



CONSUMING INTERESTS: Water, Rum, and Coca-Cola from Ritual Propitiation to Corporate Expropriation in Highland Chiapas

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A growing demand for water that exceeds scarce resources is changing political and social alignments and provoking the emergence of water wars. The scarcity of water is a result of deforestation, the contamination of existing water sources, and the diversion of groundwater to commercial enterprises. These commercial enterprises include irrigation agriculture and, increasingly, consumer beverage production, especially of bottled water, now sold to people who face growing water scarcity. A natural resource once considered a blessing for all people granted by the rain gods is now a contested commodity exacerbating the growing divide between classes.

In this article, I examine ways in which a consuming interest in water that once promoted community integration in early civilizations in Mesoamerica has become a multibillion-dollar industry with sales throughout the world, based on a commodity that many local people cannot afford. The concern of pre-conquest civilizations to ensure the water supply was transformed by the Spanish conquerors, who drained and diverted the abundant waters in the Aztec capital and then introduced commercialized cane and maguey used in the production of rum and tequila. Adopted by indigenous pueblos as a libation in ceremonies offered to the saints and divine powers during colonial and independence times, the demand was finally diverted to the consumption of Coca-Cola and other soft drinks imported by local concessionaires responding to corporate inducements. Today the major extraction of groundwater in San Cristobal de Las Casas, Chiapas is done by the Coca-Cola

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Company. The company now bottles the water and sells it throughout the world and to the people from whom it was expropriated.¹

The transformation of water from a deified resource to a commodified multi-billion dollar industry reveals how a public interest can be distorted by unregulated privatized expropriation. It is a morality tale that applies equally to other resources such as gold, silver, oil, and tin. Unlike these other resources, however, water has a human rights dimension; without water, humans cannot live. I have concentrated on water as a consumption product in this article because it is intrinsic to the social relations linking indigenous pueblos to their environment.² I include in my critique of privatized exploitation of water resources the failure of national and local governments to reach consensus on policies to address the growing shortages.

WATER IN PRECONQUEST CITY STATES

The availability of drinking water was a significant factor in the location of populations throughout Mesoamerica from the earliest known settlements hundreds of years before the Christian era to the present. In prehispanic times, growing concentrations of populations that depended on a communally controlled water supply propitiated deities who were believed to ensure a continuous flow. The confidence gained by fulfilling their obligations to the gods in ritual cycles encouraged people of early empires to perform spectacular engineering feats to control rivers and contain springs.

Possibly at the same time or even before the great ceremonial center of Teotihuacán near Mexico City developed their water control cultivation system about 500 B.C.E., precursors of the Mesoamerican civilizations in the central valleys of the state of Jalisco in western Mexico were developing chinampas, or cultivated islands anchored in lakes connected by canals that became the leading edge of horticultural activities in Mexico's central plateau. Archeological research over the past three decades by Phil Weigand and Acelia Garcia, who have examined the ecosystems of the Guachimontones site in Teuchitla, indicates that cultivators in this fragile environment were knowledgeable and concerned about soil fertility and water resources.

When I toured the site with Phil Weigand in April 2006, he pointed out the monumental lagoon where the chinampas were built and remain as islands grouped in regular blocks in canals that connected lakes. The extensive hydraulic engineering ensured the flow of water and capture of eroded topsoil in constantly enriched sites for sustained farming by inhabitants of over 2000 villages. It also provided a habitat for a variety of fish and animal species. These chinampas are, according to the

site brochure “among the earliest, most extensive and best designed cultivation fields within swamps in the whole of Mesoamerica” (Weigand and Esparza Lopez 2004:31).

Massive ritual mounds built at ceremonial sites near the springs and other sources of water, and the presence of a 2,200 meter square ball court, reveal the prosperity of the people who also developed fine pottery and sculpture. Sculptured figurines depicting dances and domestic life found in this early site and displayed in the Teuchitla museum suggest the collective basis for social organization. The widespread distribution of tools from more than 150 obsidian mines at the Guachimonton site attests to the part these people played in the circulation of ideas and techniques throughout Mesoamerica.

In the centuries after the Christian era, images of the rain god Tlaloc in Teotihuacán, and those of the Mayan rain god Chac in Palenque and Chichenitza, give further evidence of the power accorded to deities worshipped as the givers of water. This power extended to the gods of maguey and corn that produced fermented liquor that enabled humans to communicate with spiritual beings. Among the Aztecs, the goddess Mayahuel was venerated as the deity who gave pulque, the fermented juice of maguey, to humans.³ The corn god, Ixim, was venerated not only as the provider of the main dietary staple but also as the very source of human life among Mayas throughout the Yucatan, Chiapas, and the western highlands of Guatemala. Rituals in their honor solidified the social group dedicated to maintenance of the environment, but failure in cases of drought, often led ruling elites to exact human sacrifices for the gods that promoted conflicts and even cultural collapse.

The Aztecs left their homeland in Aztlan, whose geographic location is not known, about C.E. 820, arriving in the Central Plateau about three centuries later. There they introduced chinampa cultivation into the densely populated centers where they served as mercenaries for the Culhuacán and other kingdoms. Within two centuries they were able to use their military skills to forge powerful alliances; and by the mid-13th century they established a kingdom of their own, known as Tenochtitlán. Located in a river basin encompassing 70–80-thousand hectares, the capital city was set on an island in a lake surrounded by a chain of lakes, including the marshy sweet waters of Chalco-Xochimilco, the salty bitter waters of Texcoco, and the sweet waters of Zumpango verging into the salty lake Xaltocan (Tortolero Villaseñor 2000:23).

The setting for the major Aztec temple, the templo mayor, is that of a chinampa rising out of the lake that surrounds the ceremonial center. Tlaloc, the rain god, was enthroned in the vertex of the pyramid, and four of the 18 months in the

ceremonial calendar were dedicated to the gods of rain. Like all powers of nature, the Aztecs conceived of water in the form of rains, floods and storms as potentially destructive as well as beneficial to humankind (Tortolero Villaseñor 2000:24). The lakes provided fish, turtles, frogs, toads, mollusks, and algae, and supported ducks and birds and many species of animals. Highly developed hydraulic systems made up of dykes, locks, and water transport all attest to the engineering skills of the Aztec administration, enabling them to take advantage of an abundant supply of food in areas that had been abandoned by the enemies they had defeated.

Undoubtedly, the Aztec mastery of chinampa cultivation contributed to their power in the central plateau, offering them sustained irrigated lands that were replenished with rich fertilizers from the lake bottom. They fortified this material base with an ideological and ritual structure honoring the power of rain and water deities that were related to the moon, Coyolxauki; but they placed the tribal god of war Huitzilopochtli at the apex. A gigantic image of Tlaloc, the god of water, found in the biggest chinampa site of Lake Texcoco, has recently been removed to the entrance of the National Museum in Chapultepec Park. The population density of the area—hundreds of thousands in the Valley of Mexico at the height of Aztec civilization—attests to the success of hydraulic cultivation (Sanders and Price 1968:202). But the increasingly onerous demands for sacrificial offerings of human captives to their gods engendered the hostility of neighbors and even their own population so that the Spaniards found ready allies in their invasion.

Until recently, Mayas who inhabited areas to the south in Mexico and Guatemala were thought to have relied on swidden cultivation, an extensive slash and burn process requiring that large land areas be left fallow for future use. Certain of the classic sites in Chiapas seem to be chosen for the proximity of still lakes, particularly characteristic of Ch'inkultik, just south of Palenque where the dominant ceremonial site rises about 200 meters above a series of still freshwater lakes. In the streams that flow between them one can still find lilies growing. Linda Schele and Peter Mathews (1998) hypothesize that the recurrence of the lily as an emblem of kingship in Mayan glyphs may have related to the kings' responsibility to maintain chinampas that were sustained by the tuberous roots of the lily. As yet this hypothesis has not been substantiated by any archeological dig.

In these prequest city states, hydraulic systems reveal economic and social integration extending over large regions that were strongly focused on the control and conservation of water resources. The importance granted to water and the responsibility taken to guarantee its continued abundance contrasts with the culture introduced by the Spaniards and even more so with intensive commercial crop

cultivation promoted after 1960s. Where these practices dominate the landscape, the valuation of nature and the commitment to balance in the cosmos found in the Mesoamerican formative era are violated, just as they were by warring elites before the conquest when deforestation caused the collapse of lowland civilizations. Today for example, the Teuchitla area in western Mexico is environmentally devastated, and the river and lakes have shrunk or disappeared. The national government subsidizes extensive irrigation systems for the production of cane sugar and maguey that divert water from subsistence cultivation. Tequila, the chief product made from maguey, is a product identified not only with the town from which the name is derived but also with Mexico as a nation, yet it was recently sold to a foreign corporation, along with the water rights that sustain its production.⁴ Mexico City is experiencing a water shortage, and water supplies in most large urban centers are threatened with contamination or scarcity.

I now turn to the logic and practices of the Spanish invaders and conclude by highlighting the attempts now being made by Mayas to pursue an autonomous course of development reinstating small plot cultivators and craftspeople.

THE SPANISH CONQUEST AND THE DRIVE TO DESICCATE WATERLANDS

Spaniards expressed awe and admiration for the beauty of the Aztec capital, overflowing with vegetation, flora, and birds. Fountains and canals connected lakes from which rose the artificial islands or chinampas capped with flowers and fruits. Yet coming from the arid lands of Asturias, Andalusia, and Madrid the colonial bureaucrats were bent on draining the water that impeded their plans to replace the temples and palaces of Tenochtitlan with replicas of the quarried stone cathedral and government offices that still stand in Mexico City's zocalo. They are a testament not only to the dominance and control exercised by the conquerors but also to their insensitivity to the knowledge and artistry of the people and to the environment.

In the century following their conquest of the Aztecs, the Spaniards proceeded to carry out what Tortolero Villaseñor (2000:33 et seq.) calls "an ecological destruction without parallel" in the world. They diverted waters from the lakes and canals, constructing dams in ways that caused the waters to stagnate and the fish and plants to die. They burned woodlands to make pasture for cattle, introduced plow cultivation so deep that it caused erosion, and brutally disrupted the marshy lake bottom. The soft subsoil could not support the weight of their stone buildings. Lacking the constant flow of waters through canals that kept the lake waters oxygenated, the dead waters no longer maintain the life of plants and fish.

Given their own failure to dry out the landscape, the Spaniards hired a Dutchman, De Boot, because Dutch engineers had recovered 80-thousand hectares of land from the sea between 1540 and 1615. His plan to dig a ditch around the city, expel the surplus waters with hydraulic pumps as they did in Holland, and connect the lakes with canals was rejected because it too closely replicated what the Indians had had. He was denounced as a Dutchman and a Calvinist, a spy and a heretic, and condemned to death by the Inquisition in 1636. Although the sentence was suspended, he died, apparently of natural causes, in 1638 (Tortolero Villaseñor 2000:37).

Colonial government policies were guided by the attempt to dry out the urban environment of the capital city they replaced, in effect replicating the arid environment from which the Spaniards had come. Subsequent projects spread the Spaniard's ecological disaster with the advance of hacienda cultivation in the north and in the flatlands to the east and south. The destruction that followed the conquest was accelerated through the ineptitude of bureaucrats and the rejection of often-superior techniques and practices of the Indians, setting the stage for local rebellions that ultimately brought down Spanish rule. This insensitivity to the environment persisted after independence when buildings such as the Palacio de Bellas Artes and the interrupted Benito Juárez monument meant to celebrate the power of the state sank several meters. Floods resulting from the destruction of the intricately engineered canals continue to plague the population, with Lake Texcoco periodically disgorging its waters on the Mexican capital.

CHIAPAS AND THE DELAYED REVOLUTION

The highlands of the state of Chiapas did not attract many Spaniards during the colonial period. Without the participation of indigenous people, the decision to join forces with Mexico rather than Guatemala was made by the few land barons who dominated the state in 1824, three years after Mexico had gained its independence. Promoted by liberal policies in the last quarter of the 19th century, the descendants of these elites and immigrant Europeans seized coastal lands and the better lands of Indian pueblos in highland valleys. There they established a racially divided society that maintained an impoverished, geographically isolated majority of Indians in the highlands, reduced to a subordinated status, deprived of education, and dispirited by alcoholism. Mexico's independence from Spain did not bring freedom for the indigenous people, but, rather, greater freedom for the descendants of Spaniards, deculturated and mixed blood Indians, or *ladinos*, to exploit Indians in feudal institutions of work. The relative isolation of indigenous townships allowed some precolonial practices to survive until the mid-19th century when the attrition of

restricted lands previously granted to Indian pueblos by the crown forced many to migrate temporarily or become peons in coastal plantations. The vision that fostered the growth of empires dedicated to cosmological forces was further attenuated by commercial activities dominated by Europeans and a growing population of ladinos.

Throughout pre-Colombian Mexico, consumption of fermented beverages was an intrinsic part of religious and secular celebrations. Powerful seers (*iloletic*) or shamans imbibed these intoxicating beverages and smoked strong tobacco cheroots to enhance their communication with the animal spirit of the patients and their malefactors to carry out a cure or intercept witchcraft. After the conquest the fermentation and distillation of sugarcane liquor, or rum, became a monopoly of religious *cargo* (lit. "burden") holders who required the drinking of *posh*, or home brewed cane liquor, in all celebrations in the calendar cycle of saints, and in curing ceremonies, betrothal rites, and in funerals. In some towns, such as Chamula, a Tzotzil speaking municipality contiguous with San Cristobal de La Casas, both the production and distribution of *posh* was monopolized by the elders themselves. In other towns such as Amatenango liquor production became a cottage industry with rudimentary stills discretely located in hamlets surrounding the town center.

When I was living in Amatenango during the 1960s, drinking was institutionalized in every celebration within the home as well as in the church and town hall. Civil and religious officials addressed prayers, called *pat'otan* (behind the heart), to the ancestors (*me'iltatil*), asking permission to swallow the drink. Liquor was considered to be the gift of our Lord Jesus Christ, derived from the bath water of the crucified Christ when he was taken down from the Cross (*s'mahtan sapilyok, sapilsk'aab yu'un tatik Jesu Kristo*). During civil and religious celebrations, officials tested each other's manliness, equated with the ability to drink a great deal without staggering. When they reached their limit of tolerance, they could not refuse it but were allowed to pour the offering into bottles carried by young boys who accompanied each official. Every young man produced his first batch of *posh* when he started his campaign to win a wife, a long drawn out series of visits to her parents in which gifts of liquor along with bread, chocolate, and brown sugar, played an important part. When the parents of the girl accepted the drink, the troth was announced, and then the big production of liquor for the wedding began (Nash 1973). The worth of a woman was measured in the number of liters of *posh* given by a youth in the betrothal match, and years after the marriage the quantity was remembered and remarked on.

In 1957, Pedrero, one of the largest cane growers who owned the sugar refinery of Pujiltic on the lower slopes of the central Chiapas plateau, used his

political connections throughout the state to make home distilled beverages illegal. Soon afterward, state police were dispatched to the towns and proceeded to flush out the moonshiners in the hill towns. I was told after the campaign that there were two killed on each side of the fight. Sensing the futility of the military campaign, the state government called in the National Indigenist Institute (INI). They proposed a reward for anyone who brought in their equipment, in exchange for which they received ancient copper coils and metal drums. These items, including pottery tinajas (or water carriers) used to capture the evaporation of the boiling sugar, made for a fine museum collection, but in the following weeks the stills were back in operation with updated copper tubing. The owners of the 41 stills operating when I was there resisted attempts by federal police to locate them, broadcasting warnings in Tzeltal of the impending raid on loudspeakers that played popular songs to attract young men to the bars they operated in town.

Given the prevalence of this consuming interest in liquor, anthropologists were attracted to the subject, resulting in a large-scale research project and extended computer analysis during the 1960s, when this technology was not much in use. The book that resulted from the investigation in three towns, Amatenango del Valle, Chamula, and Oxchuk, was entitled *Drinking Patterns in Highland Chiapas: A teamwork Approach to the Study of Semantics through Ethnography* (Siverts 1973). It was a triumph of structural functional investigation, showing minutely the functioning of the civil religious hierarchy based on age, gender, and rank as this was played out in drinking order. In the process, a great deal of liquor was imbibed, both by anthropologists and “informants,” possibly promoting what was called rapport in those days. The requisite drinking in ceremonial occasions may have promoted conviviality, as the authors claimed (and I was one of them), but it also promoted a compulsive addictive behavior that was ruining the health of local people and promoting domestic violence. The interpretations generated by the research ignored both the overarching structures of inequality that held Indians in bondage and the way in which drinking behavior reproduced the relations of subordination.⁵

The high consumption of liquor not only increased the brutalizing impoverishment of indigenous people who expended so much of their labor and land on cane sugar liquor but also succeeded in anesthetizing Indians to the injustice in which they were held captive. Those who became conscious of this, especially women who were not so engaged in the ceremonial life requiring that they imbibe copious amounts of liquor, chose to convert to Protestantism because it absolved them of participating in the civil religious hierarchy. This strategy was notable, especially in Oxchuk where in the late 1940s over 5,000 adults had converted to escape the

required drinking in civil and religious ceremonies, and particularly in curing rituals where drinking was considered an essential part of the cure (Villa Rojas 1990). Women were among the first to convert and made up the majority of the converts that Villa Rojas recorded during his field work in the 1940s. The women, who were the first to accept the new faith, often converted their husbands because drinking was prohibited in the congregation, a pattern that Christine Eber (1995) recorded over two decades later in Chenalhó.

Aware of growing concern about alcohol, traditional religious leaders began to substitute soft drinks for the liquor, establishing concessions with the Coca-Cola Company or PepsiCo that were making inroads in indigenous markets during the 1980s. In Chamula, leaders of the hierarchy reinstated their monopoly with the new product replacing posh. The Coca-Cola Company advertised the beneficial health effects of the nonalcoholic drink, and the religious brotherhoods provided the infrastructure for the promotion of Coca-Cola in local celebrations that had previously served locally distilled cane liquor. The monopoly of this sale was granted by elders of the civil religious hierarchy to the Coca-Cola Company. In Amatenango, the concessions were granted through party allegiance, with Institutional Revolutionary Party (PRI) officials purchasing Coca-Cola and Party of the Democratic Revolution (PRD) officials favoring Pepsi. When I returned to Amatenango in 1987 after a 20-year absence, I found that these soft drinks were dispersed with the same ceremonial practices and prayers that had accompanied the distribution of posh during celebrations in the past. Soft drinks, including national brands as well as the U.S. brands that tended to be distributed in accord with monopolized markets, have even replaced the gift of posh in the elaborate household ceremonies of betrothal and death.⁶

The consumption of both posh and soft drinks opened indigenous society to wealth opportunities for a few, engendering a class system that divided the town between those who were part of the *cacicazgo*—political leaders dependent on the ruling party—and those who were not. The *cacicazgo* fostered political alliances between indigenous leaders and the state that debilitated indigenous autonomy more than any previous colonial or independence institutions. It became a key factor in the extreme marginalization of Chiapas after the Revolution of 1910–17, in which it perpetuated the rule of feudal land barons long after they had been superseded by modernizing agents in other states. Government services, including education, health clinics, electricity, and piped water, came late or not at all. Indigenous villages did not have any piped water service when I arrived in Amatenango in 1957, and it was not available even to residents in the center of town until a decade later. When

it was finally introduced in the late 1960s and 1970s, it was given out preferentially; those who lived in outlying hamlets or were marginalized from the government largess were the last to receive piped water, and often the hamlets that were opposed to the party in power never gained it.

Piped water has created another basis for partisan discrimination and conflict within communities. When piped water was first proposed by the INI, the curers in Amatenango did not want to have the spring waters covered and tapped with pipes because this was the site of curing rituals where patients were bathed. It was only after a year's negotiation that INI reached a compromise and diverted a stream for curing purposes. In the spring of 2004, Zinacantán's PRD officials who occupied the town offices refused to grant water to nonparty members. The resulting conflict caused two deaths. In Chamula, residents in the hamlet of Petet were discriminated against when potable water was first introduced in 1995 because they voted for the party opposed to that of incumbent PRListas. Remote hamlets of Amatenango have never received running water.

These local conflicts are not caused by the corporations that enter into market relations with indigenous communities, yet the concession granted to soft drink companies have aggravated deep-seated conflicts based on religious and political party schisms by promoting access to privatized gains. To resist the influence of corporations requires more than a boycott of the product, as the people of Mitzitón learned in 2004 when they opposed the order of a township official who demanded that they purchase twenty cases of Coca-Cola per week for meetings so that he could retain his concession with the company. Faced with expulsions and even death threats for refusing to buy Coca-Cola from the incumbent official, the dissidents had to leave their community and colonize a new settlement in Teopisca on the basis of Catholic Word of God principles (CIEPAC 2004:3).

Many indigenous communities are beginning to reject the authoritarian rule of traditional leaders and the increasing threat to land and water resources by foreign private enterprises. Some seek autonomy, following the path of Lacandon communities that support the Zapatista Army of National Liberation that constituted themselves as Regional Autonomous Pluriethnic Pueblos on October 12, 1993. This group drafted the demands that were later codified in the San Andrés Agreement signed but never implemented in 1996 by President Zedillo.⁷

This course is being pursued by Chamula residents who have settled on the slopes of Huitepec, the volcanic peak where the major springs that supply water for the department of San Cristobal and many of its surrounding indigenous communities are found. During the presidency of Vicente Fox, who had served as the

chief executive officer of Mexico's Coca-Cola Company prior to his taking office, the federal water agency gave permission to the company to tap deep groundwater resources. The water is not metered, and the municipality does not receive reimbursement. Perhaps to confirm the concession of this precious resource, the newly installed Partido Acción Nacional president Felipe Calderon declared Huitepec a national environmental reserve. This step, which allows the federal government to abrogate land and water rights of localities, has been taken in many of the water rich environments throughout the state. Following this preemptive act, the new paramilitary organization that has been active in prime Lacandon sites since Calderon's inauguration arrived in the area and threatened the long-term settlers, claiming that they were cutting down trees in the new reserve. The settlers claim that they have not done any more than cut small trees for firewood as they have done for the past six or seven decades of residence, and that the large-scale cutting was done by the intruders. Meanwhile, Maderos del Pueblo, an activist NGO of Great Britain, supports the residents and has called environmental and human rights organizations in the area to rally around the threatened residents. When I visited the encampments of volunteers on April 12, 2007, they reported a lull in hostilities but were maintaining daily tours to ensure that no new cutting of trees occurred.

The Coca-Cola Company, which moved its headquarters from the state capital of Tuxtla Gutierrez a few years ago to take advantage of the excellent water supply in San Cristobal, has expanded its fleets of trucks that canvass the neighborhoods of the city, proclaiming their presence with a happy jingle that draws adults and children to purchase their soft drinks and the increasingly popular bottled water. The company claims to be trying to recruit indigenous workers, but the manager complained to me in an interview (March 2006) that the level of education is too low for the jobs they need to fill. As a result, he said, they are giving grants to communities such as Chamula to upgrade the educational level. When I visited the town soon after, officials told me that, to their knowledge, Coca-Cola has not invested in any educational program in town.

PRIVATIZED APPROPRIATION OF WATER IN A NEOLIBERAL ECONOMY

In global markets, the links between resource bases and consumption needs have changed. Instead of rendering liquor, candles, tobacco, and incense to the gods in thanks for their gift of water, public officials now grant concessions to foreign firms that allow them to extract unlimited quantities of an increasingly valuable

resource. In the new exchange relationship the ritual responsibilities that promoted communal integration are waived, and in their place class differences have created the basis for growing conflicts among indigenous people.

The demand for commoditized bottled water has grown as a result both of contamination of existing water supplies and new industrial uses, particularly in agroindustry. It has also grown because of the diversion of groundwater and springs to the companies that sell bottled water. During 2004, more than 154-billion liters of bottled water were consumed worldwide. The United States is a foremost consumer with 26-billion liters and Mexico is the second highest consumer with 18-billion liters.⁸ The biggest gains in the sale of bottled water are in Third World countries, which face growing scarcity of clean water along with rising populations. Companies like Coca-Cola, PepsiCo, and Nestle that have always drawn on world water resources for their beverages, now use their water rights to exploit groundwater for sale. In countries that are experiencing the greatest growth in the world economy, bottled water conduces to the scarcity of potable water: in India Coca-Cola's export sales of water called Dasani have reduced the capacity of 50 cities to meet the needs of the people.

Although not always healthier than tap water in countries that purify piped water, bottled water is 10,000 times more costly if one takes into account the energy expended in bottling, commercialization, and recycling. Bottled water is also highly costly for the environment. There are few government regulations on the production of bottled waters, and some bottling companies simply take tap water and add minerals, a practice that has not always proved healthful (*La Jornada* 2006: 6a).

Investment in water services has low return when the server does not hold monopoly control of water. The Mexican government had hardly begun to provide water services to indigenous areas when the transfer of water services to the municipality began to be privatized illegally in 1982. Privatization was then legalized by the reform of Article 27 of the Constitution in 1992 during Salinas's presidency. The drive to privatize rights to exploit groundwater and make it available to foreign private companies surged during Vicente Fox's presidential term. As former president of Mexico's Coca-Cola Company, Fox was instrumental in assessing the wealth of subsoil waters and asserting the need of foreign capital with the perforation technology to dig deep wells. It was no surprise when he introduced the new Law of National Waters in 2004 that authorizes the privatization of the entire hydraulic infrastructure of federal property—dams, canals, and irrigation ditches—and prioritizes the rights of extraction of water by corporations. These resources had been

considered the patrimony of the nation. The new Law of National Waters expands the creation of markets of water, taking advantage of the small farmers who can sell their right of extracting water. During his presidency the Fox administration has granted rights to exploit more groundwater in a country than ever before. The country now faces water shortages owing principally to the use of subterranean water, by large-scale agribusiness.⁹

The water hunters are now actively entering the new markets opened up by the Fox administration's reforms. Carlos Slim, a man who made his multibillion-dollar fortune in the privatization of telecommunications rights over a decade ago, has now offered to assist Mexico City with its water supply. The reform in the law at the federal level has enabled the Coca-Cola company to exploit deep wells in San Cristobal de Las Casas. Although the municipality of San Cristobal does not receive any rent or payments for the rights of exploitation of the wells, Coca-Cola Company is now selling not only their signature soft drink but also 400 product lines that now include bottled water for this increasingly scarce resource. The corporation's new distribution center in San Cristobal consolidates its market gains in consumption of Coca-Cola in indigenous territory while taking advantage of low prices for clear water in territory that was known for abundant water supplies. The market has expanded with the demands of a growing tourist industry and also of low income ladinos and Indians who have no access to groundwater. Consumption of bottled water in Mexico has doubled from 1999 to 2004 as a result of increasingly contaminated waters, and the buyers are not just tourists or young urban professionals. Indigenous entrepreneurs use the corporate frame to enhance political party goals internally at the same time that the corporation uses the local concessions to promote sales and secure their position in a sovereign nation on their own terms.

THE WORLD RESOURCE WAR IN WATER

The tenuous link between consumer and producer, stretched in the western expansion and consolidation of the capitalist market system in the 20th century, is now being severed in the third millennium. Privatization had already been legislated in the North American Free Trade Agreement, railroaded through Congress during the Clinton administration and ratified by Carlos Salinas in 1993. That agreement defines water as a tradable good, obliging all parties to sell their water resources to the highest bidder under threat of being sued by private companies that want it. These parties will be strengthened by the proposed Free Trade Area of the Americas (FTAA), which would allow foreign investors to sue and demand compensation from

governments for any law or rule that affects their profits, even when these laws are motivated by environmental considerations. (Americas Program 2004). The World Bank is now making its loans to countries conditional on the privatization of water services and resources.

We are on the brink of a new resource war that will divide the populations of the world into the haves and have-nots of water. The first major water war grew out of Bolivian popular resistance to the privatization of the Cochabamba water system. It was set off when Aguas del Tunari and Abengoa Corporations, subsidiaries of Bechtel's operations in Bolivia acquired the rights to manage the water service of Cochabamba in 1999. This concession was a response to the IMF offer of a development loan to Bolivia's government on the condition that Bolivia would sell to private corporations the municipal water system of Cochabamba and the national oil refineries. The offer was cunningly related to a World Bank report advising that no relief be granted to ameliorate the increase in water tariffs that took place (Albro 2004:235 et seq.) Massive popular mobilizations ensued, involving large segments of both indigenous and chola or mestizo populations. In the process, they generated what Albro calls a "plural popular" subject that was neither Indian nor elite and that became the base for the political success of the indigenous leader, Evo Morales in the presidential elections of 2006.

Other countries in Latin America have followed the example set by Bolivia's popular resistance to privatization. In Uruguay a 2004 plebiscite limited private participation in water services, and in Argentina the government restricted the benefits that had been customary in water contracts to private companies. This could happen in Colombia, too. Costa Rica is one of the few Latin American countries that provides public water services for all, whereas in Haiti only 50 percent are served. Water has become yet another measure of the poverty index, and investments in water services for Latin America are considered a poor market risk.

The Fourth World Water Forum, held in Mexico City in March 2006, differed markedly from the First World Forum on Water held in Marrakech. The First World Forum was organized by civil society with groups such as the Coalition of Mexican Organizations for the Right to Water and the movement for an alternative to privatization and for recognition of water as a human right setting the agenda. The agenda for the Fourth World Forum was set by financial organizations that now support it, including the Interamerican Development Bank and the World Bank. (As I have mentioned, the World Bank financing for installing water service is in fact conditional on privatizing water.) These organizations prevailed on the assembled

groups not to proclaim water as a human right (Galan et al. 2006: 43). The watered down (no pun intended) declaration, simply says that water is important for health and for the poor.

Local initiatives and community-level projects to supply, conserve, and treat water were overshadowed by very different neoconservative concerns. As a result, the NGOs and indigenous dissenters held an alternative Water Forum outside in the streets of Mexico City. An estimated 10,000 demonstrators were blocked from marching to the meeting site. They included members of communities threatened with sewage contamination, Indians whose water is being diverted to supply big cities, and farmers whose lands are scheduled to be flooded by hydroelectric projects. Mazahuas carried out a ritual asking for protection of water. Representatives of Pueblos Indígenas of Latin America announced that water is not merchandise, but life, and it ought not to be sold. "We know that some chiefs of State have not accepted satisfactorily that the liquid of the indigenous pueblos is like blood for the land; it is sacred, and therefore we respect it and for it we demand that the agenda of agreements of this forum establish actions that include us." As the most threatened consumers, they were the most forceful in protesting the threatened scarcity of water. Capitalist providers might take note that the break between consumption and production will also terminate their survival.

CONCLUSION

This brief review of transformations in the social organization of water systems from preconquest to colonial to independence to modern times reveals the need for a holistic analysis to ensure sustainable development and equitable distribution of such a basic necessity. The imposition of Spanish rule interrupted well-established adaptations to fragile environments and in so doing aggravated the scarcity of water in heavily populated areas and contributed to the concentration of power and wealth. In the early colonial period, the conquerors were able to reach water with wells of nine meters, now they have to dig 450 meters to find water.

The transformation from ritual propitiation of the gods that engaged entire populations in collective action to the private expropriation of water resources is having a profound impact on the indigenous pueblos that are now major consumers of these costly products. The shift from rum to Coca-Cola or Pepsi Cola is not entirely negative; the devastating effects of alcoholism are not nearly as apparent today as when I worked in the highlands during the 1960s. Yet the immediate effects are the dental caries that afflict the population coming of age in the 1970s, and the dehydration of infants and elders with parasites that sometimes causes

death. The delayed effects are environmental changes that are already becoming apparent, along with the increasing scarcity of a gift of the gods that is becoming too costly for the poor. The alliances made between corporate and government leaders to secure water rights without redistribution of profits to the consumers remain the most pernicious effect of privatization and monopolization of this precious resource.

The magnitude of the water crisis is made clear by the indigenous people who live on the frontiers of capitalist expansion. They are the most forceful in addressing the values that are threatened in the new resource wars for water. They remind us of a culture that promoted collective rights through practices that enhanced the environment, and the will of those who were the “keepers of water and earth” (Enge and Whiteford 1989) in earlier epochs. The privatization of a resource once considered to be the gift of gods and nature threatens universal access to a primary resource that many think should be protected by human rights covenants.

ABSTRACT

In this article, I trace consumption chains motivated by religious and secular rituals that have promoted demand for water, rum, and soft drinks in Mesoamerican communities for over 2,000 years. It describes transformations in the social organization of water systems, and how these transformations have affected indigenous communities in particular. In preconquest ceremonial centers the collective effort of the entire community contributed to the engineering of water projects and the celebration of deities who ensured the supply of water. Spanish rule brought a new array of saints, often identified with deities of natural forces, and with them cane sugar and rum with which Indians celebrated sacred holidays. Religious fraternities that once promoted imbibing of rum to facilitate communication with the gods and saints during the colonial and independence periods turned to Coca-Cola and other commercial beverages in the 1970s. The Coca-Cola Company promoted the health effects of their nonalcoholic drink and religious brotherhoods provided the infrastructure or local promotion of the drink during celebrations that once served locally distilled cane liquor in the annual cycle of fiestas. Federal concessions for extracting the groundwater of Chiapas now enable the company to produce their internationally sold products along with their newly featured bottled water. Rituals once made to the rain gods as givers of water are supplanted by political concessions to transnational corporations working with local officials in contemporary Mesoamerican communities. The transformation from ritual propitiation of the gods that engaged entire populations in collective action, to the private expropriation of water resources, has a profound impact on indigenous pueblos that are major consumers of these costly products.

Keywords: Mesoamerica, preconquest, rituals, water, consumption

NOTES

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1. Federal permits to the Coca-Cola Company were granted during the presidency of Vicente Fox, who was formerly chief executive officer of the Coca-Cola Company in Mexico. The municipality does not receive compensation for the unmetered pumping from deep groundwater reserves.
2. Intensive agricultural exploitation uses far more of the country's water supply than does bottled water, as studies to the north of Chiapas amply demonstrate. Enge and Whiteford (1989) have noted the remarkable feats accomplished by small plot farmers in the Tehuacán Valley who retain a collective organization and control of the irrigation system they devised. Roberto J. Gonzalez (2001) also indicates the scientific acuity of Zapotec farmers who have adapted the new coffee crops without abandoning their cultivation of subsistence crops. Although the impact of privatization is emphasized here, I do not overlook the dangers of government programs that ignore or reject the solutions that indigenous people make.
3. Eloise Quiñones Keher (1995), traces the roots of worship of Maguey through the goddess Mayahuel in her book *Codex Telleriano, Remenses: Ritual, Divination, and History in a Pictorial Aztec Manuscript*. Like pulque, made from maguey, mushrooms and tobacco were used by Aztec shamans to conjure up demons and the devil himself. Yucatec Mayan shamans could send diseases inflicted by underworld rulers back to the realm of the dead.
4. Researchers in the Latin America Data Base (vol. 17, no. 35, September 2006): Source Mex, Economic and Political News on Mexico. Latin American and Iberian Institute, University of New Mexico) reported the sale of Casa Herradura, on August 28, 2006, to U.S.-based Brown-Forman Corp. Other firms have recently been acquired by U.K.- and U.S.-based brands. The sale that occurred during the month for celebration of Mexican independence was usually toasted with tequila, now a bitter potion for Mexicans.
5. Sergio Navarro Pellicer's (1988) incisive analysis of *aguardiente* examines the way in which *aguardiente* reproduces the relations of subordination in Chenalhó. Eber (1995) analyzes the double subordination of women as victims of domestic abuse and ethnic subordination aggravated by alcohol.
6. Another variation in this party alliance was played out in Mitzitón where the Coca-Cola Company gave the town's storekeeper a refrigerator, chairs, tables, and free gifts in a contract that required him to sell 20 cases of soft drink a week. The storekeeper used his links with the PRI-controlled community council to force the sale of the drink on all members. When the people refused to buy the costly drinks, the PRI monopoly threatened them, and they were forced into exile (Centro de Investigaciones Económicas y Políticas de Acción Comunitaria [CIEPAC] n.d.).
7. On October 12, 1994, the Lacandon communities that supported the Zapatista Army of National Liberation constituted them as Regional Autonomous Pluriethnic Pueblos and drafted the demands that were later codified in the San Andreas Agreement signed by President Zedillo. The state has failed to implement the policies.
8. See *La Jornada* (2006: 6a) and the anthology prepared for the Fourth World Forum on Water.
9. Felix Hernández Gamundi, an engineer working with indigenous communities, spoke in Taller Popular en Defensa del Agua, April 2005, printed in *La Jornada* (Gamundi 2006). has been chipping away at the nationalized enterprises of Pemex and the Federal Commission of Electricity, permitting foreign exploitation of natural gas, illegal contracts to Repsol, Petrobras, Techint, Teikoku, and Lewis Energy Group.

Editor's Note: Other *Cultural Anthropology* articles have examined ways capitalism reorients desire and consumption. See, for example, Debra Curtis's "Commodities and Sexual Subjectivities: A Look at Capitalism and Its Desires" (2004), Nickola Pazderic's "Recovering True

Selves in the Electro-Spiritual Field of Universal Love" (2004), and Adeline Masquelier's "Of Headhunters and Cannibals: Migrancy, Labor, and Consumption in the Mawri Imagination" (2000).

REFERENCES CITED

- Albro, Robert
 2004 "The Water Is Ours, Carajo!" Deep Citizenship in Bolivia's Water War. *In* *Social Movements: A Reader*. June Nash, ed. Pp. 249–271. Oxford: Blackwell.
- Americas Program
 2004 Free Trade and Water Privatization. Electronic document, http://www.americaspolicy.org/articles/2004/0412water_bodyhtml, accessed March 29, 2005.
- Centro De Investigaciones Económicas y Políticas de Acción Comunitaria (CIEPAC)
 2004 Chiapas al Dia 437(October 27):3.
 N.d. October 17, 2004. Coca-Cola vs. Indigenous Peoples in Chiapas. Electronic document, http://www.laneta.apc.org/ciepac/boletines/chiapas_en.php?id=437, accessed June 1, 2007.
- Curtis, Debra
 2004 Commodities and Sexual Subjectivities: A Look at Capitalism and Its Desires. *Cultural Anthropology* 19(1):95–121.
- Eber, Christine
 1995 *Women and Alcohol in a Highland Maya Township*. Austin: University of Texas Press.
- Enge, Kjell I., and Scott Whiteford
 1989 *The Keepers of Water and Earth: Mexican Social Organization and Irrigation*. Austin: University of Texas Press.
- Galan, José, José Antonio Roman, Angelica Enciso, and Matilde Perez
 2006 Se perfila declaración final que no proclama derecho humano al recurso. *La Jornada*, March 21: 43.
- Gamundi, Felix Hernández
 2006 El agua en México y su crisis, Ojarasca, from talk in Taller Popular en Defensa de Agua. *La Jornada*, April: 7.
- Gonzalez, Roberto J.
 2001 *Zapotec Science: Farming and Food in the Northern Sierra of Oaxaca*. Austin: University of Texas Press.
- La Jornada
 2006 El agua embotellada, altamente costosa para el medio ambiente. *La Jornada*, February 7: 6a.
- Latin America Data Base
 2006 Mex-Economic and Political News on Mexico 17(35). Albuquerque: Latin American and Iberian Institute, University of New Mexico.
- Masquelier, Adeline
 2000 Of Headhunters and Cannibals: Migrancy, Labor, and Consumption in the Mawri Imagination. *Cultural Anthropology* 15(1):84–126.
- Nash, June
 1973 The Betrothal: A Study of Ideology and Behavior in a Maya Community. *In* *Drinking Patterns in Highland Chiapas: A Teamwork Approach to the Study of Semantics through Ethnography*. Henning Siverts, ed. Pp. 89–120. Bergen: Universitetsforlaget.
- Navarro Pellicer, Sergio
 1988 El Aguardiente en una Comunidad Maya de los Altos de Chiapas. Mexico, DF: Instituto Nacional de Antropología e Historia.

- Pazderic, Nickola
 2004 Recovering True Selves in the Electro-Spiritual Field of Universal Love. *Cultural Anthropology* 19(2):196–225.
- Quiñones Keher, Eloise
 1995 *Codex Telleriano, Remenses: Ritual, Divination, and History in a Pictorial Aztec Manuscript*. Austin: University of Texas Press.
- Sanders, William T., and Barbara J. Price
 1968 *Mesoamerica: The Evolution of a Civilization*. New York: Random House.
- Schele, Linda, and Peter Mathews
 1998 *The Code of Kings: The Language of Seven Sacred Maya Temples and Tombs*. New York: Scribner.
- Siverts, Henning
 1973 *Drinking Patterns in Highland Chiapas: A Fieldwork Approach to the Study of Semantics through Ethnography*. Bergen: Universitetsforlaget.
- Tortolero Villaseñor, Alejandro
 2000 *El Agua y su Historia: México y sus desafíos hacia el siglo 21*. México DF: Siglo 21.
- Villa Rojas, Alfonso
 1990 *Etnografía Tzeltal de Chiapas: Modalidades de una Cosmovisión Prehispánica*. Tuxtla Gutierrez: Gobierno del Estado, Secretaría para el Fomento de la Investigación y Difusión de la Cultura.
- Weigand, Phil M., and Rodrigo Esparza López
 2004 *Guía del Sitio Arqueológica de Los Guachimontones*. Guadalajara: Gobierno de Jalisco.