environmental Impact Assessment (EIA) Act, which requires all development projects above a certain scale be reviewed for environmental impacts, both natural and social, and that preventive measures be developed and monitored. According to the regulation, local residents' opinions should have been consulted well before extraction permits were granted (interview with a village resident, Mr Liao, October 2001).

The officers in charge in the county government countered the charge by citing an ordinance issued by the Environmental Protection Administration (EPA) that exempts projects covering less than 5 ha from the EIA Act requirements. Although the entire extraction site reached a total of 107 ha, the developer, a conglomerate of several companies, applied for several separate permits covering less than 5 ha each.⁽²⁰⁾ Technically, the company evaded rather than broke the EIA Act. In other words, it was at the discretion of the county government officers to exempt each small-scale application from conducting an EIA.

Although it is difficult to determine if the EPA deliberately created such a loophole for developers, it failed to remedy it aggressively until the ombudsman in the Control Yuan was appraised by the villagers of the problem and passed a correction motion regarding the mistake of the EPA. In response, the EPA amended the ordinance, on a nonretroactive basis, such that all new applicants for gravel extraction must follow the 'cumulative principle', under which the area of geographically adjacent projects must be counted on a cumulative basis even though the projects are carried out by different companies at different times (EPA, 2000, page 30). Nevertheless, this new rule could not be used retroactively to help the villagers to fight the problematic administrative decisions.

Although neither the street protests nor the law suits served the villagers well in challenging the county government, the make-up election for the magistrate allowed the villagers to fight yet another battle—the election campaign. Although many villagers, including the main cadres of the protest, were members of the Kuomintang (KMT, the Nationalist Party), they turned to support the candidate of the Democratic Progressive Party (DPP) because of the traditional sympathy of the DPP for grassroots protests. Emerging from being an opposition party, the DPP has grown hand-in-hand with various social movements during democratization since the 1980s. To the villagers' disappointment, the DPP candidate lost by a narrow margin in the make-up election. Their worst nightmare came true when they learned that the winner was the one considered to have a strong connection with gravel extraction businesses.

Shifting the agenda

Right at this desperate moment, Fairy Pitta came onstage to help turn the villagers' fate around. In a bird-watching event hosted by the villagers, a bird watcher mentioned seeing Fairy Pitta in the woods of Pillow Mountain. The bird species was classified as 'vulnerable' in the IUCN (The World Conservation Union) Bird Red Data Book and as 'threatened' by BirdLife International, thus according it protection status by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) internationally and the Wild Animal Preservation Law (WAPL) domestically. Simon Liao, President of The Wild Bird Federation Taiwan (WBFT), recalled that this bird had been in the spotlight of another famous protest, against the Mei-Nung Reservoir

⁽²⁰⁾ These permits are separate in the sense that they might not be contiguous. Nevertheless, they can also be considered as belonging to the same project because they are all located on the same site designated by the provincial government several years earlier (interview with Mr Liao, October 2001).

Project in Kaohsiung County.⁽²¹⁾ This information inspired the villagers, who decided to extend their indigenous home-saving protest to a nationwide bird-saving campaign. Worrying about the fate of Fairy Pitta, the WBFT joined the villagers in November 1999 in the fight to protect Pillow Mountain. The WBFT was even more ambitious, trying to launch a worldwide campaign by connecting with BirdLife members in other countries.

Using the slogan “Save the Pitta’s Home, Stop Gravel Extraction”, the villagers and the WBFT took steps to increase publicity, believing that frequent media coverage would maintain continuous public scrutiny of the situation and thus prevent the county government and the gravel extractors from causing extra harm to the mountain. Specifically, they set up eye-catching billboards—with pictures of one of the world’s most beautiful bird species—on such occasions as bird-watching assemblies, scholarly conferences, and government-sponsored environmental campaigns, collecting signatures onsite to support their protest. Within a few months, they collected over 10 000 signatures to demonstrate strong public support.

One frequent question they confronted was: “Are there really any Fairy Pitta in the Mountain?” To prove its presence, the local wild bird society conducted a field survey on its quantity and breeding range in the area. On the other side of the controversy, the county government also contracted out a field survey, trying to prove the nonexistence of Fairy Pitta in the area. Upon the suggestion of an ombudsman, the Commission of Agriculture (COA) ordered its subsidiary agency, the Taiwan Endemic Species Research Institute, to take over the field survey so that the result would be more credible to the contending parties. In June 2000 the first video of the species in Pillow Mountain was taped. Although a comprehensive report was not available until the end of 2000, the video tape became the most powerful weapon for the villagers and the WBFT in their subsequent campaigns. In addition, the villagers invited bird-lovers to observe Fairy Pitta with their own eyes, hosting bird-watching activities.

In contrast to most other environmental campaigns in Taiwan, a unique feature of this case was the heavy involvement of international voluntary associations. As an affiliate of BirdLife International, the WBFT sent out 5 800 000 e-mails to all individual members in 94 countries, urging them to send e-mails directly to various government entities in Taiwan, including the Yunlin County government and other central agencies such as the EPA and COA. In response, about 387 individuals from seventy-five conservation organizations in fifty countries wrote letters back to support this indigenous conservation movement. In addition to having its cadres sign up petitions, BirdLife International also sent its officer, Marco Lambetini, Director of Network and Programmes, to Taiwan in July 2000. When visiting the COA, he urged its chairman to designate Pillow Mountain as an ‘important Wildlife Habitat’ to protect it from mining and gravel extraction. To put more pressure on the COA and to give Pillow Mountain international recognition, Lambetini further announced in a press conference in Taiwan that the site would be designated as an ‘Important Bird Area’. BirdLife International also tried to increase the international publicity of the campaign by sending an editor of its official magazine, *World Birdwatch*, to visit Huben Village in person and to write up a cover story about the legend of an ordinary housewife, the village warden, and the epic campaign she led (Huang, 2000, page 11).

(21) In a similar fashion, that protest shifted from one concerning residents’ rights and interests to one concerning the conservation of Fairy Pitta, butterflies, and Hakka culture. The movement lasted a long time and successfully stopped the project after Chen Shui-Bien won the presidential election in 2000.

As the villagers gained more external support, the county government and extraction contractors became more nervous and aggressive.⁽²²⁾ In May 2000 they began to build a road directly to the mountain, bypassing the village. Subsequently, a team of representatives from the contractors, the county government, and central agencies visited the warden, giving her an ultimatum that no matter whether Fairy Pitta was present, extraction activities would start without waiting for any further survey reports. They tried to co-opt the village warden by offering various benefits, including some compensation arrangements for the villagers. Based on the existing arrangement, substantial compensation would be available to a few landowners of Pillow Mountain, which, according to one informal estimate, amounted to only three households, with the majority of the people in the village left to suffer from the air pollution, traffic problems, and landscape degradation bound to be caused by the extraction activities. The village warden firmly refused to yield to the pressure from this team of representatives (interview with Ms Yin, 5 December 2001).

Being afraid that the developers would start extraction regardless of legal and political consequences, the WBFT and the villagers decided to press their case in Taipei. With the videotape record of Fairy Pitta ready and tens of thousands of signatures collected, a public hearing in the Legislative Yuan was hosted by Chao Yung-ching, who represented a subgroup of legislators called the Sustainable Development Committee of Yuan Region. In that hearing and the following press conference, the villagers and the WBFT demonstrated its determination to protect the habitat of Fairy Pitta and the strong domestic and international support it enjoyed. The hearing concluded by urging the county government to put the extraction project on hold.

This high-profile media exposure proved to be a big success and helped to trigger a surprising response from the Office of the President. The newly elected President Chen Shui-bian of the DPP suddenly announced his support of efforts to protect Fairy Pitta, signifying a fundamental policy turn in central government. Echoing this change, a member of the Wildlife Consultation Committee in the COA urged the village be declared an 'Important Wildlife Habitat' (IWH), thus granting the bird legal protection against gravel extraction and other construction work. At a later public occasion, the chairman of the COA stated that the COA should be able to make the declaration once the comprehensive reports became available several months later.

A supportive stance from the central government was important for the conservation movement, but it was far from determining. The declaration of an IWH status requires a huge budget, because 97% of Pillow Mountain was privately owned; regulatory undertakings may involve prolonged negotiation and complicated compensatory arrangements. What was critical, however, was the decision of the county magistrate, who had the authority to grant extraction permits and to halt extraction activities. One week after President Chen's declaration, the newly elected Magistrate, Mr Chang, finally yielded to overwhelming public opinion by suspending the extraction projects from further operation.

Although central government opinion might have played a role in influencing Magistrate Chang's thinking, his final decision must also be viewed from the perspective of the changing local political ecology. Since President Chen's announcement, growing panics had emerged among landowners and extraction businesses involved in the case. Such panics led to several aggressive incidents, casting the anticonservation camp in a negative light. During a bird-watching activity in the village, for instance, a landowner rushed toward the village warden and slapped her face in front of media

⁽²²⁾ The contractors became anxious because the extraction licenses would expire one year after their issuance, which was in August 1999.

cameras. Another incident involved a landowner who intentionally destroyed the trees and cast firecrackers into the woods reported to house Fairy Pitta nests. In addition, some bird watchers were rudely expelled from the sites with verbal threats. Such sensational newspaper captions as “Dark Forces Threaten the Pittas and their Guardians” and “Mafia Violence Casts Shadow on the Conservation Movement” in the following days put the newly elected magistrate in an awkward situation, as he himself had been criticized by his electoral opponents as having an intimate connection with organized criminals. Although such allegations did not lead to his electoral defeat, his victory helped to earn the county the dishonorable name of a ‘Gangsters’ Home’.⁽²³⁾

A subtle intention to disconnect himself from the violent incidents and to redeem his reputation was thus a determining factor in the newly elected magistrate’s decision to halt gravel extraction in Pillow Mountain. Another subtle factor might also be at work, however. Magistrate Chang had good connections with senior leaders of the county’s dominant faction, the Lin Faction. He had been put on the sidelines earlier, however, after he had run against and lost to Mr Su (the leader of the Lin Faction, who later died unexpectedly in office) in a previous magistrate election. After winning the make-up election several years later, Mr Chang was poised to become the leader of the Lin Faction. Such a move, however, might be resisted by Mr Su’s former associates. Mr Chang’s decision to halt gravel extraction in Huben can be seen as a way for him to demonstrate his distributional powers and to tame the old cadres in the Lin Faction (informal interview with an anonymous county officer, on 20 December 2001).

After the intense confrontation in June and July 2000, the goal of the conservation movement to protect Pillow Mountain was tentatively achieved. Yet the final goal to make the mountain an IWH is still remote because the landowners and extraction contractors have organized their own self-salvation organization to fight for their interest. The final survey report on Fairy Pitta in Pillow Mountain was published in November 2000, which documented the presence of fifteen to twenty Fairy Pittas in the Pillow Mountain area, together with twelve other bird species subject to legal protection under the WAPL (Lin and Yiao, 2000, page 3). Even with such proof, the COA has still been reluctant to declare Pillow Mountain an IWH, mainly because of continuing local protests and possible financial burdens. Instead, the COA plans to designate nearby publicly owned woods for conservation purposes. To continue to guard Pillow Mountain against possible infringement in the future, the village warden, Ms Yin, participated in the 2002 local elections and earned a seat in the county council. With this official position, she has become more able to keep a watchful eye on the county government’s decisions regarding Pillow Mountain.

Discussion and conclusions

The potential for the dominance of pro-growth regimes in local communities raises serious concerns about the negative environmental consequences of devolved governance. In recent years, literature has emerged in which the authors attempt to conceptualize possible urban regime types or models of governance, but not a pro-growth model (Pierre, 1999; Stone, 1993). For example, based mostly on the internal dynamics that shape the governing coalitions among government officials, businesses, and various civic groups, Stone (1993) distinguished between four different types of regimes—maintenance, development, middle-class progressive, and mass mobilization. Dowding et al (1999), Elkin (1987), Pierre (1999), and others have also proposed a number of other similar typologies. Regardless of the differences between these typologies, they all point to the possibility for local communities to develop regimes or models of governance

⁽²³⁾ A major appeal of the conservation campaign of Huben Village was to make Yunlin the “Home of the Fairy Pitta” rather than the “Gangsters’ Home”.

that are not pro-growth. They have in one way or another pointed to various types of socioeconomic and political factors, both local and extralocal, that may steer local communities to such nongrowth issues as conservation and redistribution. Absent from their analyses, however, are any rigorous causal models that explain forces that help develop and sustain various nongrowth-oriented regimes or governing coalitions (Dowding, 2001). More analyses, for example, are needed to understand how various antigrowth coalitions may emerge and succeed in stopping urban growth machines in different institutional contexts (for a discussion on how growth machines may encounter conservation movements, see Feldman and Jonas, 2000; Pincetl, 1999).

The Huben case illustrates how an urban growth machine strengthened by patron–client networks in a developing country undergoing democratization has been challenged by an antigrowth coalition unifying local nimbyism and national civic environmentalism. In addition to being a good illustration of how local conservation efforts can be linked up with the global environmental movement, the case sheds light on the question posed at the beginning of this paper—how can potential problems associated with devolved governance be mitigated in ways that are compatible with its original principle of solving problems through local and citizen initiatives?

The situation in Yunlin County show how established networks in local governance may tend to favor economic interests. Although empowered to make decisions that have major environmental consequences, in this case the granting of permits for gravel extraction, the county government failed to exercise due diligence in considering its residents' environmental interests. This happened in the context of a relatively underdeveloped local economy and a local, place-bound clientele network exerting undue influence on government decisionmaking.

Central government is not necessarily a solution to these problems either. Endless scandals about issuing permits and cracking down on illegal riverbed gravel extraction in recent years show that central agencies are no less resistant to clientele interests. Indeed, regulations set by central agencies themselves are sometimes the source of problems, as illustrated by the loophole in the Taiwan EPA ordinance that exempts projects covering less than 5 ha from EIA requirements.

How can environmental conservation be promoted in the context of these potential challenges? Our case study offers some useful clues. First, although supporting the principle that power “be exercised at the level closest to the people affected by the decision” (Shuman, 1998, page 125), we suggest one also must recognize that any one issue may involve multiple communities of various scopes. Huben Village is a small village of only about 1000 residents. Although most of them stand to suffer considerably from the environmental degradation caused by gravel extraction in Pillow Mountain, the vast majority of the residents in the county are not directly affected. That is part of the reason why, despite intense campaign efforts by the villagers from Huben Mr Chang still won the make-up election for county magistrate, as other residents in the county perhaps did not care about the fate of Pillow Mountain, which is not recognized as their backyard! Yet the villagers' fortune changed when their campaign against gravel extraction turned into a campaign to protect an endangered species that successfully attracted the attention of even broader constituency. The issue then becomes the reconciliation of conflicts between the economic interest of a county and the conservation interest of the whole country, or indeed the whole world. Usually, no definite answer exists as to whether greater centralization or decentralization is better for environmental conservation, but there are clues as to how different communities of interest can work together to arrive at mutually beneficial outcomes. Local autonomy can never be absolute but must be embedded within a nested system of governing institutions that are capable of mutual adjustment (Tang and Tang, 2001).

Second, somewhat related to the preceding point, conservation programs can be advanced more effectively by transcending purely local interests. In Taiwan, nimby-type protests that are aimed at securing compensation for alleged victims have been emerging since the early 1980s as part of a larger social movement that began during democratization (Tang and Tang, 1997). However, as the number of these protests has surged in subsequent years and as the self-serving nature of many of these protests became apparent, nimby-ism has gradually attained a bad reputation among the public. Villagers in Huben were able to transcend this limitation by fostering alliances with nationwide and international groups that share an ideological commitment to conservation issues. Their focus on broader conservation issues rather than seeking compensation has helped to give their cause legitimacy in the eyes of wider society and to mobilize tremendous external support, both domestically and internationally, which helped to keep local clientele interests at bay.

Third, nationwide, membership-based environmental organizations can play an important role in promoting local conservation programs. In the case studied here, the WBFT had considerable experience in supporting grassroots conservation efforts. Among the more prominent examples are its campaigns in the early 1990s to promote the establishment of the Kuan-tu Nature Park in Taipei (Tang and Tang, 1999), and its work to preserve wetlands in the Hsiang-Shan Tidal Flat in the middle of a large industrial development project during the same period (Yang, 1995). The involvement of the WBFT in these and other similar campaigns has enabled it to build large networks of grassroots organizations, academics, professionals, and social activists nationwide. Such networks can be readily mobilized to aid grassroots conservation efforts. For the WBFT there is, of course, a danger associated with its success. As some scholars have pointed out, many long-lasting membership-based environmental organizations in the USA have grown and eventually become highly bureaucratized; as a result, their zeal for supporting genuine grassroots conservation movements may have diminished over the years (Dowie, 1995). One needs to be watchful to see if the same scenario will apply to Taiwan's environmental organizations in the future.

Fourth, despite the success of the ideologically driven campaigns of the WBFT, one must be careful not to assume that such campaigns can be easily initiated and sustained over time. In the case studied here and in other similar cases in Taiwan, many conservation movements started as nimby protests. This is mainly because a purely ideologically driven conservation movement may require support from people in dispersed localities and will certainly encounter serious organizational costs, at least in the initial stages. It is often easier to organize a collective movement if there is a clearly identifiable group of people with strong concerns over a clear target. Many nimby situations with conservation implications can thus be the focal point for mobilizing collective efforts, as potential victims in a local community may mobilize indigenous social networks to overcome freerider problems in collective action. Yet purely nimbyist protests can easily be dissolved once their leaders and the victims receive compensation from the pro-growth coalitions. Our case study provides an example of how a nimby protest can serve the function of getting a social movement started. But in order to prevent it from degeneration, it needs to be linked up with a larger ideologically based conservation movement. Yet a mutually supportive relationship between a nimby protest and a conservation movement is not guaranteed. Many conditions need to be met for such a relationship to develop. One is that the grassroots, protest must involve an issue that conservation advocates care about. In the Huben case, the preservation of Pillow Mountain happened to be a common interest between the two groups. Other conditions such as mutual trust between the two camps are also important. A more detailed analysis of these conditions may form the focus of yet another paper.

Finally, 'authoritarian enclaves' are not necessarily impenetrable. Yunlin County has for many decades been dominated by a local clientele faction, whose economic interests have often undermined the county government's resolve to address broader ecological issues. However, as democratization of the island has progressed and as minority interests have found more channels through which to challenge unreasonable government decisions, it is possible that clientele networks may be weakened over time, thus creating room for the representation of broader interests in making decisions concerning environmental conservation. Nevertheless, it is important to note that the business-oriented clientele networks in Yunlin County are far from being dismantled. As illustrated by Stone's (1989) study of Atlanta, once formed, a local governing regime may survive for long periods of time despite external shocks. The Huben case may represent only a temporary setback for the clientele network in Yunlin. Indeed, the fate of Pillow Mountain is far from certain, and it remains to be seen how various external influences may gradually transform the local political landscape in the long run. In the words of Bridge and Jonas (2002, page 764), "the reregulation of natural resource regimes involves multiple levels of governance, and ... the locus and scale of governance that becomes concretized is contingent on political struggle."

In conclusion, the experience of Huben Village shows how devolved governance may pose a challenge to environmental conservation. Centralization is not necessarily a solution to these challenges. Instead, solutions are more likely to be developed by connecting grassroots victims of environmental degradation with broader conservation movements supported by networks of civic organizations that transcend narrow geographical interests. Effective environmental conservation ultimately depends on the development of nested systems of governing institutions that can effectively balance economic and conservation interests.

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