THE COMPLEX DYNAMIC OF PEOPLE AND PROTECTED AREAS
EXAMINING THE ROLE OF DESIGN
AS A VEHICLE FOR SUCCESSFUL COLLABORATION

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Fig 1. Map taken from a tourism brochure in Huatulco illustrating the 9 bays and existing development. Note also the location of the Bahia de Santa Cruz, Cacaluta and St. Maria Huatulco.

Fig 2. Map indicating the polygon of Huatulco National Park as well as zonification. Areas are designated as: sustainable use 1, 2 and 3, protection, recuperation and restricted use 1 and 2.


ABSTRACT

Shirah Cahill, May, 2009

THE COMPLEX DYNAMIC OF PEOPLE AND PROTECTED AREAS
EXAMINING THE ROLE OF DESIGN
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Mexico’s conservation policy has changed dramatically in the last 30 years to incorporate community development within the goals of natural resource management. Ecotourism has been presented internationally as a promising strategy of attaining these goals by offering local communities the ability to economically benefit from conserving their environment. The distinction between the rhetoric and the reality of this idealistic new form of tourism is considerable. Conflicts between people and protected area management abound, despite the desire on both sides to work together towards a common goal. While much literature has looked at the managerial strategies that should and should not be utilized in order to facilitate open communication, trusting relationships and successful projects, the role of design has not been explored. The following investigation will explore the role of the designer in facilitating decision making through open communication amongst multiple stakeholders, as they seek to find balance between environmental conservation and community development. This project documents a case study conducted in partnership with the CONANP (Comision Nacional de Areas Naturales Protegidas, National Commission of Natural Protected Areas) used to develop a design proposal for an interpretive center within the National Park at Huatulco. The project employs a mixed methods approach with a concentration on participatory strategies to encourage the active involvement of local cooperatives in order to reestablish trust between these groups and the CONANP and to develop a design proposal that meets the requirements of the Mexican Government while addressing the needs of the local community.
“When we see land as a community to which we belong, we may begin to use it with love and respect.”
(Aldo Leopold cited in Lippard 1997, 125)

Whether human beings are part of the natural world or separate from it is an age old question which finds support on both sides of the argument. The debate within the context of conservation has also endured decades. Where do we place the most importance, on the conservation of natural resources, or on the human communities who depend on them for survival? Can conservation and community coexist? Horror stories dominate the literature documenting the history of “people in the parks” on an international scale, and their struggle for basic human rights. The conflicts between rural and indigenous communities and conservationists have been exacerbated by the reality that many valuable ecosystems are found in developing countries where intense poverty mandates a dependence on the land. Nevertheless, as early as the 1970’s the international community began to recognize the need to include local people in the goals of environmental conservation (Stonich 2005). Governmental and nongovernmental organizations alike were determined to learn from past mistakes and move forward with participatory strategies for the common goal of conservation and sustainable resource use. For the first time, communities were seen as having rights to the resources that they had used for centuries (sometimes millennia) and their use of these resources was recognized as a potential compliment to the conservation process rather than an obstacle. In spite of this, while “so-called ‘integrated community-based development and conservation’ have become buzzwords in the national and international environmental conservation circles over the last two decades, the great disparity between the rhetoric and the reality of such efforts has caused many people to begin to give up on such efforts entirely” (Stonich 2005, 79).

25 years ago Huatulco, Oaxaca did not exist on any map. This isolated settlement on the southern pacific coast of Mexico was only accessible by boat or unpaved road until a coastal highway was constructed in 1982 (Brenner 2005). Huatulco enjoys a subtropical climate and sits at the foothills of the Sierra Madre del Sur. It consists of nine beautiful bays and is characterized by an abundance of natural resources. In the 1970’s and 80’s the Mexican government designated 5 sites in Baja California and southern Mexico for tourism development; Cancun, Ixtapa, Loreto, Los Cabos, and Huatulco. These tourism destinations were to be planned and managed by the federal agency FONATUR (Fondo Nacional de Fomento al Turismo, The National Tourism Fund). Huatulco is the youngest of the 5 state planned sites and was originally projected to be finished by the year 2018.

In 1984, a presidential decree led to the expropriation of 21,000 ha. of land, which spanned approximately 35 km of the coast of Oaxaca, for the creation of the upscale tourist destination of Huatulco. This expropriation saw the relocation of about 3000 agricultural and fishing families to planned communities on small parcels of land, making agriculture and subsistence impossible. (Camacho 2000). The local community in Huatulco experienced a massive change
in lifestyle in a very short period of time (Long 1993). The population grew from around 2,500 at the time of expropriation, to 29,437 in 1992 and was originally projected to be home to 300,000 inhabitants by 2018 (FONATUR). Among other controversial factors, Huatulco was designed to look like a typical Mexican village. Oaxaqueño culture is arguably one of the many commodities sold in this federally planned beach resort. The recent history of the local community has been replaced by legends and folklore commemorating the pre-Hispanic civilizations that once occupied the area, thus presenting an edited version of history more palatable for tourist consumption (Camacho 2000).

FONATUR's tourism development in Huatulco did not go unnoticed by environmentalists. By the late 80's a group of artists, writers, journalists and environmentalists began putting pressure on the federal government to designate a portion of the expropriated land as a protected area (Area Natural Protegida, ANP). In 1998, 11,890.98 ha of the expropriated property was decreed a national park. As Huatulco National Park is relatively new, there is currently no tourism development within the polygon of the park. The trails available for visitor use are ancient paths created by the former residents of Huatulco and due to environmental conditions are vulnerable to heavy erosion during the rainy season.

The staff at the national park office in Huatulco has been working with the area residents for a number of years on the development of an ecotourism corridor that will be run by the local communities and pass through various points within the polygon of the national park. One of the proposed projects within the corridor is called Cruz Del Monte La Ceiba. It programmatic elements include; reception, area for permanent exhibition, restaurant, interpretive trails, a bodega, security house and an interpretive exhibition called Retreat to a Pueblo. This project is valued by the local community and is meant to function as an ecotourism initiative that will directly benefit local residents. Developing a site plan that is able to meet both park and community objectives is essential.

For the purpose of this study, I will focus on the designer’s role in the creation of an ecotourism initiative that facilitates successful collaboration among a government agency and community organizations. Ecotourism has been described as a “new” type of socially responsible travel with low environmental impact that promotes conservation and provides socioeconomic benefits to the host community (Norris et al. 1998). While this new type of tourism development sounds promising, planners and managers have found that it is not a silver bullet to sustainable development, local involvement or conservation. Presently, critiques of ecotourism projects dominate the literature. Almost 20 years of experience has shown that ecotourism projects commonly fail due to distrust amongst community members and the resulting unwillingness to work together (Young 1999), and distrust and resentment of conservation officials due to restricted use of natural resources previously assumed to be the property of the local community (Astoff-Burguete 2007). This distrust is often exacerbated by the federal “top down” management strategies utilized in many biosphere reserves and protected areas in developing countries (Young 1999). Finally, a lack of political and social organizational structure needed to control development often results in the consequential takeover by larger foreign investors (Moreno 2005), and the concentration of economic benefit in the hands of a few (commonly most affluent) community members.
Considering the complex nature of designing and planning community run facilities in the context of a national park and the controversial nature within which the tourist destination of Huatulco was created, this project presents a significant challenge. The purpose of the following investigation will be to design a conceptual site plan for the project *Cruz del Monte la Ceiba* that incorporates the various goals and interests of the different stakeholders. While it is impossible to accommodate the exact vision of all participants, the purpose of this investigation will be to utilize design as a vehicle to explore the full range of possibilities and reach an acceptable solution. To do this I will consider the following questions.

What is the designer’s role and what strategies might he/she employ to facilitate successful collaboration between a local community and a federal organization within the context of a protected area in Mexico?

To this end, I must understand:

- What methods and strategies can be successfully utilized to gain the local knowledge required for the design of an interpretive exhibit that is true to the daily practice of the local community and that does not commodify or generalize traditional Oaxaqueño life?
- What are the methods and strategies best suited to facilitate the dialogue necessary to gaining an understanding of the different goals and objectives held by a federal institution and a local community in the context of an ecotourism project within a protected area?
- Finally, what process of information synthesis can be used in order to illustrate the knowledge gained about local practice and the attainment of common goals through design?

Recent literature suggests that the only way to plan a successful ecotourism project is by including the local community in every aspect of its design and planning (Torres 1996). This study will attempt to do this to the greatest extent possible, with the understanding that I am working for the National Park and accordingly must work within their organizational structure. Site visits, observation, focused interviews and mapping will be among the techniques used to understand the site and the various stakeholders. Essential components of this process will include: getting to know the project site and the determining of the most suitable location and layout for the center, gaining an understanding of the local people, the park and their vision of the project, and documenting the essential cultural practices for the purpose of designing a center that can authentically celebrate Huatulco and effectively meet the goals of multiple interest groups. The final products of this investigation will be a conceptual site plan for the project *Cruz del Monte la Ceiba*, which will include a detailed plan of the interpretive center honoring true Huatulqueño practice, and a documentation of the process mediating between a federal organization and local people.
PROJECT BACKGROUND

**History of Huatulco**

In order to understand the complex nature of this project, it is important to consider the history of Las Bahías de Huatulco. In her doctoral dissertation, Michelle Camacho argued convincingly that the creation of Huatulco as a tourist’s “paradise” has mandated the erasure of its true history and replaced it with a more palatable one easily sold to tourists. Tourism brochures and cruise ship captains selectively retell a story that touches on a few key points in the colonial past and romanticizes the “isolated” fishing village Huatulco was before the expropriation. The absence of any recent information on the communities occupying the area before the expropriation is key to understanding Huatulco as an invented place now home primarily to migrants, with an elusive sense of what is local and what is authentic (Camacho 2000). For the purpose of this project, I will be trying to identify just that. Where is the local community in Huatulco and how can their traditions be defined and celebrated?

**Recent History**

The true history of Huatulco has been passed down largely by word of mouth. It is essential to recount this oral record for the propose of designing the project *Cruz del Monte la Ceiba*. A thorough understanding of Huatulco and its people is not only essential for accurate interpretation, but is mandated by the CONANP as a precursor to the design of the project. The community in Santa Cruz is fairly young by historical standards, being settled recently in the mid 1950’s. It is said that another group of people lived on the coast prior to the most recent inhabitants, but that they were entirely wiped out by tropical disease and severe drought. The contemporary settlers of Huatulco came predominantly from the municipality of Santa María Huatulco and the Sierra Madre del Sur. The settlers that came from Santa María have attributed their arrival to increased violence over a land dispute between their pueblo and the neighboring town of Pochutla. To escape the chaos, many families made the long journey by foot to the coast, where they began to settle. Other families are said to have descended from the Sierra due to the lack of arable land resulting from an influx of new population (Brenner 2005).

As more people began to inhabit the area, it changed from an informal settlement to a functioning community. The people of Huatulco obtained everything in their pueblo on their own through hard work and determination. For this reason they were extremely proud of the community that they had built before FONATUR arrived. In the 1970’s they began to get their electricity from Santa María Huatulco and with the help of the government and personal man power, built roads that connected Huatulco to the main highway twisting through the Sierra to Oaxaca City. It was around this time that the citizens of Huatulco also obtained potable water, built a school, a health clinic, a church and a small jail (Camacho 2000). The majority of the population subsisted and depended economically on small scale agriculture and fishing. It is also noteworthy that 97% of the people in Huatulco are monolingual Spanish speaking Mexicans who do not identify as indigenous (Camacho 2000).
The system of land ownership for agricultural use most common in Mexico is the *ejido* system. Under this system, farming cooperatives have claim to land rights and resources that are passed down through generations. The system of land ownership utilized by the communities living in Huatulco was that of common property. “Plots of arable land were handed over to recognized members of the community (comuneros) for individual use, while the remaining land (beaches, forests, lagoons, etc.) was reserved for common use” (Brenner, 2005, 150). The distinction between common property and *ejido* land is that *ejidos* are divided up into individual parcels, where common property is used by all comuneros. Ejido land cannot be expropriated except under very rare circumstances, the expropriation of communal land however, is possible as long as it “serves and benefits the greater national goals.” (Camacho, 2000)

**Huatulco the Tourist Destination**

During the 1970’s and 80’s the Mexican government created five new tourist destinations in southern Mexico and Baja California, based on information gathered in the 1969 Banco de Mexico Report. The projects were meant to generate economic growth in the nation’s poorest regions. “Tourism was considered promising because it was both capital and labor-intensive and therefore attractive both to international lending institutions such as the World Bank and to Mexico’s burgeoning population seeking employment.” (Clancy, 2001 and Jud, 1974 cited in Gullette, 2007, 603). As mentioned previously, the sites designated as new tourist destinations included; Cancun, Ixtapa, Loreto, Los Cabos, and Las Bahias De Huatulco. Each of these new tourist destinations were developed by the federal agency FONATUR (Fondo Nacional de Fomento al Turismo). Among other things, FONATUR is responsible for “constructing and maintaining infrastructure, granting loans, attracting investors and selling property,” most noteworthy is FONATUR's ultimate authority over land use (Brenner, 2005, 142).
Huatulco fell under government speculation in 1983. Census takers arrived in the small coastal communities and began to record who was living there and who was considered a *comunero*. Because the federal officers taking the census never stated their purpose, many people assumed they were collecting taxes and did not participate (Camacho 2000). It was also at this time that a meeting with community members and government officials took place, at which the officials asked if the community would like to extend the borders of their municipality to include the land designated to Santa Maria Huatulco. Because the community members thought that by voting to extend the limits of their municipality they would be granted their land titles, they voted yes (Camacho 2000). Shortly afterwards, in 1984, a presidential decree expropriated the land now considered one municipality, for the future tourist development of Las Bahías de Huatulco. There was much resistance at first on the part of the local community until the murder of two prominent leaders of the protests. People believe that the murders were executed by representatives of FONATUR in order to quell the resistance. Whether or not this is true, the murders as well as the introduction of armed forces needed to “maintain peace” silenced resistant voices and increased a hesitant cooperation (Camacho 2005).

As Huatulco is the most recently developed of the “state-planned tourist destinations,” it was supposedly planned with the knowledge gained from the previous four developments. FONATUR had learned from the social and environmental mistakes committed in the recent past and designed special measures to mitigate the impacts of development. This being said, the hypocrisy in their development strategy is apparent on multiple levels. For example, there was much conflict regarding the relocation of the original residents and deciding how much to reward those “eligible” for compensation. Due to lack of communication on the part of FONATUR and the resulting lack of participation on the part of the community members in the original census, many residents were not listed as *comuneros* and were not “eligible” for any compensation. Additionally, FONATUR only gave compensation for the value of built structures (mostly beach shacks) and crops planted, rather than the land itself. “If compensation were to be compared to size of land plot, the range of payment would vary from 90 centavos per square meter to 12 pesos per square meter…FONATUR by contrast, sold the same lots of land for about 25,000 (pesos) per square meter” (Camacho 2000, 61).

A body of literature examining the results of FONATUR's attempts at creating a socially and environmentally sustainable tourist destination have shown that mitigation techniques have not prevented social marginalization or poverty (Brenner 2005). Interestingly, migration from Huatulco to the United States and other parts of Mexico has actually increased since the new development and is happening at a rate considerably higher than the rest of the state (Gullette 2007). In light of these recent events, it is of the utmost importance to celebrate the traditions, practices and history of native Huatulqueños in the interpretive center within the CCC. It is also critical to work with the local community on the design and planning of the project in an effort to break the cycle of marginalization that has characterized the area.
The Formation of Huatulco National Park

While FONATUR claims to have had ecological goals in mind when considering the development of Huatulco, the creation of a national park was not part of the original plan. The most prominent actors in the formation of Huatulco National Park were an artist couple named Agar Garcia and Leonardo D’jandra. While they are not native Huatulqueños, they had been living in Cacaluta (the area where the project site is located) since before the expropriation. The couple also took great interest in Huatulco’s cultural conservation. They formed a cooperative called the Taller Estetico y Ecologico del Tropico (TEEDT from this point on), which they used to raise awareness about environmental conservation as well as the celebration of Oaxaqueño culture. In 1991 they helped to organize Huatulco’s first eco-cultural week (semana eculturistica). Many officials attended the event and the couple utilized the opportunity to publicly begin their platform on the environmental conservation of Huatulco.

By the third eco-cultural week in 1995 the TEEDT had gained momentum and support from journalists, artists, writers, television programs, photographers and environmentalist among others. It was at this time that they officially began to appeal for the designation of a protected area within the expropriated property, taking into account that there were 10,000 hectares “that thanks to the economic crisis had not yet been covered in concrete.” (Mateos, Enviada 1995) A petition was signed by all supporters and sent to the president of Mexico, Ernesto Zedillo. During the next three years correspondence continued between the TEEDT and the federal government. This finally culminated in the designation of 11,890.98 hectares of the expropriated land as a national park on July 24th 1998.
Environmental Characteristics

Huatulco National Park falls under the classification of *selva baja caducifolia*, which is characterized as a sub humid, dry, tropical forest. This area has a rainy season from July to October and an extreme dry season that persists during the remaining eight months of the year. During the dry season, the jungle changes from green to brown and vegetation loses its leaves completely. The *selva baja caducifolia* is home to a diverse biological community, statistically claiming to house 30 to 50 species per .1 hectare. The marine area of the reserve is also biologically diverse, containing an impressive number of fish, crustaceans and mollusks living in and around the coral reefs. Most notable is the existence of the caracol purpura (*Plicopurpura pansa*), which has been utilized for centuries by the Mixtec communities of Pinotepa de Don Luis to dye fabric. The Mixtec are one of the many indigenous groups living in the state of Oaxaca. Because of its exploitation by a Japanese firm in the 1980's the species is now protected on Oaxaca's Coast. As the Mixtec people posses the necessary knowledge needed to utilize the dye that the animal excretes for protection without killing it, they are still permitted to use this resource as they have since pre-Hispanic times (*Programa de Manejo, Parque Nacional Huatulco*- Management Program, Huatulco National Park 2003)

The Legend of La Cruz del Monte

The legend of *La Cruz del Monte* is the story of how Huatulco got its name. It tells of a white bearded man, with blue eyes appearing on the beach of Santa Cruz, long before the Spanish arrived. This old man was apparently mistaken as the god Quetzalcoatl by the natives, while some modern writers identify him as Saint Thomas. The old man placed a wooden cross (Cruz) into the sand on the beach and taught the indigenous people to worship it. After the Spanish conquest, Huatulco was attacked numerous times by English pirates searching for gold. Legend has it that the most famous of these pirates, Sir Thomas Cavendish made various attempts to destroy the cross, angered by his failure to find gold. He tried to burn it, saw it off and rip it out of the ground but the cross remained unscathed. Ultimately distressed by these futile attempts, the pirate had the village burned to the ground. The cross remained unharmed. When the Aztecs invaded the region, they gave the village the Nahuatl name *Cuauhtolco*, meaning place where the wood is worshipped. Pieces of this cross can still be admired in Cathedrals in Oaxaca, Puebla, Mexico City, Santa Maria Huatulco and Rome.

The oldest tradition in Huatulco is the pilgrimage made from the surrounding communities to the cross on the beach of Santa Cruz on the first Friday of Lent. Before the expropriation, people would meet at Santa Cruz, share food and trade goods. Many people still celebrate this tradition but its lively public spectacle has been lost. People say that FONATUR did not like the sight of “dirty Indians” on the beach where tourists could see them. The trail that has been stamped down over centuries by communities traveling on foot to see the holy cross still exists in the national park as does a small shrine dedicated to the Cruz just outside of its border. This trail has been proposed as the main entrance to the project site thus incorporating those who still celebrate this tradition into the tourism activities of the park as well as celebrating the cross's importance in the history of Huatulco.
Cruz del Monte La Ceiba: The Project

After the expropriation in 1984, many local people formed tourism cooperatives and began bringing tourists by boat (lanchas) to visit the bays. These tours entered the marine portion of what was to become a national park in 1998. After the park was formed, the federal government instituted what is called a cobro de derechos (a mandatory tax) for entrance into the park. The members of the tourism cooperatives did not understand why they should have to pay for something that they had always used for free. In order to justify the payment of the tax, the tourism cooperatives felt that infrastructure should be built inside the park. They requested small scale development such as signage and a boat dock as well as ecotourism activities within the terrestrial portion of the park that they could utilize when they were unable to go out to sea for various reasons. The park agreed to realize the project, but never did anything.

When the park failed to act on this commitment, the members of the tourism cooperatives responded by refusing to pay the tax and going on with their daily tourism activities as usual. Problems came to a head when the marines were called in to detain the members of the tourism cooperatives while they were out at sea with tourists. No force was inflicted, but tourists were scared and an ugly scene was caused. The use of the marines infuriated the tourism cooperatives who responded by storming the National Park offices with the purpose of forcefully provoking the (then) director to resign. She did not resign, but the project Cruz del Monte La Ceiba was born.

The plan for Cruz del Monte La Ceiba was originally completed by an ecotourism consultant in Huatulco. He worked with the community members in the cooperatives and with professionals such as architects and tourism specialists to develop interpretive trails, and an interpretive exhibit that was called Retrato de un Pueblo (Retreat to a Pueblo). Retreat to a Pueblo was designed for the visitor to be transported back in time to a Zapotec Pueblo. Because the park lacked the funds for implementation, after collecting the proposal and project report, the park staff put it away and ceased to involve the ecotourism consultant. When I began working on this project, the park was not aware that he had brought the plan nearly to completion. As a result of the friction between the consultant and the park, he chose not to share the work he had done with the staff, providing them only with what they asked for and keeping the remaining pieces in his archives. Four years after the project was solicited, it remains on paper and in a drawer. The community groups that originally solicited this development are still interested in seeing it through, but have lost respect and faith in the National Park (all information gathered through interviews with park staff, the ecotourism consultant and community members).

Given that the current park staff was not aware of the extent of work that had been completed on the project, I had to facilitate communication between the original consultant and the park in order to avoid redoing elements of the project that had already been done well. My work was to review the project and then update and enrich those aspects of the plan that had been completed. It was important to reengage the design of the interpretive piece in order to create something that was uniquely Huatulqueño. Zapotecs are one of the Indigenous groups living
in Oaxaca. While Huatulco was formerly inhabited by Zapotecs, Chontales and Mixtecs, as previously mentioned the current residents of Huatulco do not identify as indigenous and resent being classified in this way by the Mexican government attempting to market Huatulco as exotic. For this reason, I have proposed changing the Zapotec pueblo to a Huatulqueño pueblo, as I believe that Huatulco does not need another exhibit glorifying the deep past while ignoring the recent history of its residents. The design process utilized in this investigation, facilitated the participation of the local community in order to create the first project in Huatulco that does not sacrifice local identity for consumption.
Conservation in Mexico

Given that Huatulco National Park (NPH for its Spanish initials) was only recently established, considering what preceded it in Mexican history is helpful in order to understand its current challenges. Similar to many developing countries, the history of conservation in Mexico has been one riddled with problems. Conflicts between communities utilizing natural resources for survival and professionals attempting to conserve them, the constant industrial pressure to increase exploitation of raw materials in order to advance to the first world and the government's inability to enforce environmental regulation, are all factors that have contributed to the intense destruction of Mexico's natural resources. This being said, there have been a number of pioneers who have successfully fought for the conservation of Mexico's wildlife. In fact, the first national park El Chico was established in the state of Hidalgo in 182, more than 60 years before the creation of Yellowstone National Park in the United States (Faust and Smardon 2006).

Miguel Angel De Quevedo was one of Mexico's first and most well known environmentalists. While working under the administration of President Cardenas(1934-1940), conservation was made a priority. Together Cardenas and Quevedo established 0 national parks. Given Mexico's land-use policy, this was a challenging task. The constitution prevents the sale of communal land and the majority of Mexico's forests are communally owned by campesinos.3 This meant that the government had to solicit support from Mexico's rural poor in order to establish the parks. Land disputes have been a source of conflict between campesinos and officials persisting into the present. Unlike many Mexican presidents however, Cardenas showed compassion for the poor. While he used taxes as incentives to stop deforestation, in 1938 the government declared that "the campesino who lacks other means of a livelihood than individually using the forest can take forest products to the market (up to 15 pesos worth weekly) without fear of the tax collector." (Simonian 1995, 92) More commonly however, Mexican policy has catered to the rich industrialist while ignoring the plight of the campesino.

The inability of the Mexican government to enforce environmental law has deep roots in its colonial history and is still vividly apparent in various contemporary challenges. For example, with the election of a new president every 6 years, the country also experiences a complete overhaul of environmental agencies, personnel and responsibilities. “This has had costs in terms of continuity in programs, institutional memory, and the longitude of professional expertise. Mexico does not have a professional civil service with permanently employed experts; those who are in government service for one six-year period are frequently later to be found in academia or business, using their accumulated knowledge in other ways.”(Faust and Smardon 2006, 175). Additionally, the allocation of responsibilities has traditionally been spread out among various federal agencies, creating a highly factioned governing body. It was not until the election of President Zedillo in 1994 that an independent government ministry was established for the management of all natural resources including forests, fisheries, biosphere reserves and other protected areas (Faust and Smardon 2006).

The ministry established by President Zedillo was called the Secretaria de Medio Ambiente, Recursos Naturales y Pesca (SEMARNAP, Secretariat of the environment, natural resources and fish). However with the election of Vicente Fox in 2001, the SEMARNAP was changed
to the Secretaria para el Manejo de Recursos Naturales (SEMARNAT, The secretariat for the management of natural resources), thus transferring the regulation of fishing to the agricultural ministry. Under President Zedillo, The National System of Protected Natural Areas (SINAP for its Spanish initials) was created, which was similar to the National Park’s Service in the United States. President Fox also changed this agency to the Comision Nacional de Areas Naturales Protegidas (CONANP), which continues to be an official agency of the SEMARNAT responsible for management of protected areas in Mexico today. To be clear, Huatulco National Park is part of the CONANP which is an agency of the SEMARNAT. This brief chronological example illustrates the ever shifting power dynamic and allocation of responsibility characteristic of Mexico’s official environmental bodies and is key to understanding their seeming inability to govern efficiently. Also noteworthy is the lack of funds allocated to these agencies to fulfill their mandate. The result is a factioned governing body with officials that must struggle to attain the resources needed to accomplish their goals (Faust and Smardon 2006).

People in the Parks

The concept of the “park” was invented in the west (Harper 2002 cited in Wallace 2005), but it was the U.S. model of the national park, controlled and regulated by a National Park Service that has been most commonly adopted by the developing world (Brechin et al. 1992 cited in Wallace 2005). The utilization of a system developed for a wealthy nation and which “grew out of a mixture of romantic idealism, anti-urbanism, nationalism and commercialism” (Wellman 1987 cited in Peters 1998, 65) as the primary conservation technique of the third world has been highly criticized. Gonzalo Halffter, a prominent critic of the national parks system in Mexico, argued that the system made sense in the United States where there were few demographic pressures, a tradition of concern for nature, the financial capability to take land out of production and the administrative capacity to ensure its protection. Mexico however, did not possess these characteristics (Simonian 1995). Halffter further criticized the failure of Mexico’s parks to address the needs of the people, arguing that in poor nations, development must accompany conservation.

The salience of local and regional development to the goals of conservation was recognized by the international conservation community as early as the 1970’s (Stonich 2005). Most notable was The Man and the Biosphere Program which was initiated by the general conference of the United Nations’ Educational, Scientific and Cultural Organization (UNESCO). This program was meant to provide the knowledge, skills and human values essential to a harmonious relationship between human beings and the environment. It was noted that worldwide poverty made it impossible to completely restrict man’s utilization of the land and instead sought to implement strategies that would lead to sustainable development (Simonian 1995). The biosphere reserve program instituted a zonification of protected areas that permitted varying levels of use from low impact development to total restriction. The purpose was to enable local communities to economically benefit from their environment without exploiting natural resources. After the UNESCO conference in Mexico City in 1974, the Man in the Biosphere Program was implemented in Mexico with the help of Gonzalo Halffter. One of Halffter’s contributions to the biosphere program was the inclusion of the community in its development. Halffter felt that it was not enough simply to solicit community support, but that it was necessary for local people to have a direct say in how things were run. While this practice has not been unanimously adopted by professionals or officials in Mexico, there have been cases where the government has worked successfully with community groups on the development programs for conservation through a participatory process.4
Since the implementation of the Man in the Biosphere program in 1970, numerous programs have been initiated on an international scale for the purpose of integrating conservation and development. One example is The Wild lands and Human needs Program, which was initiated by The World Wildlife Fund in 1985. This program originally implemented approximately 20 integrated conservation and development projects (ICDP, now commonly referred to as community based conservation projects), that were meant to “improve the quality of life of rural people through practical field projects that integrated the management of natural resources with grass roots economic development” (Larsen 1997 cited in Stonich 2005, 80). The first generation of ICDPs implemented in the 80’s have been criticized for not thoroughly involving the local community and in fact not being integrated at all. Literature on the second generation of ICDP’s implemented in the 90’s to the present however, has noted their improvement based on past lessons learned. These projects supposedly ceased viewing local communities as a hindrance to conservation efforts, and began to recognize their rights and responsibilities to contribute to resource management (Stonich 2005).

The difference between the rhetoric of community-based conservation and the reality however, continues to be problematic. This inconsistency is brought to light in a study of the Ranomafana National Park in Madagascar. The creation of this national park in 1991, resulted in the expropriation of 41,601 ha of land and adversely affected 27,000 local residents. There were no formal mechanisms to solicit community participation. The government viewed residents as a threat to conservation efforts while the residents saw the government as a threat to their livelihood and way of life. This situation, coupled with a history of conflict between colonists and native people made further conflict inevitable. Because the resident population was never educated about the objectives of the park, they were unwilling to cooperate with officials and even threatened those who attempted to enforce conservation law. Corruption, lack of communication and top down management are all unfortunate characteristics of this park’s establishment and management practice. The author of the study laments that “Despite this apparent failure of project administrators to adhere to the basic principles of conflict management and resolution, the Ranomafana National Park and its associated integrated conservation development project (ICDP) are touted in the press and literature as examples of promising conservation and development efforts” (Brody 1998; Bohlen 1993 cited in Peters 1998, 71). This example illustrates the unfortunate distinction between the rhetoric of inclusive conservation practice and the reality. In the wake of much idealistic literature, it is important to recognize that many projects, programs and policies that look good on paper are in fact failures in the field.

**Participatory planning**

As mentioned previously, the techniques applied to meet conservation goals have changed dramatically over the years. “Rather than excluding and relocating local people to create parks, the current strategy supports engaging the local populations in protected area management based on the theory that long-term conservation efforts have a greater chance of success if conservation activities involve local people and provide opportunities for improvement of their economic well being” (Ericson 2006, 243). In the late 70’s and early 80’s, participatory techniques began to gain popularity in response to the formerly utilized “top-down” strategies of conservation planning and research. While the premise of community participation seems promising, many researchers have pointed out that in some situations, funding organizations use “participation” as a means of soliciting support from community groups in order to reach desired outcomes (Ericson 2006). Michener (1998) separated participatory strategies into two categories, those with planner-centered and those
with people-centered benefits. The former is characterized by an administrative and financial focus that utilizes participation as a technique to gain local support, potentially exploiting indigenous knowledge and labor. The second, people-centered participation, is what most people regard as participatory planning, whereby the local population is empowered through direct involvement in the project, capacity is built and confidence is gained (Michener cited in Twyman 2000). In order to understand the complexities of contemporary participatory projects, one must remain critical and mindful of the potential disparities.

Researchers have also defined varying degrees of participation. Ericson separates these into 6 subgroups which range from passive participation to community self-mobilization. It is important to recognize that not all participatory strategies involve the local community to the same degree or facilitate the same benefits. Ericson also makes a point to identify the strengths and weaknesses of a participatory approach with regards to conservation research.

Strengths to the participatory process:

- The ability to give a voice to diverse perspectives, which can enrich the products of research as well as facilitate communication among participants.

- The utilization of activities whereby participants produce visual products; Ericson claims that these activities encourage reflection on topics that are commonly overlooked while employing conventional techniques, and improve the rapport between researcher and participant.

Weaknesses of the participatory process:

- The difficulty in maintaining substantial community participation the “higher the information moves.”

- The potential to raise the hopes of community members who feel that the researchers have the power to influence changes outside of their control. Many communities targeted for participatory research are in need of economic support. Conservation research is often focused on issues that don’t concern these communities by virtue of the fact that the results cannot affect them monetarily. For this reason, the intentions of the researcher can be easily confused and the hopes of community members can be raised anticlimactically.

It is imperative to recognize the strengths and weaknesses of this approach when working with a community in order to take full advantage of its potential and avoid the ethical problems that may result from miscommunication.

Tourism in Mexico

In many ways the evolution of tourism has paralleled that of conservation in its eventual recognition of the social implications of its development. Literature on general tourism trends documented a strong economic and social idealism in the 60’s and 70’s that resulted from technological improvements in the fields of transportation and communication. It was believed that tourism would improve the economic position of the south (developing nations in a general sense) through the increased foreign investment of the north (the first world). This position lead to federal investment on an international scale in numerous third world destinations. In the 80’s, when tourism had not provided the expected economic
benefit, people began to view foreign investment as taking advantage of the natural and cultural resources of the third world. Idealistic visions were replaced by tourism centers characterized by environmental degradation and social marginalization. In the late 80’s, in response to past mistakes, tourism development in the south began to stress the social and environmental impacts of investment and aspire for sustainable growth (Brenner 2005). An example of this phenomena can be seen in FONATUR’s attempts to mitigate for the social and environmental impacts of tourism development in Huatulco. Unfortunately, similar to community based conservation strategies, the difference between the rhetoric and the reality of this sustainable and socially just tourism policy is significant.

Like other developing countries, Mexico has viewed tourism as a promising strategy to remedy its economic problems and promote regional development through increased foreign investment. In order to reach these goals, the federal organization FONATUR was established as an agency of the SECTUR (Secretaria de Turismo, Ministry of Tourism) in 1974. One of its primary functions was to create “State Planned Tourist Destinations”. FONATUR has given priority to a handful of targeted locations for state funded development of mostly luxury tourism. Evaluation of these destinations has shown that attempts at economic development through tourism at the national and regional level have failed for various reasons. Among these reasons, most noteworthy are:

- The fluctuations in the tourism industry. This applies both to fluctuations in international tourism resulting from the changing value of the peso and the temporal nature of tourism based work. In most tourist destinations including Huatulco, employment stability is drastically affected by cutbacks in staff during the low season which usually lasts about half of the year (Brenner 2002).

- The reality that most tourism related jobs are precarious and low skilled. In the case of Huatulco and other state planned tourist destinations in Mexico, this situation has resulted in most qualified jobs being given to an imported work force, leaving menial labor to the locals; a notable consequence being marginalization and social segregation (Camacho 1996).

- Lack of planning on the part of FONATUR for the massive migration to tourist destinations. This has caused social marginalization through the formation of shanty towns of migrant workers without access to necessary services such as piped water or electricity (Brenner 2005).

- The inability of regional and local enterprises to support tourism development. As a result most work is contracted out to larger firms in more established urban centers. This trend is also seen in souvenir production and sale. FONATUR originally planned for Huatulqueños to sell handicrafts in the markets proposed in Huatulco’s new town center. Because the crafting tradition in Huatulco was not diverse enough to support tourist demand, most crafts are imported from other areas in Oaxaca and more established tourist centers like Mexico City and Acapulco, thus not stimulating the local economy (Brenner 2005).
To date, Mexico’s tourism strategy has focused primarily on the creation of “conventional beach enclaves” which have failed in attaining their proposed goals. Oppermann (1992, 1993) made a distinction between two types of international tourism which he referred to as “formal mass tourism, based on large-scale national and international investment and drifter tourism, marked by small scale investment mainly on local initiative” (Oppermann 1992, 199 cited in Brenner 2005, 50). He points out that formal mass tourism tends to create enclaves in capital city and coastal areas that are isolated economically from their hinterlands, whereas drifter tourism is characterized by local participation and control as well as regional economic linkages. In response, researchers have pointed to examples in Costa Rica and Belize where small scale community based tourism initiatives have succeeded in promoting local and regional development and have stressed the need for these types of projects to gain momentum in Mexico.

Ecotourism Potential and Paradox

As an alternative to conventional tourism, ecotourism provides a promising strategy for local and regional development. It is unique in that it combines the goals of economic benefit with environmental and cultural conservation. While the concept of ecotourism has been defined and re-defined, certain components of the definitions are most salient. Ecotourism is an alternative form of tourism with low cultural and environmental impact that promotes and facilitates the conservation of natural resources while providing economic benefit to the local community. “The theory behind it is simple: because most of the destruction of forests and other habitats is driven by people’s need to grow crops or earn income to support their families, such destruction can best be prevented if continuing sources of employment and income are created that depend upon keeping the resource intact” (Norris et al. 1998, 30). In a study by Brenner and Job on the famously unsuccessful Monarch Butterfly Biosphere Reserve in Mexico, they argue that “It becomes clear that ecotourism is far more than just a specific segment of the tourism market; rather, it is an ambitious strategy for sustainable regional development into which numerous actors with divergent interests should be explicitly incorporated” (Brenner and Job 2006, 10). Viewing ecotourism in this light is key to understanding its many challenges. At the same time, it is important to acknowledge the projects that have been created by innovative communities, designers, planners and resources managers that have successfully reached ecotourism’s lofty goals. The following section provides examples of community based ecotourism (CBE), which is defined as ecotourism...
developed and managed by and for community members in order to meet their own needs (Norris et al. 1998).

Innovative ideas

A common cause for the failure of ecotourism projects is their tendency to only benefit a small percentage of the local community. While community members may appear to share common characteristics, it is important to remember that individual members are not one homogeneous group. By treating a community as a single unit, less powerful members may be left out of ecotourism initiatives and therefore not benefit from their development (Sproule 1996). In Southern Belize, various Maya and Garifuna communities have formed a network called The Toledo Ecotourism Association that works towards the creation of community-based ecotourism initiatives in the region. In order to ensure the participation of multiple communities and multiple members, this organization has instituted a system of “rotating food providers.” Families who want to participate are required to attend a workshop in food preparation and health standards, and are then allowed to take a turn in providing food for the visiting tourists. No more than four tourists at a time are allowed to eat at an individual family’s home, thus ensuring that the economic benefit is spread throughout the community. 80% of the food revenue is given directly to the family while the other 20% is put into a community fund. A list is also publicly posted to ensure clarity in the rotating schedule as well as financial transparency (Sproule 1996). Within this system, all community members who wish to participate can and those who do not are still able to economically benefit from the project.

It could be argued, that this project was successful because it was planned and organized according to the local systems already in place. Basing organization on a rotation amongst individual family units increased the probability of maintaining order and trust amongst participants. Some authors have argued that in order for ecotourism projects to function properly, NGO’s and other development organizations must take into account the community’s ability to cope with impending social/economic/cultural changes. Solutions for potential problems are often prescriptions for training programs and other strategies meant to help communities build a strong organizational structures to support future investment (Moreno 2005). While training and capacity building is crucial to creating ecotourism initiatives, it is important to avoid the assumption that the organizational structure already in place in the local community is not sufficient to deal with increased tourism. On the contrary, the above example shows that a successful project can be achieved if it is designed using the existing systems and working groups already in place in a community.

While it is important to recognize the existing capacities of the local community, it is also necessary to design ecotourism facilities at an appropriate scale. Moreno (2005) presents a series of case studies from the Bay Islands of Honduras, Ambergris Caye, Belize, and Punta Gorda to demonstrate the affects of ecotourism at an exploded scale which the local communities could no longer manage. If not planned properly, ecotourism can have negative environmental and social consequences (Barkin 2002). In a project initiated by an NGO called The Center for Ecological Support (CSE, for its Spanish initials) in Huatulco, scale was a defining factor in planning and development. The CSE led a community run initiative to combat deforestation that resulted from the increased production pressures associated with the development of Huatulco as a tourist destination. Documentation of the project states that the temptation to attract large groups of visitors presented a permanent threat to the communities and the surrounding ecosystems. The coordinators of the project opted
to implement a steady growth of smaller enterprises so that the local communities could eventually begin full control of the activities (Barkin 2002).

Ecotourism Strategies for the collaboration of parks and communities

Respectful collaboration among multiple interest groups is of paramount importance. Building trust between the local community, government officials and NGO’s is essential if a project is going to succeed. It is helpful to consider a successful collaborative conservation project in Latin America as proof that this type of initiative is actually possible. In the 10th region of southern Chile, a group of 8 indigenous communities joined together with NGOs and public officials in the design and implementation of a series of protected parks. A number of key factors have contributed to the successful implementation of this project. While the indigenous communities in Chile do not hold titles to all of the land under their domain, government agencies have acknowledged their right to the land and have valued their input as knowledgeable consultants in the design and planning of the project. Regular meetings were held over a four year period with community leaders and government agencies. Through these meetings, trusting relationships were built among members as community problems were discussed and potential solutions identified. Funding was provided to the local communities for tourism training programs and the construction of community centers, campgrounds and trail systems. All construction was implemented by and for community members. Given that this project is new, it is impossible to determine its economic success from the perspective of increased tourism. It is possible however, to note the successful collaboration of indigenous communities, government and conservation organizations in the planning and implementation of a system of indigenous parks within a protected area.

As illustrated in the example above, it is imperative to identify partners in the process of ecotourism planning (Sproule 1996). Working within a participatory framework has been seen by many researchers as an appropriate strategy to build trust between the various interest groups inherently intertwined in ecotourism initiatives. “Even when projects have a local and rural focus, exceptional efforts must be made to build trust and negotiate with governmental organizations. Governments have the authority. They determine project opportunities and implementation” (Torres 1996, 293). This is especially important to remember when working on ecotourism projects in developing nations where top down management of protected areas is common and it is extremely difficult to maneuver without government support.

Cultural Conservation, the dilemma of authenticity

“There is a problem of commoditization of culture which is not required the consent of the participants; it can be done by anyone.
Once set in motion, the process seems irreversible and it very subtly prevents the affected people from taking any clear-cut action to stop it...Perhaps this is the final logic of the capitalist development of which tourism is an ideal example. The commoditization process does not stop with land, labor or capital but ultimately includes the history, ethnic identity, and culture of the peoples of the world. Tourism simply packages the cultural realities of a people for sale along with their other resources. We know of no people anywhere who can live without the meanings culture provides; thus tourism is forcing unprecedented cultural change on people already reeling from the blows of industrialization, urbanization, and inflation. The loss of meaning through cultural commoditization is a problem at least as serious as the unequal distribution of wealth that results from tourism development” (Greenwood 1989 cited in Howell 1984, 152).

The above quote is a cautionary statement, warning against the very real consequences of marketing cultural tourism. While ecotourism and ethnic tourism have been presented as alternatives with the potential to avoid the consequences of mass tourism development,
critics have noted that these efforts can actually do more harm than good. While traditional tourism often ignores the existence of the local community, ecotourism exposes it to outsiders thus posing a larger threat (Howell 1994). In the wake of this delicate situation, scholars have recognized the need for cultural specialists (often anthropologists) to be involved in the development of cultural tourism projects in order to act as a mediator between entrepreneurs, government officials and the affected communities.

There is a significant body of literature that “exposes and in some cases decries how exhibits, festivals, and government sponsored conservation programs “package” cultural heritage for nationalistic propaganda and tourist consumption” (Bauman, Sawin, and Carpenter 1992, Cantwell 1991, Greenwood 1989, Handler 1987, Herzfeld 1991, Whisnant 1983, Wilson 1976 cited in Howell 1994, 151). This situation is exacerbated in the third world where community groups have even less power to combat the whims of the state (Howell 1994). In Michelle Camacho’s dissertation on the Politics of Progress and the Construction of Paradise in Huatulco, she points out that the selective rewriting of history and the commoditization of culture was a key tactic utilized by the federal agency FONATUR in the creation and sale of Huatulco as a tourism destination. Camacho documents tourist information claiming that locals are of primarily Mixtec and Zapotec descent. “There is a need to create the image of Huatulco as the magical paradise, with reference to an ancient civilization, however, the community does not concur with the fanciful indigenous images described. They are poor folk, marginalized by the rest of the nation, monolingual Spanish speakers, and their most outstanding feature has less to do with their connection to pre-Columbian society and more with the extent to which they have been nationally neglected” (Camacho 2000, 07).

In a similar example, Papson (1981) documents how the “provincial government of Nova Scotia and Prince Edward Island” selectively retold pieces of marketable history for tourist consumption and reconstructed “historical props, living history displays and community events” in order to conform with the marketed images (Papson 1981 cited in Howell 1994). Papson has defined this type of cultural display for tourist sale as spurious culture. He asserts that even if tourists recognize that the “culture” they are witnessing is contrived, the invented display takes on a life of its own, potentially replacing authentic cultural practice and distorting local people’s sense of identity. In Huatulco, stores are filled with artisanal crafts imported from other regions of Oaxaca and brochures depict images of indigenous women dancing in traditional dress. After careful analysis, Camacho concludes; “The...history of this region was usurped for an image of the history of Mexico popularized abroad, a mythical history of magical people. Tradition is exhumed, authenticity is staged” (Camacho 2000, 108).

Some researchers have argued that authentic culture and tradition do not exists because of the nebulous nature of cultural creation. Traditions and practices are in a constant state of change, consistently influenced by outside sources and conflicting agendas (Handler 1984 cited in Howell 1994). In consideration of the complexities inherent in authentic representation, Howell (1994) contends that the difference between spurious and authentic culture becomes ambiguous. She challenges; “Perhaps then, the crucial issue in heritage tourism is not staging per se, but rather, who constructs culture, and on behalf of whom”(Howell 1994, 153). She further explains that cultural interpretation will always be problematic because all cultural information is recounted by distinct groups of people from various vantage points. She suggests that it is the work of the cultural specialist to solicit information from all relevant voices and search for strategies to incorporate multiple perspectives in cultural conservation projects.
Interpretive design

“Landscape’s most crucial condition is considered to be space, but its deepest theme is time.”
(Rebecca Solnit in Lippard 1997, 14).

The recent rise in popularity of cultural and heritage tourism has challenged designers and planners to seek interpretive strategies that are capable of authentically representing the past while simultaneously providing a positive visitor experience. Interpretation has been defined as “an educational activity that reveals meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media” (Knudsen et al. 1995 cited in Jones and Hoversten 2004). The educational component of interpretation as well as the potential to teach tolerance and respect for other cultures is what sets it apart from other types of landscape design (Thomas 2000 cited in Jones and Hoversten 2004, 162). Jones and Hoversten separate interpretive exhibits into two categories which they refer to as overlay and lifeway. Overlay is characterized by descriptive exhibits that are presented in a lecture-like format emphasizing statistics and facts and lacking a strong story line. In contrast, lifeway fully integrates the visitor into the site by presenting alternative points of view in authentically re-created or restored cultural landscapes. While the ability to re-create authenticity presents a significant challenge, studies have shown that perceived authenticity will heighten visitor experience (Chhabra et al. 200). The following section will briefly discuss key interpretive strategies that have been highlighted in the literature. While these strategies take on various forms, they share the common goal of re-presenting the past in an attempt to prolong its memory.

Theming

Perhaps the most familiar form of interpretation is that of theming which was popularized by Walt Disney in his famous re-creations of American history at Disneyland theme parks. Historical geographer Richard Fracaviglia laments that while “Disney-bashing” is common in his field, Disney’s depiction of historical American life in attractions like Main Street and frontierland have popularized a love for history and pride in certain American ideals. This being said he notes that Disney “aggressively edited” what was represented in his theme parks and thus held the power to write the history that main-stream America would remember (Fracaviglia 1995). Ada Louise Huxtable (1997) makes the distinction between a “real fake” and a “fake fake,” marking the slight difference between places with a historical past that have commodified it for sale and places with invented historical themes and no real connection to the history of a site. Similar to other scholars, she warns against the ethical problems inherent to both types of invented history. The worst case scenario being when people buy the fake as real and even prefer it, thus erasing “less sexy” portions of true history (Shanken 2007).

Staging

There has been much scholarly critique of the heritage tourism industry claiming that it presents “a tabloid history that turns to “shallow titillation” (Walsh 1992 cited in Crang, 416). It becomes nearly impossible for the tourist to find anything authentic as all pieces of preserved history, are heavily inundated with signs reasserting their historic-ness, telling the tourist why they are important and valid. “There is no unmediated encounter with the past, and everything becomes a sign of itself” (Culler 1981 cited in Crang, 416). This in turn motivates a desperate search for the real thing, in which people happily borrow the personas and accoutrements of those whom modern mythology defines as quintessentially
real” (Handler 1987 cited in Crang 1996, 416). This method of interpretation can broadly be referred to as staging but can take on various forms. Reenactments or other forms of “living history” give contemporary people the opportunity to act out past events and experience them in a self-reflective way (Crang 1996). Staging ranges from paid employees acting out historical events in a museum atmosphere to volunteers from the general public reenacting time periods by assuming different characters and living out history through the persona of others. In Scandinavia, Viking markets have become popular tourist spectacles. Usually held in a historically pertinent locale, these markets feature people from various walks of life dressed in traditional Viking clothing and pedaling Viking wares. They have also become a stage for combat, horse riding and craft demonstrations. Reenacting history gives tourists the opportunity to immerse themselves in the past rather than act as passive observers of artifacts. The degree of authenticity in this type of interpretation is debatable, but also calls into question once again, the true authenticity of any cultural experience. Scholars have pointed out that there is a degree to which all cultures are “staged” and in a sense “inauthentic.” Cultures are invented, remade, reorganized and are often the product of considerable outside influence (Crick 1989 cited in Chhabra 2001).

Metaphor

Metaphor has been used in interpretive design artistically to express certain concepts, positions or memories that demand more powerful imagery than can be attained through literal representation. Memorial sites have often used metaphor as a method of conjuring up feelings from past events in order to provide an emotional experience for the viewer. A civil rights memorial designed by Maya Lin features black granite and water. “Water becomes the theme and the content, as it runs down behind the oval black table and bubbles up from the table itself....” (Lippard 1997, 108). Martin Luther King’s words quoting the bible are inscribed in the wall behind the granite oval, “We are not satisfied and we will not be satisfied until justice rolls down like water and righteousness like a mighty stream.” Water becomes a metaphor for healing as it runs over forty names of men, women and children killed in the struggle for civil rights (Lippard 1997). In a second example, a native Canadian (Ojibway) artist named Rebecca Belmore organized an event by gathering native Canadian leaders, poets, social workers, activists and writers for an exhibition on tourism and nature. The event called “Speaking to their mother” in Ojibway featured participants voicing concerns regarding land rights and self-determination to their mother earth through a two-meter wide megaphone in the Rocky Mountains. The giant megaphone became a symbol for public address. “Protest often falls upon deaf government ears,” said Belmore, “But the land has listened to the sound of our voices for thousands of years” (cited in Lippard 1997, 15).
GOALS AND OBJECTIVES

The State of the Question

Presented here is a significant body of literature providing background on conservation and tourism in Mexico and the many challenges inherent to designing initiatives within this context that have the ability to stimulate positive community development. Also presented, is the complex nature of “authentic” representation in heritage tourism and the ethical problems of commodifying culture as a product for sale. To date, the literature most thoroughly documents methods and strategies of dealing with community ecotourism development from a managerial perspective, but there is very little literature on the subject from a design standpoint. Within the context of cultural conservation, the need for cultural specialists (namely anthropologists) is mentioned, but the role of the designer in giving voice to the community who’s culture is being interpreted in not addressed. This investigation presents the opportunity to discover the role of design within these very complex issues and aims to illustrate the power of graphic communication in visually representing the common goals of various stakeholders. While the capability of designing an “authentic” interpretive center is debatable, this study aims to address Howell’s question of “who constructs culture, and on behalf of whom.” Through participatory strategies, design will be utilized to give form to the voices of native Huatulqueños while incorporating the larger goals of Huatulco National Park and the CONANP for the realization of a project that celebrates local memories of local culture for the benefit of local people.

Goal 1: Facilitate communication among multiple interest groups

Objectives:

- Coordinate meetings among those interest groups who have lost communication
- Utilize graphic communication to explain ideas and illustrate common goals
- Maintain transparency in all elements of my process when dealing with various stakeholders

Goal 2: Design a project that can be run by and for community members

Objectives:

- Work closely with community groups in order to gain understanding of existing organizational structure so that goals can be written and met for the process of organizing and implementing the project
- Study local building techniques and materials in order to design a project that can be built by local people
- To the best of my ability, facilitate communication between the local people, private consultants and federal agency that are involved in the planning of this project, in order to maintain transparency in the process, build trust and move forward productively
**Goal 3:** Select appropriate site for the project Cruz del Monte la Ceiba as well as the location of the interpretive exhibition *Retreat to a Pueblo* within the development area.

Objectives:
- Work with community members who have knowledge of the park to determine performance potential of site
- Conduct an inventory that will aid in the creation of analysis maps which identify cultural and environmental components on site as well as areas of high or low building potential
- Utilize standards provided by the CONANP to guide location of the center

**Goal 4:** Celebrate Huatulqueño tradition and practice in the design of an interpretive center that illustrates the voices of the local people and does not commodify “Oaxaqueño” living

Objectives:
- Conduct interviews and document participant observation to gain an understanding of local practices
- Attend community meetings and informal gatherings for multiple purposes in order to gain understanding of current challenges, traditions, values etc.
- Develop graphics that can be used to illustrate what I am learning with the community members in order to confirm my understanding and correct potential mistakes

**Goal 5:** Design a conceptual site plan for the project *Cruz del Monte la Ceiba* that incorporates the vision of all stake holders and successfully illustrates shared goals

Objectives:
- Synthesize goals and objectives provided by the NPH and the CONANP with those of community organizations (find linkages)
- Utilize an iterative design process to share inventory and analysis; present initial schematic plans to the park, the original consultant and the community groups to solicit feedback, incorporated this feedback into the final design

**Goal 6:** Develop successful methods and strategies for mediating between a federal agency, private consultants and community organizations that can be utilize by future designers and planners of ecotourism (and related) projects.

Objectives:
- Follow best participatory practices- as documented in literature and research
- Keep accurate records and documentation of al encounters, meetings and community activities related to the project
- Analyze journal documenting process; pull out opportunities, constraints, strengths and weaknesses of all stakeholders in order to uncover problem areas, potential solutions and opportunities not being taken advantage of
- Be diplomatic
METHODS

This study employed mixed methods drawn from social science and design. This combination of approaches was an attempt to gather information about the people who will be affected by the project in order to reflect their goals, interest and history in a design proposal. Katherine Crewe and Ann Forsyth (2003) describe a typology of 6 approaches to landscape architectural design. They argue that each approach is unique on several dimensions including its goals, process, scale, ethical concern, intellectual knowledge base, audience and relation to the natural world. The approach deemed most appropriate for this investigation is plural design. It is defined as design that is

“...concerned mostly with adapting mainstream design styles to local situations, and giving users a voice in decision making...The approach assumes that users can be given power over their own environment, and addresses larger issues of inequality by dealing with immediate needs” (Crewe and Forsyth 2003, 46).

Plural design suited the intent of this study in that it facilitated participation by the CONANP and the community stakeholders in a collaborative process of design development for the project Cruz del Monte la Ceiba. In order to meet the goals of the project and produce a site design proposal, I used a variety of methods meant to give all participants a voice in the process and facilitate a productive dialogue among stakeholders. The primary goals of this investigation were to evaluate the role of design in mediating between various interest groups for the development of a community project within a protected area and to design a project that can be run by and for community members that will provide them both social and economic benefit.

Primary methods included:

FOCUSED INTERVIEWS
Focused interviews are semi-structured conversations utilized to understand the interviewees’ perspective on specific subjects. During this investigation, a general outline was prepared for each interview. Open-ended questions and probes were used to solicit more specific information on the topics most salient to the investigation. All interviews were recorded through notes and transcribed into the daily journal.

PARTICIPANT OBSERVATION
Participant observation is a strategy borrowed from anthropology in which the researcher actively participates in the activities of the cultural group they are researching. This strategy was used in this investigation whenever possible to gain a deeper understanding of people, practice and place through doing. All participant observation was recorded through photodocumentation and notes. Photographs were organized according to content and notes were transcribed into the daily journal.
OBSERVATION
Observation in the context of this study was learning through watching and carefully documenting what was observed. All observation was recorded through photo-documentation, drawings and field notes. Drawings and photographs were organized according to content. Field notes were transcribed into the daily journal.

MAPPING STRATEGIES
Various mapping strategies were used in this investigation to gain an understanding of the project site and the layout and organization of the settlements in this region. Illustrative diagrams and thematic maps were created to document information gained through these techniques.

The primary components of this investigation can be broken down into two parts. The first phase was the investigation completed while in Mexico. This field work consisted of gaining an understanding of ecotourism, the stakeholders involved in the project, traditional Huatulqueño practice, architecture and settlement patterns and finally an understanding of the project site. This initial investigation built the knowledge base necessary for the second phase which was the development of interpretive strategies and the final conceptual site plan for the project. The entire study was dependant on an iterative process of sharing, confirming, correcting and ultimately refining the final design solution.
TASK 1: UNDERSTANDING ECOTOURISM AND COMMUNITY-RUN INITIATIVES

As highlighted in the literature, there is a great disparity between the rhetoric and the reality of ecotourism and community-run projects. For this reason, I felt it was necessary to investigate those projects currently operating in Mexico. This piece of the project began before arriving in Huatulco and continued throughout the investigation competed there. The purpose was to gain an understanding of what factors contributed to the success and failure of these initiatives before attempting the design of another.

Data Collection:
Participant observation allowed me to understand the ecotourism projects from the perspective of a visitor. Photo-documentation was used to record these experiences and focused interviews were used to gain specific knowledge about the projects from the perspective of their proprietors. Each interview followed the same general format (see Appendix A). A greater understanding of ecotourism in Mexico gained through first hand experience strengthened my ability to work with the community of Huatulco and the various stakeholders involved in this project.

Data Analysis:
Analysis of field notes and interviews were used to pull out trends that commonly contribute to the success or failure of ecotourism projects. This investigation helped me avoid designing a project that was in direct competition with existing community initiatives and acquainted me with the opportunities and constraints common to ecotourism projects in Mexico.

TASK 2: GETTING TO KNOW THE STAKEHOLDERS

The stakeholders involved in this project, were the local cooperatives and the national park. It was critical to develop trusting relationships with all interest groups in order to gain an understanding of their values and their goals relative to the project. The park provided me with extensive documentation on the original project proposed in 2004. Included in this, were the goals of the park and the community as well as the program for the project. My task was to develop an updated set of goals that would be applied to the original program and open lost lines of communication by illustrating common goals through the design process.

A. GETTING TO KNOW THE PARK

It was critical to develop a good relationship with the park, as they are the institution that controls the realization of this project. As a temporary employee, I had the opportunity to learn about the park from the inside and gain an understanding of the complexities inherent to implementing projects from the perspective of the federal government.

Data Collection:
I used focused interviews with staff members (see Appendix A) to gain an understanding of the professional dynamic in the office, the park's relationship with the community and their goals regarding the project. I also had regular meetings with key players to maintain open
communication and stay updated on the status of the initiative. I attended office meetings whenever possible to stay current on issues being dealt with by the staff. Additionally, observation was used in daily visits to record the process and rhythm of working in the national park's office.

**B. GETTING TO KNOW THE LOCAL COOPERATIVES**

Developing a trusting relationship with the community cooperatives was equally as important. Their investment in the initiative will determine its success or failure, as they will ultimately run the project.

Data Collection:  
In order to get to know the community cooperatives involved in this project, I used focused interviews (see Appendix A), observation and participant observation. Focused interviews with members of each tourism cooperative allowed me to gain an understanding of their specific interest in the project, their goals and the resources that they needed from the national park. Observation was used during all community meetings in order to understand the dynamic between the various groups and the national park and to further understand their stake in the project. Participant observation was utilized to learn about the activities practiced by each cooperative and build a stronger relationship with its members.

Data Analysis:  
All data recorded in the daily journal was analyzed in order to extract the goals of the multiple interest groups. The official documentation received from the national park was considered along with the information gained through this investigation. A matrix was constructed that organized the goals and illustrated the overlapping interests of the different community cooperatives and the national park. The journal was also analyzed and coded to extract the opportunities and constraints relative to the working relationship of the community and the national park. As a result of this analysis, a list of recommendations for improved collaboration was also developed.

**TASK 3: GETTING TO KNOW HUATULQUEÑOS**

The next piece of this investigation was getting to know Huatulqueños in a broader sense. This had three primary components, gaining an understanding of traditional practice, the layout and spatial organization of the surrounding pueblos and the building techniques and materials used in the region.

**A. TRADITIONAL PRACTICE**

Becoming familiar with the daily practice of rural communities in and around Huatulco was essential for my ability to interpret these practices, understand their place in the landscape and develop an appropriate design proposal. The *Programa de Manejo* (Management Program) for Huatulco National Park provided a list of the activities traditionally practiced in the region. This list was used as a starting point to begin my investigation.
Data Collection:
To gain knowledge of these local practices, I utilized focused interviews, observation and participant observation. Interviews were the most vital component as many of the practices that were interpreted in the center are no longer performed in Huatulco. Sketches were also used to clarify processes during the interviews. Practices still utilized were observed and documented through photographs, notes and drawings. When appropriate, diagrams were constructed to document the spatial needs of the individual practices. Participant observation was utilized when possible in order to experience local practice first hand. I had the opportunity to harvest corn, make tortillas with the “señoras” for a community breakfast and go on an excursion with local fisherman. Through doing, I gained a greater understanding of local activity and used this to enrich the design.

Understanding my position as a temporary member of the park staff, I had to work within their framework and abide by their rules. For this reason, I sought out community members that had a relationship with the park to begin my investigation. Through my initial connection with these community members I made contact with others who were willing to share their knowledge with me. I spoke with at least one community member who was especially knowledgeable about each of the practices outlined in the Management Program. Through this investigation, I gained knowledge on the practices outlined by the CONANP and uncovered others not listed, including making hand and face cream with coconut and vanilla and making soap from various natural materials.

Data Analysis:
The daily journal was reviewed and new documents were created that exclusively included interviews and notes describing practice. This new document was analyzed to pull out practices common to Huatulqueños. Once the practices appropriate for interpretation in the center were determined, photo-documentation and further analysis of the journal was used to construct a matrix illustrating Huatulqueño practices, their essential components, the time it took to perform the practice, the landscape character necessary for their realization and the steps in their process.

B. TRADITIONAL BUILDING TECHNIQUES AND MATERIALS
Understanding the traditional building techniques and materials used in Huatulco was necessary for two reasons; to design a project that was a true interpretation of local culture, and to design a project that could be built by and for community members. The latter reason was meant to create incentive for those vested in the project to maintain it after its completion. Using local materials will also allow the construction of this project to directly benefit local suppliers.

Data Collection:
In order to gain knowledge of local building materials and techniques I used focused interviews, photo-documentation and drawings. Interviews with those people who were familiar with building techniques were used to learn about the processes employed in construction. Diagrams were created and used during interviews to clarify construction techniques, the components of typical structures and the specific materials used for these
components. Photo-documentation and drawings of traditional buildings were utilized to further understand the materials and structures.

Data Analysis:
Notes were analyzed to document building practices and lists of materials. Photos were categorized according to technique and material. Diagrams created during focused interviews aided in drawing details of specific techniques especially salient to Huatulqueño construction. Final illustrative diagrams were prepared that include cross sections of dominant building strategies, their essential components and corresponding materials.

C. PUEBLO LAYOUT AND ORGANIZATION
It was my intention to employ the same logic used by those native to the region to determine the general layout of the interpretive center. In order to do this, it was critical to gain an understanding of the spatial layout of the surrounding pueblos.

Data Collection:
In order to become familiar with the layout of traditional Pueblos, I used cognitive mapping, character sketches, photo documentation and schematic mapping. Cognitive maps are the internal representations made by living beings of their surrounding area. These representations were especially useful to this investigation in that they gave real people the opportunity to show me the most essential pieces of their pueblos and living spaces through their own eyes. Schematic maps are diagrammatic maps highlighting certain characteristics or features of a place. For the purpose of this study I used schematic maps to identify overall form, pattern and circulation of Huatulco’s surrounding pueblos.

Cognitive mapping-
I was especially interested in how the settlements were laid out before the expropriation in 1984. I solicited cognitive maps from community members who used to live inside the expropriated area that represented their pueblo as they remembered it before Huatulco became the tourist destination it is today. Cognitive mapping allowed me to identify salient components of the former pueblos and settlements by recording reoccurring themes as well as the size and detail given to specific elements. I also collected overhead drawings of people’s homes and the space around them which included, cooking areas, washing etc.

Character sketches, photo documentation-
During visits to the surrounding pueblos, I used character sketches and photo documentation to record their essential qualities. I took note of how they were typically organized, especially in relation to agriculture/gardens, washing and cooking space etc. I created plan view sketches of each site that I visited in order to create a bank of comparable layouts.

Schematic mapping-
I downloaded Google satellite images from the internet of the communities surrounding Huatulco and constructed figure ground maps of each, in order to analyze the general layout of these settlements. These maps focused mainly on built structures and roads. The aim was
to uncover trends and understand cognitive maps within the solid framework provided by satellite images.

Data Analysis:
Cognitive maps and schematic layout maps created on visits to surrounding pueblos were compared to identify settlement patterns and the necessary components of settlements in this region of Oaxaca. Patterns were identified with regard to form and circulation. My intent was to further understand Huatulco in the context of the rest of the region. My interpretation of this study informed the layout and design of the interpretive center. Given that the original Huatulco has been almost completely erased, understanding the layout, circulation and relationship to the landscape of the surrounding pueblos was one strategy of gaining an understanding of the authentic Huatulco pre-development.

**TASK 4. GETTING TO KNOW THE SITE**

Given that there was very little infrastructural development inside the national park, there were no base maps of the general area that had been selected for the project. As a result, it was impossible to choose a site or develop a plan without first doing an investigation of the area and various mapping exercises to gather the information needed to make informed layout and design decisions.

Data Collection:
The task of getting to know the site was completed in two related steps. First I used site visits to identify areas within the general site location that would be well suited for development. Next I returned to the selected site location and completed an inventory of existing conditions that was later used to construct base maps for the final site selection and design of the center.

Site Visits-
Site visits were used to gain both physical and historical knowledge of the site. I visited the park with community members to locate past settlements as well as understand how the landscape was currently and formerly used. I also returned to the site alone to familiarize myself with the area and begin to locate potential areas for development. Photo documentation and field notes were used to create an inventory of the vegetation on site and document the ruins of former homes and other traces of past settlement. Conversations with community members regarding the site pre-expropriation were also recorded.

GPS mapping-
With the knowledge gained from site visits, I returned with a community member to map out the sites of interests for the project and document the existing conditions on these sites. The purpose was to construct base maps that referenced the features on site and helped guide the layout of the center. I created analysis maps of the site that included:

a. Cultural elements: where women used to harvest clay for making pots, old homes, vegetation utilized for ceremonial purposes etc.

b. Ecological/agricultural elements: areas good for planting certain crops, specimen trees, areas that attract specific wildlife etc.

c. Interpretive trail *Sendero Mulato*: this trails had been designed but had not been mapped.
d. Construction capability: areas that were too wet or steep, those already flat and deforested, exceptional views etc.

Data Analysis:
General Site Location-
Conversations recorded during site visits were utilized to further my understanding of local practice and specifically the project site. Photo-documentation was organized according to site location and was recorded with information gleaned from conversations about specific locations and my observation. Through this analysis, potential areas were sited for the development of the center. The analysis of the information gained during initial site visits was used to determine where I would begin mapping potential development areas.

Criteria for choosing a site included:
- Must be in zone of the park designated for public use
- Must have sufficient space
- Must be in proximity to existing interpretive and recreational trails
- Must be in proximity to cultural resources
- Must be sited where existing topography and soils can support the development, ex: areas that are relatively flat, not wetlands etc.
- Must include areas that will support demonstrative gardens and small scale agriculture
- Must have access to diverse vegetation and views of river
- Must be in close proximity to pilgrimage trail, *Cruz del Monte*

Constructing Base Maps-
Information gathered through GPS mapping was utilized to create composite thematic maps of the site. These maps were overlaid to analyze potential development opportunities based on existing construction potential, the location of cultural resources and the sensitivity of ecological conditions. Through this analysis I identified appropriate development areas for the project.

Vegetation Analysis-
Photos of plants were recorded after each site visit with their name and utility. Charts were constructed that categorized vegetation as ornamental, construction material, medicinal, cultural, poisonous, attracts wildlife and food source. Charts were used as a guide for the development of a plant palette for the center.

**TASK 5. DESIGN DEVELOPMENT**

Plural design involves an iterative process that begins with an understanding of local values, interests and opportunities (documented in the 2nd and 3rd tasks of this project). Also salient to this process is a sound understanding of site grounded in credible inventory and analysis (documented in Task 4). The final piece of this investigation was the design development of the conceptual site plan for the center. This was completed in three primary steps.
A. THE DEVELOPMENT OF A SCHEMATIC SITE DESIGN
Before leaving Mexico, my task was to synthesize the information gathered while completing tasks 1 through 4 of this investigation and develop a schematic site plan that incorporated the program outlined by the CONANP to be presented to the community and the national park for review (see diagram on following page).

B. THE DEVELOPMENT OF INTERPRETIVE STRATEGIES
Developing appropriate interpretive strategies was an iterative process that also began with the synthesis of the first 4 tasks completed in this investigation. Next, it incorporated literature review on established interpretative strategies utilized in tourism, environmental projects and the fine arts. Final strategies were developed through an iterative process of testing ideas, receiving critique and refinement (see diagram on following page).

C. THE DEVELOPMENT OF A FINAL CONCEPTUAL SITE DESIGN, CRUZ DEL MONTE LA CEIBA
Developing the final site design for the project Cruz del Monte la Ceiba was completed concurrently with the development of interpretive strategies. It began with an analysis of the review provided by the community cooperatives and the national park relative to the schematic plan. Next was the incorporation of alternative energy strategies needed to run the center. Finally, an iterative process of testing ideas, receiving critique and refinement brought the final design to completion (see diagram on following page).

PRODUCTS
The final products of this investigation are:
1. A conceptual site plan for the ecotourism project Cruz del Monte la Ceiba, which will include appropriate interpretive strategies.
2. Recommendations for an improved working relationship between the national park and the local community.
3. Recommendations for future designers working in a similar context.
THE DEVELOPMENT OF A SCHEMATIC SITE DESIGN

THE DEVELOPMENT OF INTERPRETIVE STRATEGIES &
THE FINAL CONCEPTUAL SITE DESIGN, CRUZ DEL MONTE LA CEIBA
In the following section, I will outline in detail the process used and the results yielded from this investigation. Upon reflection, it has become clear that the power of this design process was its iterative nature. The knowledge that I gained about the national park, the people of Huatulco, their practice and the project site was all strengthened by sharing, confirming and correcting errors with all stakeholders. The process of graphically illustrating what I had learned, and re-presenting information back to the community and the park in a new format, allowed them to view elements of their situation again for the first time. This sparked new dialogue about future possibilities and assisted in starting the process of reopening lines of communication that had long gone dormant.

The first piece of this investigation was gaining a deeper understanding of ecotourism projects. While ecotourism has the potential to promote local and regional development, the notable difference between the rhetoric and reality of projects found in the literature, gave me reason to do my own investigation in the field.

I was surprised to find that ecotourism projects in Mexico were very easy to locate. Signs advertising local initiatives appeared to be everywhere. That being said, many of these signs led nowhere, which reinforced my suspicion that it is common for projects to begin with lofty goals but close down quickly.

Here I have provided information gained through focused interviews with members of ecotourism initiatives in Huatulco and in other parts of Mexico. I have also included one community-run project that is not ecotourism. I believe that the similarities between this project and the ecotourism initiatives relative to way in which it was formed, how it is operated and the challenges it has faced make it a relevant subject for investigation in this project. In each section, I provide a brief background on the project and then list what I refer to as “ingredients for success.” The last project called Pueblos y Tradiciones, is documented in a slightly different way. This initiative was organized by the original consultant on the project Cruz del Monte la Ceiba. I was invited to participate in the tour, but asked not to interview any of the families working on the project or the tourists. For this reason, I have included only what I understood through observation.
CASE STUDIES...

GRUPO KOLE ME YA, MUJERES TRABAJANDO
CHUBURNA YUCATAN

This project is run by a group of women who work together in the coastal community of Chuburna, Yucatan collecting plastics and paper products to recycle. To my knowledge this is the only place where anyone can recycle anything in the area. The project was started by a priest who came into the Pueblo with the hope of beginning a community project. It was initially offered to the wives of the ejiditarios, but they refused it. The women who currently participate said that the ejiditarios’ wives felt that they were too good to pick up garbage in the streets. When the women who now participate began working, they received negative feedback from other people in the pueblo who also thought that the work they were doing was dirty. A number of women told me that their husbands complained that they were ashamed and tried to get them to quit. Now they have been in operation for 3 years and have been recognized by the news paper and the local community as a success. People bring them plastics and paper products which they are reimbursed for. This gives economic incentive to those not involved in the project to participate. Additionally, the women involved have begun working on other local environmental initiatives. Those who are widowed can say that through this medium, they have been able to provide for their families. They are all proud to be involved in something that gives them credibility in the community, financial stability and helps to clean the environment.

INGREDIENTS FOR SUCCESS

TRUST... The women who run this project have known each other since childhood. Two women from another pueblo were once involved but there was friction between them and the rest of group and they were eventually replaced by two local sisters. Considering the lack of trust that I have observed in Mexico of people outside of the family unit, I believe that projects are more likely to succeed if the people involved have a long history together. Additionally, the woman who is president maintains complete transparency with the group. She explained that many people want to become president so that they can use the projects funding for personal needs. She believes in what they are doing and prides herself on being open and honest with the women in the group. This was also confirmed through private conversations with the other members in her absence.

SOLIDARITY... The people involved in this project have a special bond because they are women. The president of the project began attending workshops on women’s rights in Merida to combat the machismo (chauvinism) that existed on the peninsula. She would come back to the pueblo and tell all of the women what she had learned and they began to feel empowered. One woman told me that in the beginning her husband would complain because she was not home to cook dinner and she simply told him, “so you cook then, you’re home.” I believe that the bond this group shares as women has been a major factor in the success of the project.

COMMUNITY INVOLVEMENT... This project is also successful because it provides economic incentive to members of the community who are not directly involved by reimbursing them for plastics that they collect and bring to the cooperative. Through this mechanism, the project benefits the entire Community, not just those directly participating.
CASE STUDIES...

EL CORCHITO PROGRESO YUCATAN

El Corchito is an ecotourism project that brings people out in small fishing boats to see and swim in a number of fresh water springs off the gulf coast of the Yucatan Peninsula. The location was originally sited by the water company in Progreso as a potential source of potable water for the up and coming town, but was abandoned when the company realized that the springs were not large enough to support all of the development. A group of fishermen began using the area in their free time to fish in the fresh water springs. They became invested in the area and dredged a canal out by hand to ease their access to the site. When the government declared the location a protected area in 2003, the fishermen proposed a low impact ecotourism project and were given a 100 year lease on the land. Together, with hard work, they built all of the infrastructure on the site, including, palapas, tables, bridges, fences etc. Tourism began to increase to the area around 2005 and the fishers were able to obtain funding from the government to buy needed supplies for the initiative. All of the fishers involved in the formation of the project also had other forms of livelihood and all but one now work at the facility exclusively in their free time. It would require more investigation to determine whether the project is a success, but it has been in operation for 3 years, the facilities are very well maintained and they have the capability to keep one full-time employee.

INGREDIENTS FOR SUCCESS

TRUST AND ORGANIZATION... Similar to the women in Chuburna, the fishers involved in this project had a long history together which enabled a trusting working relationship to evolve. Additionally, they were already in a self-create group with its own informal organization. The experience that they had working together fishing and dredging the canal to access the springs provided them with an organizational structure that could be used to run the ecotourism project.

PERSONAL INVESTMENT AND OWNERSHIP... The idea for this project was born with the fishers who run it and they constructed all of the infrastructure on site by hand. These two components provide them with a strong sense of ownership which gives them incentive to care for the structures as well as the area.

ALTERNATIVE INCOME SOURCES... It is also noteworthy that the fishers involved in this project had other reliable sources of income. When the government decreed the land a protected area, they were able to begin an ecotourism project without risking their ability to provide for themselves economically. Simply put, they did not have everything riding on their ability to utilize this land for subsistence or the success of this project, as a result common sources of conflict between themselves and the federal government were avoided.
CASE STUDIES...

ECOTOURISM
CHUBURNA YUCATAN

This community-run ecotourism project operates out of Chuburna, which is a small pueblo on the gulf coast of the Yucatan Peninsula. The project takes tourists bird watching, kayaking, fishing, mountains bike riding etc. It was initiated when a group of fisherman in Chuburna began to collectively recognize the hardships inherent to living off of the sea and the difficulty they had earning a steady income. They began talking with the municipality and decided to start an ecotourism project. While planning the initial organization, they held workshops amongst themselves to determine the skill sets of the individual members and decide as a groups how the project should be run and organized. One of the fishers had friends at Corpus Christi University who helped to promote the project by bringing groups of students to Chuburna as eco-tourists. The Secretaria para el Manejo de Recursos Naturales (SEMARNAT, The Secretariat for the Management of Natural Resources) also decided to support the project and since this time, the project has been in operation.

INGREDIENTS FOR SUCCESS

TRUST... Once again, the fishers that created this ecotourism project grew up together in the same small pueblo and as a result were able to form a trusting working relationship. Their knowledge of one another’s abilities and comfort level together helped in the initial organizational stages of the project.

INITIAL INTEREST... The initial interest from the acquaintance at Corpus Christie that brought the first surge of tourism was essential for getting this project off the ground. El Corchito described a similar situation where tourism began to boom in 2005. The publicity and financial support that initial interest provides appears to be a major component for the eventual success of these projects.

CONSTRAINTS... When asked about current problems, the representative in Chuburna told me that the cooperative found it very difficult to manage the bureaucracy mandated by the federal government necessary to legally maintain their business. This is a common problem in community initiatives in Mexico, a country famous for overly complex legal procedures. He told me that it would be easier for them to get funding and operate if they relinquished control to the government and became employees, but that they refused to do that and chose to tread through uncertain waters and learn as they go.
This “ecotourism” project offers a tour of the pueblos that surround Huatulco to visitors that arrive primarily on cruise ships. A van brings tourists from the marina to a botanical garden at a families home, the field of a prickly pair farmer, a home where people observe traditional cooking techniques, an adobe making demonstration, a banana orchard, a palapa where women explain how to weave baskets and mats from palm leaves and finally to the grapefruit and orange orchards of the final local farmer. Almost all of the stops offer food, and all offer an explanation with English speaking guides. The local families that participate in the tour have stands open to sell local crafts to tourist at an inflated price. The person who runs this project has told me that the community members who participate benefit financially from the revenues of the tourists paying for the tour itself. A member of the national park staff told me that the tour company earns all revenue and the community only makes as much money as the crafts that they sell. I am not sure which of these stories is true, but truly hope it is the former. If the latter were true, this would be a gross exploitation of people and their culture to turn a profit that did not substantially affect them financially.

**OPPORTUNITIES**

This tour offers authentic cultural tourism that is not found anywhere else in Huatulco, as such it has the potential to truly financially benefit the families that participate because there is very little competition.

**CONSTRAINTS**

Welcoming tourism into the homes of these “traditional people,” has the potential to commodify their practice as a product for sale, or worse, threaten the very identity that makes their homes special places for tourists to visits...such is the paradox of cultural and ecotourism attractions.
GETTING TO KNOW

In the initial conversation with the national park office about the project *Cruz del Monte La Ceiba*, I was told that the project was solicited by the local community and was to be community-run upon completion. They also assured me that they would introduce me to the cooperatives involved in the project so that I could begin my investigation. It was only when I arrived in Huatulco, that the severe lack of trust and strained relationship between the park and the local cooperatives became evident. Communication among the various interest groups had been almost completely lost. It appeared that numerous projects were going on simultaneously sharing only a common name and nothing else. As a result, each interest group had a different idea of what this project should be and who would be the primary beneficiary. Because the park had lost control over the organization that would allow a project of this nature to function, they were hesitant to introduce me to the stakeholders. The reason behind their hesitation became clear when the director of the park finally invited me to a meeting with the interests groups regarding the project. Not only was she absent, but so too were the community cooperatives. I sat in a room with three other members of the park staff for an hour and half until we decided to pack up and go home. This was my first “introduction” to the community groups that I would be working with on this project. I understood at that moment, that my first task would be to gain an understanding of the various goals of the multiple interest groups involved, in order to uncover common goals and open up lines of lost communication.

FOLLOWING THE PEOPLE TRAIL

In order to gain an understanding of the goals of the various stakeholders involved in this project, I first had to locate them and get them to talk to me. I began to call this search “following the people trail.” When I realized that the local Huatulqueño community was small enough, that one successful introduction led to another and eventually I had come full circle and met and understood the relationship between each of the cooperatives in this project. Luck and persistence allowed me to make three essential contacts that began my productive travel down the people trail. The first was a native Huatulqueño working in tourism in the federal building where the National Park’s Office was located. The director of the park suggested that I speak to him rather than the community cooperatives. He turned out to be the head of the bird watching cooperative and one of the elusive stakeholders. He helped me contact the original consultant on the project and the people trail continued from there. The second was a local community members who originally lived steps from the project site. I met him on my first excursion into the park by accident because he had to be accompanied by a park staff member to collect fallen trees he would use for construction. He became a valuable resource to me, sharing his knowledge of the culture and history of the project site. The third was a member of the national park staff who had specific interest in the local community and substantial animosity towards the national park and their strategies for community involvement. After a series of intense conversations where he questioned my intentions, he found that our values were similar and offered to introduce me to the head of each tourism cooperative. Once again, through these initial introductions, I was invited to meetings, dinners, commu-
nity events and family homes. I attended everything I could and documented each experience. Through my participation in community events, people began to trust me enough to agree to be interviewed about the project. After substantial leg work, I understood who all involved parties were and their specific goals regarding the project, Cruz del Monte La Ceiba.

Gaining an understanding of the goals of the national park was slightly easier. While it was difficult to schedule meetings with key people, as they are extremely busy, I was eventually able to speak with the director of the park, the sub-director as well as the head of ecotourism in order to gain an understanding of the park’s intentions and primary goals regarding this project.

I created the matrix on the following page which separates the goals into subcategories of: tourism, economics, collaboration, conservation, land, credibility and opportunity. I was able to show this matrix to all interest groups in order to visually illustrate the common goals that they shared. Goals shared by all stake holders included; ecotourism opportunities, obtaining funding for implementation, establishing connection between governmental, non governmental and academic organizations, the promotion of a community project and opportunity for employment. Through conversations with the national park, I understood that their primary goal was getting the tourism cooperatives to begin paying the cobro de derechos while the tourism cooperatives’ primary goal was economic benefit to justify this tax. This is a perfect example of an opportunity to implement a project for the purpose of attaining a shared goal.

RE-OPENING LINES OF COMMUNICATION
Once I had successfully identified each of the groups involved in the project, I set my mind to re-establishing lost lines of communication essential to project success. Most salient, was the re-connection of the original project consultant and the national park and planning a meeting with all of the community cooperatives in order to align expectations and understanding of the project.

Organizing a meeting between the original consultant was important because he had completed the technical study necessary for legal project implementation in Mexico. Additionally, he and members of the community cooperatives had mapped out three interpretive trails still included in the program but not digitally recorded. Unfortunately, he had extreme distaste for the national park and their inability to implement projects. In order to avoid re-doing work that had already been completed and for the purpose of alleviating the animosity felt on his part towards the park, I organized a meeting with him, the director of the park, the head of ecotourism in the national park and myself. This meeting took weeks to schedule, but eventually served to begin the process of re-establishing dialogue amongst those players knowledgeable about obtaining funding, tourism development and organization in Huatulco. This was also the first step to coordinating the multiple parties involved in this project.
The national park staff member who had introduced me to the tourism cooperatives was also interested in getting the community groups organized and involved in this project again. He arranged a meeting with all of the cooperatives to begin this process. At one of these meetings, the original consultant presented all of the work that had been completed in 2004 to bring everyone up to date. One meeting led to another, but there was a lack of accountability on the part of the cooperatives and the park. Park staff and cooperative members began to miss meetings and essential deadlines. The momentum needed to realize this project had once again been re-established, but participation was inconsistent and disappointing. On an individual basis, the cooperatives were much more reliable. It became clear to me that the healing process in this tarnished working relationship would take substantial time and investment on both sides to reconcile. Their willingness to cooperate with me on an individual basis illustrated that the desire and readiness to work was still strong. It was the trust necessary for a successful collaborative relationship that would take patience and time to re-establish.

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Similar to the process of getting to know the community cooperatives involved in the project, gaining an understanding of traditional practice also entailed “following the people trail.” By virtue of the fact that native Huatulqueños are few, most families have known each other for generations and are happy to refer you to someone they think is a specialists in the field that you are researching. Using the management program of the national park as a preliminary guide, I began looking for people who were knowledgeable about the practices listed by the park as typical to the region. I was nervous at first to be seen as another American come to study the “indigenous peoples” of Mexico, but was happily surprised to find that community members were proud of their traditional knowledge and were happy to share it with me. Farmers referred me to fisherman who referred me to carpenters and local healers. Before long, patterns and commonalities began to surface in the stories that I was recording.

### Practice Components Time L.S. Character Process

#### Making Soap
- **Components:** Cattle, Water, Firewood, Olla, Orange Tree/Peel
- **Time:** 8 days
- **Location:** In or near the home
- **Process:** Boil cow fat and orange peel in water with ashes left from fire for 8 days. Make balls out of grease that is left over. Make enough soap to last for 6 months.

#### Making Milpa
- **Components:** Hand tools, Sembrador, Yunta, Oxen
- **Time:** Rainy season
- **Location:** Forest
- **Process:** Slash and burn to clear field. Prepare soil with oxen. Plant using dried gourd tied around waist to hold seeds (Sembrador) while oxen dig trench with Yunta. Plant in June, harvest until October. Corn, melon, beans, squash, tomato, chile, banana, papaya, ajonjoli, etc.

#### Fishing
- **Components:** Drying Rack, Wooden Box, Line, Hooks, Lamps, Lures, Bate, Etc., Canoe
- **Time:** 24 hr/day
- **Location:** At sea, on the beach
- **Process:** Carve lures out of guava can. Fish using a line and hook only, no rods. Also use harpoons fashioned by metal smiths. Gas lamps used for illumination while fishing at night. Soak catch in salt in wooden crate on beach and then dry out for sale on wooden rack. Sell on fiesta days and in market in surrounding towns.
Each interview began with the interviewee describing a typical day before the expropriation from the time they woke up, to the time they went to sleep (see Appendix A). These stories proved to be the most helpful in uncovering traditional practice. They also prompted more specific conversation regarding materials, tools, food, and the time tables of day to day practice. Once the interview process was complete, I revisited the documentation, extracted those practices most commonly mentioned and created a list of nine practices I felt were appropriate to be interpreted in the center.

I then created the matrixes seen below in order to re-present what I had learned to the community members in order to confirm the accuracy of my documentation and correct any errors. The conversations born out of these sessions were sometimes even more informative.
than the original interviews. During one session with a prominent family in the Cooperativa Cruz del Monte, they informed me that matrixes appeared complete with the exception of the fishing section. They then invited an elder from the fishing community to their home, where he spoke to me for two hours about fishing, making nets and lures, building canoes, storing supplies, the sap that was used to repair barrels etc. He drew me pictures and diagrams of how the old canoes functioned and harpoons were made. This was one of the many times, the use of design got people excited, enriched the research process and deepened my knowledge on the subject.

### Practice, Components, Time, L.S. Character, Process

<table>
<thead>
<tr>
<th>Practice</th>
<th>Components</th>
<th>Time</th>
<th>L.S. Character</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dying Cotton Thread with the Caracol Purpura</td>
<td>LOW TIDE WET ROCKS BOAT (OPTIONAL)</td>
<td>2-3 HOUR INTERVALS OF WORK AT LOW TIDE. TWICE A DAY FOR THE DURATION OF 1 MONTH</td>
<td>ON ROCKY BEACHES. THE CARACOL LIVES WHERE IT IS DAMP AND IS ONLY FOUND ON WET ROCKS ON THE COASTS SUBJECT TO HIGH AND LOW TIDES.</td>
<td>GATHER STRING MADE FROM COTTON HARVESTED LOCALLY IN PINOTEPA DE DON LUIS. PACK FOOD, WALK 8 DAYS TO HUATULCO. WAIT FOR THE LOW TIDE IN THE MORNING (VACIANTE). COLLECT SNAIL, AGITATE IT WITH FINGER, SNAIL SECRETES YELLOW LIQUID ONTO THE STRING, RETURN SNAIL TO THE ROCKS OR IT WILL DIE. AS THE YELLOW LIQUID DRIES IN THE SUN IT TURNS DARK PURPLE. BRING FABRIC BACK TO PUEBLO FOR SALE. LOCAL WOMEN WILL SPIN YARN INTO TABLE CLOTHS, NAPKINS, TRADITIONAL CLOTHING ETC. SLEEP ON THE BEACH WHILE WORKING. WORK FOR ONE MONTH INTERVALS. SNAIL IS NOT HARMED.</td>
</tr>
<tr>
<td>Harvesting Clay to Make Kitchen Wares</td>
<td>FIREWOOD CLAY MOLD</td>
<td>3 DAYS NEAR THE HOME AND IN THE FOREST AT SPECIFIC POINTS IDENTIFIED BY LOCAL PEOPLE FOR THEIR BANKS OF GOOD CLAY</td>
<td>HARVEST CLAY IN FOREST, BRING HOME. FORM CLAY AROUND CLAY MOLD. MAKE FIRE WITH LAYERS OF FIREWOOD. PLACE KINDLING AT BOTTOM WITH POT DIRECTLY ON TOP. PUT LARGER PIECES OF FIREWOOD AROUND POT. SET A FLAME, LET BURN UNTIL FIRE IS OUT. LIGHT BROWN CLAY WILL TURN RED WHEN FIRED. ALLOW POT TO SIT FOR 24 HOURS AND IT IS READY TO USE.</td>
<td></td>
</tr>
<tr>
<td>Making Hand and Face Cream with Coconut and Vanilla</td>
<td>WATER FIREWOOD OLLA COCONUT AND VANILLA WORK SPACE</td>
<td>IN OR NEAR THE HOME</td>
<td>CUT COCONUTS DOWN FROM TREE. CUT MEAT OUT OF SHELL AND INTO PIECES. BOIL UNTIL ONLY THE OIL REMAINS. ADD VANILLA FOR SCENT, USE FOR FACE AND HAIR.</td>
<td></td>
</tr>
</tbody>
</table>
During the interview process I was referred to local carpenters who had specific knowledge about the process of building structures in Huatulco. While it was useful to speak with specialists, I found that most people had a working knowledge of construction techniques as most of the homes prior to the expropriation were built by their proprietors.

Photo-documentation and observation were also useful tool in taking an inventory of the existing strategies most commonly used in construction. After interviews, I found it easy to identify the different techniques utilized in the area. Three primary building types were determined to be most common to Huatulco and have been documented through section, perspective and photographs.

1. HOUSE/CASA
Before the expropriation in 1984, most people lived in simple homes made of wood and thatch. It is common for the home to be used only for sleeping with adjacent structures for washing, cooking and bathing.

3. PALAPA
Palapas are shade structures commonly found in public places. The

Images from left: Thatch roof made with palma real, morillos fastened to barra with bejuco, horcon supporting morillo, Palapa and pediment, Cruz del Monte, Ramada in banana field, arched ramada in botanical garden, detail of thatch made of tule tied to morillos in the roof of a palapa.
main difference between a palapa and a house is that palapas do not have walls and their roofs often come to a point and/or are round.

2. RAMADA
The ramada is a shade structure used throughout Mexico. They are found on public and private property. Thatch used for the roofs of ramadas is made with palm leaves and laid flat on top of morillos in layers to keep out sun and rain, but not fastened. Because ramadas are simple to construct, they can serve as temporary shelter. Fisherman erect ramadas on beaches to sleep underneath during fishing trips.

GENERAL NOTE:
Joints of all structures are tied with bejuco, which is a general term for strong vine. Thatch is commonly made of tule or paja which are native grasses or palm leaf. Thatch made with palm is tied to the soleras using its own leaves as twine. Tule is tied to soleras using the leaves of mague cut into long strips. The same forms are generated currently in contemporary architecture, but nails are often used to fasten joints.
In order to plan for the layout of the center, I conducted a figure ground analysis of 6 pueblos surrounding Huatulco to identify trends and patterns of spatial layout and organization. As a result of this analysis I identified two primary patterns;

1) roads follow the natural topography. By virtue of the fact that this region is situated in the foothills of the Sierra Madre del Sur, roads are formally organic and almost never organized on a traditional grid.

2) Homes are grouped into small clusters. Unlike North American settlements, structures do not follow the line of the road, but are organized in small groups, nestled into the landscape.
Upon closer investigation, I found that these clusters were often extended family units. Additionally, the components of a home were separated into individual pieces. To the left are two layout diagrams created on site visits to the pueblos of Herradura and Coyul just outside of Huatulco.

In these examples, you will note that there is one structure for sleeping, another for washing, an outdoor space or additional structure for cooking and a central water source. Ramadas are also found commonly around the home to provide shaded seating areas when it is too hot to be inside.
POISONOUS
ATTRACTS WILDLIFE
ORNAMENTAL
CULTURAL
GETTING TO KNOW
THE PROJECT SITE

VEGETATION ANALYSIS

MEDICINAL

CONSTRUCTION

FOOD
The following plant list is the result of site visits with community members used to develop the planting palette for the center. Plants are listed in the same order as the images displayed on the previous page.

**POISONOUS:**
- **POISONOUS BERRIES**
- **TATATIL**- Time underneath the shade of this tree causes a severe rash.
- **TOMATE LOCO**- has small hanging seed pods that cause burns.
- **PALO DE VELA**- Secretes liquid that people say causes blindness if it gets into your eyes. Attracts humming birds.

**ATTRACTS WILDLIFE:**
- **CHONULA**- Attracts deer.
- **CIRUELO/PLUM TREE**- Attracts deer.
- **PAPAYA TREE**- Attracts iguana

**ORNAMENTALS**
- **CORNISUELO**
- **MATRIMONIO**
- **RABO DE IGAUANA**
- **MATA PALOS**
- **HUISACHE**
- **LA CEIBA**
- **CANDELABRO CACTUS**
- **EBANO**
- **MORNING GLORY**
- **NOPAL SILVESTE**
- **MULATO**

**CULTURAL**
- **SAZANIL**- Berries have sticky liquid inside used as glue.
- **STORAQUE**- Secretes liquid that forms balls which are burned at ceremonies, such as baptisms etc.
- **MORO**- Cut in half, remove seeds, leaving just the shell, used as jicara (receptacle to carry water and other liquids).
- **MORTIFERA/HIERBA PARA CUCARA-CHA**- Boil spines and put into masa (dough made from corn flour used to make tortillas). Leave masa around home and it will kill cockroaches without hurting humans. Grass taken with mescal, causes drunkenness.
- **HUAJE BLANCO**- Has hanging seed pods, seeds are eaten in various ways, salads etc.
- **PAPAYON/STAR FRUIT TREE**- Gives fruit in the dry season, used to make atole.
- **PAPAYA TREE**

**CONSTRUCTION**
- **OTATATIL/TATATIL**- Water resistant, used in various ways in the construction of traditional structures. Secretes liquid that causes skin rash.
- **CORTA EL AGUA**- Used for morillos, not water resistant.
- **SASANIL MORENO**- Used in various ways in the construction of traditional structures. The berries also have liquid inside them that is used as glue.
- **MORA**- Used in various ways in the construction of traditional structures.
- **OCOTILLO**- Used for morillos and soleras.
- **OCOTILLO**- Image of mature tree already dry and ready to utilize.
- **GUANACASTLE/PAROTA**- Used for furniture and making canoes.
- **CAMARON**- Used for horcones.

**MEDICINAL**
- **OJA DE ZAPO**- Use for bacterial infections in the skin. Used to cure fever and to treat diabetes.
- **MARAVILLA**- Boil leaves with those of coachana-la, used to treat heat rash.
- **OJA DE PAZMO**- Used to treat cuts that won't heal.
- **SANGREGRADO**- Secretes red liquid used to make teeth stronger.
- **BEJUCO DE TORTUGA**- Boil in water and drink as flavored water. Used to clean out the kidneys.
- **OJA DE NEGRO**- Used to heal cuts that will not heal; dry leaves and place on wound with salt. Women also take when during menstruation to clean out their system; boil leaves in water and drink liquid.

**FOOD**
- **LITTLE WATERMELON/ SANDIYITAS**
- **POCHOTE**- Roots hold reserves of water. People cut pieces out and chew to quench thirst in the jungle; similar to sugarcane. Holds the most water in March and April. Has flowers in December that attract deer.
- **TAMARIND TREE**
- **HUAJE MORADO**- Has hanging seed pods, seeds are eaten in various ways, salads etc.
- **CHEPIL**- Herb used in various ways, tamales etc.
- **MAFAFA/TARAGUNTIN**- Grows near water and can cause irritation if touched, eaten boiled with lemon.
- **PITAJAYA**- Bears fruit similar to the pitaya and can be used for reforestation.
- **CHICHICASTLE**- Proliferous plant that has purple flowers. Mixtec people use this leaf to make barbacoa. To do so, dig hole, make fire in hole and let burn until embers are left. Wrap meat in leaves, cover with earth and let cook for 5 to 12 hours depending on the meat.
- **HUISACHE**- Used for firewood that is good for making charcoal for cooking meat.
- **CIRUELO/PLUM TREE**- Gives fruit in the dry season, attracts deer.
After I had finished the vegetation analysis, there were three primary pieces to understanding the project site; understanding the site before the expropriation, understanding the existing conditions on site and finally, analyzing the existing conditions in consideration of the former conditions to determine the best layout and organization of the Interpretive Center.

**UNDERSTANDING CACALUTA BEFORE THE EXPROPRIATION**

Before the expropriation in 1984, there was a settlement in Cacaluta where the project has been proposed. I was fortunate to meet some of the families that previously lived in this area. Hector Aragon is a former resident of Cacaluta and a member of the Papaya farmer’s co-operative. During one of our conversations about the project site, he drew a map of how he remembered Cacaluta before the expropriations. This map was valuable in that it illustrated the previous performance of the site and the way it was utilized by the people who lived there. This information helped to inform the final layout of the “Retreat to a Pueblo” and provided insight about the potential of the existing landscape.

**UNDERSTANDING CACALUTA’S EXISTING CONDITIONS**

The project site within the national park had not had a formal survey or and did not have access to utilities. For this reason, I had to create the base maps that I would use for the design. In order to do this, I took trips into the park alone and with community members and used the GPS mapping system to locate flat and deforested areas best suited for development, unique ecological features such as specimen trees, areas best suited for demonstrative agriculture and cultural features.

**DRAWINGS COLLECTED FROM COMMUNITY MEMBERS IN HUATULCO**
SYNTHESIS
Once I had obtained the map of Cacaluta’s previous condition and completed my analysis of the existing conditions on site, I was able to make decisions as to the general layout of the project, Cruz del Monte la Ceiba. I sited the majority of the tourism development including the reception area, area for permanent exhibition, entry courtyard, restaurant and “Retreat to a Pueblo” in the flat deforested areas. Demonstrative agriculture has been sited in the location of previous productive space and close by the seasonal pond. Community members informed me that this location was best suited for agriculture because of its low elevation and saturated soil. These characteristics would allow this space to be planted and harvested twice. Interpretive plantings were also sited in the fertile soil around the seasonal pond. Finally, an UMA (Unidades de Manejo Ambiental) has been proposed where the old settlement was located. An UMA is an initiative for the sustainable management of the natural environment. In this case, the UMA will be for the sustainable management of iguanas. This was solicited specifically by the papaya farmers who used to live on this site. The idea is to restore the old settlement, include information on the history of Cacaluta and provide conditions that will attract iguanas to be viewed by tourists.
WALK THROUGH

Park vehicles will pick up groups of tourists at the Bay of Santa Cruz. They will be dropped off at the center so that parking is not needed. The entry sequence consists of a palapa which houses the reception and area for permanent exhibition. A ramada covered courtyard separates the reception from the restaurant, bathrooms and covered eating area. The trail leading to the “Retreat to Pueblo” is lined with ceiba trees. These trees will be accompanied by plaques made from the barro (clay) harvested in the area and engraved with information about the importance of the Ceiba tree throughout Latin America.

Behind the restaurant are gardens that will be used to grow vegetables and herbs that will supplement food from outside sources sold in the restaurant. This area will also be used for rain harvesting and compost.

The “Retreat to a Pueblo” has been proposed as an interactive workshop space. It will be set up so that those who wish to spend only a short amount of time can walk through quickly, but
those who wish to spend more time can participate in workshops where community members teach tourists how to perform the nine practices interpreted in the center. For example, in the kitchen workshop, tourists can learn how to harvest corn, grind it into minsa, kneed it into masa and finally cook it into tortillas on the comal. Each space is set up as a typical pueblo, but with the necessary components to accommodate groups of people in an educational atmosphere.

There are three primary workshop spaces in the pueblo. The pueblo's formal qualities have been derived from the investigation completed on site, the surrounding pueblos and a design logic necessary to facilitate a functional tourism center. Outlined below is the spatial organization of the pueblo, the relationships inherent to the practices, their corresponding place in the landscape and the general circulation.

After exiting the pueblo, visitors will pass through a demonstrative agricultural field that will be planted with rotating crops of corn beans, squash, papaya, sesame, tomatoes etc. The trail leads into the jungle passing specimen trees that have been mapped using GPS and turns into an elevated wooden boardwalk that will guide visitors through interpretive planting installations and finally back to reception area for pick-up.

Also included in the conceptual site plan is the UMA to the south east, a bodega and security house to the west and a rest area for viewing the dry river to the south west.
INTERPRETIVE

Developing the interpretive strategies that would be utilized on site was the most challenging piece of this investigation. My goal was to develop strategies appropriate for this project and those community members invested in it. Camacho and Howel were both sited in the literature review. Camacho argued that the federal tourism agency FONATUR had imported culture from other parts of Mexico already popularized abroad and used it in place of the true culture existing in Huatulco. A primary goal of this project was to employ interpretive strategies that re-introduced the voices of native huatulqueños and began the process of re-establishing a local identity.

Among others, Howell claimed that by virtue of the fact that culture is in a state of constant change, true authenticity no longer exists. For this reason she argued that the real issue in heritage tourism is not staging false culture, but rather “who constructs culture, and on behalf of whom” (Howell 1994, 153). One of my goals in the design of this center, was to set up a framework in which the people of Huatulco and the ecological forces that naturally exist on site were the voices that dictated the story of this place and visitor experience.

In the following section I will outline the interpretive strategies proposed for the center, visually illustrate their character and describe their relationship to the landscape and native people.

INTERACTION & PARTICIPATION

The first strategies encountered are interaction and participation. Through interviews, I recognized people’s willingness and pride to share their cultural knowledge and for this reason, I embraced the concept of participation as a primary characteristic of this center.

Participation is possible from the moment a visitor enters the project site at the reception and area for permanent exhibition. The top image on the opposite page illustrates the use of fold-out signage made from changeable vinyl panels. The visitor will be able to interact with and move these panels, which also make up the walls of the area for permanent exhibition. The panels will be double sided and feature corresponding information on their front and back. For example, a sign may offer information on the cultural value of the Ceiba tree on one side and information on its ecological value on the other. The vinyl panels are remove able so that the exhibition can change with the seasons, interests, pressing social issues etc. that the park and community cooperatives deem important.

As mentioned previously, the Retreat to a Pueblo is proposed as an interactive workshop space where local people and visitors collaborate on the performance of traditional practice. The bottom image on the opposite page is a perspective sketch illustrating the character and layout of the kitchen workshop. There are two kitchen set ups which include the metate, comal, molino, parilla, work space and tables for communal meals. The pueblo also offers visitors the opportunity to participate in the other nine practices outlined in the previous matrix.
STRAATEGIES
INTERACTION & PARTICIPATION

CHANGEABLE FOLD-OUT SIGNAGE

KITCHEN WORKSHOP
INTERPRETIVE
MARKING THE SITE

ENTRY PATHWAY WITH PRINTS OF METAPHORICAL INHABITANTS OF SITE

RESTAURANT

EDUCATIONAL PRINTS - LOCAL ECOSYSTEM
STRATEGIES
MARKING THE SITE

The project site is a lowland area nestled between a number of hills. For this reason the ground is inundated with water for a large part of the year. The animals coexisting here mark the ground with prints of all sizes and shapes. As previously mentioned, the pilgrimage trail, Cruz del Monte, is the only infrastructure inside the national park and is culturally significant to the people of Huatulco. Similar to the marks left by animals, the pilgrimage trails has been stamped down over time by the people of this region. The strategy of marking is used in this context to pay homage to those who occupied this site before we did, metaphorically engraving their memory into the earth.


INTERACTIVE SIGNAGE

Highlighted in pink on the previous page, are the areas that will bear the markings of the metaphorical and literal inhabitants of this site. The first area that one must pass in order to enter into the reception palapa will be marked with the foot prints of travelling animals and people. This first image is meant to reinforce the notion that many have walked here before we arrived. The strip running through the center of the entry courtyard will be marked with prints of plants animals currently living inside the park along with their names. This portion will serve as an educational piece addressing the local ecosystem.

Marking is also used in the design of the signage found throughout the center. Small plaques made from the barro harvested in the park will be marked with the form of a plant or animal featured in the sign. These plaques will unfold to unveil color photographs with more detailed information about that particular species.
INTERPRETIVE

Recognizing how Huatulco the tourist destination was formed, the notion that true Huatulqueño culture is being erased and the goal of designing a project that the local community will be invested in, the interpretive strategy of narrative is essential to this project. My aim was to inscribe the memories and values of native Huatulqueños throughout the center.

After one passes through the reception area they will pass through the entry courtyard which is covered by a long ramada leading to the restaurant patio. Rather than using only wooden
beams, the ramada uses fabric panels to shade the visitor. Prose describing the history of this place and song lyrics from the area will be carved out of the over-head fabric. The top image on the previous page illustrates how local narratives will be projected onto the ground plane with light and shadow cast by the sun’s rays shining through the ramada.

The bottom image on the previous page is an example of the proposed signage that will run along the pilgrimage trail, Cruz del Monte. Community members will be asked to submit stories recalling the pilgrimage and other relevant cultural events and practices. These stories will be exhibited in the handwriting of the author throughout the site.

As mentioned previously, the use of the *caracol purpura* for dying fabric is very culturally important to this region. Other methods of dying fabric with natural materials are also practiced in Huatulco. On the pathway leading from the interpretive planting area to the house of the *caracol purpura*, textiles will be used as the canvas where stories describing traditional dying techniques are told (see image above).
The strategy of revealing is used to make the natural processes on site visually apparent to the visitor. As mentioned previously, Huatulco National Park is classified as a Selva Baja Caducifolia. This means that each year it experiences an extreme wet season in which the jungle is full and lush and an extreme dry season where almost all vegetation goes dormant and the leaves fall from the trees.

Located on the project site is a seasonal pond whose water elevation rises and falls during the course of the year. Rows of plantings with different colors, textures and tolerance to inundation will be planted along the edge to reveal the water's changing elevation. While doing my investigation in Huatulco, I developed a relationship with a Oaxaqueño botanical garden specialist who has helped me create the planting pallet for this exhibit.
Characteristic of the selva baja caducifolia is a variety of climbing vines. A series of three trellises have been proposed along the boardwalk running through the interpretive plantings. Three different combinations of climbing vines will be planted and allowed to grow up and around the structures, simulating the appearance of the natural environment in the national park. The extreme seasonality on site will be revealed by the vines’ cycle of growth and dying back. The boardwalk underneath the structures will expand to a width of 15 feet leaving enough room for seating and interactive signage that explains the natural processes being revealed.
This project is also unique in that it has to be run entirely on alternative energy. Because Huatulco is exposed to an extreme amount of sunlight, I determined solar energy to be the most suitable energy source. I had difficulty locating solar information specific to the south of Mexico. Because I did not intend to fully engineer a solar collection system, I decided to use the tools available to me to estimate the size of the system needed to run the center. I wanted to ensure that my proposal was realistic and that engineers could easily install a system in the future.

The first step was to determine the roof angle that would allow the photo voltaic (PV) cells to absorb the most sunlight and produce the most energy. To do this I used a solar chart specific to the latitude and longitude of my project site and took the average of the sun angles during the course of a year. This average was 72.33 degrees, which meant that the roof that held the PV cells would have to be built at a 17.67 degree angle to optimize solar collection.

In order to determine the size of the system, I used a solar calculator at Find Solar http://www.findsolar.com/index.php?page=rightforme. To complete the solar calculations necessary to establish the size of the system, I had to know the number of kilowatt hours (kwh) the center would use per month. While, I lacked this information, I did know that it would take a relatively small amount of energy, as I proposed few electricity-dependant installations. For this reason, I decided to use the amount of kwh used by a leed certified home as a basis for my calculations.

The solar calculator’s result is also dependent on geographic location due to the extreme differences in solar radiation collected in different
locations on the earth's surface. Because I was unable to find a calculator that had the capacity to solve for the coast of Oaxaca, I identified a comparable location in the United States. With maps provided by the National Renewal Energy Laboratory, I found that the average daily solar radiation in Arizona was similar to that of Huatulco. Using Arizona as a substitute, I calculated the square footage necessary to produce the amount of energy used by a LEED certified home.

Through this exercise, I determined that the roof size would need to be 193 square feet. The roofs above the bathrooms on either side of the restaurant where the solar panels were proposed have an area of 400 square feet. For this reason, I am confident that the proposed design could easily produce the amount of energy needed to be self-sufficient.

Average Daily Solar Radiation Per Month


LEED CERTIFIED HOME- 7000 KWH/YEAR
The final piece of this project was the documentation and analysis of the working relationship between the national park and the local community in order to provide useful recommendations on how it might be strengthened. As stated in my methods section, I kept a detailed daily journal that recorded my observations while working between the community and the national park in Huatulco. After I completed my field research, I went back through the journal, coded my documentation and extracted a list of relevant opportunities and constraints regarding the working relationship of the people and the park.

CONSTRAINTS

CONFUSION REGARDING VARIOUS FEDERAL ORGANIZATIONS
The federal organizations FONATUR and CONANP have the most prominent affect on the community cooperatives, but their role and power in the Mexican government is very different. Through conversations with the cooperatives, I found that they tended to lump the two agencies together. The reality is that the Mexican government sees tourism as a higher priority than environmental conservation and as a result, FONATUR has much more money and power than the CONANP. Because the community does not distinguish between these different agencies, they don’t understand why they can no longer cut down even one tree while acres are being cleared for condo development and hotel construction. Severe distrust of federal power leads to the notion that all are corrupt and “in cahoots.”

POOR COMMUNICATION
Poor communication is symptomatic of the problems between the cooperatives and the park as well as internally within both groups. As mentioned previously, when I arrived in Huatulco it appeared as though ten different projects were happening under the hand of countless different people. The communication necessary between the various stakeholders that would ultimately determine the success of this initiative had been completely lost. Additionally, the park staff was so overwhelmed and busy that they hardly had time to communicate with one another either. When I began this investigation, there were two separate teams of people organizing the project Cruz del Monte. Their work was so separate, that it seemed as though they were working without the knowledge of the others’ efforts. They held separate meetings and addressed the community groups about separate issues. This problem was also symptomatic of the internal relationship between the cooperatives who would attend various meetings, talk about their desire to implement a community project and not communicate with each other about it.

“US VS THEM” SOCIAL DISTANCE
It was evident when I began this research that there was a clear distinction made between the local community and the national park. I noticed this early on when the director of park hesitantly invited me to the first community meeting and told me that I’d be able to see “how they are.” This problem was also fueled by the actions of the community who clearly saw themselves as separate

OPPORTUNITIES
& CONSTRAINTS

IMPROVING

THE WORKING RELATIONSHIP

from the park staff, needing them only for potential funding, not having anything to do with true collaboration.

HISTORY OF CONFLICT
The way in which Huatulco the tourism destination was formed initiated a contentious relationship between the government and the local people which has continued to cause friction up until the present. The events of 2002, when some of the members of the cooperatives attempted to force the ‘then director’ to resign caused a number of staff members to fear the cooperatives and refuse to work with them at all.

POOR ACCOUNTABILITY
Poor accountability is a problem among the community cooperatives and the park staff. As explained, momentum on the project ebbed and flowed with the presence of stakeholders at meetings. At one point, we had all of the interest groups in one room discussing options and I felt that we were finally making progress. At the end of the meeting we scheduled a follow up for the next week in which the president of each cooperative was going to bring a list of the members of his/her group that was committed to being part of the Empresa LA Ceiba (The Company La Ceiba). Next steps were to sign the necessary documentation and send it into the CONANP to request funding for the following year. I was very surprised when only three people showed up to the following meeting, bringing us back to square one. This is a typical example of the “one step forward, two steps backward” process of working with the stakeholders in Huatulco.

POOR CREDIBILITY AND LACK OF TRUST
By virtue of the fact that many projects had been proposed and zero had been taken to the phase of implementation, the cooperatives had lost totally respect and trust for the national park. They had worked for over a year with the original consultant on this project, only to see it hidden away in a drawer without the funding necessary for implementation. The president of the largest tourism cooperative told me during an interview, “para nosotros, el parque nacional no existe”, (for us, the national park doesn’t exist).

This was also true of the park’s relationship to the community. They felt that the cooperatives had gotten used to taking handouts and took advantage of the little money the park had. For example, one of the members of the park staff told me about a situation where they had secured funding from the CONANP to give to tourism providers for necessary improvements on their boats. After they had distributed the money, they found that many of the people who came to collect it didn’t even have boats and others had used the money for personal reasons.
LACK OF FUNDING
Lack of funding is a problem that affects both the national park and the local community. The cooperatives lack the funds to implement projects on their own and need the park to help them secure resources. However, because environmental conservation is not a major priority in the Mexican government and given that Huatulco National park is fairly young, the park is allotted a small amount of money in consideration of all that they are expected to accomplish. They are also extremely understaffed, making their ability to successfully implement complex projects almost impossible. For example, there is only one person in charge of all ecotourism inside the national park. As a result of the demands placed on her to control the tourism arriving from other parts of Mexico and the world, she spends almost all of her time inside the office doing paper work and has little to no relationship with the local community.

COMPLEX BUREAUCRACY
Once again, this is a problem affecting both the park staff and the local cooperatives. While the understaffed park remains buried under paperwork inside the office, the community is unable to legally begin tourism initiatives due to the complexities inherent to the process.

COMMUNITY RELATIONSHIP NOT MADE FEDERAL PRIORITY
Finally, while the relationship with the local community is considered important, it was clear to me that the park's main objective was environmental conservation. Upon reflection, I don't believe that they recognize that their relationship with the community and their ability to successfully steward the land are intertwined and that they will not be able to accomplish one, without successfully addressing the other.

OPPORTUNITIES

ABUNDANCE OF TRADITIONAL KNOWLEDGE
While FONATUR may have imported “Mexican” culture for sale to tourists, there still remains an abundance of local knowledge. Because Huatulco is primarily home to migrants, the native Huatulqueños that remain are proud of their heritage and have a desire to keep it alive.

STRONG INTEREST IN COMMUNITY PROJECT
I was happily surprised to find that the national park and the local community both felt that implementing a community-run project was a priority.

SELF-REFLECTIVE PARK STAFF
While some members of the park staff did not seem to be bothered by their inability to successfully implement community projects, others were very aware of their shortcomings and
open to suggestions for improvement. I sat in on a staff meeting called by the director of the park to address the issue of collecting the cobro de derechos from the tourism cooperatives. During the meeting, they discussed their inability to implement projects and their lack of credibility in the eyes of the community. They were also very receptive to the input I provided regarding my perspective on the situation. After additional personal meetings with staff members and the director of the park, I realized that the desire to improve their relationship with the local community and implement needed projects was strong, but that they felt their hands were tied due to the amount of work dictated by the higher ups in Mexico City and the lack of funding allocated to complete it.

HISTORY OF CONFLICT AS UNIFIER
The history of conflict surrounding the formation of Huatulco can also be seen as an opportunity. After years of fighting for their rights to their own land, native Huatulqueños are proud of their heritage and have a strong tie to place. If this pride could be harnessed and used to unite the various interest groups, community-run projects would be more likely to succeed.

LOW EXPECTATION, OPPORTUNITY FOR REINVENTION
Because the local cooperatives have lost faith in the national park, even small moves towards a full blown project would seem like great strides. This gives the park the opportunity to work with the resources they have to help the community get the project off the ground and show them that they are serious about improved collaboration.

GREEN GLOBE, HUATULCO THE SUSTAINABLE TOURIST DESTINATION
Huatulco has been marketed by FONATUR as the first “sustainable” tourism destination in Mexico and has been certified by green globe. This opens up an opportunity for the community and the park to solicit funding from the more affluent agencies in the Mexican government for the implementation of a “sustainable” project.

EXISTING CONSERVATION CULTURE
The park believes that the community cooperatives do not see environmental conservation as a priority. However, during my interviews with the different interest groups, they each mentioned their desire to conserve Huatulco's resources. Recognition of this shared goal could act as a unifier.

UNDERSTANDING RESULTING FROM DELAYED PROJECT IMPLEMENTATION
Finally, while it is not ideal that this project is currently five years old, the stakeholders involved now have a clear understanding of the process required to implement a project with the Mexican government. If the stakeholders can bring themselves to work together, this enhanced understanding will serve to expedite implementation by avoiding common problems resulting from confusion.
DISCUSSION

The primary goals of this project were:

- Understanding the role of design as a vehicle for successful collaboration between a national park and a local community in the context of a protected area.
- Uncovering methods and strategies appropriate to gaining knowledge about traditional Huatulqueño practice without commoditization and
- Understanding the goals of various stakeholders for the purpose of highlighting common goals through design.

Upon reflection, the design process used in this investigation was most successful in its ability to open new dialogue on old issues by highlighting unrealized common goals, gaining new understanding of practice in collaboration with local people and re-establishing lines of lost communication.

OPENING NEW DIALOGUE

From the very beginning, my intention was to use design as a communication tool over the course of this project. While I recorded interviews, meetings and observation through written documentation, I produced matrixes, charts and other visual aids to help myself understand the information more completely and to share my new understanding with the stakeholders in order to confirm accuracy and correct errors. The power of this iterative process, was its ability to re-present old information to the interest groups in a new format. I found that when information was presented in a new fashion, stakeholders saw it in a new way, igniting fresh dialogue on old issues and enhancing my ability to learn from them. For example, when I first proposed changing the “Zapotec Pueblo” to a “Huatulqueño Pueblo” the original consultant on the project felt that it would not be marketable to tourists and made it very clear that he did not like the idea. Later, when I presented him the matrix outlining the practices that would be celebrated in the center, he was immediately sold and got excited about the future prospects of the project. It was evident that at that moment he finally understood my vision and began to trust my judgement and ability.

GAINING A DETAILED UNDERSTANDING OF PRACTICE IN COLLABORATION WITH LOCAL PEOPLE

The process of graphically illustrating the results of my investigation with the local community allowed me to gain a deeper understanding of local practice, architectural strategies and the project site. Similar to its ability to insight new dialogue, the process of re-presenting information in a graphic format not only got people exited about the project, but it also created a situation where local people could correct any errors that I had made and add information that I was lacking. A perfect example of this was sited previously when I presented the prac
tice matrix to a prominent family in the cooperative *Cruz del Monte* and they invited an elder from the fishing community to help me understand the parts of the process that I had missed.

**RE-ESTABLISHING LINES OF LOST COMMUNICATION**

From the start of this project, a primary goal was to open lines of lost communication, attempt to coordinate the various stakeholders and establish a mutual understanding of the present and future state of the project. The process that was used to get to know the park and the community cooperatives required a lot of leg work and time investment. At times, it felt as though I was working between warring parties that would never be able to reconcile. While it was difficult not to become discouraged, I attempted to develop trusting relationships with all of the interest groups. This meant accepting every invitation to participate in community events, meetings, dinners etc. I aligned myself with the park staff and the community groups and maintained transparency in everything that I did. As a result of this process, I was able to earn the trust of the “warring parties” who I truly believed to all have good, (if not misunderstood) intentions. Through these relationships, I was finally able to coordinate meetings with people who had lost contact and begin the process of opening lines of lost communication.

Before I left Huatulco, I was determined to establish a mutual understanding of the state of the project. The park staff had promised to hold a community meeting where I could present my findings and preliminary design in a forum to solicit feedback and get everyone on the same page. As a result of uncertainties and mistrust on the part of the park, this meeting never happened. Instead, I presented my findings and the preliminary design to members of each community group separately. While I feel it would have been more useful to do this with the cooperatives together, I was able to get feedback from individual groups and bring everyone up to date before leaving the country.

**CONCLUSION**

The investigation completed here on the process of design and development for the project *Cruz del Monte la Ceiba* was just the beginning of work that needs to be done on improving the working relationship between Huatulco National Park and the local community cooperatives. More work is needed to address the organization of the initiative and measures to ensure its longevity.

The process used in this investigation, was meant to address the potential power of design as a vehicle for collaboration. In this respect, I believe the project was a success. The power of design to excite people, provoke dialogue and gain an understanding of people and place is clearly illustrated in the results of this project. The profound comprehension of Huatulqueño practice that resulted from this process was also reflected in the final design of the center. My hope is that the insight gained on designing ecotourism initiatives, while mediating between multiple interests groups can be utilized by future designers doing similar work.
COLLABORATION

LESSONS LEARNED

USE GRAPHICS TO RE-PRESENT FINDING, TO SHARE, CONFIRM, CORRECT
This process will enable the designer to develop a relationship with stakeholders and gain a deeper understanding of the people and the place they are designing for.

TAKE TIME TO GET KNOW ALL INTEREST GROUPS
The only way to design a project true to the value system of multiple interest groups is to gain an understanding of each group in order to develop trusting relationships and identify common goals.

REMAIN NEUTRAL, MAINTAIN TRANSPARENCY
While working on community projects, it is likely to find oneself amidst conflicting parties. In order to develop an appropriate design solution, it is essential to develop a trusting relationship with all parties. The only way to do this is to remain neutral and maintain transparency in all parts of your process. Students may have an easier time developing a trusting relationship as they commonly work voluntarily. Once people understood I was unpaid, they were much more willing to cooperate with me. While developing relationships may be more challenging as a paid professional, being honest and maintaining complete transparency has the capacity to reach the same goal.

CONCENTRATE ON DESIGN
During the course of this investigation it was difficult not to get caught up in the politics of the situation. During an interview with a native Huatulqueño who ran a local travel agency, we began discussing the political and social complexity of the project. I told him that I was beginning to get discouraged about the possibility of it ever getting off the ground and he gave me some valuable advice. He told me not to get caught up in the politics. He said that as a designer, I would be most useful to the community of Huatulco if I produced the best design that I was capable of. A strong design would enable them to apply for the funding needed for implementation. I realized that my role was not that of a mediator, but that of a designer and if I wanted to help the people of Huatulco, I would have to use the skills that I excelled at.

RECOMMENDATIONS FOR IMPROVED WORKING RELATIONSHIP BETWEEN THE NATIONAL PARK AND THE LOCAL COMMUNITY

HOLD REGULAR OFFICE MEETINGS TO MAINTAIN OPEN COMMUNICATION
As mentioned previously, there was a severe lack of communication internally in the park’s office. In the four months that I was there I only observed one office meeting that was meant to include all staff members, and even in this circumstance many were absent. Because the park is understaffed, most people work independently on projects. Problems occur when different
groups take on pieces of the same initiative but maintain poor habits of never communicating about it. For example, the woman who was supposedly in charge of ecotourism in the park and the project *Cruz del Monte La Ceiba*, was not even told about the community meetings coordinated by the park staff member who had taken special interest in the project.

**SET EXAMPLE FOR IMPROVED ACCOUNTABILITY**
Momentum on the project was lost when people began to miss meetings. It was especially disappointing because members of the park staff were as guilty as the community groups in this respect. If the park wishes to improve accountability on the part of the local community, they must set the example first.

**INCREASE CONTACT WITH COOPERATIVES**
The park is severely understaffed. As a result, there is only one person in charge of ecotourism and she has little to no relationship with the tourism cooperatives operating in Huatulco. In order to improve their working relationship, build trust and find strategies to implement local initiatives, she must make it a priority to leave the office, go out into the community and build a relationship with the people she is meant to be working with.

**IMPLEMENT SMALL IMPROVEMENTS TO GAIN TRUST**
Because the park's office is only allocated a small amount of money to do a large amount of projects, they feel as though they don't have enough to implement the projects solicited by the community. Instead of starting small and adding onto the projects that the community is invested in, they give the money away piecemeal to causes less important to the community. This often results in the money being used for personal gain and/or forgotten. If the small amount of money available was put towards the initiatives more important to the community groups and used to implement phases, the park would begin to re-establish a respectable reputation.

**INCLUDE COMMUNITY ON CONSERVATION INITIATIVES**
Finally, the park has the misconception that the local community does not consider environmental conservation a priority. If they would include the community in their efforts to steward the land, it could begin a process of working together towards a common goal.
Upon completing this investigation, I realize that I have learned a great deal through the design process employed here. The first insight regards the potential inherent to an improved working relationship between the local community of Huatulco and the national park. Through literature review and my personal experience working inside the park's office, it has become clear that the challenges the park faces relative to their ability to successfully steward the land are exacerbated by their poor relationship to the local community. While conservation is not made a federal priority, the responsibilities mandated by the government are substantial. The park's lack of funding and necessary staff has created a situation where ethically responsible, hard working people feel trapped behind their desks, buried under paperwork and unable to do anything besides simply keep up. Because the park does not have the capital to provide sufficient surveillance of natural resources or follow through on project proposals, the local community has ceased to take them seriously as a governing body. The paradox lies in the fact that this same community needs the park to help them allocate resources and legally complete the bureaucratic steps required in establishing ecotourism initiatives. Upon reflection, it is clear that a partnership between the community and the park is essential to regain control over this challenging situation. The park's ability to successfully steward the land is dependent on their alliance with the people who call it home. Because the park cannot provide the funding necessary for full project implementation, the community must work with the park to begin small and use the resources available in a productive way. Over all, the success or failure of the project Cruz del Monte la Ceiba, and all future projects not yet imagined, is dependent on the park and the community's ability to act as a partnership. Simply put, in opposition they are weak, together they are powerful.

The second insight gained through this investigation regards the role of the designer in facilitating successful collaboration between conflicting interest groups. As mentioned previously, I received a valuable piece of advice from one of the community members during an interview. He told me not to get caught up in the politics of the situation and that I would be best suited to help the people of Huatulco if I concentrated on design and provided them with the plans necessary for project implementation. This short conversation made me realize that the designer's role is to remain neutral and to use their skills to facilitate communication among multiple interest groups by re-presenting the individual groups’ ideas and values back to them in a new format. The designer has the potential to allow people to see old ideas in a new way and to find common ground where communication has been lost.

The last lesson learned from this investigation is also regarding the power of design to re-present old information in a new format. Not only does this process have the potential to open lines of communication, but it also serves as a powerful tool for gaining a deeper understanding of people and place. This has been illustrated multiple times in the results portion of this
report. A perfect example is how the matrix created on traditional practice encouraged further conversation that provided a more detailed understanding of the content and new insight on aspects of Huatulqueño culture.

While considerable obstacles remain in the way of implementing the project Cruz del Monte la Ceiba and the working relationship between the local community and the national park has much to be desired, this investigation has been successful in a number of ways. The design process employed here has proven to have the capacity to open lines of lost communication and be used tool to gain a deeper understanding of people and place. This provides a platform for myself and other future designers to use while working in a similar context and supports my theory that design really can make a difference.
The county seat of Las Bahias de Huatulco is St. Maria Huatulco. Natives of the area are constantly correcting foreigners who refer to Las Bahias de Huatulco as Huatulco, claiming that St. Maria Huatulco has claim to the name. It is still most common however, for people to refer to Las Bahias as Huatulco and for the purpose of simplicity and congruence with quoted sources I will do the same. When discussing the county seat, I will refer to it as St. Maria Huatulco in order to make this distinction clear.

The people of Huatulco practice Tequio. This is the concept of all people in the pueblo providing free man power in order to accomplish tasks for the benefit of the community. This may involve people uniting to build a house for someone whose husband has passed away or building roads to enable the pueblo’s access to amenities not found on the coast.

Campesino literally means farmer or peasant. It is a term commonly used to refer generally to Mexico’s rural poor.

See Defending the Land of the Jaguar, Lane Simonian, 1995 chapter 8 for examples of successful people/protected area collaboration.

For complete definitions see A Participatory Approach to Conservation in the Calakmul Biosphere Reserve, Campeche, Mexico, Jenny Ericson, 245-246.

References


FOCUSED INTERVIEW OUTLINE

UNDERSTANDING ECOTOURISM

- How did this project begin?
- How did you get funding? Whose idea was it?
- Family? Public? Privately run?
- What are individual’s roles in the company? How do they work together?
- Can you give an example of past problems that you learned from?
- What would you do differently?
- Greatest success/failure?

GETTING TO KNOW THE NATIONAL PARK

Understanding their goals relative to the Project:

- Why is the national park interested in pursuing this project?
- What are the primary goals that the park would like to reach?
- What elements of the project are most important to the national park, why?

GETTING TO KNOW THE COMMUNITY COOPERATIVES

Understanding their goals relative to the Project:

For my first interaction with the community cooperatives, I would begin by explaining who I was and that I was working voluntarily as a student with the national park on the project Cruz del Monte la Ceiba. I also explained that my primary interest in the project was working within the framework of participatory/community design.

- Can you tell me about the project Cruz del Monte La Ceiba?
- Are you still interested in participating in this project? Why?
- Why do you feel that this project is needed?
- If it were up to you, what would be included in the development of this project?
- What components of the project are most important to you? Why?

UNDERSTANDING TRADITIONAL PRACTICE

All interviews began with the question:

- Can you please describe a typical day before the expropriation from the moment you woke up, to the moment you went to sleep?

The questions that followed would depend on the practices described in a typical day. Probes were used to solicit more detailed information.
APPENDIX B

DEFINITION OF TERMS

SEMARNAT- Secretaria para el Manejo de Recursos Naturales, The Secretariat for the Management of Natural Resources

CONANP- Comision Nacional de Areas Naturales Protegidas, National Commission of Natural Protected Areas. Federal agency in charge of protected area management in Mexico, equivalent to our National Park Service in The United States


ANP- Area Natural Protegida, Natural Protected Area

SECTUR- Secretaria de Turismo, Ministry of Tourism


NGO- Non-governmental Organization