

Chapter 8

Working for Beans and Refrigerators: Learning about Environmental Policy from Mexican Northern-Border Consumers

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1. Why Learn from Consumers in Industrialising Societies: Aren't They Just Adopting our Bad Habits?¹

Increasing consumption by “modern” (Miller 1994) households in developing societies worries environmental activists and policymakers, even those, such as Durning (1992), who recognise that most environmentally-deleterious consumption still takes place in over-developed societies (see Heyman n.d. for an overview of consumption in developing societies). Most attention is paid to aggregated phenomena, such as population growth and how gross economic development affects disposable incomes. They determine the number of potential consumers, but not how and why they consume. To address the latter requires learning from people themselves about their ideas and practical behaviours.

The people who shall teach us, albeit through my mediation, are working-class families in Agua Prieta, Sonora, a booming manufacturing city on Mexico's northern border. They present a prototypical case of new consumers whose incomes come from low-wage, world market-oriented industrialisation (in this region, export-assembly plants called *maquiladoras* — see Fernández-Kelly 1983; Kopinak 1996; Peña 1997; Sklair 1993) and whose proximity to the United States exposes them to contemporary global consumer goods and lifestyles (Heyman 1991). Systematic anthropological fieldwork (Heyman 1994a, 1994b) has documented the regional material-culture and how it has changed over time. A sense of culture and history enables us to situate contemporary consumer choices in the available options of material goods and knowledge.

Two observations about consumption in Agua Prieta seem particularly telling for environmental policy. Increasing electricity prices and decreasing real incomes during the mid-1980s did not reduce household reliance on electricity. Price incentives were ineffective, at

¹I thank my informants in Agua Prieta; I hope that my small efforts to tell the world of their lives provides indirect repayment for their help in my work. I also thank Maurie Cohen and Joseph Murphy for their thoughtful comments on this chapter. The research was generously supported by the National Science Foundation, the Wenner-Gren Foundation for Anthropological Research, and the Henry L. and Grace Doherty Foundation. All responsibility for errors of fact and interpretation remains my own.

least in a simple way; electricity was a necessity more than an option or a want. Meanwhile, a popular Catholic parish was unable to attract factory-labouring youth to their mostly preparatory-school “teen groups” that emphasised, among other issues, the critique of consumerism. Moral suasion against desire and wastefulness had little hold on its intended audience. Why were these two common modes of environmental policy so limited? Their flaws reside in widely shared ideas about consumerism (for overviews, see Goodwin *et al.*, 1997; Miller 1995a; Stern *et al.*, 1997), chief among them the notion that obtaining and possessing goods are rooted in wants or desires, and that such wants reside in the individual person. While seemingly drawing on opposite impulses in the human psyche, both moral suasion and price incentives assume a simple input to/response by an isolated decision-making unit, be it person or household. To seek alternatives, we need a more social and cultural notion of consumption than that allowed in the tiny space between individual desire and possession (Carrier and Heyman 1997; Lutzenhiser 1997).

We should first question the primacy of desire and possession, without denying the relevance of either factor. Artifacts are not just passive objects of longing or holding; they are actively utilised in both practical and meaningful ways (e.g., Wilk 1999). They are cultural equipment for living. Likewise, we should widen the relevant units of consumption beyond individuals or other isolated entities. Many consumer goods are purchased on behalf of households, after much collective debate. Nor are households neatly bounded and privileged domains of consumption. Internally, they are riven by interpersonal divisions and alliances. Members consume not only in household contexts but also with reference to friendship networks, especially among peers. Externally, they exist in a tremendous matrix of inequality, of both resources and social status (Carrier and Heyman 1997). Consumer actions, whether collective or individual, must be understood with reference to highly unequal contexts and meanings (e.g., Chin 1998). Finally, households and individuals face entities of an entirely different sort, firms and parastatals that supply and market goods and services (see Fine and Leopold 1993; Miller 1997).

The first section of this chapter unveils the scene, the United States–Mexico border, and peoples its stage with urban, consuming households facing serious financial and logistical problems. The next section addresses one of their dilemmas, the need to maintain access to utilities even as real incomes declined, and asks why people did not simply turn the electricity off. From that observation, it explores the historically recent commitment of working and middle-class urban households to consumer durables and external resource inputs. Although that section directs attention toward families and firms and away from personal tastes and desires, such issues remain informative, so the third section addresses the cultural and social development of consumerism on the border, examining blue jeans and other youthful fashions and the changed role of meat in the Sonoran diet. If the second section may be said to ask “why refrigerators?,” the third section addresses what Sonorans put in them, their wish for meat and their sense that they just “work for beans.” The conclusion draws out the implications of the preceding parts for making an environmental policy that ameliorates the impact of consumption. Without dismissing either price incentives or moral suasion, it argues for a more ample involvement of the public in environmental science and collective-supply systems as a way to tap the manifest concern people have with their consuming lives.

2. “The Money Isn’t Even Enough for a Beer”: The United States–Mexico Border in a Time of Boom and Crisis

I visited a family I had never met before while surveying changes in the household economy from 1982 to 1986 (discussed below). They patiently trudged through a standard interview. At the end, however, the husband of the family, a lorry driver at a large *maquiladora*, was eager to continue our visit. As I recognised, he sought a certain format of conversation, typical in Mexican culture, in which two people exchange their emotions and anxieties, let forth their worries and concerns. Perhaps he was encouraged to do so by my stated objective of documenting how the Mexican consumer had been hurt by bad times following the debt crisis after 1982. At any rate, he talked about his frustration with having to stop his addition to the house because he ran out of money for building materials. He disclosed his anxiety about having the money to pay the recent electric bill and buy petrol for his ancient car. And, most emotionally of all, he revealed his feeling of duty toward his family. “I bring home every *peso*,” he said. “There isn’t a *centavito* (one tiny little cent) left over. If I take care of my family, the money isn’t even enough for a beer.” Beer, of course, sipped among friends, offers an occasion for exactly this unburdening so important to the creation and reinforcement of relations among men. Torn between two compelling kinds of consumption, between household logistics and culturally appropriate desires, worry over money gnawed at Aguapretense.²

We shall pay attention to the income problems that confronted these people, but beyond that, we will examine why lost purchasing power hurt them so much, by delving into commodity consumption in and of itself. That is to say, we shall use the difficulties of consumption not to emphasise people’s sacrifices on behalf of international banks (see Heyman 1991:176–78), but rather what made purchased goods and services a vital worry to them in the first place. In turn, to understand how these people became consumers, we need to explore briefly the historical formation of Mexico’s urban northern-border region (concerning the border generally, see Fernandez 1977; Herzog 1990; Heyman 1991; Martínez 1994; Ruiz 1998; Lorey 1999).

Although some of the United States–Mexico border follows the Rio Grande river and has long sustained small settlements, most of the frontier, including the entire western half that cuts across open desert, urbanised during the twentieth century because of economic interchanges between Mexico and the United States. Most border residents live in these newly formed cities, so their consumer culture, as well as other aspects of their lives, was created in a unavoidably transnational context. For example, Agua Prieta, which abuts on Douglas, Arizona (at about the mid-point of the western half of the border) obtained its water and electricity from that American municipality until the early 1980s. Also, it had free-trade zone status in Mexican customs law, so that locals could shop in the United States and return to Agua Prieta without paying tariffs. This peculiar status was accorded Mexican municipalities on the northwest border because of their great distance from the centre of that nation and proximity to the United States. While, with the advent of the North American Free Trade Agreement (NAFTA), all of Mexico now enjoys open shopping in

²Aguapretense is the Spanish collective noun for the inhabitants of the city of Agua Prieta.

the United States and the border zone is thus no longer unique, it is also the case that the remainder of Mexico has gravitated toward the borderland pattern rather than the other way around.

Initially, the cities of Mexico's northern border were small and specialised in either tourism or commercial transfers at the boundary port of entry. Mexico as a whole urbanised rapidly during the 1950s–1970s, because of population growth, increased inequality and the decline of the peasantry, and the growth of the state and national industry. The border cities shared in this expansion, receiving migrants from the interior zones of northern states. New households quickly took advantage of access to American goods, especially inexpensive used ones, to equip themselves; in this period, United States banks in border towns gave small consumer loans to Mexican residents, even working-class ones. Many families received income and material culture from the neighbouring side, whether by migrant labour under a variety of legal and extra-legal arrangements or from close relatives who lived across the boundary. (This binational region sustains a remarkable web of cross-border kinship and friendships.) In 1965, Mexico launched the *maquiladora* program to attract labour-intensive manufacturers (i.e., electronics, garments, auto parts, toys, household furnishings, etc.) to its northern border. The *maquiladoras* have grown from a few thousand workers in 1965 to well over a million today, constituting one of the key zones in the global economy. Although hiring patterns have diversified somewhat, it remains the case that most factory operatives are young people, above all women, often living with their parents. *Maquiladoras* provide important income, but few households rely solely on their paychecks. Not only do other household members labour in the city or operate tiny enterprises in the informal sector, but also older generations, above all women, conduct elaborate transactions in consumer durables and provisions to assist the household economy.

The *maquiladora* economy has grown in direct relationship to the stagnation of wages, because that trend maintains Mexico as a pre-eminent source of “cheap” labour. Since 1976, the nation has laboured under the constant drain of foreign exchange caused by its enormous external debt. Its currency, the peso, has devalued repeatedly, which together with inflation has eroded real purchasing power for most households. A radical reorganisation of its economy, blandly called “structural adjustment,” has increased its production of exports, which earn foreign exchange to pay the debt. It has also liberalised its importation of consumer and capital goods. Mexico's private economy is strikingly more advanced than in 1982, but its public services are not, and furthermore its households have not shared in this progress, so that we may speak of the nation as undergoing economic, but not societal development (although it *has* moved toward effective democracy).

As an indication of this growth without development, the real minimum wage in Mexico has declined continuously since 1976, today holding less than a third of that year's value. Wages as a share of gross domestic product (GDP) declined from 37 percent to 27 percent from the late 1970s to the late 1980s, and have stagnated or periodically declined (e.g., during 1994–1995) since then. In the *maquiladoras*, real wages of low-skilled workers declined over 40 percent from 1976 to 1993 (Galhardi 1998; ILO 1999). In 1986, when I conducted my study, the Agua Prieta factory base-wage converted to about US\$23 for a forty-eight hour week, while at the time I write this, it is worth just about the same (Ibarra 2000).³ To survive, households often used multiple sources of income, so that in the 1986

survey the median Agua Prieta household income was US\$55. Although the cost of living in Mexican-border cities was lower than in the United States, making comparisons to dollar incomes somewhat tricky, the median Agua Prieta household spent about two thirds of its income on food (Heyman 1988:369), suggesting that their budgets were tight by any measure. There is little reason to suppose that conditions for such households differ greatly today; the sharpest wage decline took place from 1982 to 1986, and then flattened out, while the key elements of urbanisation, growing employment, and depressed incomes continue to the present. This welter of economic numbers adds up to one essential point: border householders are fully modern consumers, but impoverished ones. Their consumption in aggregate is probably environmentally significant (e.g., demanding electricity and fresh water), but their immediate household concerns are daily provisioning and obtaining inexpensive clothing, house-construction materials, and cheap or used consumer durables, not discretionary goods. Because of their proximity to the United States, because of the long-established pattern of free trade on that border, and because of the international importance of the *maquiladora* industry, Mexico's northern borderlanders once seemingly exceptional now indicate the fate of many regions of the globe.

3. Increasing Electric Service During a Time of Scarcity: A Curious Paradox with Revealing Answers

Let us examine more closely how border consumers, well established in their material needs, coped with this rapid loss in purchasing power. In late 1981 and early 1982, James Greenberg interviewed 93 Agua Prieta households in two working-class neighbourhoods concerning their family economies, and in early 1986 I reinterviewed 63 of them.⁴ The real household income of the 63 families had fallen by about one third (34.3 percent) using conservative assumptions. As a consequence, utility bills, which always posed a financial challenge on their due date, took on crisis proportions. Particularly pressing was the electric bill, received every two months, more costly than piped water and less flexible in scheduling its payment than bottled gas, the two other important resource expenses. A typical electric bill of 6,000 pesos⁵ was roughly one half a full week's wages from a *maquiladora*. Thirty-nine percent of families reported reducing their food expenditures during the week electric bills came due. Yet no one went so far in defending their household economy as to drop their electric service.

³Ibarra (2000) reports that in Agua Prieta a possible weekly take-home pay with bonuses and incentive- or piece-work-payments was the equivalent of US\$50 per week, which is higher than the \$22.80 base rate. This was also the case in 1986, though I think bonuses are relatively higher now than then. The general pattern of low pay and little improvement from when I did my study remains true.

⁴The people I was unable to recontact tended to be renters rather than homeowners, so the process biased the information toward mature, better established, and more prosperous households; see Heyman 1991 and 1994b for details on the methodology and the results of these interviews. I have not updated this survey, as my research has turned toward issues of border control, smuggling, and immigration policy, and most recently globalizing elites; but as the text explains, there is solid reason to suppose that the 1982–1986 data remain relevant.

⁵Throughout this essay, I use “old pesos,” which in early 1986 were valued at 500 to the U.S. dollar. Mexico later eliminated three zeros from the pesos, thus creating a “new peso.”

Indeed, during these same four years of economic travail seven households added electric service (their streets were newly wired), and only three of 63 remained without power. A similar pattern held for bottled gas, used for cooking and heating: in this period thirteen households adopted gas over firewood, an industrial over a regional energy source, again nearly saturating the available households.⁶ Meanwhile, Aguapretense strived energetically to obtain water main connections into their homes rather than hauling water from central faucets or delivery lorries. Street by street, people petitioned city hall for water mains and contributed in-kind labour of digging the trenches for their blocks, as well as installing their own connection and domestic plumbing. The pattern is clear: people sought for their homes industrially supplied inputs of power and other resources. Once connected, people were sensitive to prices — for example, they used electric lighting conservatively, dwelling in darkened rooms that felt uncomfortable to this North American anthropologist. The key is the phrase “once connected.” Linking to commoditised-resource systems, like the electric grid, was obligatory, no matter the sacrifices entailed, but why?

The surveyed households had by and large settled in cities and joined the working class, in either the formal or informal sectors, during the late nineteenth and throughout the twentieth centuries. In the process, they also became consumers of manufactured goods.⁷ The first appliance acquired typically was a kitchen stove, a cast-iron firewood burner through the 1960s and after that a gas range. By 1986, virtually every household had a range. Starting in the 1960s, they bought refrigerators — often from American relatives or dealers in used appliances from the United States — and at the same time blenders and electric crockpots. Less common, but still popular with housewives, were washing machines. These five appliances — and others can be recited — link houses to the utility grid, whether for fuel, motive power, or piped and drained water (see Heyman 1994b for specific household appliance histories, as well as coverage of parallel developments in cars, lorries, and furniture).

Each appliance helps resolve a pressing dilemma for the newly urbanised and proletarianised household, as I learned from many hours of conversations with Angelita Aguirre, an experienced manager of household affairs.⁸ Gas ranges cook quickly compared to

⁶Unlike electricity, in this case the decision was partly based on price — heating and cooking with subsidised butane gas was much less expensive than purchased firewood. Even so, the effect was the same: dependence on external resources and related technologies.

⁷I have elsewhere delineated a more complex model of the changes described in the text, which the reader may wish to consult (Heyman 1994b:179–83). In a nutshell, it involves two different kinds of household involvement with consumer markets, one conserving of external expenses and resource flows, and the other more deeply committed to flows of money, goods and utilities. For research, this suggests paying more attention to family flows of money, time and resources than rates of purchase and possession of goods; for policy, the perhaps irreversible historical transformation from flow-conserving to flow-through household organisation suggests altering the environmental effects of household inputs (e.g., by the decarbonization of energy services; see Allen 1997; Goldemberg 1996; Goldemberg *et al.*, 1988) rather than exhorting the consuming family to conserve in ways it can no longer afford to do.

⁸Much of this work is done by unpaid housewives, many of whom also work in factories or, like Angelita Aguirre, run cooking and sewing businesses out of their homes. I do not blindly assume a gendered division of household labour; indeed, attention to the roles, interests and actions of mature women is an important part of this analysis. It is also worth commenting that this passage in the text, though spoken in my scholarly language, is derived quite directly from an extensive discussion with Doña Angelita about appliances in her house, as well as constant visiting there.

cast-iron stoves, and they require less effort from the cook to fuel and start. The use of gas also eliminates the need to gather firewood, which was impossible because of urban settlement and lack of proximity to wood sources, immensely time-consuming (for children) even had it been available for free, and otherwise fairly expensive when bought from professional firewood cutters. The refrigerator enables the storage of cooked food as well as frozen meat and tamales, not precisely reducing the housewife's culinary labours but enabling her greater flexibility in scheduling its production and delivery. The blender is an important time- and effort-saver for Sonoran housewives, using the motive power of a small electric engine to replace the arm and hand toil of crushing refried beans, a complement of most meals. Crockpots utilise the electric heating element to facilitate cooking the ubiquitous soups and stews and softening dried beans. (Another time and drudgery saver is purchasing tortillas from the neighbourhood factory, rather than grinding flour and making tortillas by hand.) The washing machine was, by women's own accounts, their most valued device, since washing laundry by hand is achingly hard on the back, shoulders and forearm. Water for washing machines, like other household uses, can be carried in buckets and containers from outside the home, but piped water was strongly preferred because it reduced the time and toil of housewives and children. In summary, each commoditised resource — water, fire, and electricity — in some way added to the production speed, volume, and time-management capabilities of unpaid household labourers.

Such devices do not reduce the total time spent on housework (Simonelli 1986; in general, see Cowan 1983). Agua Prieta housewives do, however, appreciate the reduction in physical effort, according to Doña Angelita. Most importantly, appliances and commoditised inputs facilitate the coping of Mexican households with profound transformations of time. These households had shifted from “freely”⁹ allocating among farming and household tasks the full set of adult males, females, and children of both sexes, toward a more rigid model in which adult males devoted a considerable amount of time to paid labour and children many hours to school. Migrant labour in both Mexico and the United States took away some young women and many boys and men. After 1965 households had given over many teenage and unmarried young adult women and men to work in *maquiladoras*. The result was, of course, greater cash income, but also less time available to devote to unpaid household tasks. The use of that income to replace some unpaid work is evident. The burden grew on adult female “housewives,” especially when they replaced children's labour. Also highly troublesome to home managers has been the bureaucratic rigidification of time schedules for those who depart the house, both factory workers (Thompson 1967) and school children, as the years of school attendance increase. Rigid time means not only difficulties in scheduling unpaid household work by husbands and children — who, of course, still do many tasks in afternoons, evenings, and Sundays — but requires that the housewife perform key duties like providing hot meals at strictly-determined hours. Bureaucratic regimens (e.g., school) also demand greater attention to the neatness and

⁹That is, without being subject to external scheduling constraints; it was, of course, shaped by gender and age roles.

cleanliness of clothing than did older patterns of agrarian life. Domestic productive capacity and rapidity then comes to the fore.

Although the transformation of time is crucial, changes in space are also important, insofar as they alter access to manufactures and natural resources. In the course of the late nineteenth and the twentieth centuries, collective commons came under private or governmental ownership, reducing Sonoran access to the clays, skins, fibres and wood from which they made their traditional material culture; meanwhile, the high pine and oak forest were substantially clear-cut for smelter fuel, mine timbers and commercial lumber. Urban concentration also altered the household's relation to material inputs, as it became increasingly difficult for the 100,000-plus inhabitants of Agua Prieta to walk to and carry back adequate supplies of free, naturally available items like rushes and firewood. If such resources withstood urban demand, they were commoditised and became increasingly expensive relative to industrial alternatives (see note 5). In this process, older skills such as basketry were abandoned and manufactured goods such as glass bottles and plastic containers replaced them. This change also happened when craft practitioners left the social-cultural settings in which they were learned; for example, Sonoran women departed villages where, working in kin groups, they plaited baskets in cool, damp underground shelters, in favour of mine-company towns and border cities. Once a craft is not taught to the next generation, it is dead, gone, useless, no matter if later economic or environmental demands might favour its revival. The loss of skills and resources needed for non-manufactured goods constitutes "consumer proletarianisation," and in my opinion it is as central in making modern consumers as its more famous sibling is in making working classes.

Although consumer proletarianisation involves a taking away, it also brings — for border Mexico, and urban Mexico more generally — an opening up to goods either imported from the United States or manufactured in Mexico by transnational corporations using American, Japanese, and European designs and technologies. As Ruth Schwarz Cowan (1983) demonstrates, such goods were designed for consuming households in the United States in response to a reorganisation of household time and money, gender and generation that is analogous to that described above. So the appeal of such consumer goods in newly industrialising countries such as Mexico should hardly surprise us. While many distinctive goods, like foodstuffs, are produced for the Mexican market, I know of no common appliance in Agua Prieta that differs from those in American kitchens, just that sometimes the items are intriguingly archaic because they are purchased second-hand and strenuously kept alive with repairs.¹⁰ There is in the notion of consumerism as desire an implication of volition or choice, a possibility of acting differently, albeit not grasped. But the "Cowan globalised" phenomenon hardly smacks of choice, either in terms of imperative problems or possible solutions. As I have written elsewhere, "People are not tricked into desiring western consumer goods, nor are they subject to blind imitation, but rather they undergo transformations analogous to western households, generating similar needs, with viable responses limited to those technologies currently marketed" (Heyman, n.d.).

¹⁰Tortilla factories are distinctive to Mexico, because of the fundamental role this flat bread plays in the Mexican diet, and although located outside the home, purchasing tortillas from such factories responds to and causes transformations in Mexican women's lives parallel to those described in the text.

Agua Prieta houses embody the preceding points. Houses are, of course, a vital consumer good, the most valuable item that almost any working-class Mexican will ever own. Relatively few houses are purchased as such; rather, they are mostly self-constructed with the major acts of consumption being renting or purchasing lots, buying materials and making utility connections. Comparing urban to rural Sonoran houses (Heyman 1994a versus Owen 1959 and Sheridan 1988), how might we understand the heightened cost in economic and environmental terms of the former? Typical house size has increased, though homes remain small by American standards; a humble rural house has one or two bedroom/storage areas and a roofed, but open-walled cooking area to the back, while a comparably simple urban house has a front room (often used as a bedroom at night), another bedroom, and a fully enclosed kitchen. Larger and more internally differentiated homes are commonly owned by the more prosperous and well-established families of working-class neighbourhoods. Along with size, the nature of construction materials has changed, with interesting environmental implications. The older house style utilised adobe (unfired, sun-dried mud) bricks for walls, a packed dirt floor, and a cane and mud roof; the current house style, more frequent in town than in the countryside — but present in both places — uses fired bricks, a concrete slab floor, a sheet metal roof, and in some instances reinforced concrete framing. The latter obviously are manufactured inputs and several of them, such as locally fired bricks and industrially kilned cement, require considerable energy to manufacture. They are also poorer insulators than traditional building materials, but far more enduring. Also, houses increasingly come equipped with electrical wiring and interior plumbing, again purchased from the industrial economy and serving as delivery systems for commoditised-resource inputs to the household.

House forms and materials change for many reasons (see Colloredo-Mansfeld 1994; Fletcher 1997; Grimes 1998; Heyman 1994a; Pader 1993; Thomas 1998; Wilk 1989). I find it helpful to follow Richard Wilk's argument that investing in houses is a collective good that unifies households made up of multiple genders and generations with diverse interests and sources of income. As people move to cities from the countryside, they leave behind the inheritance of land, animals and rights to commons as a collective-household good and means of property transmission. The collective interest instead is invested in houses. The aspiration to build houses for children to inherit, typically multiple small ones on a collective lot, is widely shared among Aguapretense, and often fulfilled. Using hard, enduring materials like fired brick fits this new concept of providing a lasting family good. In tandem, the agrarian prestige system drew on public knowledge of land and animal holdings. Amid the rapidly expanding neighbourhoods of the border city, the reputation of the family is not so easily communicated, with households of very different income levels living side-by-side in working-class districts. The family's honour is, however, indicated by the exterior of the house, most clearly in the proud display of family-name plaques (e.g., "Familia Valenzuela" as burnt lettering in wood). The front room offers a public space where outside friends and relatives are received in suitable fashion and collective-family life is enacted, social interactions facilitated by the characteristic sofa and television. Again, in a change from the countryside, guests and family alike eat and socialise indoors, around a kitchen table, rather than in the yard, except for specific occasions like barbecues. In some regards, the newer houses draw on upper-class Mexican or American styles, while in other aspects humble vernacular styles suit the skills and aesthetics of

innumerable Mexican men who build their own homes. Status emulation is, at any rate, a by-product of more profound alterations, in that people have additional cash incomes to purchase manufactured inputs and that the social role of the common person's house has changed in such a way as to encourage greater investment and elaboration.

Together with the increased use of the house as a place for visiting, the new time regimen favours interior lighting. The day no longer necessarily begins before dawn, as in the countryside, but the solid blocks of time devoted to factory work, school and housework during prime daylight hours heighten the pleasure of collective time spent during evening hours with family and friends, visiting or watching television, itself a significant reinforcer of new time patterns. Likewise, the reorganisation of housework, combined (not coincidentally) with ideologies of modern bodily hygiene and comportment, promotes the shift from dirt to cement floors and the piping of water into interior washing and plumbing spaces. For houses, as for appliances, the technologies available to northern-border Mexicans are precisely the same as those in the United States, especially since North American discount-hardware centres and used-building materials are important resources for Mexican homebuilders. Exteriors, layouts and colours offer more space for local aesthetics, and thus choice than do house components, but the process by which houses are made larger and more elaborate seems unconscious and thus not amenable to environmentalist exhortation. The same appears to be true of appliances and water and energy inputs. Is there, hence, no hope of a policy that would address the energy and resource-intensive features of houses and households in contemporary societies, rich and poor? I will argue in the conclusion that there *are* appropriate policies, but they must work with people's needs and decisions, and not against them.

4. Barbecue and Blue Jeans: Consumers' Tastes and Desires, From Whence Do They Come and Where Might They Go?

The consumer goods surveyed so far — houses, refrigerators, water mains and the like — are enduring and expensive. This emphasis was deliberate. Such items loom large in the household economy, and they also involve extensive environmental inputs and resource flows. Yet in the study of materialism and global consumer ideology (Sklair 1994), such goods receive far less scrutiny than they deserve (Carrier and Heyman 1997), while attention is heaped on less expensive items of adornment and style, such as clothing or recreation, that are meant precisely to be visible rather than functional. The point, in terms of study and policy, has been made sufficiently by now, however, and it would be a mistake to neglect altogether small and stylish items, not least because people themselves contemplate consumption through such goods (Foster 1991; Wilk 1999). An important scholarly development, meanwhile, has been to view this sort of item as not simply foisted on people by mass marketeers, but as part of various social projects of defining oneself and communicating these identities with others (see Carrier 1994; Miller 1995b). In the case we shall first take up, designer jeans among factory workers, a notion of active consumers is necessary to understand desire, possession and display. Yet it begs another historical question, namely how such consumers are made in the first place.

With the advent of waged and schooled life, the intergenerational bonds involved in the inheritance of fixed property crack and give way. Disputes between older and younger generations worsen and a self-conscious youth culture emerges, aided by alert marketers (Heyman 1990). In the Mexican-border case, we have already noted the *maquiladoras*' summoning together a million-plus army of teenage and twenty-some-odd operatives. Their work is intense, meticulous and repetitious, partaking of the universal character of assembly lines. Typical of time-disciplined labour throughout the contemporary world, the border-factory experience promotes in working youth alternation between intensive duties, subject to external authority, and release during the hours of leisure, celebrating not only pleasure but also autonomy. As María Patricia Fernández-Kelly (1983) narrates in her impressive ethnography of these factories, young people gain their temporary liberation with groups of their peers — in her experience, groups of young women going to night-clubs to dance. At the same time, factory wages give these young people a little money to spend on their small wishes.

Little money it is indeed. As I have mentioned, the 1986 standard factory wage equated to US\$23 weekly. Most of the paycheck went home, but not all, at least for unmarried family members; working children hold a portion of their income for their own uses (Heyman 1991:185; also see Baer 1998). The amount varied (it averaged 31 percent in my survey) according to the personal relationships and negotiating situation of that individual within the household. Hence, the goods they bought with their portion of the earnings represent a bit of freedom not only from the factory routine, but also parental demands. The most common, as well as largest expenditure of this sort was low-price "designer" blue jeans, bought on credit from clothing stores or home-based dealers. A pair of jeans might be taken home after four or five instalments at a downtown retailer. For example, in one relatively poor family, a working daughter from her monthly 46,000 peso pay covered a 8,000 peso per month household debt payment (about US\$16) and paid 2,500 per month (about US\$5) for her own clothing-instalment plan, as well as general family expenses. Obviously, children's spending replaces the family buying the clothes, but this practical interpretation, while not wrong, misses the personal importance of such items to young adults (also see Mills 1997).

In anthropological fieldwork, insight often comes from witnessing conflicts, when the normal performance of cooperative daily life breaks down and contradictory ideas and practices are revealed. While working children usually contribute generously to their parents' budgets, they are also tugged by desires for consumer goods of their own. To my embarrassment, I witnessed such a conflict while visiting a friend's home. The mother vociferously criticised her daughter for spending too much money on clothes and snacks with her friends at the factory where she worked. She stressed the family's need for money to buy heating gas and pay the electric bill. The young woman was less articulate, even sullen, except to say that it was money she earned with hard work. One sensed in her non-verbal language, however, pulling back into herself and away from her mother, her conflicted feelings of personal autonomy and yet reluctance to attack her mother and her family obligation. Of course, the stressful economy is the context of this argument, and even more fundamentally, the dual role of consumption as household logistics and personal, meaningful activity.

Discretionary spending certainly does not turn Mexican working people into uncontrolled materialists. But, to my understanding, it does produce and reproduce desires and needs for consumer goods, which in short we might call consumerism. First, it provides an

inducement to utilise consumer credit. Second, it links youth-peer culture with the styles seen on television variety shows and *novelas* (the Latin American form of soap opera, which is shown in evenings as well as during the day). And television is certainly the most potent contemporary medium for marketing specific goods and general lifestyles.¹¹ The debate on whether people are coerced by or are creative with style and marketing is, for present purposes, beside the point (see Miller 1995a for a review, and also Miller 1997's ethnography). The key is that such consumption is willful and pleasurable, especially when understood in its social and cultural contexts. Hence, a puritanical approach to environmental-consumption policy is unlikely to succeed. A successful policy, especially one that mobilises participation, will partake of the conviviality and hopeful sentiments that enable such hard-working and hemmed-in people to persist and thrive.

Lest it be thought that in emphasising either personal meaning or household logistics I rationalise developing society consumption growth and underestimate its potential impact, allow me to examine the environmentally significant topic of dietary meat. Cattle ranching for domestic-meat production is the largest cause of deforestation in Latin America, although the latter's causes are complex and vary considerably (see Moran 1993). In Sonora, beef cattle raising for local and United States markets promotes overgrazing of sensitive arid pastureland, mediated by complicated property arrangements (Sheridan 1988). Domestic-meat consumption in Mexico also diverts land and water from the production of corn for tortillas, the foodstuff of the common man, to the raising of sorghum for animal feed (Barkin and DeWalt 1988). It is not possible, within my data, to tell if Aguapretense have increased their total beef, pork, goat or chicken consumption over time, but there is reason described below to suspect they have, and likewise that if their income was to increase with Mexico's industrial development rather than stagnate, they would demand even more meat.

It is probable that human beings crave high-energy, fat-bearing foods, including meat (Eaton *et al.*, 1988). Even if this biocultural generalisation proves not always true, it certainly is the case that northern Mexicans, rooted in a cattle-ranching culture, value meat. In the rural setting, however, beef and other meat meals were rather sparse. They mostly occurred at times of family or community-wide celebrations, the baptism of a child or the visit of a state governor. At such times, meat was distributed to a wider set of people than just the household (Sheridan 1988:33, 212). Historically, lack of refrigeration meant that slaughtered animals had to be consumed quickly or dried. In the border city, families have more access to refrigeration, both on their own and via stores. Their sociality increasingly focuses on the immediate family, as explained above, though by no means have collective celebrations disappeared. And they have a different relationship to animals: rather than meat animals being a moderate to large investment which is completely liquidated when slaughtered — favouring an intermittent style of meat-eating — they purchase via a steady cash income small pieces of meat to be consumed on a regular basis,

¹¹Some Aguapretense started to watch American television broadcasts in the 1960s and 1970s, but the placement of a retransmission tower by the Mexican government in 1981 increased interest in television, because it was now in the Spanish language. Popular programming was Mexican, not American in origin. There is not enough room here to elaborate on the role of television, but what I found resonates with the Brazilian ethnography by Conrad Kottak (1990).

facilitated by refrigerators. In my 1986 survey, I conducted a previous 24-hour recall of meals; 48 percent of households reported eating at least one meat meal, roughly an even mix of chicken and beef with pork, goat and fish also included. And while I gathered this dry data, I spent time conversing with people. Amid the tremendous economic crunch of the mid-1980s, they emphatically remarked on having to cut out meat and replace it with more beans and potatoes (to wit, a catch-phrase they often repeated: “the poor never lack for beans and potatoes”). Beans and potatoes might have kept them nourished, but meat was what they wanted. It reminded them of the ranch life, it reminded them of happy times with family and visitors, and like sugar in Sidney Mintz’s (1985) analysis of the British industrial revolution, it was a deeply-satisfying reward achieved when they spent their hard-won earnings. I therefore consider it highly likely that meat consumption in Mexico will rise as that nation urbanises, industrialises, and if that country sustains real increases in income for common people. It hardly begrudges Mexicans fair earnings and simple pleasures to note the difficult environmental dynamic entailed by meat production and consumption. An honest social and cultural view of consumption reveals intractable phenomena as often as it discloses novel policy approaches and suggests potentially optimistic outcomes.

5. The Environment–Consumption Nexus: Possibilities and Problems in Public Participation

Given the dispersion of households, any meaningful effort to affect their environmentally significant practices will require popular involvement, commitment and enactment. Yet in view of the Agua Prieta experience, I am sceptical about moral suasion and price incentives, the two most common and least politicised approaches to inducing widespread consumer participation in environmental amelioration. A moralistic environmental policy, following a long tradition of asceticism about material life (Shi 1985) — admittedly here serving as a straw man, but a relevant one — aspires to dissuade novice consumers in developing societies from leaping into modernity, from radically changing their material tools, needs and desires. It is premised on the notions that global consumers recapitulate the mistakes of the West and that such mistakes were and are made voluntarily, blindly or greedily, rather than for socially- and culturally-systematic reasons. Were such views to inform environmental policy, it might well ignore the actual points of leverage, the reasons why Aguapretense and others like them purchase manufactured goods and use industrial resources, and thus become a cause of resentment and resistance rather than success and its diffusion. Let us take electricity, for example. For housewives needing its motive power for their productive appliances and its evening light for their schoolchildren’s work and public sociability, it hardly constitutes a willful lifestyle choice, to be turned off as easily as it is turned on. Value-directed politics are relevant, I shall argue shortly, but we need to go beyond the notion of the individual chooser to frame collective-consumer issues, and hence go beyond the idea of persuading people toward giving them “capabilities” (Sen 1992) to think and act on public alternatives.

Price incentives have some potential, especially for households that watch every peso. Many environmentally deleterious practices are premised on the availability of energy and

material resources at inexpensive market or artificially subsidised prices (Roodman 1999:171–74). Mexican working-class consumers are active cost minimisers within a given set of technologies. On the one hand, such people will respond to price incentives within limits (e.g., conserving electricity, but not cutting its service off), and hence some environmental policies may be enacted by anonymous price incentives. On the other hand, such consumers, bereft of a collective commitment to environmentalism, may strenuously resist environmental policy-driven price increases in petrol, natural gas, electricity, water and sewage. Politics may then turn angrily against environmentalism. Also, price incentives alone cannot solve all consumer environmental issues. Householders as dispersed decision-makers often shun more costly but less polluting or more resource-efficient devices. They cannot fully respond to environmental policies unless they wield fundamental capabilities to reorganise their systems of household production/consumption and promote their personal and collective goals. Here I delineate two approaches. The first simply assists poor consumers overcome some practical limitations on their ability to improve their material culture and resource flows. The second asserts a more robust idea of participation, in which people are active participants in policy and are thus motivated to enact it, rather than being resistant recipients of persuasion and price manipulation.

One opportunity for environmental policy is to give the hard-working but poor and highly circumscribed consumers a wider range of realistic options and capabilities. An income-poor household has little hope of making large lump-sum purchases, but they can spread expenses (often at added cost) over time. Most households where I did appliance histories had used-American refrigerators, though older and less energy-efficient models. They saved precious money up front, but paid in electric bills and added carbon to the atmosphere via utilities over the long haul. Analogous observations can be made about other appliances and home heating, cooling and lighting systems. The Mexican researchers Omar Masera, Odón de Buen, and Rafael Friedmann (Tevis 1993; also see Friedmann *et al.*, 1995) are exploring policy options for subsidising and spreading out the costs of new and efficient household- and office-energy technologies. Although necessary to enable consumers to participate in changing their environmental impacts, this kind of adaptive policy perhaps will not prove sufficient to motivate them to care and act, both as householders and as users and masters of collective resources. Participatory strategies seem to be called for.

As the recent florescence of “participation” has shown, however, the word is easy to use but the approach hard to utilise. It might help to begin by inquiring into what common Aguapretense actually did to affect the conditions of their consumption in a collective fashion. In the mid-1980s, there was no widespread environmental activism in Agua Prieta, though this has since changed.¹² But they were not passive, not purely recipients of costs and technologies. Consumption was an explicit public concern, not surprisingly, because of price inflation and loss of purchasing power. For example, I accompanied a march from a large working-class neighbourhood to the offices of the national electrical

¹²Environmental participation has focused on toxic releases by *maquiladoras* and on public involvement on planning water supply and sewage treatment systems. The former, of course, involves acting on production entities outside the local sphere of consumption while the latter does involve consumption, but on a collective (municipal) rather than household scale. It is also not clear how deeply such participation has penetrated in the middle to lower income neighbourhoods of the city.

utility that protested sudden and unevenly applied bill increases. The demonstrators did not, however, request a strict return to the old price levels. They sought instead a gradual implementation of the increase, allowing their household budgets to adjust, and a review of what seemed inexplicable inequities among bills. Afterward, standing amid his power tools, Juan Bautista Valenzuela remarked that it seemed unreasonable that his elderly neighbour received higher electric charges than he did for his house and a mechanical workshop that relied heavily on an electric-arc welder. The demonstrators clearly understood the relationship between their own consumption practices and the use of electricity, and held the electric utility publicly responsible for performance of its duties.

The nexus between utility and household as a public concern is vital, because key environmental effects of many consumer goods emanate from the industrial suppliers rather than the household demanders (see Allen 1997 for the United States). Sonorans use electricity generated by a large parastatal utility. Sonorans make houses with bricks fired by minuscule manufacturers in border cities (see Cook 1998). They adopt American plumbing, but its water efficiency is a byproduct of older and cheaper manufacturing standards. This is not the place to explore opportunities and problems in utility and industrial ecology; however, a successful environmentalist reading of consumption will carefully distinguish between final consumers and proximate polluters, and then explore how they might be connected. As I have argued strenuously elsewhere (Heyman n.d.), environmental policy should focus on the linkage between consumers and bureaucratised resource suppliers, governmental and private. Considered just as a matter of prices and private decisions, this nexus will likely frustrate environmental advocates, but as a matter of democratic policy-setting in the collective arena, there is reason to hope that an informed and active public will bring its weight to bear on technology mixes, productive and consumptive efficiencies and cost structures. In the south Indian state of Kerala, for example, vigilant and aggressive social movements have forced public institutions and service providers to function with remarkable efficiency and responsiveness (Franke and Chasin 1994), though this is not specifically reported in the environmental domain. We must insist, however, that this approach to policy assumes a deeply politicised public.

The politicisation of seemingly private environmental issues depends, in substantial part, on widespread understanding of and interest in environmental sciences. Working-class Mexicans with a (typically) junior high-school education cannot be expected to immerse themselves in the subtleties of global climate-change models, but the example of the Kerala popular-science movement shows that relatively uneducated people have a tappable reservoir of interest in nature, science and technology, including environmental issues. Furthermore, in participatory education commitment and motivation are more important than maximising information (Zachariah and Sooryamoorthy 1994:115–22). Hence, popular participatory science would emphasise knowledge capabilities — active control over learning, debating and deciding publicly on options for both households and organisations — rather than passive environmental education, being told (or sold) what is “best” for nature. Often, the latter means simply being given the results, the do’s and don’ts of environmental science, and perhaps some terrible perils if they are not obeyed, rather than engaging the thinking chain from fundamental facts and simple models to those final do’s and don’ts. At the end, people can develop practices applicable to their own circumstances and capabilities, and informed demands on powerful firms and institutions.

In the thinking process, people come to *own* the conclusions. To do this, however, they will have to engage in hard educational work. Is that a realistic expectation?

The possibility of common Mexicans understanding their effects on the environment exists. When I went to sell a used refrigerator before leaving Agua Prieta, a friend and factory mechanic carefully timed the compressor's cycle to see if it was running efficiently or not, which bears on its electric usage (he had considered buying it for his parents, but it was highly inefficient, something I had suspected, but he was far-better equipped to diagnose). This knowledge of critical technologies and concern with how well they function was not exceptional by local standards. It was, admittedly, aimed at cost minimisation and concerned most with proximate rather than distant effects of the technology on resource use. Also, competing against participatory education are the time pressures of factory and other paid and unpaid work, as well as the obstacle of television's pacifying relaxation. While best viewed with realistic caution, participatory popular science and engineering, with its appreciation for everyday technologies and the life of goods, promises a more welcoming door to environmentalism than anti-materialist exhortation.

In the 1980s and 1990s, border Mexico has indeed been highly politicised. The main focus has been effective democracy and the control of corruption and malfeasance. Also, the popular notion of social justice included the consumer goods on which Aguaprieta built their lives (Heyman 1997). Justice, in this instance, meant giving access to consumption to all households. The use of the term justice in the environmental literature as "environmental justice" focuses, instead, on communities controlling and distributing fairly the burden of non-household polluters, such as the *maquiladoras* (e.g., Peña 1997). There is a chasm between the environmental notion of justice and the populist notion of distributive-material justice. Popular movements may have a hard time bridging this chasm other than with rhetoric, so supportive intellectuals have work to do in learning about and thinking through this issue. I close with one suggestion. Greater popular income is sometimes seen as a bad, as giving common people more means to pollute (e.g., Brown 1999). For cases like meat, this will likely prove true. But, when we examine households' ir retrievable commitment to resource-gobbling technologies and inputs, and ask what are the alternatives within that scenario, we find that low income precludes use of the most physically-efficient options and that it favours cost-minimising attitudes that have at best mixed environmental effects. Fundamental change will require a radically redistributive social economy that in the face of existing monetised income inequality delivers significant added capabilities to households, perhaps in the form of specific environmentally directed opportunities and motivations. Only this will give the householders of Agua Prieta, and people around the world like them, the options and tools not to harm environments that give them and us sustenance.

References

- Allen, D. (1997), "Wastes and emissions in the United States." In P. Stern, T. Dietz, V. Rutan, R. Socolow & J. Sweeney (eds) *Environmentally Significant Consumption: Research Directions* (pp. 40–49). Washington DC: National Academy of Sciences.
- Baer, R. (1998), *Cooking — and Coping — among the Cacti: Diet, Nutrition and Available Income in Northwestern Mexico*. Amsterdam: Gordon and Breach.

- Barkin, D., & DeWalt, B. (1988), "Sorghum and the Mexican food crisis." *Latin American Research Review* 23 (3), 30–59.
- Brown, L. (1999), "Crossing the threshold: Early signs of an environmental awakening." *World Watch* 12 (2), 12–23.
- Carrier, J. (1994), *Gifts and Commodities: Exchange and Western Capitalism Since 1700*. London: Routledge.
- Carrier, J., & Heyman, J. McC. (1997), "Consumption and political economy." *The Journal of the Royal Anthropological Institute N.S.* 3, 355–373.
- Chin, E. (1998), "Social inequality and servicescape: Local groceries and downtown stores in New Haven, Connecticut." In J. Sherry, Jr. (ed.) *Servicescapes: The Concept of Place in Contemporary Markets* (pp. 591–617). Chicago: NTC Group.
- Collredo-Mansfeld, R. (1994), "Architectural conspicuous consumption and economic change in the Andes." *American Anthropologist* 96, 845–865.
- Cook, S. (1998), *Mexican Brick Culture in the Building of Texas, 1800s–1980s*. College Station: Texas A&M University Press.
- Cowan, R. (1983), *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*. New York: Basic Books.
- Durning, A. (1992), *How Much is Enough?* New York: W. W. Norton.
- Eaton, S., Shostak, M., & Konner, M. (1988), *The Paleolithic Prescription: A Program of Diet and Exercise and a Design for Living*. New York: Harper and Row.
- Fernandez, R. (1977), *The United States–Mexico Border: A Politico-Economic Profile*. Notre Dame, IN: Notre Dame University Press.
- Fernández-Kelly, M. (1983), *For We are Sold, I and My People: Women and Industry in Mexico's Frontier*. Albany: State University of New York Press.
- Fine, B., & Leopold, E. (1993), *The World of Consumption*. London: Routledge.
- Fletcher, P. (1997), "Building from migration: Imported design and everyday use of migrant houses in Mexico." In B. Orlove (ed.) *The Allure of the Foreign: Post-Colonial Goods in Latin America* (pp. 185–202). Ann Arbor: University of Michigan Press.
- Friedmann, R., De Buen, O., Sathaye, J., & Gadgil, A. (1995), "Assessing the residential lighting efficiency opportunities in Guadalajara and Monterrey, Mexico." *Energy* 20, 151–169.
- Foster, R. (1991), "Making national cultures in the global ecumene." *Annual Review of Anthropology* 20, 235–260.
- Franke, R., & Chasin, B. (1994), *Kerala: Radical Reform as Development in an Indian State*, 2nd Ed. Oakland, CA: Food First Books.
- Galhardi, R. (1998), *Maquiladoras as Prospects of Regional Integration and Globalization*. Employment and Training Papers No. 12, International Labour Organization. Geneva: ILO.
- Goldemberg, J. (1996), *Energy, Environment, and Development*. London: Earthscan.
- Goldemberg, J., Johansson, T., Reddy, A., & Williams, R. (1988), *Energy for a Sustainable World*. New Delhi: John Wiley Eastern.
- Goodwin, N., Ackerman, F., & Kiron, D., (eds). (1997), *The Consumer Society*. Washington, DC: Island Press.
- Grimes, K. (1998), *Crossing Borders: Changing Social Identities in Southern Mexico*. Tucson: University of Arizona Press.
- Herzog, L. (1990), *Where North Meets South: Cities, Space, and Politics on the U.S.–Mexico Border*. Austin: Center for Mexican American Studies, University of Texas.
- Heyman, J. McC. (1988), *The Working People of the United States–Mexico Border in the Region of Northeastern Sonora, 1886–1986*. Unpublished doctoral dissertation, City University of New York, Graduate School.

- Heyman, J. McC. (1990), "The emergence of the waged life course on the United States–Mexico border." *American Ethnologist* 17, 348–359.
- Heyman, J. McC. (1991), *Life and Labor on the Border: Working People of Northeastern Sonora, Mexico 1886–1986*. Tucson: University of Arizona Press.
- Heyman, J. McC. (1994a), "Changes in house construction materials in border Mexico: Four research propositions about commoditization." *Human Organization* 53, 132–142.
- Heyman, J. McC. (1994b), "The organizational logic of capitalist consumption on the Mexico–United States Border." *Research in Economic Anthropology* 15, 175–238.
- Heyman, J. McC. (1997), "Imports and standards of justice on the Mexico–United States border." In B. Orlove (ed.) *The Allure of the Foreign: Post-Colonial Goods in Latin America* (pp. 151–184). Ann Arbor: University of Michigan Press.
- Heyman, J. McC. (n.d.), *Consumption in Developing Societies*. Forthcoming in Encyclopedia of Life Support Systems. Geneva: UNESCO; available on the Internet at <<http://dizzy.library.arizona.edu/ej/jpe/consumpt.htm>>
- Ibarra, I. (2000), "Mexico's minimum wage unlivable." *Arizona Daily Star*, July 23, 2000, A1.
- ILO (1999), *Minimum Wage Fixing in Mexico*. Briefing Note No. 13, Labour Law and Labour Relations Branch, International Labour Organization. Geneva: ILO.
- Kopinak, K. (1996), *Desert Capitalism: Maquiladoras in North America's Western Industrial Corridor*. Tucson: University of Arizona Press.
- Kottak, C. (1990), *Prime-Time Society*. Belmont, CA: Wadsworth Publishing.
- Lorey, D. (1999), *The U.S.–Mexican Border in the Twentieth Century*. Wilmington, DE: Scholarly Resources.
- Lutzenhiser, L. (1997), "Social structure, culture, and technology: Modeling the driving forces of household energy consumption." In P. Stern, T. Dietz, V. Ruttan, R. Socolow & J. Sweeney (eds) *Environmentally Significant Consumption: Research Directions* (pp. 77–91). Washington, DC: National Academy of Sciences.
- Martínez, O. J. (1994), *Border People: Life and Society in the U.S.–Mexico Borderlands*. Tucson: University of Arizona Press.
- Miller, D. (1994), *Modernity: An Ethnographic Approach*. Oxford: Berg.
- Miller, D. (ed.). (1995a), *Acknowledging Consumption: A Review of New Studies*. London: Routledge.
- Miller, D. (1995b), "Consumption and commodities." *Annual Review of Anthropology* 24, 141–161.
- Miller, D. (1997), *Capitalism: An Ethnographic Account*. Oxford: Berg.
- Mills, M. (1997), "Contesting the margins of modernity: Women, migration, and consumption in Thailand." *American Ethnologist* 24, 37–61.
- Mintz, S. (1985), *Sweetness and Power: The Place of Sugar in Modern History*. New York: Viking Penguin.
- Moran, E. (1993), *Through Amazonian Eyes: The Human Ecology of Amazonian Populations*. Iowa City: University of Iowa Press.
- Owen, R. (1959), *Marobavi: A Study of an Assimilated Group in Northern Sonora*. Anthropological Papers of the University of Arizona No. 3. Tucson: University of Arizona Press.
- Pader, E. (1993), "Spatiality and social change: Domestic space use in Mexico and the United States." *American Ethnologist* 20, 114–137.
- Peña, D. (1997), *The Terror of the Machine: Technology, Work, Gender, and Ecology on the U.S.–Mexico Border*. Austin: Center for Mexican-American Studies, University of Texas.
- Roodman, D. (1999), "Building a sustainable society." In L. Brown (ed.) *State of the World 1999* (pp. 169–188). New York: W. W. Norton.
- Ruiz, R. (1998), *On the Rim of Mexico: Encounters of the Rich and Poor*. Boulder, CO: Westview.

- Sen, A. (1992 [1983]), "Development: Which way now?" In C. Wilber & K. Jameson (eds) *The Political Economy of Development and Underdevelopment*, 5th Ed., pp. 5–26. New York: McGraw-Hill.
- Sheridan, T. E. (1988), *Where the Dove Calls: The Political Ecology of a Peasant Corporate Community in Northwestern Mexico*. Tucson: University of Arizona Press.
- Shi, D. (1985), *The Simple Life: Plain Living and High Thinking in American Culture*. New York: Oxford University Press.
- Simonelli, J. (1986), *Two Boys, a Girl, and Enough!: Reproductive and Economic Decisionmaking on the Mexican Periphery*. Boulder, CO: Westview Press.
- Sklair, L. (1993), *Assembling for Development: The Maquila Industry in Mexico and the United States*, Rev. Ed. La Jolla, CA: Center for U.S.–Mexican Studies, University of California, San Diego.
- Sklair, L. (1994), "The culture-ideology of consumerism in urban China." *Research in Consumer Behavior* 7, 259–292.
- Stern, P., Dietz, T., Ruttan, V., Socolow, R., & Sweeney, J. (eds). (1997), *Environmentally Significant Consumption: Research Directions*. Washington, DC: National Academy of Sciences.
- Tevis, Y. (1993), "Cookstoves to air conditioners: Improving energy efficiency in Mexican homes." *UC MEXUS News* 30, 1, 5–10.
- Thomas, P. (1998), "Conspicuous construction: Houses, consumption, and 'relocalization' in Manambondro, southeast Madagascar." *Journal of the Royal Anthropological Institute N.S.* 4, 425–446.
- Thompson, E. (1967), "Time, work-discipline, and industrial capitalism." *Past and Present* 38, 56–97.
- Wilk, R. (1989), "Houses as consumer goods: Social processes and allocation decisions." In H. Rutz & B. Orlove (eds) *The Social Economy of Consumption* (pp. 297–322). Lanham, MD: University Press of America.
- Wilk, R. (1999). "'Real Belizean food': Building local identity in the transnational Caribbean." *American Anthropologist* 101, 244–255.
- Zachariah, M., & Sooryamoorthy, R. (1994), *Science in Participatory Development: The Achievements and Dilemmas of a Development Movement: The Case of Kerala*. London: Zed Books.