Tracing the Trail of Table Grapes:
A Commodity Chain Study of Sonoran Table Grapes in the Global Economy

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I. Introduction

This paper is intended to provide update on dissertation research currently underway. Overall, my research focuses on the relationships between the growers, distributors, marketers and consumers participating in the commodity chain of a particular product, table grapes, as they are sourced from a single region and marketed throughout the world. Specifically, I am following the path of table grapes from fields near the city of Hermosillo, Sonora, Mexico, through re-packing and distribution centered in the border city of Nogales, Arizona, to their ultimate destination in American supermarkets and homes. I am particularly interested in the role of U.S.-based transnational corporations involved in the global sourcing and marketing of fresh produce, including produce companies such as Dole, Del Monte and Chiquita, as well as supermarket chains including Wal-Mart, Kroger and Safeway. By focusing on a single region's production of table grapes, and then examining the local and global implications of this production through a multi-sited ethnography of a linked series of contexts, my research is intended to shed light on the impacts of globalization on individuals, communities and business institutions.

This commodity chain study began with the table grape growers. I have spent the last nine months living in Hermosillo, conducting interviews, analyzing historical and statistical materials, and generally becoming familiar with growers and their world. I have also mapped out who the primary distributors in the area are, made contacts with some of them and gained a greater understanding of their role.

At the same time, I have been reading trade publications of the fresh produce industry, such as *The Packer* and *Global Produce,* in order to become more familiar with the industry in which my case study is located. I have conducted research via these industry publications and the Internet on specific companies involved with Sonoran table grapes and fresh produce in general, and also reviewed more of the literature on global food system change, particularly as it relates to the fresh produce industry.

Through the course of the research thus far, it has become apparent that my original proposal contained several assumptions about the roles and relative power of each link of the commodity chain that have since been proven false, or have at least required some revision. Thus after providing an overview of the Sonoran table grape industry, this paper will examine some of these underlying assumptions, and the factors that contradict them.

II. Overview of the Sonoran Table Grape Industry

I chose the Sonoran table grape industry as a case study for several reasons. First, in planning a study of an entire commodity chain with sufficient detail for an in-depth ethnography, but that would be manageable for a single researcher with a limited budget and within a set time frame, I decided that it would be best to select a product that is sold in its fresh and unaltered form. This would allow me to avoid analyzing processing issues. I have since discovered that the highly perishable and seasonal nature of the commodity I chose has significant implications on the chain of production, which differentiate it from other studies of this type.

Second, again due to budget and time constraints, it was helpful to choose a commodity chain whose links were all in relatively spatial close proximity, and therefore more easily accessible. The production region I am studying lies about three hours south of the border city of Nogales, Arizona, where inspection and distribution activities are centered. Many of the distributors who have branch offices in Nogales, Arizona have their home offices in southern California, and travel to Hermosillo a few times per year. Obviously, U.S. supermarkets and consumers are accessible from nearly anywhere in the United States, including my home of Tucson, Arizona.

The Sonoran table grape industry further interested me because of its rapid increase in importance to the state's economy. Although there are reports of Sonoran farmers growing table grapes for local consumption since the 1950s, the industry did not become commercially viable for export until four U.S. distributors became involved in the region during the mid-1970s, providing needed capital and distribution assistance. The industry experienced a major growth spurt around 1985, when the growth stimulator Cyanamid (sold under the brand name Dormex) became widely used in the area. This allowed Sonoran table grapes to be ready for market several months earlier than those from central California, and thus establish their niche in the global grape market. Sonoran table grapes fill a narrow niche in the global market by being ready for harvest in May and June, after most Chilean grapes have left the market and before those from central California hit the market. Their only direct competition currently comes from growers in the Coachella Valley of southern California (who, incidentally, recently filed an anti-dumping suit against Mexican and Chilean grape growers who are out-competing them).

Today there are approximately 60 growers of Sonoran table grapes, and perhaps 30 distributors of various sizes who deal in this commodity. Larger distributors may sell grapes for up to seven or eight growers, while larger growers may use two or three different distributors. This case study was also appropriate due to the involvement of several large transnationals including Dole, Del Monte, Chiquita and Sun World, who distribute Sonoran table grapes to major supermarket chains including Wal-Mart, Kroger and Safeway.

The Sonoran table grape industry is also an interesting case study because it is part of Northern Mexico's shift from grain production for domestic consumption to fruits and vegetables for export, a phenomenon which has generated considerable research. Table grapes are an excellent example of this trend. The expansion of this crop has been supported to some extent by the state and national governments, who see the promotion of high-value export crops such as table grapes as a key part of trade liberalization and structural adjustment policies, reducing reliance on traditional exports such as wheat, cotton, corn and cattle that can no longer compete in the global economy. Although this crop has only become commercially important in the last fifteen years, the total value of production has expanded twelve-fold during that time frame. All of the table grapes grown in the study area are intended for export, although only about 80 percent of the harvest is of sufficient quality to actually be exported (grapes that cannot be exported may wind up in the national market). Mexico now accounts for six percent of world table grape exports, all of which are grown in Sonora.

The crop's increasing importance to the local economy is tied not only to changes in the global marketplace, but also to local issues of water scarcity and labor availability. Table grapes have a much higher economic return per liter of water used for irrigation than more traditional crops such as wheat and cotton. In the irrigation district of La Costa, (which was known as the "breadbasket of Mexico" thirty years ago), table grapes currently use 22 percent of total annual water withdrawals, but produce 60 percent of the total value of agricultural production. This crop also generates 60 percent of the total agricultural work days generated (i.e., jobs), despite accounting for only 18 percent of the land cultivated.

Despite their increasing economic importance, the region where table grapes can be grown competitively is quite limited, due to the crop's fairly rigid temperature requirements. Three main areas produce Sonora's table grapes for export: the Altar desert near the northern town of Caborca; and two areas adjacent to the capital of Hermosillo, La Costa, to the west, and the Pesqueira area, to the northeast. My study focused on the latter two areas, which produce about 80 percent of the total exported.

III. Key Assumptions and Revisions

Despite the fact that in-depth analysis of the interviews, observations, articles, statistics and historical information I have gathered has not yet begun, the results so far have caused me to revise several of the assumptions guiding the research:

1. I underestimated the power and autonomy of Sonoran table grape growers in structuring the Sonoran table grape industry.
2. I overestimated the power and advantages that large transnational corporations such as Dole, Del Monte, Chiquita and Sun World would have in determining both the Sonoran table grape industry and changes in food marketing.
3. I overestimated the degree of social change brought about by the recent expansion of Sonoran table grape production.
4. I did not anticipate the power and growth of food retailers on shaping the industry as a whole.
5. My understanding of the location of marketing was misplaced.

The following section will reexamine my primary hypotheses regarding corporate involvement in the globalization of food, and how these have changed during of the course of the research.

1. I underestimated the power and autonomy of Sonoran table grape growers in structuring the Sonoran table grape industry.

Based on the literature regarding the growing spread and strength of transnational corporations, particularly regarding changes in the global food system, I had constructed an image of transnational corporations such as Dole, Del Monte, and Chiquita as being the primary drivers of change in the fresh produce industry. Studies of the corporatization of the U.S. hog industry and the global grain industry reinforced this idea, as did readings on the production systems of United Fruit and other banana-based companies in Latin America. A review of the company reports and web pages of these corporations, which refer to ten of thousands of employees on thousands of hectares of company-owned land, reinforced this thinking. I had expected that these corporations would control a great many aspects of table grape production, perhaps including ownership of land or joint ventures with landowners, management of labor issues, and supplying of the necessary technology, as well as all distribution and marketing aspects of the industry.

Sonoran table grape growers reveal quite a different image, and are departure from the "oppressed peasant" model that much social science research focuses on. With few exceptions, the grape growers of today are the same families who have formed the backbone of Sonoran agriculture since the 1950s. In the "good days" of the 1950s, '60s and early '70s, private agriculture was a lucrative and prestigious profession. Some of the state's elite families who have diversified into businesses such as supermarket chains, department stores and real estate interests, first made their money in agriculture. Table grape growers can be characterized as upper-middle class to wealthy, well-educated, and, usually, English-speaking. Today it is not unusual for family vineyards to be managed by a father with decades of experience in large-scale agriculture, along with his sons or nephews who are trained in the latest viticulture techniques, as well as in business, accounting and marketing. Families may diversify their agricultural holdings into vineyards managed by brothers or father-son teams, and some grow other horticultural crops, such as vegetables, melons and walnuts, for export.

Sonoran table grape growers are generally aware of rapidly changing global market forces, although their ability to adapt to them varies. For the most part, agriculturalists in the area have adequate information about crops that will turn a profit and that are appropriate to the growing area. They have access to trade publications, may visit fruit and vegetable trade shows or hear reports from others who attend them, and share information among themselves both informally and through the local table grape grower's association. These growers can generally marshal the resources necessary to invest in producing these crops through their commercial relationships with distributors (very few commercial agriculturalists in Sonora can obtain loans from Mexican banks).

This is a distinguishing feature between these private growers and *ejiditarios* (participants in government-mandated collective agricultural holdings), who have grave difficulty in attracting investors due to the lack of productivity of their lands. The costs for establishing a vineyard, as well as annual production costs, are around $9,000 USD per hectare, and the average vineyard size is 124 hectares (although this varies widely from about 30 hectares to over 800 hectares). The industry is characterized by the use of cutting-edge technology in many of the vineyards, which increases expenses further. Because of these factors, former *ejiditarios* are not able to produce this crop due to the lack of credit.

Credit is regarded as the most important aspect of the grower-distributor relationship; growers readily admit that due to the lack of available loans from Mexican banks and the high production costs, without credit from distributors to cover their annual production costs, they would not be able to produce table grapes. Contracting terms are relatively consistent, regardless of the size of the grower or the distributor. The majority of distributors contract to sell the grapes on a commission basis, usually for 15% of the sale price. They advance the growers money to cover production expenses, and charge them interest. The percentage of production costs covered by the distributors does vary anywhere from 70 to 20 percent of the total costs, depending on the growers' resources, with a 50-50 split being most common.

As previously mentioned, growers own their own vineyards, and run little risk of loosing them if they are unable to repay loans from their distributors. Rather than using the land for collateral to secure the loan, proceeds from future harvests are used instead. If the debt cannot be repaid with the profits from a single season, the distributor must simply wait for the next season, and will continue to charge the grower an average 12 percent interest rate on the loan. I found little evidence of growers having to carry debt from year to year except in exceptional circumstances, and no instance of growers loosing their land or other productive assets to distributors. This is tied to the fact without water rights, the land cannot be cultivated, and water rights can only be bought and sold in specific circumstances. Land prices in the area are very low for this reason, although water rights run in the neighborhood of $150,000 to $200,000 per well.

Nor are growers dependent on their distributors for technical advice in most cases. Although there are a few instances of Chilean growers coming to Sonora to manage new projects, and some private technical consultants cross the border frequently between California and Sonora, the area has its own cadre of 30- to 40-year old viticulture specialists. These *technicos*, who may have received their training at the University of Sonora, UC Davis or other California universities, or schools in Chile or Europe, are said to be better consultants than foreigners due to their understanding and experience with the Sonoran industry's unique growing conditions and extremely contracted season. Information and problem solving efforts seem to flow freely between *technicos*, each of whom may be managing multiple vineyards. Comparisons between growing technology in Sonora, and that of most of California, find that many Sonoran growers have state of the art production technology, due in part to the fact that many of the vineyards are newer than those in California. While most of the chemical agents used are imported, growers are able to propagate cuttings from old vines for new plantings, and have access to the technical skills to graft root stocks and other similar procedures.

2. *I overestimated the power and advantages that large transnational corporations such as Dole, Del Monte, Chiquita and Sun World would have in determining both the Sonoran table grape industry and changes in food marketing.*

I had expected to find that the economies of scale generated by larger distributors seeking contracts with larger growers would be pushing smaller players out of the market, perhaps leading to consolidation of both growers and distributors. However, consolidation does not appear to be occurring amongst either distributors or growers. In fact, there is evidence that the larger size of some distributors may actually be a disadvantage, while larger vineyards are often seen as being too large to be effectively managed.

In general, distributors seek out growers with reputations for good management and delivering quality product on time, while growers look for distributors that will get them the best possible price for their grapes and pay them in a timely manner. Larger distributors, such as Chiquita, seem to be willing to distribute grapes for smaller growers, as well as with larger ones, because handling more table grapes increases their profits. However, some growers, particularly the smaller ones, voiced the belief that smaller distributors often did a better job finding them better prices for their grapes than larger ones, due to their higher flexibility, and their concern about getting the highest possible price, rather than in selling greater volumes of grapes. Regarding the recent pull-out of one very large and well-known transnational distributor, one industry consultant said, "They came in here and expected to get a lot farther on their name than they were able to, and when that didn't happen, they left." The pullout of this major distributor hardly seemed to cause a ripple among grape growers, since demand for their product is high enough that finding another distributor to sell the grapes on equal terms is not difficult for growers.

Rather than being highly dependent or rigid, bonds between growers and distributors are fluid and can change rapidly. Growers can, and frequently do, shift between distributors from year to year in order to find the one who will consistently get them the best prices for their grapes. Some growers even pit distributors against each other to their own advantage by signing contracts with multiple distributors, and then actually delivering their crop to the one who gives them the best deal.

There is also little evidence that larger growers are more successful than smaller ones. Of the five or so (out of a total of about 60) growers who have gone out of business in recent years, three or four were above the 124 hectare average vineyard size, and at least one was an integrated grower-shipper operation. New vineyards of a variety of sizes have been established recently. Vineyard sizes are fairly well distributed, particularly in the Pesqueira area, between smaller and larger producers, and this does not seem to be changing rapidly. Few growers are willing or motivated to join forces to produce larger vineyards. Both small and large growers acknowledged that larger operations were often not as well managed as the smaller ones, and had much higher expenses and thus incurred greater risks and debts.

Other questions regarding the level of corporate influence in communities have proven largely irrelevant. I had originally proposed to examine the web of macro- and micro-level linkages by examining ways in which transnational corporations interact with and manage communities within the context of the corporate ideology, policies, production standards and market demand. Part of the project was to assess ways in which information about local conditions, constraints and preferences is transmitted back to corporate headquarters, and the ability of local populations to precipitate changes in corporate policies to suit their needs. The research was also to facilitate understanding of the means by which U.S.-based corporations implement food safety and quality standards, while complying with the environmental regulations imposed by GATT and NAFTA.

However, the answers to these questions appear to be less complex than anticipated for two reasons. For one, the loose relationship between growers and corporations, and the fairly standardized terms of contracts, as previously described, give growers little reason to ponder the corporate ideology of the distributor they are using that particular year, and little motivation to share such thoughts with their workers.

The second reason is that production requirements are completely standardized, and thus there is no real quality difference between produce distributed under different brands. Growers and distributors seek only to meet the USDA standards for grape production, and do not impose additional requirements. All growers are bound by a USDA marketing order imposed in 1984 to meet specific measures of size, color and sweetness before their grapes can cross the U.S. border, or the shipment is rejected. Interestingly, since Sonoran grapes are inspected at the border, rather than in the vineyard, as those produced within the U.S. are, the risk of rejection of a load carries much higher financial risk since the grower will have already paid for packing and shipping, in addition to harvesting. To reduce the risk of a trailer of grapes being rejected, Sonoran growers routinely strive to produce grapes of a higher quality than is required. For this reason, a large percentage of Sonoran table grapes may be graded “extra fancy,” as opposed to the more standard “fancy.” However, these same standards apply to whatever brand the produce is marketed under.

3. *I overestimated the degree of social change brought about by the recent expansion of Sonoran table grape production.*

Much of the literature on the expansion of non-traditional, export-oriented agriculture in Latin America focuses on the disruption of traditional local agricultural systems, and the resultant displacement of small farmers who may be unable to compete with larger foreign interests. I had expected to find a similar phenomenon in Sonora, due to the rapid rise in table grape production, which, I believed, had to be displacing the previous agricultural system.

This hypothesis has been proven untrue through a better understanding of agriculture in this part of Sonora. Historically, there was limited small-scale production of grain crops, cattle and fruits and vegetables for the city of Hermosillo in the Pesqueira area. However, in La Costa, agriculture beyond low-density cattle ranching was impossible until the technology for boring deep wells to tap the aquifer became available. Although some land in these areas was distributed to *ejidos*, few were able to make the capital investments necessary to put in wells, or to pay for the electricity to keep them running. As a result, La Costa was never an area of small-scale, subsistence production. The only wide-spread agriculture that has existed in the area is irrigated agriculture, which began in response to Green Revolution technologies that allowed for higher wheat, cotton and corn yields on large, irrigated plots. Despite the fact that until the 1992 constitutional changes growers were prohibited from owning more than 100 hectares, many did own several times that amount through registering land in the names of spouses, children and other relatives.

This constitutional change also allowed *ejiditarios* to sell or rent their land, use land for collateral, and to enter into joint venture agreements with foreign investors. While these constitutional changes may have had significant impacts on areas of Mexico were *ejidos* are the predominant land tenure form, they seem to have made little difference in La Costa or the Pesqueira area, beyond allowing *ejiditarios* to sell their land and get out of agriculture. Several of the *ejidos* in the area have been subdivided and are being sold off, but these seems to be due more to the low profitability of agriculture in general than to the expansion of the table grape industry in particular.

Patterns of land use have changed with the growth of the table grape industry. While distributors have played a role in encouraging the production of this crop by offering growers credit and incentives to expand production, the rise in table grape production is also tied to the need for higher returns per liter of water in this arid and over tapped region, as previously mentioned. Traditional grain and cotton crops were grown in the heavier, clayey soils of the central and southern areas of La Costa because they retain water better during flood irrigation. However, large expanses of this type of soil have been abandoned due to salinazation of the aquifer and the soil, and the rapidly falling water table in the central and southern areas. Table grapes, and other export-oriented horticultural crops, are grown with drip irrigation, which is more efficient in the light, sandy soils of the northern area of La Costa and the Pesqueira area. Before the expansion of the table grape industry, areas that now support thousands of hectares of table grapes were largely virgin desert land, or supported low-density cattle grazing.

There have been some changes in the local agricultural labor structure with the increase in fruit and vegetable production, especially table grapes. The towns of Pesqueira to the northeast, and Poblado Miguel Aleman, in La Costa, have long supported a relatively small numbers of agricultural wage laborers, some of whom were *ejiditarios* who worked as day laborers to earn needed cash. Due to the high investments required for pumping irrigation water, there was no class of small producers, and wage work for large growers has long been important.

The relations of production inherent in the table grape industry, wherein a small number of vineyard owners hire hundreds or thousands of workers, are primarily an extension of pre-existing conditions. However, there have been a few important changes. The most crucial is that due to the extremely contracted harvest season (only five or six weeks, from the first week of may through the middle of June), and the importance of grapes being harvested and sent to market as quickly as possible once they have reached adequate size, color and sweetness, there is a need for a short-term labor supply beyond what the local labor pool can supply, and which available economic activities in the area for the rest of the year would not support. Thus the number of seasonal workers who are brought by contractors to work the few short weeks of the harvest season has increased dramatically.

Smaller growers may rely more heavily on local labor, but the larger ones prefer to hire contractors who bring laborers from central and southern Mexico. Local workers are said to "think they're being oppressed," "want to go home for lunch every day," "won't work overtime," and generally are not considered as productive as workers from other states. As for non-local workers, as one grower said, "These people come to us hungry and destitute, and all they want to do is work." Fieldworkers earn an average of 85 pesos ($8.50 USD) per day for most tasks, and perhaps 120 to 150 pesos ($12 – 15 USD) per day during the harvest, depending on how quickly they can pick and pack the grapes. Because of the distance between the vineyards and the few towns in the region, most growers supply their workers with basic living and eating facilities during the harvest. However, these additional workers may strain the local capacity to provide medical care and other social services. There are also reports of poor social conditions in the labor camps, including drug use, alcohol abuse and robbery.

4. *I did not anticipate the power and growth of food retailers on shaping the industry as a whole.*

As previously noted, I had assumed that large transnationals that are household names in the U.S., such as Dole, Del Monte, and Chiquita, would be the most powerful entities in the chain of production of fresh produce commodities such as table grapes. I had considered supermarkets little more than glorified distribution points for these transnational produce distributors. However, the preliminary research that I have conducted on the U.S. supermarket industry has caused me to revise this hypothesis, and to attribute a great deal more of the "power" in determining the structure and specifics of the commodity chain to food retailers.

In food retailing, what had been a historically fragmented, regionalized industry is rapidly shifting into a highly consolidated one organized on a national, and even international, basis. Sales of the top eight chain stores increased from a 25 percent share of total grocery store sales in 1992 to 42 percent in 1999. Interestingly, at least five of the top 20 retailers in the U.S. have at least partial European ownership. On the other hand, since Wal-Mart's move into food marketing in 1992, they have expanded their supercenter format into nine countries, including the recent purchase of 238 Asda food stores in the United Kingdom. While none of the global fresh produce transnationals are large enough to appear in The Institute for Policy Studies' 1999 list of the 200 largest corporations in the world, twelve retailers of food, including fresh produce, do make the list.

Consolidation in the food retailing industry has implications for both distributors and growers in the Sonoran table grape industry. For distributors, it means that fewer buyers are available for the products they sell. This gives supermarkets the advantage in determining the terms of the sale, because while a distributor a decade ago may have had contracts with twenty different chains, those same twenty chains may have consolidated into four or five. With less competition for contracts, supermarkets have more pull in determining the terms of sales. They are thus asking distributors for year-round contracts at a fixed price for fresh produce commodities, so that rather than allowing the world market price to determine their selling price. A price set in this manner would not respond to over- or under-supply of commodities due to conditions affecting agriculture, such as crop losses due to the weather, disease and pests. This would also require distributors to source from enough different areas to ensure a constant supply at all times of the year, which many of them already do.

Sonoran table grape growers believe that this might or might not work to their advantage, depending entirely on the price that is agreed upon. Sonoran growers have in recent years lost money due to oversupply from Chile cutting into their marketing niche, and might benefit from some protection from this type of occurrence. It might also protect them somewhat from new growing regions that are developing their own table grape industries by producing a cheaper product. A few growers, in fact, have experimented with contractors who offer them a fixed price for the whole season, but they were not conclusive as to whether this ultimately works to their advantage.

Fewer but stronger retailers are also in a better position to ask their distributors to deliver product packaged in specific ways, such as in resealable plastic bags or shipped in reusable plastic containers. They can also insist on additional food safety measures, such as independent certification of food handling and sanitation in the fields. These programs can be expensive and cumbersome for growers to implement, but growers seem to see their implementation as an inevitable cost of doing business, and some say that these stricter hygiene standards are not a significant deviation from their current techniques.

5. My understanding of the role of marketing was too limited.

I had believed that the tasks of each link of the commodity chain was fairly straightforward, and that marketing was something that happened between retailers and consumers in supermarkets, or perhaps to a limited extent between transnational produce corporations and consumers through branding of produce. However, marketing defined as information about Sonoran table grapes and encouragement to purchase them occurs all along the chain of production, both between the various links and directly to consumers. The local association of table grape producers has a relatively sophisticated marketing program that they target at supermarkets who may be willing to sell their products, and point-of-purchase materials designed to reach consumers as they shop in supermarkets. Distributors sell themselves and their products to both growers they would like to contract with, to food retailers through advertisements in trade publications, and to consumers through their brands.

Branding is an aspect of marketing that takes a variety of forms. Some growers may have a separate label for each of their vineyards, and believe that this is an important means of identifying themselves to both supermarket buyers and consumers. Others pay a fee to have their grapes marketed under another label (such as Chiquita), while still others complain that when the distributor puts its label on their grapes, they are cheated out of the recognition they deserve for the quality of their product. Grower perceptions of brands are likely to be significantly different than those of marketers, and further research will investigate this issue.

IV. Conclusions

My research on Sonoran table grape growers has revealed a complex production and distribution system, in which growers have a considerable amount of autonomy in determining the structure of the industry. Growers are more subject to cues from the global grape market than they are to the dictates of the distributors they work with, although distributors do play key roles in providing credit and marketing the product to retailers. Because of their increasing size and power through consolidation, supermarkets are able to dictate prices and conditions to both distributors and growers. These are some of the more surprising findings that my research with growers and distributors has generated. Now the picture this paper presents of growers' relationships with other links of the commodity chain must be compared to distributors', marketers' and consumers' perceptions of themselves and other links in the commodity chain.

Thus I estimate that at this point the total research project is about half completed. This summer I will spend a few weeks in Nogales, Arizona, interviewing more of the distributors of Sonoran table grapes. While I think that I have a fairly clear grasp of the relationship between growers and distributors, I have little information on the relationship between distributors and supermarket buyers, so this is an area for further research. I plan to travel to different areas in California, where some of the produce distributorships located in Nogales have their home offices, to do research on how the global sourcing of fresh produce, including table grapes, is organized. I will also interview supermarket buyers and managers, to fill out those links of the production chain. A final part of the research, to be conducted this autumn, will focus more on the ways that fresh produce distributors and supermarkets attempt to reach consumers (primarily through advertising and public relations), and what affect these efforts have on consumer perceptions, particularly regarding the origin of the produce they eat and the conditions it is grown under. As the research progresses, I am certain that more new hypotheses will be generated and old ones revised.