PART 3
Anthropological Actions

Chapter 16

Consuming Ourselves to Death: The Anthropology of Consumer Culture and Climate Change

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Defining "The Cause" of Global Climate Change

The way different experts define the causes of global climate change tells a great deal about their training, world view, and the limitations of the partitioned knowledges we have inherited from the nineteenth-century division of the world into physical, natural, and social sciences. Ask an atmospheric scientist, and they will tell you that the cause is greenhouse gases, cloud cover, and the balance of the carbon cycle. An ocean specialist is likely to talk about thermohaline circulation, currents, glaciers, and sea levels. You get the same myopia from economists, who focus on the industries that spew carbon dioxide and other gases into the atmosphere, and from political scientists who talk about the failure of regulatory regimes. A tropical ecologist is likely to give you a lecture about deforestation and the burning of Amazonia.

At the other extreme are consumer activists and the "simple living" movement, which tell us that climate change is the result of Western society's extravagant lifestyles that consume too many of the world's resources, and other world areas emulating the West. From this perspective, consumption is "using up" the resources of the world, leaving nothing but a despoiled wasteland for the next generations. While this is an easy way of defining the problem, with a clear moral vision defining "good guys" and "bad guys," it is in many ways as myopic and inaccurate as a technical focus on smokestack emissions or rainforest destruction. It may work as an agitation tactic to wake people up and get them to see the urgency and magnitude of the problem of climate change, and warn them that the solution will impact all of our lives. However, in some important ways, this image of "using things up" misrepresents the problem and can make consumers think that just using less of everything is the answer.

If the world was simply a shopping bag of groceries that humans could either open and eat, or store for later, then the idea of "using up" would make sense. Instead human impacts on the planet are far more varied than simply

using up stocks of resources. Most nonrenewable resources—like copper, iron, and coal—are still abundant and are in no danger of running out. In fact, cost, not availability, is usually the obstacle to obtaining them. Additionally, the ocean is an almost inexhaustible supply of gold and other valuable minerals, but the cost of recovering them is very high. The irony is that *renewable* resources like timber and fish are the ones most in danger of being destroyed by human overexploitation. The most immediate ecological dangers of pollution, extinction, and climate change are due more to waste, poor regulation, and unregulated emission than to the using up of resources.

The vast engines of the economy, especially in rich, developed countries, *are* ultimately driven by the relatively luxurious lifestyles of what is called the "consumer economy," a way of life based on moving and transforming huge amounts of materials and energy. Averaged on a per person basis, for example, citizens of the US use about sixty times as much material each year as citizens of poor countries like Mozambique, and ten times as much as people in middle-income countries like Turkey or Mexico. On the other hand, because of their huge populations, large countries like China and India, even though they consume far less on a per capita basis, are now rivaling the national levels of consumption and carbon emission of rich countries with far smaller populations. Said another way, if 1.3 billion Chinese were to start producing waste and emitting CO_2 at the same level as North Americans, the rate of climate change would increase dramatically. The Chinese, however, see this is an issue of development and justice, and ask why they should stay in poverty in order to compensate for the past greed and wealth of North Americans and Europeans (Patterson and Grubb 1992). Even though rich countries want to focus on the present and the future, the legacy of the past injustice and inequality will not go away in debates over sustainability. There is always a moral and political dimension to issues of consumption, and because moral standards vary from place to place, we also have to think about different cultural ideals about justice, comfort, needs, and the future. Anthropology is uniquely situated as a discipline to address just these issues, all of which have historically been part of our research program.

But defining the cause of climate change as overconsumption and prescribing a kind of global belt tightening tends to put the burden of *systemic* change on individuals. Many of the ways North American consumers live are beyond their individual control: suburbs are built in a way that requires people to own cars, since there is no public transportation. Businesses are actually the largest consumers of many kinds of goods like paper and cardboard and so even if every private citizen were to recycle every single piece of household paper waste, this would still account for less than 10 percent of the paper used in the country. Many consumption decisions are not made by consumers at all, but by governments, regulatory agencies, and businesses.

To give just one example, the automobile industry in the US has not produced and sold large numbers of electric vehicles to a mass public market since 1914, despite abundant evidence for demand. Archaeologist Michael Schiffer (2003) has persuasively argued that the death of the electric car was a cultural event, related to the marketing of electric cars as "feminine," rather than an economic or technical imperative. The industry's antipathy to the electric car has continued to the recent past, when General Motors, forced to produce an electric vehicle by the state of California, eventually killed the program and destroyed the vehicles despite strong public demand (Sartotius and Zundel 2005)[1]

My point is that it is only easy to condemn overconsumption in general terms. On a large scale there is no question that many of the environmental problems the world faces are due to high levels of material and energy that are used, wasted, and disposed of. But the devil is in the details. A simple message to "consume less" may be a satisfying moral message, but in different contexts it can carry class, cultural, and religious overtones. Most religions of the world tell us to be charitable, because wealth is corrupting and materialism distracts us from spiritual and ethical matters (Belk 1983; Miller 2005). But on the other hand, poor people are often accused of wasting their money and resources, consuming improperly or immorally on clothes, drink, or drugs. The moral critique of consumption is a difficult terrain, in which we have to tread carefully to make sure we are not passing along class or religious prejudices, rather than thinking about environmental ethics and issues (Miller 2001; Wilk 2001; Horowitz 1988).

In practice it is very hard to separate "good" consumption from bad; why should visiting museums to view fine art be inherently better than going to amusement parks? Is a collection of old master paintings less materialistic than a box of comics, or a garage full of motorcycles? Why should a fast food hamburger be censured, while a plate of fresh foie gras in a gourmet restaurant is praised? Recent studies show that eating centrally prepared, highly processed food is actually more energy-efficient than home cooking the same number of meals from fresh ingredients purchased individually in many stores (Sonesson et al. 2005a, 2005b). When it comes to organic, ethical, local, and energy-efficient, what yardstick do we use to measure the negative aspects of consumption, and when do we acknowledge the importance of aesthetics and pleasure? Even tracking the total energy cost or CO_2 emissions of a single product turns out to be a complex task, full of uncertainties and arbitrary choices. For the problem of climate change, some kinds of consumption are pretty irrelevant—what is most important is how much fossil fuel was burned to produce, move, and dispose of an item, and how much fossil fuel an item (like a lawnmower) consumes over its life.

So far most of the information that has been provided to the consumer public about these kinds of issues has been oriented towards helping individuals be "smart consumers' who make the right choices. But what do consumers do as public citizens, as politically engaged members of society, and

as anthropologists who want to address the major pressing issues that face humanity during our lifetime?

At the general, strategic level, can anthropologists contribute to understanding the complex dynamics of consumer culture, so that they can play a part in the modeling and prediction that has become so crucial to the public policy battles going on at national and international levels? In other words, can anthropologists use what they know about society in general to understand consumer culture in a way that is precise and concrete enough to have an influence on government policy? The second way anthropologists can work is the tactical level of applied anthropology, on specific projects aimed at changing specific kinds of consumption—can anthropologists, for example, find ways to get people to weather-strip their houses or compost their organic trash?

Anthropology and Climate Change Strategy

One way to recast the problem of consumer culture and climate change in anthropological terms is to phrase it this way: *What makes human wants and needs grow?* How do things that were once distant luxuries—say, hot water—become basic necessities that people expect on demand for civilized life (see Illich 1977)? Air conditioning in personal automobiles, an expensive and uncommon option just twenty years ago, is now standard—even on cars sold north of the Arctic Circle in Norway! Why do Western consumers expect their standard of living to keep rising?[2]

Anthropology offers the scope and sweep of time to step back and offer a bigger picture of how the human species got itself into its present dilemma of rapid growth in greenhouse gas emissions. Archaeology shows that the growth of human wants and needs is not a new thing. The Neolithic period, for example, saw human societies all over the world becoming used to a wide assortment of new goods and possessions, from pottery to personal jewelry. Once people built a way of life around these goods, they seem to have been very reluctant to give them up and go back to being mobile hunters and gatherers. But compared to the pace of change today, the consumer culture of most early civilizations was relatively stable, and new wants and needs grew very slowly. The Nile Valley of Egypt and Sudan hosted a civilization that seems to have provided a stable, modest life with the same basic domestic consumer culture for millions of people over at least three thousand years. There were only short periods of instability. A small urban elite class lived in relative luxury, with bigger houses, servants, and many kinds of exotic arts and crafts, but even their repertoire was, by our standards, remarkably conservative and slow to change. The daily material culture and rhythm of everyday life did not substantially change until cheap manufactured goods and machines from Europe arrived in the late nineteenth century.

These historical examples contrast sharply with today's furious pace of change in Chinese and Indian consumer societies or with the constant stream

of new goods that flow into supermarkets, electronic stores, clothing stores, and car dealerships in the US and other rich countries. Marketing and selling, as Kalman Applbaum (2003) persuasively argues, are the dominant ideology, the unquestioned daily work, of Western consumer society. Disposing of no-longer-wanted goods has itself become a major enterprise and environmental problem. North Americans are buying bigger and bigger houses (and renting huge amounts of extra space) just to have the room to keep all of their possessions.

Why have human beings become so insatiable? Social science, to date, has provided only fleeting and partial answers to this query. Here anthropology can potentially play an important role. Economic anthropologists have convincingly argued that the modern capitalist economic system, itself an enormous engine of growth requiring constant expansion in consumption, is itself a cultural artifact (Yang 2000; Miller 1997). Humans are operators and participants whose behavior is not simply determined by advertisers. Because anthropology has a systemic view of human society and does not isolate our evolutionary heritage from our technology, economy, consumption, morality, and religion, and which commands the full sweep of the human past, it alone has the potential to assemble a comprehensive approach. But since the time of Leslie White's now outdated evolutionary model of human energy use, anthropologists have not used their magnificent cross-cultural and long-term data on human societies to think synthetically about the problems of growth and consumption.

This is not to say that anthropologists have not recognized consumption's key importance to the problem of climate change. In the last decade, an interdisciplinary approach to understanding consumer culture has been slowly growing under the rubric "sustainable consumption" (Murphy and Cohen 2001). However, anthropologists have not had a notable presence in any of the discussions about how public policy can respond to the challenge of making consumer culture more sustainable. Willett Kempton, a cognitive anthropologist trained at Berkeley, and I were the only anthropologists who gave papers at the 1995 National Research Council conference on Environmentally Significant Consumption. Since then, sociologists, social psychologists, and ecological economists have taken the lead in thinking about the problems of high consumption in North America (e.g., Princen et al. 2002; Princen 2005; Jackson 2006).

The idea of making consumer culture more sustainable through government policy is much more widely discussed in Europe than in the US, and there have been many congresses and high-level policy groups on the issue (OECD 1997). There are already dramatic results: for example, German legislation requiring companies to take responsibility for recovering and recycling the consumer products they sell (papers in Reisch and Ropke 2005). Yet anthropologists have again been almost invisible in these discussions,

their place taken by social scientists who lack cross-cultural experience and have a global perspective.

At least anthropologists have begun to take consumer culture seriously as a research topic in the last two decades.[3] The number of studies and their breadth is truly impressive (e.g., Miller 1995), though some find the anthropological approach fragmented, overly symbolic, and poorly contextualized with political economy (Carrier and Heyman 1997). Anthropologists have also been lumped together with cultural studies scholars, whose approach to consumer culture is often to celebrate its richness and variety, the opportunities it offers for expression, agency, and developing identity, rather than critiquing it.

Nevertheless, for a globally contextualized picture of how consumer culture is becoming established in new territories around the world, or for a detailed understanding of the social and moral meaning of daily grocery shopping in rich countries, anthropologists offer rich and comprehensive case studies and sophisticated theory. So far, what anthropologists have not done is to sit down together to compare and synthesize results, or put them into the kind of language or format that could be useful to policy makers. Why not?

Fundamentally, anthropologists are methodological individualists. We are not trained in collaborative research, and we are not socialized to work together—instead, we compete for publications, jobs, and visibility. Our collaborations tend to be fleeting affairs, at most on a single research project or a publication, more often confined to a few days of conference discussion or committee meetings. Contemporary anthropology departments rarely offer the time or the resources for faculty members to actually do research together, much less synthesize and discuss their work with an eye towards policy. These are not the kinds of work that the academic reward structure supports.

In contrast, the disciplines that have made effective contributions to policy have developed appropriate institutions that bring numbers of scholars together for an extended period of time in specialized research institutes, think tanks, and policy centers, often with direct foundation support. There have been a few applied anthropology "shops" associated with major anthropology departments over the years, but they have usually been oriented toward field research and contract supported, with limited policy capabilities.[4] About the closest thing we have today are the two Sloane Foundation–supported centers on American working families at UCLA and the University of Michigan, both of which have done a great deal of innovative research and are beginning to produce policy-relevant publications. But otherwise there are no Brookings Institutes, World Resources Institutes, or Russell-Sage Foundations to support groups of anthropologists to translate research into useful advice and policy, and to act as a public voice for the discipline. The result is that anthropologists are left to their own devices to

try to bring the relevant results of their individual research to the attention of a policy community, a task akin to whispering in a room full of people screaming through bullhorns.

Tactical Responses to the Problems of Consumption

Global climate change has brought the issue of consumption forward into public and academic attention. But it was the so-called first energy crisis in the early 1970s and the OPEC oil boycott that gave the world its first taste of what a world with energy scarcity and higher prices would be like. This initiated a first round of scientific research on conservation, energy efficiency, and alternative energy, funded by the US federal government and electric utilities. For a time in the early and mid-1980s, several anthropologists became involved in what was a flowering of applied social science in the field of energy consumption.

Willett Kempton was perhaps the most prominent and prolific researcher, and his innovative ethnographic work on home hot water use, the way people used and understood thermostats, and folk knowledge about energy costs was widely read and cited among energy researchers (Kempton et al. 1992, 1991; Kempton 1986). He had influence on the eventual shape of the DOE Energy Star labeling program. His experimental work on the way people could be encouraged to lower their electricity use by showing their neighbors' consumption on their monthly bill was pathbreaking. He has also done important research on how Americans think about and understand global climate change, which attracted attention from congressional legislators (Kempton 1997). Steve Rayner is another anthropologist who had a major role in energy research, through his leadership position at the Oak Ridge National Laboratories and then the Pacific Northwest National Laboratory, where he was chief scientist (see Rayner and Malone 1998).

During this time, Harold Wilhite and I conducted an ethnographic study contrasting people who were and were not investing in home energy-saving improvements, funded by the University of California Energy Research Group. We were the only anthropologists who applied for funding. The funding organization was initially quite skeptical, but, once they saw our results, became quite supportive. We found a receptive audience for our research in the energy community, and our technical publications continue to be cited (Wilk and Wilhite 1984, 1985; Wilhite and Wilk 1987). But even with grant funding, neither of us could get secure university positions in anthropology, and we both had to leave California. Wilhite moved to Norway, where he continued to do innovative research on culture and energy consumption (Wilhite and Ling 1995; Wilhite 1996). I left academia for a position as a rural sociologist with the US Agency for International Development.

If anyone knows how to change consumer behavior, it is advertisers and marketers. Consumer research is the applied science of consumption, taught

in marketing programs in hundreds of business schools in the US and elsewhere. During the 1980s business schools became the sole haven for anthropologists interested in the applied study of consumption. Eric Arnould, John Sherry, Barbara Olsen, and Grant McCracken, among others, effectively introduced cultural anthropology to marketing programs, which had previously been dominated by social psychologists, survey researchers, and demographers. They produced a huge volume of new and creative research, textbooks, and collaborations (e.g., Sherry 1995; Arnould et al. 2003; Sunderland 2007).

Anthropology has become both an accepted part and a fashionable trend in mainstream consumer research and marketing. Anthropologists also helped bring a critical perspective towards consumer culture into business schools, which have questioned the impact of consumption on culture, gender, class, individual identity, and the environment, in ways that were previously quite alien in a pro-business environment. This movement matured in 2005 with the "Transformative Consumer Research" initiative and conferences sponsored by the Association for Consumer Research, both of which explicitly seek to turn the tools of marketing towards socially positive ends.[5] In 2006, the University of Auckland founded an "anticonsumption" institute within its business school, a radical initiative unmatched by anything imagined so far by anthropologists or sociologists.

Given the potential for an applied anthropology of consumption, however, the total response of our discipline has been late, random, and feeble. Anthropologists have started to study the environmental movements that have spawned simple living, bioregionalism, farmers' markets, Community Supported Agriculture (CSAs), local currencies, and a host of other initiatives. However, anthropology plays catch-up with popular movements for ethical consumption, vegetarianism, and global equity, and against the World Trade Organization, genetically modified organisms, and the industrialization of the food system. These movements are growing by leaps and bounds in the US and throughout the world, and many of these groups have also formed effective international networks. Not only are anthropologists slow to recognize the importance of consumption activism and study it as an important phenomenon in the world, they also have lagged in putting anthropology to work as an applied tactical tool in furthering activist goals.

The Teaching Mission

Our students live and breathe consumer culture, and just the way fish living in water never really see the water they live in, our students pass through their four years at a university without ever learning anything systematic about the consumer culture that forms the very fabric of their daily lives. In some ways this is a strange paradox—the most conspicuous aspect of modern life and the part that students have direct daily experience with is largely passed over during their studies. A liberal arts curriculum is supposed

to equip them for intellectual engagement with the world they live in. This is a great tragedy, for it misses an important chance to show students how their daily life engages them with global issues, complex moral choices, and cultural complexity.

This huge gap also presents an enormous opportunity for anthropology to step in as the one discipline that can integrate a topic that is otherwise fragmented and scattered across the entire university curriculum from nutrition to economics, history to physics. Teaching about consumption is also a great opportunity to put ethnography right into the classroom, and to get the university connected with its surrounding community through various kinds of service learning and community engagement in active learning.

Among other consumption-related classes, I teach a freshman course on "global consumer culture" to 120 students every other year.[6] I give students a variety of assignments that require them to go out in the community to talk to people in supermarkets, shops, restaurants, and food banks, and I also ask them to inventory their own food, bottled water, and clothing consumption. A smaller group does service-learning projects with our Bloomington community Center for Sustainable Living.[7] A significant number of students every semester find that thinking about their own consumption is challenging, transforming, and exciting, and I am always gratified when it recruits new anthropology majors, but I am equally happy to see others heading off towards history, psychology, media studies, international studies, and other useful majors.

Teaching this class keeps reminding me that teaching university students is itself one of the most important kinds of applied anthropology. Each public speaking opportunity, every lecture is an opportunity to bring anthropology to bear on problems of consumption and to spread the message that sustainability is not an issue that can wait for the next generation. Students want to see the university itself as a laboratory for a more sustainable way of life. Anthropologist Peggy Barlett (see her chapter in this section) is among the pioneers of the "Greening Campus" movement—first working effectively to get sustainability ingrained into the mission of her own Emory University, and then seeing how to extend the message to other institutions around the country (this volume, and Barlett and Chase 2004). Any anthropology class can take up fair trade coffee, bottled water, or another global or equity issue as an applied project with direct relevance to daily campus life.

Conclusion

"Sustainability is a term like truth or beauty," says Fred Kirschenmann, a senior fellow at the Leopold Center for Sustainable Agriculture at Iowa State University. "We struggle but never get there."[8] But we have no choice but to join this struggle, because the world cannot survive any more with business as usual. Since we are all consumers, we have power to change our own participation in the system as users, though many of our decisions

will be negative ones—we will decide not to eat certain things, not to buy particular products, or to travel by train instead of by air, for example. But this is only a small and relatively passive part of our possible role in building a sustainable future that is going to depend on new kinds of social, cultural, and economic systems. The challenge of the next generation is inventing those systems and getting them deployed in the world while there is still time. Anthropology has tremendous potential to play a productive role in the transformation to a more sustainable economy, but only if we are willing to enter new fields of study, improve our communication skills, and think of ourselves as participants in change rather than just critics. So far we have mainly exploited our methodological skills as specialists in ethnography and participant observation to gain entry into areas that are already full of active and engaged social scientists from rival disciplines. Now that we have an entry, it is time to use our knowledge of social change and process, our synthesis of biology and culture, our command of global issues, and our holistic understanding of the economy to make a greater contribution and increase our voice. It would help a great deal in this enterprise if we could find a way to temper methodological individualism, and create new models of comparison and collaboration, so that we could represent anthropology as more than a quarreling and fractious gaggle of scholars.

Notes

1. This incident was the topic of the documentary film "Who Killed the Electric Car," http://www.whokilledtheelectriccar.com/.
2. Surprisingly few philosophers and theorists have written extensively about this very fundamental question, which Adam Smith considered fundamental to economics, but which later economists fumbled and then dropped.
3. Although Eric Arnould and I remember submitting a paper on growing consumer culture in developing countries to *American Anthropologist* in 1982, only to have it rejected on the grounds that "consumption was not an anthropological topic."
4. One of the longest lived is the Bureau of Applied Research in Anthropology at the University of Arizona, which has concentrated on border-studies issues, and there have been similar institutions focused on international development at Harvard and SUNY Binghampton.
5. The TCR website is at http://www.acrwebsite.org/fop/index.asp?itemID=325.
6. The syllabus from the last time I taught the course can be found at http://www.indiana.edu/~wanthro/e104_05.htm
7. http://www.bloomington.in.us/~csl/
8. http://pelennor.leopold.iastate.edu/about/moreaboutfred/kirschenmann.htm

References

Applbaum, K. 2003. *The marketing era: From professional practice to global provisioning*. London: Routledge.

Arnould, E. J., Price, L., and Zinkhan, G. M. 2003. *Consumers*. Columbus. OH: McGraw-Hill.

Barlett, P. and G. Chase 2004. *Sustainability on campus: Stories and strategies for change*. Cambridge, MA: MIT Press.

Belk, R. 1983.Worldly possessions: Issues and criticisms. *Advances in Consumer Research* 10: 514–19.
Carrier, J. and J. Heyman. 1997. Consumption and political economy. *Journal of the Royal Anthropological Institute* 3(2): 355–73.
Horowitz, D. 1988. *The morality of spending*. Baltimore: Johns Hopkins University Press.
Illich, I. 1977. *Toward a history of needs*. New York: Pantheon.
Jackson, T. 2006. *The earthscan reader on sustainable consumption*. London: Earthscan Publications Ltd.
Kempton, W., D. Feuermann, and A. McGarity. 1992. "I always turn it on super": User decisions about when and how to operate room air conditioners. *Energy and Buildings* 18: 177–91.
Kempton, W., J. Darley and P. Stern. 1992. Psychology and energy conservation. *American Psychologist* 47(10): 1213–23.
Kempton, W. 1986. Two theories of home heat control. *Cognitive Science* 10: 75–90.
———. 1997. How the public views climate change. *Environment* 39(9): 12–21.
McCracken, G. 1988. *Culture and consumption: New approaches to the symbolic character of consumer goods and activities*. Bloomington: Indiana University Press.
Miller, D. 2001. The poverty of morality. *Journal of Consumer Culture* 1(2): 225–43.
———. 1995. Consumption and commodities. *Annual Review of Anthropology* 24: 141–61.
———. 1997. *Capitalism: An ethnographic approach*. Oxford: Berg.
Miller, V. J. 2005. *Consuming religion: Christian faith and practice in a consumer culture*. London: Continuum International Publishing Group.
Murphy, J. and M. J. Cohen. 2001. *Exploring sustainable consumption: Environmental policy and the social sciences*. London: Pergamon.
Murthy, J. 2006. *Environmental sustainability: A consumption approach*. New York: Routledge.
OECD. 1997. *Sustainable consumption and production*. Paris: Organization for Economic Co-operation and Development.
Paterson, M. and M. Grubb 1992. The international politics of climate change. *International Affairs* 68(2): 293–310.
Princen, Thomas 2005. *The logic of sufficiency*. Cambridge: MIT Press.
Princen, T., M. Maniates, and K Conca, eds. 2002. *Confronting consumption*. Cambridge MA: MIT Press.
Rayner, S., and Malone, E. 1998. *Human choice and climate change*. Colombus, OH: Battelle Press.
Redclift, M. 1996. *Wasted: Counting the costs of global consumption*. London: Earthscan Publications.
Reisch, L. A., and Ropke, I. 2005. *The ecological economics of consumption*. London: Edward Elgar Publishing.
Sartorius, C., and S. Zundel. 2005. *Time strategies, innovation, and environmental policy*. London: Edward Elgar Publishing.
Schiffer, M. B. 2003. *Taking charge: The electric automobile in America*. Washington, DC: Smithsonian.
Scitovsky, T. 1992. *The joyless economy*. New York: Oxford University Press.
Sherry, J. F. 1995. *Contemporary marketing and consumer behavior: An anthropological sourcebook*. New York: Sage Publications.
Sonesson, U., et al. 2005a. Industrial processing versus home cooking: An environmental comparison between three ways to prepare a meal. *Ambio* 34(June): 414–21.
———. 2005b. Home transport and wastage: Environmentally relevant household activities in the life cycle of food. *Ambio* 34(June): 371–375.
Sunderland, P. 2[illegible] *Doing anthropology in consumer research*. Walnut Creek, CA: Left Coast Press.

Stern, P. C., Dietz, T., Ruttan, V. W., Socolow, R. H., Sweeney, J. L., et al. 1997. *Environmentally significant consumption: Research directions*. Washington, DC: National Academy Press.

Wilhite, H. 1996. *The dynamics of changing Japanese energy consumption patterns and their implications for sustainable consumption*, American Council for an Energy Efficient Economy Summer Study, Human Dimensions of Energy Consumption, ACEEE, Washington, DC.

Wilhite, H. and R. Ling. 1995. Measured energy savings from a more informative energy bill. *Energy and Buildings* 22: 145–55.

Wilhite, H. and R. Wilk. 1987. A method for self-recording household energy use behavior. *Energy and Buildings* 10: 73–79.

Wilk, R. 2001. Consuming morality. *Journal of Consumer Culture* 1(2): 245–60.

Wilk, R., and H. Wilhite. 1984. Household energy decision making in Santa Cruz County, California. In *Families and energy: Coping with uncertainty*, ed. B. Morrison and W. Kempton, 449–59. East Lansing: Michigan State University.

———. 1985. Why don't people weatherstrip their homes? An ethnographic solution. *Energy* 10(5): 621–31.

Yang, M. 2000. Putting global capitalism in its place: Economic hybridity, Bataille, and ritual expenditure. *Current Anthropology* 41: 477–509.