

ALTERNATIVE FOOD VENUES AND FOOD WASTE:
FROM CULTIVATION TO CONSUMPTION

By

DANIELLA PATRICIA TRIMBLE

A Thesis Submitted to the Honors College
In Partial Fulfillment of the Bachelors degree
With Honors in
Sociology

THE UNIVERSITY OF ARIZONA

MAY 2012

Approved by:



Dr. Celestino Fernández
Department of Sociology

STATEMENT BY AUTHOR

This thesis has been submitted in partial fulfillment of requirements for a degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Signed: Daniella Trumbte

Alternative Food Venues and Food Waste: From Cultivation to Consumption

IRB Project No. 12-0269

Daniella Trimble

University of Arizona

2 May 2012

Abstract:

In 2010, 33 million tons of food made its way to landfills in the United States alone (Environmental Protection Agency 2012). That same year 925 million people worldwide were undernourished, 98 percent of them in developing countries (Food and Agriculture Organization 2010). It is this contrast and threats to future global food production that has motivated the study of food systems and particularly of food waste. Existing literature on consumer level food waste almost exclusively emphasizes quantifying and characterizing the behavior of the average American consumer (Gallo 1980, Griffin 2009, Rathje 1996, Van Garde 1987). One question that has garnered far less attention from scholars, however, is how and why a small percentage of American consumers are beginning to make concerted efforts to prevent their personal food waste. This study analyzes survey and interview responses from target groups who acquire their food from non-conventional, alternative market sources in an attempt to find the reasons why certain individuals waste less than the average American consumer. The interview data suggests that consumer participants in these markets experience elevated value and sentiment toward their foods, which ultimately results in heightened consciousness surrounding both food consumption and disposal.

Introduction:

This study is centered on uncovering the factors that influence individuals to reduce their food waste compared to the average American consumer. Specifically, this study focuses upon consumers in central Tucson who acquire their foods from unconventional sources and who make exceptional time and capital investments in their acquisition of food.

Food waste pervades every country in the world. Much of it is unavoidable, particularly the waste that occurs in developing countries. However, the waste that occurs in high-income countries, especially in the United States, occurs primarily at the consumer level (Buzby 2009). 925 million people worldwide experience hunger, which is more than the combined populations of the United States, Canada, and the European Union (FAO 2010). 239 million people in sub-Saharan Africa currently suffer from hunger (Gustavsson 2011). The 222 million tons of food waste created annually in the aforementioned regions (the United States, Canada, and the European Union) could nearly double the net food production in sub-Saharan Africa (Gustavsson 2011). It is of the utmost importance to find a way by which to reallocate these chronically squandered resources. Additionally, the majority of food thrown away in the United States ultimately ends up in landfills where food waste decomposes and contributes 20% of all methane emissions: a toxic greenhouse gas that has twenty-one times the global warming potential as carbon dioxide. Though nearly twice as much paper and cardboard is thrown away annually than food scraps, recycling rates for the former ultimately make food the number one component of landfills in the United States (EPA 2010).

Countless studies have been conducted by governmental and non-governmental agencies in an attempt to characterize food waste in high-income countries. There is consensus that food waste is a serious threat to the environment and to the future availability of food resources in

developing countries. Additionally, it has become apparent that average consumer waste rates are not affected by income level, occupation, race, or other explicit demographic factors (Bloom 2010). Numerous studies have attempted to find out who wastes food and why, but pinpointing a specific contingent has been fruitless, as the wasteful behavior is ubiquitous in high-income countries. However, there does exist a contingent of individuals that wastes less than the average American. This study seeks to uncover how food consumption behaviors and participation in alternative markets influences the relationship that consumers have with their with food and how this may possible result in reduced levels of waste. Consumers in this contingent express valuation of their food purchases beyond its nutritive and taste qualities. Further, they continually cite the medicinal and cultural qualities of their physical food purchases and an implicit trust in the markets through which they acquire such goods. The transparency and familiarization with food production in these alternative food markets provides individual consumers with a venue to develop a connection with their food purchases beyond its commoditized form. Participants in this study also describe the importance of gaining insight into the resources and labor conditions required to make their food purchases possible.

Literature Review

“Food waste at consumer level in industrialized countries (222 million tons) is almost as high as the total net food production in sub-Saharan Africa (230 million ton).”

The Food and Agriculture Organization, 2011

Of the top ten countries with the highest rates of hunger, nine of them are located in sub-Saharan Africa (International Food Policy Research Institute 2009). The population of these countries was estimated to be at 800 million in 2007 (World Bank). With just the food waste generated in North America and Oceania, Europe, and Industrialized Asia, the dietary needs of the individuals in these countries could be at least partially met.

World populations are currently struggling against chronic hunger and malnutrition. Meanwhile, detrimental levels of methane are being released into the atmosphere as a result of the accumulation and decomposition of food waste in our ever-expanding landfills (Bloom 2010). Gaining an understanding of the factors that contribute to and motivated the western-throw away culture (Emery 2006) on a micro local level (Griffin 2009) can serve as an aid in effectively curbing preventable food waste in communities across the United States and the western world.

There are varying estimates as to how much food is actually wasted. The most conservative of estimates suggest that nearly a third of the food produced in the United States is squandered—that is, it ultimately ends up in the trash (EPA 2006). Additionally, it is estimated that at least fifteen percent of solid food purchased at the consumer level is ultimately thrown away (Rathje 1997). In his widely read *American Wasteland*, Bloom states that color nor creed affects the amount of food wasted on an individual level. However, an analysis of food waste conducted in the United Kingdom cites that the social makeup of household members does marginally influence the amount of food that is wasted at the consumer level (Muth 2007).

Though estimates as to how much food is actually wasted in the United States widely vary, the most conservative of estimates remain unacceptable: the EPA estimates that nearly 34 million tons of food waste is generated each year (this figure is from 2009). Given the recovery and recycling rate of other goods that are thrown away like paper and cardboard, food waste now accounts for the greatest proportion of municipal solid waste that ends up in landfills and incinerators. Globally, the rate of food waste is approximated to be one-third of the food that is initially produced for human consumption. This equates to nearly 1.3 billion tons of food waste per year. Reasons for food waste vary regionally and are necessarily caused by technological limitations and sheer excess. It is estimated by the Food and Agriculture Organization that per capita food waste in western countries averages between 95-115kg per year, while that of Sub-Saharan Africa and South/Southeast Asia roughly amounts to 6-11kg per year. In low-income countries, inadequate methods of food transport and storage and limiting technological and managerial factors are the primary cause of the food waste. In middle and high-income countries most of the waste is attributable to consumer level food losses and a lack of communication between the different stages of the food cycle framework.

The implication of the presence of a landfill on the health of surrounding communities, such as the threat of toxins seeping into the water table, is significant. Currently, food waste makes up 27% of domestic landfills (EPA 2010). Great proportions of landfills have reached their capacity and are no longer in use. While some may suggest that more landfills be constructed, there are political, social, and space barriers that prevent the digging of landfills in certain areas (mainly affluent ones).

Of further concern, in equal amounts methane gas is more harmful to the environment than carbon dioxide. Currently, food waste is the main contributor (20%) to methane released

into the atmosphere (EPA 2010). In total, 47% of methane and 58% of nitrous oxide emitted into the atmosphere is due to agricultural production (Foresight. The Future of Food and Farming 2011). While the technology exists to capture methane from landfills and convert it into reusable energy, the payoffs for its implementation are insignificant (Themelis 2007). In squandering food calories, we also subject the environment to the unnecessary costs of transporting such waste to landfills. If a third of the food that is produced for human consumption is ultimately lost in the United States (whether it is at the consumer level or the production level) then a third of the greenhouse gas emissions emitted in the process of agricultural production have contributed to global warming for no reason at all.

How Much Food Do We Waste?

To put American food waste in perspective, there is enough food wasted in the United States alone in a given year to fill the entirety of the Rose Bowl Stadium (which seats 90,000 people) to its brim every single day. This equates to roughly half a pound of food waste per capita on a given day (Bloom 2010). It was also found that food waste in the United States alone accounts for 1400 kcal per capita on a daily basis and also for a quarter of total freshwater consumption. Additionally, wasted food uses approximately 300 million barrels of oil a year (Hall 2009). Given the current rates of food waste in the United States, and similar food waste behavior in other industrialized countries (such as the UK), there is enough food waste produced to potentially eliminate the hunger faced by nearly 925 million people worldwide (these are just those individuals who experience hunger in its most base sense—a lack of access to macronutrients) (Foresight: The Future of Food and Farming 2011).

In Europe, North America and Oceania, and Industrialized Asia, 15-30% of the fresh fruits and vegetables purchased by consumers ultimately become fodder for the garbage bin.

Nearly 50% of animal meat losses and waste are accounted for by consumer level behaviors as well, particularly in North America and Europe. 40-65% of milk and 40-50% of cereals are wasted at the consumer level in these regions as well (Gustavsson 2011).

Many consumers report that simply cooking too much food and its diminishing quality over time causes them to throw food away (Van Garde and Woodburn 1987). Others have simply allowed the food that they have prepared to spoil (Kantor, L. et al. 1997). Consumers feel justified in their waste because there is a great deal of unawareness concerning the environmental implications of food waste and widespread hunger problems both globally and nationally (Hamilton et al. 2005).

Because of the high microbial environment of landfills, food does not just biodegrade. The assumption that many individuals make (39% of them in fact) that food is entirely biodegradable is incorrect. Many perceive that the packaging that houses their food purchases is where the environmental footprint of their food-related waste ends (Brook Lyndhurst 2007).

Identified Recourses for Food Waste

Instead of squandering the potential of the nutrients and calories that food possesses, they could be put to productive use by properly recycling them. Possible alternative recourses for food waste include composting or using it for animal feed. Currently, a miniscule amount of the food wasted in the United States is composted. The EPA estimates that less than three percent of food waste was recycled and recovered in 2010. Though the process of composting may be more time-consuming than just throwing it down the garbage disposal or in the trash bin, we keep these foods from being transported to landfills where they will expel methane and have detrimental effects on the environment.

Using wasted foods as animal feed is another suitable remedy for such waste. Just because food no longer seems appetizing to a human does not mean that it is not still suitable for consumption, particularly by livestock and other animals. By diverting some of the food waste produced not only in the United States but also in regions the world over, we would be recycling our food back into the products that we will later consume. It is the first law of physics that energy is never destroyed nor created, but technological limitations make it difficult and expensive to capture this energy once it has begun to spoil and begun to convert itself into toxic gases (such as methane).

Why Do We Waste?

In wealthy, industrialized regions, we waste because we can. When there is a seemingly endless supply of food it is easy to throw away a banana that has begun to brown past its point of peak ripeness. When we go to conventional grocery stores and purchase produce, our selections do not leave a visible void: the place that the orange occupied previously is quickly replaced by the shifting mountain of fruit. When dining out with great frequency, it's easy to forget about the head of lettuce or the chicken drumsticks that have been shoved to the back of the fridge and remain there, forgotten. That is until it begins to breakdown and reminds us that they're there.

Misconceptions of quality also cause individuals to waste. If an apple isn't shiny, in the opinion of many, then it probably isn't worth eating. A pear that has become too soft is easier to throw away than to cut up and freeze, throw in a smoothie, or bake into a pie. If food doesn't *look* perfect, we don't have to eat it. This has not only encouraged the food industry to cover our foods in unnatural chemicals and waxes, but also causes grocery stores and distributors to waste tremendous amounts of food that will never be purchased for human consumption—just because it didn't look pretty.

There is a lot to be said for the “smell it” method employed by many individuals to determine whether or not a food is still suitable for human consumption—it works. Foods are marked with use-by dates that are set well before the food will become unsafe to eat to prevent potential lawsuits against distributors. A 2010 article in *Science* on the future challenges of food security states that:

Litigation and lack of education on food safety have lead to a reliance on “use by” dates, whose safety margins often mean that food fit for consumption is thrown away. In some developed countries, unwanted food goes to a landfill instead of being used as animal feed or compost because of legislation to control prion diseases.

H. C. J. Godfray

It is questionable whether it is necessary and effective for a governmental agency to dictate to individuals when food products are or are not still suitable for human consumption. Consumers heavily rely on use-by dates that usually indicate a foods expiry well before it has reached the point where it is no longer suitable for human consumption.

We’ve Grown Apart

In 1972, farmer Wendell Berry said that “Our model citizen is a sophisticate who before puberty understands how to produce a baby, but who at the age of thirty will not know how to produce a potato”. Because the majority of people in industrialized countries do not work in agriculture and do not tend to their own gardens we have become increasingly divorced from the food production process. If individuals were more familiar with how long it took a potato to grow, and the process of planting and harvesting the crop, then perhaps they would think twice before throwing it in the garbage bin.

Conscientious Consumption

“Tell me what you eat and I will tell you what you are.”

Anthelme Brillat-Savarin, 1826

Just around seventy years ago, the United States experiences a period of overwhelming scarcity. The Great Depression was a time of ration, insecurity, and compromise. Now, big-box grocery stores and supermarkets provide consumers with the illusion that there is an unlimited supply of food. It is these conventional venues whose shelves and bins seem to magically refill themselves to the brim that partially afford Americans this perception. Though food scarcity is a perpetual world problem, it is not one for the majority of inhabitants of the western world: Americans no longer have to worry about having enough to eat.

Now, Americans who enjoy a comfortable income are now afforded the privilege of being able to mull over not on the health implications of food, but also the political, social, and environmental effects that their food consumption practices pose. Still, widespread consumption of conventional produce and food products persists in post-industrial countries. What is it about the circumstance and ethos of a contingent of individuals that causes them to reject the industrial food complex and pursue alternative markets? It is my hypothesis that this ethos, of consuming locally and mindfully, extends to the ultimate destination and remediation of these food products.

Bruce Pietrykowski suggests that participation in the slow food movements and the producer-consumer relations that it houses rely on and perpetuate social and cultural values (2004). Additionally, Pratt argues that local food markets (which fall under the umbrella of the slow-food movement) provide a venue by which the history of the products that are being brought to market can be more fully expressed (Pratt 2007). I argue that this affords consumers the ability to become more fully acquainted with the life-cycle of the produce they consume, and enables them to come to see these products as more than their present physical embodiment, but

also as the inputs and outputs that imbue it with its worth. The transparency of alternative food markets such as community shared agriculture, cooperatives, farmer's markets and small-scale farming itself personalize the products that individuals are consuming. In having real-life interactions with the producer, and in being made aware of its origin, and the practices employed to cultivate and harvest these food products, a piece of produce is transformed into a vessel through which human labor, water, fertilizer, sun, fuel, and countless other inputs are delivered.

Our consumer purchases help to shape our identity and set us apart (Jackson 1999). Given that many markets, however, have become homogenized with the advent of the Internet, there exist few arenas by which to affirm individual identity through the purchase of consumer goods (particularly food items). When purchasing food commodities, however, we are not only purchasing things that we will adorn ourselves with, decorate our homes with, or will be driving around in; we are purchasing items that we will be putting inside of our bodies. Though purchasing a block of Parmigianino imported from Italy that costs \$100 a pound may be representative of conspicuous consumption (Veblen 1915), daily food consumption is not generally viewed as such. Participation in food markets that fall under the umbrella of a larger social movement and that indicate solidarity with individuals who employ similar dietary behaviors and patterns does suggest that food purchases are used as a medium by which to express the self within the context of a larger whole (Warde 1997).

These markets do not only provide a venue by which individuals can affirm their solidarity with a consumption ethos, but also one in which they can adopt and develop an ethos which extends to their behavior and treatment of food, and perhaps the eventual waste it creates.

Data and Methods

Location Selection

Organic food and alternative food venues such as farmer's markets and Community Supported Agriculture have gained significant popularity in recent years. In fact, organic food and beverage sales are reported to have accounted for 4 percent of all food and beverage sales in the United States in the year 2010 (*Organic Trade Association's 2011 Organic Industry Survey*). Growing awareness of unconventional sources from which to acquire food seems to be especially gaining traction in university towns and areas. In choosing my locations for individuals who would possibly represent a demographic that diverged from normative American food consumption patterns, I chose locations that represented an exceptional investment, whether it is time or capital, on the part of the individuals who partake in such ventures. These four locations require a larger commitment on the part of the consumer. This commitment includes time elements, preparation and cooking efforts, knowledge and information gathering, and often requires a larger share of one's income than just purchasing conventional foods.

Sleeping Frog Farms Community Supported Agriculture (CSA) Members

Sleeping Frog Farms is a small, 75-acre farm located in Cascabel, Arizona near the San Pedro River. They state their growing practices are based off of permaculture design and biodynamic growing principles. They participate in community efforts such as Farm to School (which aims to bring farm fresh food to public schools in the Tucson community) and also provide an opportunity for individuals in the community to obtain a community supported agriculture share to have a source for heirloom, seasonal produce.

Individuals who choose to purchase a CSA membership for approximately 12 weeks of produce must make an upfront commitment of \$300.00 and must pick up their share once a week

at a designated time and location, neither of which may be convenient for them. Those with shares must go out of their way to pick it up once a week, or make arrangements for it to be retrieved for them, because if the share is not picked up, they do not have the option to pick it up at an alternative time or double their share the following week. Additionally, members are given the opportunity to visit the farm in Cascabel and volunteer. This provides them the option to become more familiar with the physical, and time-intensive process that provides them with their produce. The farmers also send out frequent emails to shareholders alerting them of news on the farm. These emails include pictures of the produce and animals on the farm, along with farm activities to provide their members with a transparent look into their farming operation.

Unlike a conventional grocery store where individuals are able to pick and choose the products that they put into their grocery baskets, the CSA provides members with six or seven items that are selected for them. Additionally, they are restricted to seasonal produce that can often be repetitive and limited in winter months. Many of the food products that the CSA provides may be unfamiliar to individuals who are purchasing a share. They must therefore learn what the product is and how it is best prepared, making it a more time-consuming process than selecting produce you are readily familiar with at a large grocery store.

Membership with Sleeping Frog Farms is contingent upon individuals making a substantial upfront investment in the farm. Additionally, in being part owners of the farm for the season in which they purchase, members risk bearing the cost of unfruitful seasons and unforgiving weather. It is because of this that I hypothesize that these individuals will possess an alternative relationship with their food, particularly the food that they glean from this source. Given the risks and inconveniences and proximity to the food that they are afforded, it is likely that these individuals may place higher value on the food that they purchase, thereby making it

more difficult to squander these precious, one of a kind resources. It is because these resources are often of the heirloom variety and are often not available from more conventional sources that I call these resources precious. Additionally, in knowing that the person you pick up your share from likely picked the rainbow carrots that are a part of your share that week, and that they still have a little dirt on them, it imbues the food with the interactions this kind of market engenders.

Members of the Food Conspiracy Cooperative

The Food Conspiracy Cooperative is a small natural foods grocery that provides organic foods and products in the downtown Tucson community. In order to be a part of the Food Conspiracy Cooperative, members must pay a one-time membership fee of \$180. There is no parking lot for the grocery store, and the street where it is located is often too crowded to find a parking spot, making it inconvenient to travel there by car. Given that the absence of a vehicle would make large grocery purchases difficult, individuals often must make more frequent trips to meet their food needs. Additionally, the majority of the products made available are organic and substantially more expensive. For example, while the average price of apples and potatoes, according the USDA, is \$1.07 and \$0.48 a pound respectively, the average price at the Co-Op for these same items is \$1.99 and \$1.19.

Unlike most conventional grocery stores, the origins and distance of the produce is clearly marked for all fresh fruits and vegetables at the Co-Op on bright green placards. Because an effort is made to source the produce for the Co-Op from close locations, and much of the food available from grocery stores is shipped from remote regions. These placards are an invitation for customers to take other factors besides the appearance and firmness of a piece of produce into account when making their purchases. The kinds of fruits and vegetables available are mainly seasonal as well, further diminishing the variety of produce made available at the Co-Op.

Individuals must make an upfront financial commitment in order to be a part of the Co-Op where produce is more expensive and they have access to less variety. For many, the shopping experience is less convenient overall. There must then be other qualities that they seek out in food that are not necessarily made available through convenient venues. I predict that individuals with memberships in the Food-Co-Op will possess an alternative relationship with food in which they have higher valuation and attachment to their purchases. This may lend itself to less wasteful food behaviors and particularly high valuation of their food purchases.

Individuals with a garden plot in the Iron Horse Community Garden

The Iron Horse Community Garden in downtown, Tucson, AZ provides individuals in the community with the opportunity and space to have their own plot for gardening. Though there is no fee required for community members to participate, they are required to sign a contract that obligates them to keep up their plot and the community spaces. Because individuals who partake in this particular activity are extending an effort to engage in the process of growing food, they will likely be more attune to the time and labor intensive nature of cultivating fruits and vegetables than would be the average consumer. In being familiar with the invisible inputs and costs behind such food products, I believe that these individuals will also possess an alternative relationship with food, and may possibly place higher value or treat food with greater respect than would the average consumer. This would perhaps translate into lower rates of food waste or the employment of exceptional efforts to prevent it.

Shoppers at the Santa Cruz River Farmer's Market

The Santa Cruz River Farmer's Market is held on Thursday afternoons from 3pm-6pm. Given that the Farmer's market is held at a very select time, individuals who frequent the market must set aside this specific time in order to make some of their food purchases here. Additionally, the

items made available are generally seasonal and more expensive than at a conventional grocery store. The diversity of items that are made available to consumers is limited and varies week by week. Customer's are also given the opportunity to interact with the farmer's themselves, and often there are musicians playing in the courtyard of el Mercado San Agustin where it is held. Given that the market embodies an overt sense of community, and there is physical and verbal interaction with the individuals who often planted and picked the food that they are selling, individuals who make purchases at this Farmer's Market may find it especially important to make every effort to consume all of the product and treat it in the most respectful way possible.

Methods

Participants

The participants in this study were selected using convenience samples at the various locations. In total, 21 interviews were conducted.

At the Food Conspiracy Cooperative, I sat outside at one of their deli tables and approached individuals as they were leaving the grocery store. I approached every individual who exited from the time I arrived. Individuals were asked if they were members of the cooperative. If they were and agreed to be interviewed, I proceeded with the series of questions.

At Mercado San Agustin where the Santa Cruz River Farmer's Market is held, I sat at a table in the middle of the market and approached individuals of different demographics. I randomly selected a young male and female, an older male and female, and a family that was shopping together. Because there are so many individuals shopping at the same time and there isn't a designated entrance, selecting individuals of differing demographics yield a more varied and diverse set of responses.

Individuals at the Sleeping Frog Farm pick up were asked if they had time for an interview as they arrived.

At the Iron-Horse community garden, I made appointments for interviews with individuals who are known participants in the garden, because it is small and the times that members are on site is extremely varied and sparse. Individuals were interviewed at the community garden.

Design

Participants were asked simple demographic questions regarding their age, occupation, and household income, so as to compare this contingent of individuals with the average American consumer. Additionally, the income was used as a factor in determining what percentage of their income they spent on food. This information would later be used as a comparison point between this specific group of individuals and the average consumer. They were also asked if they lived in a house or an apartment, and whether or not they had a backyard and a garden. The rationale behind asking these questions was to capture whether or not these individuals had the incentive and space to invest in the labor and time-intensive process of gardening.

Most of the interview focused on their food consumption, acquisition, and waste behaviors. Individuals were asked questions regarding their frequency of trips, their locations for acquiring foodstuffs, whether or not they brought their own bags to the grocery store, how they arrived to that particular venue and to make other food purchases at other venues. These questions were asked to gauge their conscientiousness as consumers, and whether or not there would arise between shopping behaviors and an underlying consumption ethos.

Participants were asked how often they spent planning, cooking, and eating meals how often they went out to eat on a weekly basis to gauge the importance of food in their daily lives. The results and responses would be used as a comparison point between this contingent and the average American consumer, to see if the time spent preparing and consuming food signifies increased valorization of the food products and the process.

Participants were also asked about their relationship with food and whether or not that relationship influences the aforementioned behaviors. Specifically, they were asked whether or not that specific alternative venue and others that they frequented allowed them the opportunity to become more closely acquainted with the life-cycle of the products that they were purchasing, purchased, or were gleaned from the source.

The interviews were recorded using a personal recording device and were transcribed manually after the interview.

Not Just Food

The most commonly reoccurring theme throughout nearly all of the interviews conducted was one of enjoyment. Despite the expense, inconvenience, and limited variety, individuals participate in these alternative markets because it brings them pleasure

Seventeen of the twenty-one individuals who were interviewed reported having a garden that they spent ample amounts of time tending to—not only because it provided them with food, but because it also provided them with intangibles. One interviewee with a plot at the Iron Horse Community garden commented:

Gardening? Why do I do it besides for food? For beauty, I think beauty is a necessity for life. I spend most of my time out there. Tending to my garden is my meditation.

Another stated:

This just seems like it was the way it was supposed to be. When I go home to my parents I help them plant their garden every year. I love being back there and just watching things grow. Just knowing where my food comes from, too. Knowing that I'm responsible for everything that went into the food.

Participants in these alternative food markets emphasized the importance of being familiar with the process of growing food and how gardening afforded them an opportunity to become more closely acquainted with the process of cultivating and harvesting. They also related that this allowed them ultimate transparency into the foods that they were putting inside of their bodies. When I asked a shopper at the Santa Cruz River Farmer's Market what gardening provided for her besides sustenance, she responded that it made her think more about where her food was coming from and water usage, and helped her strike a balance with nature. In familiarizing themselves with the growing process, consumers are made more aware of the inputs and outputs that are intrinsic in the food production process which are veiled in the consumption interactions that occur in more industrial and conventional sources.

When asked about the qualitative differences between their food purchases and yields from the venue at which they were interviewed, and from alternative venues in general as opposed to more conventional sources of food, many of those interviewed saw their purchases and their harvests as more than *just* food. Food was a source of health, of community, of creating a harmonious and mutualistic relationship with the earth and its resources, and one of exploration and enjoyment. Additionally, they provided a contrast between *these* venues and *those* more conventional sources. This implies that they value the models adopted by these alternative food markets in opposition to the modern industrial, rationalized food production model adopted by conventional grocery stores and supermarkets.

When a shopper at the Food Co-Op was asked about what they enjoyed about that market in opposition to others, they commented:

I really support the fact that it's a co-op and non-profit, you know, and the profit goes back into the store and the people, and I think they have a really high quality of food too. I mean sometimes when I go to Trader Joe's, I'm enticed by all the packaging but I'm always pretty disciplined, generally. I just stock up on canned goods. There are a few things; I get a certain type of big chocolate bars if I'm making a certain type of candy [...] I get a sense of satisfaction if I'm buying something that supports local small farmers, there's sort of a feeling almost of providing a service to be able to buy their stuff instead of you know, buying from somebody who's a big corporation.

The previous respondents remarks indicates that participating in these alternative markets and purchasing products from these purveyors enables them to feel as if their consumptive behavior is creating more than just revenue, but is supportive of a market structure that they are in support of. When they purchase food from the co-op, they are providing financial backing to both the store and the individuals who co-own it. Additionally, when frequenting more conventional venues for food purchases, they cite acting in a disciplined manner, only purchasing those items that are not available from the alternative venues where they source the majority of their food products.

One interviewee who had a share with Sleeping Frog Farms shared that his rationality for purchasing foods from local venues was about “keeping money here. It’s like keeping some of the income in the culture.”

Keeping money in the local economy is a motivating factor to many of those who were interviewed. Instead of funneling resources outside of the economy and to large agri-business, they provide them to those businesses whose practices are politically and morally aligned with. Participants in these alternative markets participate and thereby are the source of its revenue because of their transparent nature.

Many indicated that they frequented more conventional venues for products that they were not able to source from these alternative markets, such as the big chocolate bars that were mentioned above. This example demonstrates of the limited choices within alternative food markets. Nevertheless, consumers still choose to frequent these venues for those products that they would also be able to acquire from more conventional and convenient ones. Additionally, there was a feeling that those who endeavored to provide these sorts of markets were doing a service to the community. Purchasing these goods provided by demonstrates their support for such business practices. These sentiments signal a rejection of the accepted norm of large-scale food production and that there is a need for the financial support of industries that stand in opposition to them:

It’s a completely different system from a few people at the top of big corporations making a whole lot of money and making a lot of it off of food that is less healthy than food you can get from [this alternative venue].

Community and Trust

Shopping at these alternative markets for food isn’t just about getting groceries. For many of those interviewed it is about cultivating and maintaining a community. Frequenting these

venues is ultimately about food, but it is also about the interactions that they share with the individuals from whom they purchase their food and from other like-minded individuals who come to market. Many commented that the model in which these venues are constructed allows for a development of trust between producer and consumer that is not made available through more conventional venues. One interviewee commented:

There's something about meeting the farmer, seeing where it came from. Knowing there's a certain level of accountability. I don't like the idea of being really far away from where it was produced although I know everything I do in life is really separated from the source but I'd like to attempt to not do that.

Another echoed a similar sentiment:

I like that I see the same people; in the community; the knowledge that it's not processed as much as other places. It definitely adds to the shopping experience. But taste is the prevailing factor.

Yet another stated:

Local is the most important thing because I know where the food comes from, there are no worker's right issues, and I've met the farmers, especially at farmers markets. I think that's the number one thing I feel better about. I feel better about giving my money to a farmer in Arizona or a store that's owned by someone in Tucson instead of some place that ships food around the world and I don't know really what all's involved with that.

In being able to have direct communication with the producer of their food purchases, these consumers are able to hold those producers accountable for their actions. Additionally, they have the opportunity to inquire about the growing methodologies and the pesticides and fertilizers used in the process. Further, the participants in my interview value the ability to know the living conditions of the animal products that are purchased, and whether or not their workers are paid fair wages. In many instances, they are able to visit the farms from which they are acquiring their produce so that they can become even more closely familiarized with the process.

Additionally, consumers in these alternative markets express negative feelings towards industrial food producers who ship products around the world. Fuel usage is of concern to them

and being far removed from the process denies them the ability to have implicit trust in the production and delivery of those goods.

However, there is no guarantee that producers in these alternative markets employ growing methods; what causes consumers to make these assumptions?

I really trust the people, generally, who even bother to do organic or a CSA. It's hard work and they're making a living somewhat too, but people who don't do that and just make profit. It says they care... I don't need the stamp.

Because the process of growing organic food and products, and of using growing methods that are mindful of the environmental effects that they may pose is so labor intensive, interviewees felt a sense of implicit trust in the process and in the farmer's who *even bothered*. Because farming using these less invasive methods and on a much smaller scale is often coupled with profit sacrifices, consumers who purchase these goods inherently trust them.

Another interviewee expressed this trust as well:

I visit some of the farms and I get to know the people. At the co-op it's nice the produce you know where it's coming from.

Here, the interviewee is responding to the placards at the cooperative that label the produce with their place of origin. Not only does this motivate shoppers to make decisions about their consumption behaviors with the distance traveled of foods in mind, but also roots the products in their origin. These products do not magically come to appear in the produce bins at this supermarket, but are a part of an extensive and resource consuming process to bring it here.

Though the actual names of the farms from which these products were sourced are provided for a select few products, the sourcing process employed by the organization comforts members of the cooperative:

I guess I feel like farmer's market have affected me more in that area, because you're actually interacting with the people who are making your food... What I do like about the co-op is when I don't like something, I'm like "I own this place", so I can have a say in

it. I feel really comfortable talking with the people who work here, knowing that they do care, whereas if I'm at Safeway, I know anyone I talk to isn't going to be able to change any policies or have any effect, so I like that. I know that some suggestions I've had, they've had done so it's nice to know that they're listening and they want to please the customers.

In being part owners of the cooperative, members are able to effect change within the organization. There is a high level of trust within the organization due to extremely high levels of transparency. The employees of the co-op have extensive knowledge concerning the origins of the products made available, and investigations into worker conditions and growing methodologies are part of the sourcing process employed by the cooperative. Many of those interviewed expressed that they felt an implicit trust in the Co-Op. Knowing that they had the *ability* to ask questions and that there were recourses for their concerns afforded them trust in the process.

Authenticity

Carroll's investigation of authenticity in contemporary food and dining in the United States provided several definitions for authenticity. Two will be used here to provide basis for the construction of authenticity within these alternative food markets.

- 1) moral authenticity, where the issue concerns whether the decisions behind the enactment and operation of an entity reflect sincere choices (i.e., choices true to one's self) rather than socially scripted responses;*
- 2) craft authenticity, which involves whether something is made using the appropriate techniques and ingredients (Carroll 2009)*

Assessing the relative authenticity of products acquired through alternative markets as opposed to those goods sourced from more conventional ones allows for an interpretation of behaviors surrounding the consumption of food products. Goods that are perceived to be more authentic, whether it is through its moral implications or through the process of its cultivation, imbues the

product with value beyond that of the standard and mass-produced. Just as painting by Pollock is more precious and valuable than an inauthentic knockoff that may, perhaps, even be more aesthetically pleasing, food that lacks the unnatural veneer, and is cultivated using processes that are associated with being authentic, are also more valuable.

One shopper the Santa Cruz River Farmer's Market commented on how the process of cultivation imbued much of the food she acquired from this source with qualities that foods from more conventional sources lack:

I like the intention; you can tell when someone cares for their food a lot. With vegetables it's the freshness and the color and the way it looks; all of that feels so much better; it looks and feels fuller, richer colors, deeper colors. More sensory, rich, I think it feels closer to the process. Someone grew this, cut it, put it in their car and drove it here, it's not like there has been 1000 steps.

Another stated:

It's different to me because if I buy an apple at Sunflower, even if it's organic or from California, it's probably produced on a larger scale, there's so much more that you don't know, or it feels unhealthy to me. Like once you start to produce things just for scale it's like you don't care about the workers, or you don't care about the land, you're like making something because it sells, whereas if I buy an apple from someone I can talk to at a farmers market, or even cares to be at a farmers market, they're usually more socially informed and love what they're doing, passion.

The products acquired from these alternative markets are perceived to be more authentic not because of their organic label, but because of the intention with which they were grown. If the intention was purely for profit, then these goods are perceived to be morally inauthentic.

Whether or not they were grown organically using biodynamic or permaculture methodologies implies craft authenticity, but most of those interviewed tended to be more concerned with the moral authenticity of the products they were purchasing.

These products are therefore richer, more authentic, and are imbued with the sentiment and philosophy of the cultivators. It is because of these values that these products are therefore

more valuable. It is because of this higher valuation of these food products that these consumers may find it more difficult to readily dispose of them. In squandering these food resources they are not just tossing away a carrot, but are throwing out the intention and effort of the farmer's away, and are throwing away a philosophy of cultivation that brought it to market.

Another shopper at the Co-Op, when asked whether or not she perceived the food that she acquired from that particular venue to be more authentic when compared to food acquired from more conventional venues replied:

Yeah, I mean, I don't know if it's more real or authentic in that sense, vegetables are vegetables, but I tend to trust it more. That's the thing, there's nothing more accountable than like I mean, I know one of the guys who runs one of the farms these come from. Yeah it's very comfortable, I never come here and wonder or worry, it's just very comfortable.

Though this interviewee did not perceive the food she purchased to necessarily be more authentic, she chooses to participate in these markets because of the accountability that farmer's have when there is complete transparency. She therefore, in having a personal connection with those on the production end of the transaction, perceives the goods that she acquires from them to be more valuable. She claims that vegetables are vegetables, but the trust afforded through this transaction model adds value to the product through the interaction. The vegetables that she obtains from this source are imbued with trust and thereby more valuable. The produce houses not only a calorie count but also the social interaction that they experienced with the producer.

One interviewee responded that he now judges tomatoes from other sources "based on what [he] think[s] a tomato should taste like, like the tomatoes that [he] get's [at the Farmer's Market]." This implies that the he perceives the produces that he obtains from this alternative market as being the standard for authenticity. That is, food that he purchases from other venues *should* meet the standards of taste set by the producers of goods at these farmer's markets. The

process by which they grow and process their goods is somehow, in his point of view, is superior to that employed by more conventional sources.

I also posed a question to interviewees concerning their choice in eating a bag of greens purchased from one of these alternative venues as opposed to one purchased from a grocery chain. I asked that if both bags of greens were going to go bad the next day, and that only one could be consumed before then and if both were organic, which bag they would choose to consume.

One interviewee with a share with Sleeping Frog Farms stated that:

We'd eat these [Sleeping Frog's], because it seems fresher. Because they tell us out loud where it came from.

Though this response was extremely brief, he states that he would make a decision to consume the greens obtained from the local farm as opposed to the ones from a more ubiquitous source because they *seem* fresher. The in-person declaration of their origin signals the importance he places on the transparency of consumption in this particular alternative market. Goods purchased and obtained from these alternative markets are more valuable and are not as readily disposed of because they are not just greens from the supermarket, but are greens that were grown at this particular farm. He thereby has a personal connection to the food he purchases because of the transparent nature of the exchange.

Seemingly mundane and ubiquitous produce takes on additional value and meaning when cultivated using non-conventional methodologies and when produced and consumed in these alternative markets. The transparency of these markets allows the consumer insight into the production of cultivating food and they are thereby more deeply rooted in the process. This affords consumers an avenue by which to become more closely acquainted with the life cycle of their food purchases and see it beyond its grocery-bin state.

Do the Right Thing

Every single of the individuals who I interviewed had a compost, chickens, or a worm bin that they used for their food waste. Though the sample interviewed was not large enough to conclude that the majority of individuals who participate in these alternative markets have these sources for waste remediation, I feel it is safe to say that amongst this contingent, implementation of these sorts of waste remediation methods is likely higher than amongst the entire American consumer base.

The majority of those who were interviewed also expressed feelings of shame and guilt when wasting food. Many were unable to verbally explain their rationale behind feeling such guilt, but explained that it was, for some reason, inherently unjustifiable. Some expressed that they made efforts to not throw away food they acquired from alternative sources such as these not because they had higher monetary value, but because:

We know what went into producing this. We know the people who grew it, and whose sweat it was that went into it. So its not just about monetary value, its whatever value we place on things. You know, monetary value is just an assigned value too I guess.

Another interviewee added:

I think we waste this food less because it's like, "they made this stuff", so all that hard work and effort being wasted seems more shameful than the stuff from the faceless Safeway guy.

Because they are able to form interpersonal connections with the individuals who cultivated these food products, participants in alternative food markets see food waste as not just a squandering of money and resources, but also of human effort. Because, unlike the food from more conventional sources, these products are not faceless, you are throwing out the *sweat* of the individual who planted, cared for, and picked that piece of produce. Though it would be difficult for those who grew the food to ever find out whether or not you chucked the crimson scallions

into the garbage bin, it is less easy to do so because you have attached human sentiment to the product and have, through physical interaction, associated the product with a specific individual.

Others suggested that wasting food was a gross waste of money, others of resources, and others expressed feelings of guilt in wasting food when it was unavailable to others.

I guess it just feels intrinsically and morally wrong and not something I have to question too much. This is what happened with my boyfriend, who was like why does it matter? Gut reaction: it was alive, I bought it to eat, its just wasteful there's nothing forgivable about waste. I feel like waste is something people should just morally react to. I only buy clothes second hand if I can help it, I don't need to get new things.

When food is thrown away in the United States it is out of site and out of mind. It is a burden that is shifted from the individual to the landfill and therefore the ramifications of waste are generally not on the forefront of the consumer mind when disposing of food. The above interviewee suggested that it wasn't something that they generally thought about, but finds it morally objectionable to dispose of food for a variety of factors:

- 1) It is not cost effect to purchase food and then dispose of it.
- 2) The food was once alive. This suggests that taking a once living good and not extracting its greatest use value (as food) is wasteful and unacceptable.

Additionally, she states that she doesn't "need new things", suggesting that her mindful resource use extends beyond food and into her purchases of clothing. This may imply that consumers who participate in these types of alternative markets may be more aware of the environmental effects of the consumer behavior than the majority of the American population.

Another interviewee, when asked why they felt that wasting food was a bad thing, replied:

There's an awareness that the earth is a finite resource—it really, really is. And that's funny to realize, but it is. And I cannot stand the feeling of mining it and mining it.

This consumer points out that the world is a finite resource, and that in wasting food we are creating unnecessary waste with those resources that we extracted from it. Not only are we not using these resources to the best of their abilities, but are creating negative effects on the environment through the excavation of these resources and are doing so for no reason at all when we waste those resources.

Another added:

I know that it goes to waste; to the environment, I know obviously that's something we'll have to deal with soon, like where' is "away" when we throw something away? But also it's just such a social and economic injustice. So I see a lot of the waste [...] there are so many people who are hungry, and we don't have enough money to pay for their food, basically. But the food is here. So I have in the past taken some of that food and taken it to like Dry River, the community center, other places where other people can pick it up, I've given some to students, which I'm not supposed to do.

Not only does food waste have negative environmental implications, but diverts resources away from regions that experience low levels of food security and safety. This interviewee places emphasis on the social implications of waste, stating that the food wasted is squandered resources for other regions that are less plentiful and wealthy as ours. She suggests that there are even, as she observes, issues of food security that occur on a more local level.

One interviewee, when asked if they still felt guilty about not using all of their food purchases even though they were going to use it as fodder for their compost, replied:

I think I would [still feel guilty about wasting it], because I got this thing and didn't use it at all. I think that feels wasteful still. But I think in general I feel good about composting still.

Though these consumers feel better about their food "waste" when it is used as compost material, they still feel a sense of guilt when not using food to its greatest potential. Purchasing food to then not consume it does not make moral or economic sense to many individuals within this contingent.

Discussion

With these interviews I sought to find how participation in alternative food markets, and specifically of participation as a member in a local cooperative, a shareholder of a local organic farm, a frequent shopper at farmer's markets, or as a participant in the physical cultivation of food, transforms consumer relationships with food. Specifically, I sought to find whether or not these markets and venues provided for a heightened valuation of food and whether or not that translated into increased efforts for preservation of the commodity.

Through the analysis of these interviews and my qualitative research, I have found that consumers in this market do experience heightened valuation of food products and that they often go to exceptional lengths in order to ensure these products do not go to waste. Because these markets are structured in a fashion that provides for increased levels of transparency and in a way that naturally engenders personal interaction between consumer and producer, food products are transformed from mere commodities to gifts. Several interviewees suggested feelings of guilt and shame in disposing of products gleaned from these alternative sources not only because they were squandering resources, but also because they were throwing out the additional value that these markets lend to food products. Mainly, this additional value was expressed in terms of effort and of personal interaction. Because these consumers get to know the producers, they are now throwing away a product that is personal. Additionally, participation in these markets signals consumer solidarity with a certain production and consumption ethos that is employed by these venues. Perpetual participation in these alternative markets indicates alignment with the alternative food movement and for many, a rejection of the industrial food consumption and production system that has become ubiquitous in developed regions and particularly in the United States.

Participation in these alternative markets also allows consumers to become more fully acquainted with the lifecycle of their food purchases, transforming them from static goods to transformative ones. In taking account the inputs and outputs of these products, and its value beyond a calorie source, they divert these resources to composts where methane is captured for productive uses (mainly to facilitate additional food production). Many of those interviewed were unaware of the harmful effects that improperly disposed food has on the environment, and that improperly processed food waste is a large contributor to methane production and therefore greenhouse gas emissions in the United States. Still, because they saw that these food products had value beyond the table, they diverted their waste to more fruitful processes. Removing food products from the grocery store produce bin and placing it in the hand of the farmer who himself brings it to market, motivates consumers to be more cognizant of the food's history (Pratt 2007).

We are confronted with a causality dilemma when attempting to find whether it was the alternative market or the alternative consumer that came first. What is clear is that without these alternative markets, many consumers would be able to adopt a consumer identity that communicates their rejection of conventional food markets and their support of the former.

Because of increased valuation of food products and of increased familiarity with the history of food stuffs, consumers in these alternative markets go to greater lengths to preserve these goods, because it's not just food anymore.

Further study of food waste that is focused on uncovering the nature of the relationship that individuals who go to great lengths to preserve and reuse food waste have with their food will be important in attempting to disseminate this ethos to larger populations. With a rapidly increasing population and increased levels of consumption worldwide, countries like India and China that are quickly being transformed into consumer societies will have larger portions of

their populations that will be able to afford to throw away consumer goods, and particularly food. Contemporary and future threats to global food security demands that populations who can endure the financial loss of food waste begin to view their food as more than just capital, but as a precious resource that cannot be squandered.

Conclusion

My interviews suggest that participants in alternative food markets experienced heightened valuation of food commodities and thereby make larger than average efforts to use them or dispose of them properly. Consumers experience heightened sentiment towards these food products because of the social interactions that surrounds them and the familiarity with the food's history that these markets facilitate. This causes this contingent of consumers to value these goods more highly than ones from conventional sources. Studies conducted on food waste to date (Gallo 1980, Godray 2010, Griffin 2009, Gustavsson 2011, Hamilton 2005, Rathje 1997, Van Garde 1987) have exclusively focused on the "why's" of food waste and not the "why not's." I have, through the analysis of these interviews, captured the ethos and consumer behaviors of individuals who participate in these alternative markets and how participation in these markets leads to minimal levels of personal consumer level food loss.

References

- Berry, Wendell. *A Continuous Harmony: Essays Cultural and Agricultural*. New York: Harcourt Brace Jovanovich, 1972.
- Bloom, Jonathan. *American Wasteland: How America Throws Away Nearly Half of Its Food (and What We Can Do about It)*. Cambridge, MA: Da Capo, 2010.
- Buzby, Jean C., Hodan Farah Wells, Bruce Axtman, and Jana Mickey. *Supermarket Loss Estimates for Fresh Fruit, Vegetables, Meat, Poultry, and Seafood and Their Use in the ERS Loss-Adjusted Food Availability Data*. EIB-44, U.S. Dept. of Agriculture, Econ. Res. Serv. March 2009.
- Carroll, G.R, and D.R Wheaton. "The Organizational Construction of Authenticity: an Examination of Contemporary Food and Dining in the U.S." *Research in Organizational Behavior*. 29 (2009): 255-282.
- Emery A., Davies A., Griffiths A., Williams K. Environmental and economic modelling: A case study of municipal solid waste management scenarios in Wales (2007) *Resources, Conservation and Recycling*, 49 (3), pp. 244-263.
- Food and Agriculture Organization of the United Nations. *Global hunger declining, but still unacceptably high International hunger targets difficult to reach*. Rome: 2010. <<http://www.fao.org/docrep/012/al390e/al390e00.pdf>>.
- Foresight. *The Future of Food and Farming (2011) Executive Summary*. The Government Office for Science, London.
- Gallo, A.E. 1980. "Consumer Food Waste in the U.S." *Consumer Research* Fall:13-16.
- Godfray, H.C.J, J.R Beddington, I.R Crute, L Haddad, S Robinson, D Lawrence, J.F Muir, J Pretty, S.M Thomas, and C Toulmin. "Food Security: the Challenge of Feeding 9 Billion People." *Science*. 327.5967 (2010): 812-818.
- Griffin, Mary. "An analysis of a community food waste stream." *Agriculture Human Values*. 26 (2009): 67-81.
- Gustavsson, Jenny. Food and Agriculture Organization of the United Nations. *Global Food Losses and Food Waste*. Rome: 2011.
- Hall KD, Guo J, Dore M, Chow CC (2009) The Progressive Increase of Food Waste in America and Its Environmental Impact. *PLoS ONE* 4(11): e7940.
- Hamilton C., Denniss R., Baker D. 2005 Wasteful consumption in Australia. Discussion Paper Number 77, March 2005. Manuka, Australia: The Australia Institute.

- International Food Policy Research Institute. *Global Hunger Index*. Klaus von Grebmer, Bella Nestorova, Agnes Quisumbing, Rebecca Fertziger, Heidi Fritschel, Rajul Pandya-Lorch, Yisehac Yohannes. 2009. Bonn, Washington D.C., Dublin
- Jackson, P. (1999) 'Consumption and Identity: The Cultural Politics of Shopping', *European Planning Studies*, 7(1), 25-39.
- Kantor, L.S., K. Lipton, A. Manchester, and V. Oliveira. 1997. "Estimating and Addressing America's Food Losses." *Food Review* January-April: 2-12.
- Lyndhurst, Brook. (2007) WR0104 Lifestyle Scenarios: the Futures for Waste Composition. A project for Defra's WREP.
- Muth MK, Kosa KM, Nielsen SM, Karns SA (2007). Exploratory research on estimation of consumer-level food loss conversion factors, Agreement No. 58-4000-6-0121, Final Report.
- Pietrykowski, Bruce. "You Are What You Eat: the Social Economy of the Slow Food Movement." *Review of Social Economy*. 62.3 (2004): 307-321.
- Pratt, Jeff. "Food Values: The Local and the Authentic." *Critique of Anthropology*. 27.3 (2007): 285-300.
- Rathje, WL. The archaeology of us. In Ciegelski, C.(ed.), *Encyclopaedia Britannica's Yearbook of Science and the Future—1997* (New York, Encyclopaedia Britannica), 158-177, 1996.
- Themelis, N.J., 2007. Thermal treatment review. *Waste Management World* (July–August), 37–45.
- United States. Environmental Protection Agency. *Basic Information about Waste*. 2012. Web. <<http://www.epa.gov/osw/conservation/materials/organics/food/fd-basic.htm>>.
- U.S. Department of Agriculture. Economic Research Service. By Mary K. Muth, Katherine M. Kosa, Samara J. Nielsen, and Shawn A. Karns. <http://www.rti.org/pubs/0210449_food_loss_report_7-07.pdf>
- Van Garde, S.J., and M.J. Woodburn. 1987. "Food Discard Practices of Householders." *Journal of the American Dietetic Association* 87(3): 322-29.
- Veblen, Thorstein. *Imperial Germany and the Industrial Revolution*. New Brunswick (U.S.A.: Transaction Publishers, 1990.
- Warde, A. and L. Martens (1999) *Eating Out Social Differentiation, Consumption and Pleasure* (Cambridge: Cambridge University Press)