

PROJECT SUMMARY

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Title: *A "New" Environmentalism or Agribusiness as Usual: A Case Study of California's Organic Produce Sector*

The purpose of this study, which will be the first of its kind, is to examine the genesis, development and character of the California organic produce sector to demonstrate how a particular notion of "organic" has been constituted politically, and how this codified definition shapes the structure and geography of the sector. Building on the investigator's pre-dissertation research, the proposed study will involve collection, compilation, and analysis of both historical and contemporary data on the scale and structure of the sector using survey data from public and private regulatory agencies, research associations, and licensing agencies. Qualitative data will be collected through in depth, semi-structured interviews and observations on site visits. Interviews will focus on land tenure, organizational structure, production strategies, sourcing and marketing strategies, motivations and ideologies, and impacts of regulation on the enterprise. The research will also involve collection and analysis of legislative and other regulatory documents, and comparison of organic standards among various regulatory agencies, including private certifying agencies. In depth interviews will be conducted with key representatives from each of the regulatory groups to document the origins of the regulations, their future directions, and what impacts they may have on the sector.

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I. Introduction

In the last two decades, dramatic changes in the patterns of food consumption have taken place in the advanced capitalist countries. One is toward healthier diets, increasingly composed of less red meat and more fresh fruits and vegetables (Friedland 1994). These dietary shifts reflect enhanced consumer concerns over food, and environmental, quality and new consumer power in the marketplace. An exemplary dimension of these dietary shifts is the explosive rise in the provision of what is called organic or natural food. With little empirical evidence to explain the nature of this growth, the field of organic production is nonetheless the source of grandiose claims. For instance, in recent work on the "new" political economy of food and the "new" rural sociology (e.g., Buttel 1994, Friedmann 1993, Whatmore 1995), organic agriculture is heralded as one of the frontiers of a "new" environmentalism where concerns about food safety, land use, and social justice are converging with a politics of re-localization. The presumption is that institutions within the organic sector, which are the source of this "new" politics, operate according to a different logic than the large agribusiness firms which drive the industrialization and globalization of food provision. The organization of organic food provision, in this view, reflects both structural and ideological obstacles to agribusiness penetration. While existing research has confirmed that the units of production in organic agriculture are relatively small, on average about one-half the size of so-called conventional (i.e., non-organic) farms (Dunn 1995, Klonsky and Tourte 1995), considerable uncertainty continues to exist about the structure and organization of production within the sector (specifically patterns of ownership, farm size, land tenure, labor management, and cropping), the relationships of producers to markets, and the spectrum of governing ideologies.

The proposed project is the first systematic study of organic production in what is arguably its most important center in the world food economy: California. Emerging from my pre-dissertation research, which suggested a need to radically reconsider the assertions of the new political economy of agriculture, I shall argue that the most high-value crops and the most lucrative segments of organic commodity chains are increasingly being appropriated by agribusiness firms, many of which are abandoning the putatively sustainable agronomic and marketing practices associated with "organic."¹

Specifically my research will focus on three critical questions: 1) What is the genesis, development, and structure of the California organic produce sector as a whole, which includes those institutions which claim to produce food with organic techniques, whether or not they actually meet existing standards of organic? 2) What are the various ways that production,

¹ The multiplicity of "sustainable" agronomic practices are described in Altieri's (1995) book on agroecology. Organic agriculture is of course but one variant of agroecology and the highly contested category of "sustainable agriculture." Nevertheless, in California the right to claim that a product was organically produced has become contingent upon compliance with legal, and therefore socially-constructed definitions. An examination of the codification of organic food provision is crucial to understanding the character of the sector and will be discussed further in section III.

distribution, and marketing are organized within the sector? 3) What are the politics and history of the regulation of organic production in California, and in what exact ways has the regulation of organic production become a vehicle by which agribusiness appropriation is taking place? My hypothesis is that while there continues to exist a plurality of economic and ideological actors along all links of the commodity chain, the sector is increasingly being dominated by agribusiness firms. The particular way in which "organic" has been socially-constructed and regulated has been most critical in facilitating the proliferation of agri-business entrants.

II. Theoretical Overview

The proposed research is located at the intersection of three broad bodies of literature: the classic debates on the agrarian question, theories of agricultural regulation, and the politics of consumption in advanced capitalist societies.

1. *The Agrarian Question Revisited*

The idea that institutions within the organic sector operate according to a decidedly different logic than do conventional agribusinesses can be situated within the century-old "agrarian question" which attempts to understand how specific economic and ecological structures of agrarian production confound capital's penetration, defined as wage labor at the site of production. Insofar as the social and technical particularities of organic production embody "obstacles" to agribusiness penetration, or likewise, confer certain structural or scale advantages to small family-like enterprises these debates are highly relevant to my study.

The origin of these ideas lie in the late nineteenth century debates over the differentiation of the peasantry in Europe and Russia. At that time, Lenin had predicted the imminent disappearance of the peasantry, and the concomitant emergence of the wage form in agriculture, which was presumed to lead to increasingly industrial and more efficient scales of production (1899). Kautsky, however, sought to explain how certain "pre-capitalist" forms of production nevertheless persisted in the countryside, even in the face of urban industrialization (1888, original 1899). Kautsky's central argument was that agriculture's basis in land creates obstacles to capitalist accumulation, related to fragmentation of holdings and other peculiarities of land-based production. Most presciently, Kautsky introduced the idea that small peasant farmers are not only willing to self-exploit in order to hold on to their land, but are actually functional to large capitalist farms because they provide a cheap (part-time) labor force. Kautsky's analysis remains remarkably relevant since in advanced capitalism, the family farm has refused to go away², so-called pre-capitalist forms of production such as sharecropping have resurfaced (see Bardhan 1980, Hart 1986, Wells 1984) and new sorts of "functional dualisms" (deJanvry 1981) have arisen, such as contract farming for high-risk, low-profit production (Watts 1993).

Most of the agrarian transitions literature has nevertheless focused on the social relations of production, and not the uniqueness of land-based production (Goodman et al. 1987) One response has been to theorize the particular resource characteristics of agriculture that present obstacles to capitalist intrusion. The Mann-Dickenson thesis is that capitalist penetration of agriculture is protracted and uneven because of agriculture's centeredness in nature (Mann 1989).³ In a similar vein, some of the literature on regional economic development has coupled

²California, the focus of this study, historically has not had a significant family farm sector, thus emerging forms of small-farm production, such as organic, cannot be understood as historical relics.

³Problems such as the non-identity of labor application time with production time (which gives rise to labor

the unique resource characteristics of extractive industries with particular forms and processes of industrial organization, if not capital's actual preclusion (e.g., Bunker 1989, Markusen 1985, Barham et al. 1994). Other work considers how technological developments and capitalist restructuring of agriculture reconfigures opportunities for accumulation by reducing agriculture's dependence on nature (Whatmore 1995). Goodman et al. (1987), for example, make the argument that capitalism can penetrate into agriculture in other ways besides subsumption of the actual production process, both by creating industrial substitutes for the rural product and by appropriating products and processes once integral to on-farm production and refashioning them as inputs. In other words, processes of appropriation and substitution marginalize the actual site of production as the locus of profits. The extent to which organic producers withstand or incorporate processes of appropriation, specifically, will be a focal point of this study.

It is equally important to consider the persistence of non-capitalist enterprises as a result of their own structural logic and their ability to out-compete capital. While this thread originates with Chayanov (1986, original in 1924), Friedmann (1978) extends the Chayanovian argument to show that even where production is both competitive and specialized, simple commodity producers (i.e., family farms) may out-compete enterprises based on hired labor, because the household need only reproduce the household's subsistence needs and the means of production, whereas the capitalist enterprise must also (re)produce surplus (i.e., profits). Friedmann's argument underplays other ways in which off-farm capital is able to appropriate surplus (e.g., through tenancy, contract farming, and debt) (Buttel et al. 1990, Mooney 1983); nor does it take into account that many small farms (e.g., hobby farms) are actually subsidized from other sources of income or their ability to sell high-value specialty products (Buttel and LaRamee 1991). This last point is particularly important point in regards to this study in light of the putative price premiums (i.e., economic rents) associated with organic production.

Furthermore, most of these theories of capitalism's uneven development in agriculture understand it to be a function of biophysical and social structural conditions of production, which potentially can be rationalized, mechanized, or bio-engineered in ways to ensure that wage labor will eventually dominate all but the most marginal aspects. This classically Marxist emphasis on the relations of production shares an economism with neo-classical economics, to the exclusion of other factors that may explain the structure and dynamics of agricultural production. One of the most oft-cited subjective obstacles to the spread of large-scale agrarian capitalism is farmers' willingness to hold on to their land, or pursue a farming life, no matter what the costs. Weber (1946) posited that even enterprise-oriented small farmers will endure extreme sacrifices to obtain or preserve their land, a form of self-exploitation that bestows a peculiar productivity advantage over the hired labor of large farms. Contemporary farmers who choose farming as a "lifestyle," hobby, or any other ideologically-motivated choice, such as a commitment to agricultural sustainability, may reap a similar advantage over large scale agribusiness (Bonanno 1987).

2. Theorizing Agricultural and Organic Regulation

Agriculture in the US has been highly regulated since the New Deal. New Deal reforms and those that followed created a complex set of price supports and production controls. These policies were directed at enhancing the performance of strategic commodity producers in

recruitment problems, inefficient use of machinery, and long turnover times) amplify the more obvious risks of extreme market volatility, nature's vagaries (e.g., floods, droughts), and product perishability. (Mann 1989)

response to what had become a chronic over-supply problem (LeHeron 1993).⁴ Since the farm crisis of the 1980s, agriculture, as everything else, is undergoing a de-regulation of sorts. US dependence on export markets has created incentives for promotion of agricultural free trade, which is effectively eroding the integrity of national and regional systems of regulation, and reconstructing them on an international scale (Lowe et al. 1994) For instance, both NAFTA and the Uruguay round of GATT included agreements to reduce or phase out agricultural export subsidies, tariffs, and price supports.

Yet, it is not so much that national and regional regulation are being abandoned, but rather that they are taking on new forms. First, the proliferation of agro-food industries and the development of biotechnologies are shifting the site of food production from farms to factories, so that the focus of regulation is shifting from agriculture *per se* to food (Buttel 1994). But also, the diminished importance of national food security in advanced industrialized states has opened the door for "post-productivist" agro-food regulation where food quality has come to take precedence over food quantity. Changing discourses on what constitutes healthy food in addition to environmental concerns regarding agricultural inputs and externalities now permeate the politics of food delivery (Arce and Marsden 1994, Buttel 1994, Marsden 1992, Marsden and Arce 1995).

Significant changes in the scope of agricultural regulation can be partially explained by concepts central to the French "regulationist school," most of which are applicable only to advanced capitalist societies. The key "regulationist" notion is that coherent "regimes of accumulation" are associated with "modes of regulation" which mediate capitalist tendencies toward crisis (Lipietz 1986). This thinking has been coupled with Piore and Sabel's (1984) proposition that advanced industrialized economies have crossed a "second industrial divide," from a manufacturing economy based on Fordist principles of mass production to production based on what they have termed "flexible specialization," also referred to as post-Fordism. As a mode of regulation, Fordism was associated with Bretton Woods-based financial regulation, strong trade unionism, and the ascendance of the welfare state, all of which purportedly contributed to strong domestic production-consumption linkages. Post-Fordist "regulation" implies a breakdown of these same institutions (Clark 1992).⁵ The concept of Fordism, however, is somewhat marginal when applied to agricultural production, which has never been characterized by mass production, in large part due to its basis in nature (Goodman and Watts 1994).

Nevertheless, one variant to regulation theory, which applies directly to agricultural regulation, is posited by Friedmann (1992, 1993), i.e., the existence of identifiable, periodized food regimes. The post-WWII surplus regime (1947-1972) was characterized by national regulation, subsidized grain production, chronic food surpluses, and a commodity focus on mass-produced durable foods. The incipient "post-Fordist" food regime is characterized by international production-consumption links, international free trade regulation, the demise of farm-based price supports, and a shift to non-traditional exports and "niche" commodities,

⁴ New Deal agricultural policy created significant disincentives for sustainable agriculture as the employment of crop rotations made farmers ineligible for price supports, and production limits encouraged high-input use to maximize yields per acre (LeHeron 1993).

⁵The Fordism/post-Fordism periodization is criticized for being analytically weak in its demarcation of one period in opposition to the other. Such "binary history" also masks local differentiations and trajectories (Sayer and Walker 1992).

especially fresh fruits and vegetables.⁶

A newer and more relevant literature, in terms of this study, turns on questions of local and national forms of food regulation based on quality and health (Arce and Marsden 1994, Boyes and Allaire 1995, Nicolas and Valceschini 1995, Sylvander 1994). By "quality," these theorists mean that specific attributes of agricultural commodities (e.g., production processes, nutritional composition) are privileged and regulated. But also, they posit a more encompassing view of quality regulation that is defined by social relations and networks outside the sphere of legislation, what they call "conventions." Building on the work of other institutionalists (e.g., Grannovetter 1985, Williamson 1993), they suggest that institutional arrangements help to construct the "quality" of food. Therefore, any social relations distinctive to the organic sector, such as direct sales of organic produce to high-end restaurants, or "subscription sales" to individual consumers (to be discussed in part III) are also part of its regulatory context, an insight which is relevant to my project.

3. The Politics of Consumption

In this "post-Fordist" era, not only the composition of diets, but also the practices of consumption are changing. For example, there is a trend toward individual consumption of factory-prepared foods in place of the home-cooked "family meal." The significance of industrial food preparation is that surpluses are being re-distributed away from agricultural producers to those who control (and add value) in the processing, distribution, and retailing links in various commodity chains (Marsden and Wrigley 1995). At the same time, the retreat of the welfare state (also associated with post-Fordism), coupled with the decline of trade unionism and social democratic parties, has led to a growing role of what have been called new social movements (NSM's) in late capitalism (Buttel 1992, Epstein 1990, Offe 1985, Scott 1990). One of the ways in which NSM's are distinct from "old" social movements is their focus on the politics of consumption (Burawoy 1985, Warde 1988 based on the work of Castells 1983), including public goods such as environmental quality which do not confer to any one group (Offe 1985).

It is at the intersection of these two trends that consumer intrusion into the productive sphere (Goodman and Watts 1994) must be conceptualized. By becoming central to the political economy, consumption provides a specific axis for social change (Marsden and Wrigley 1995). Specifically, consumers are now demanding agricultural products that do not involve those inputs and processes that historically have made agriculture profitable. As land-based production, moreover, agriculture lends itself to linkages with broader cultural and material struggles over the rural environment (Goodman and Watts 1994, Whatmore 1995). Whatmore is quite sanguine about the possibility of merging production, consumption and environmental concerns around food, and in a way that transcends the classic NIMBYism of mainstream environmentalism. Others link sustainable agriculture with the politics of re-localization. Friedmann (1993, p.35), for instance, posits that a "new agriculture would emphasize proximity and seasonality: a food delivery system rooted in local economies."

⁶Friedmann's periodization of commodity-based complexes is clearly more applicable to mid-Western agriculture. Fresh fruits and vegetables have been a cornerstone of the California economy for at least a century, and many of California's standard commodities (e.g., lettuce) were once considered specialty goods. Nonetheless, it is worth exploring the explosive growth in "organic" produce as an example of the commodity differentiation said to be representative of post-Fordist food supply.

It appears, then, that a multiplicity of sometimes contradictory ecological, economic and ideological imperatives are all being invoked in the name of sustainable agriculture. They include concerns with the mass-production of food, the healthiness and safety of food, the conditions of food workers, the survival of small farms, the energy costs of food delivery systems, and even the vanity character of food. It is for this reason that the regulation of organic agriculture has become a crucial site of struggle, as it is in this sphere that a plurality of producers, retailers, consumers, and NGOs can all vie for a say as to what constitutes healthy, sustainable, natural, and mainly "organic." Indeed, it is in the regulatory sphere that meanings and their associated practices are negotiated, contested, and eventually reified.

Consumer "involvement" in the construction of "organic" suggests that consumers are not completely passive to agribusiness controlled production and marketing; however, the notion of unequivocal consumer sovereignty, extolled by neo-classical economics, is equally problematic and not the position taken here. A complex combination of social, economic and historical factors contribute to both the quantity and composition of consumed foods, and affect the meanings attributed to different commodities. In an ironic way, state regulation and intense civil society involvement also benefit agribusiness, by endowing it with an image of responsibility and caring, and effectively legitimizing new and lucrative forms of consumption, such as "organic." (Fine and Leopold 1994, Marsden & Wrigley 1995)

In short, whether organic production poses obstacles or opportunities to agribusiness appropriation is directly related to the codification of product attributes arising from the ostensibly consumer-driven "post-Fordist" regulatory sphere. Thus, in the context of the proposed study, the politics of consumption, regulation, and the agrarian question are linked together in inextricable ways.

III. Organic Vegetable Commodity Chains: a Northern California Case Study

As part of my pre-dissertation research, I conducted substantial field work on northern California's organic vegetable sector (see Buck et al. forthcoming). Using a "commodity chain method,"⁷ this research involved interviews with over seventy players, including growers, handlers, retailers, processors, restaurants, venture capitalists, unions, certifying agencies, and academic specialists, to identify historical and developing trends in the industry and suggest future research.

Historically, the market for organic produce in the US was largely confined to a minuscule health food sector. Only in the last decade has it expanded rapidly, first in 1986, in response to the threat of Aldicarb poisoning in watermelons, and again in 1989, when the Alar scare arguably contributed to a quadrupling of California's certified organic acreage (Schilling 1995). By 1994, there were 4,050 certified organic farms in the United States (Dunn 1995). Total organic industry sales had surpassed \$2.3 billion per annum, growing more than twenty percent each year since 1989 (Mergentime and Emerich 1995). Moreover, this growth occurred in spite of many predictions that the Alar scare would fail to create a sustained market. Although organic production still represents less than one percent of the total US produce market, Bob Scowcroft, the Director of the Organic Farming Research Foundation, predicts that with the

⁷See Friedland (1984) for an overview of the commodity chain approach to the political economy of agriculture. This approach takes individual systems that deliver products from farm to table as the unit of analysis. Rather than focusing solely on the internal dynamics of any one particular level, such as production or distribution, the commodity approach highlights the interaction and power relations between actors at different levels.

impending implementation of federal standards, it will quickly soar to ten percent of the US agricultural economy.

In the context of this rapid growth, I found notable bifurcation within the sector in regards to institutional structures, objectives, practices, and geographies. On the one hand, there are many units of production which are small and under-capitalized, and are located in a variety of small, hilly, even discontinuous spaces, on the margins of prime agricultural space. These farms tend to employ the agronomic practices associated with agroecology, such as crop rotation, cover cropping, and on-farm composting (Altieri 1995). These small farms tend to be labor intensive operations, not only because of the variable and complicated labor needs of mixed cropping strategies, but also because labor substitutes for chemicals and machinery. Thus, these farms offer year-round employment for a handful of workers, who engage in a variety of functions with a variety of crops.

The agronomic practices employed by these small farms may be construed as obstacles to agribusiness penetration.⁸ For instance, those crops which are most effective in replenishing nutrient levels in the soil and filling in the seasonal gaps garner little interest in the market, and yield only marginal returns. Marketing organic produce is also complicated by inconsistent interest by conventional retail chains and an eclectic regulatory environment, in addition to the usual problems of perishability, price volatility, and irregular volumes. Therefore, it is the small (and ideologically committed) organic growers who tend to choose alternative - and attenuated - marketing strategies such as farmers' markets, back door sales to restaurants, and increasingly, subscription sales.⁹

On the other hand, I noted several larger organic farms which either recently converted from conventional farming, or more likely, experienced rapid growth as organic farms in the last few years. Most of these farms specialize in the mass production of a few high-growth, high-value crops, such as carrots or salad mixes respectively. Allowable inputs are purchased in markets, and may be composed of exotic substances sourced globally. On these more capitalized farms, which are usually located on flat expansive parcels in the more traditional agricultural zones of the San Joaquin and Salinas valleys, monocropping is common. In fact, geographical cropping patterns are similar to conventional industrial agriculture, where single crops are grown in their most optimal climatic and edaphic conditions, and seasonally rotated to other locations to ensure year-round supply. As with conventional agriculture, these enterprises recruit a seasonal migrant labor force to move with production.

On these farms, organic growers have begun to experiment with mechanical harvesting which requires large fields of laser-level land. As with conventional agriculture, however, it is in the near-farm activities that mechanization is really taking hold, such as in post-harvest handling (e.g., washing, spin drying, and refrigeration) and light processing (e.g., packaging and labelling). All these practices add value to the product and render distinct marketing advantages. Firms with these facilities often contract out production, which not only diversifies risk, but also ensures a source of product inputs for the high-margin processing and marketing. In other words, there is a classic case of what Goodman et al. (1987) have referred to as "appropriation"

⁸ Since the very essence of agro-ecology is about re-claiming so-called natural processes (Altieri), the Mann-Dickensen thesis may be relevant in this context.

⁹ Subscription sales allow growers to shift many of the production and marketing risks onto the consumer. Consumers subscribe on an annual or monthly basis, and for a set fee, receive a standard box of seasonal produce, chosen each time by the grower.

occurring in the organic sector. With higher volumes and better access to conventional marketing arrangements, especially with the huge growth in organic retail, these businesses are able to out-compete marginal farmers, which increasingly depend on consumers committed to the process as well as the product of organic farming.

My research also suggested the existence of a sizable segment of growers who incorporate many agroecological practices, but cannot be considered "organic" producers, either because their processes do not meet the particular specifications of existing organic standards or they deem the registration process unnecessary. Whether these producers defy the (costly) regulatory process of being declared organic based on economic calculations or on ideological leanings such as self-sufficiency or state protest is insufficiently known, but significant, and thus will be examined as part of my proposed research.

Of course it is impossible to understand the diversity of organizational forms and practices in California without understanding the ways in which a particular notion of "organic" has been constituted and codified. In California, there are essentially two layers of regulation in the organic sector. The California Organic Foods Act of 1990 (COFA) established a baseline definition of organic growing practices, including a list of allowable inputs. The Act does not require inspection or verification of organic practices, and in fact, is enforced only in cases of confirmed violation (Klonsky and Tourte 1994). As a consequence, the definition of "registered organic" only means that the grower has registered with the state. The second layer is certification, a "voluntary" regulation requiring verification that organic produce is separated from conventional produce and protected from contact with prohibited substances all along the commodity chain. Growers certified by an independent agency and registered with the state may sell their produce as "certified organic," a claim which is more influential in the market among knowledgeable consumers than "registered organic."

To the extent that standards of "organic" have been defined in ways that create barriers to entry (e.g., a required three year conversion process) and add value, they create economic rents. Consequently, codification affects who can viably participate within the sector, from producers to consumers. Moreover, to the extent that these standards are different among certifying agencies, and between certifying agencies and the state, they allow a wide spectrum of allegedly "sustainable" practices to occur all under the name of "organic." That said, the debates about organic regulation have been narrowed to a determination of allowable inputs, which, as it stands, are only those that are found "in nature." To be called "organic," a product must have had no contact with industrially or synthetically produced fertilizers, pesticides, herbicides and other inputs. In other words, as yet there exists no codification prescribing the use of agroecological processes such as polycultures, crop rotations, green manuring, and so forth. I suggest that this emphasis on regulation of inputs, as opposed to processes, has been the critical factor in facilitating the proliferation of agri-business entrants.

IV. Research Design and Methods

Using a commodity systems methodological approach, my research design includes collection of survey data, in-depth interviews, and analysis of legal archives. Specifically, I intend to test the following hypotheses:

! Organizational forms within the sector have shifted over time; specifically, the role of agri-business has become more significant.

! There exists a strong relationship between the degree to which agro-ecological farming and

direct/localized marketing practices are employed and the ownership of the enterprise, such that agri-business firms will tend to employ the least "sustainable" practices.

! The particular ways that organic food provision has been regulated, both in terms of technical requirements and the manipulation of meanings, has enabled the proliferation of agri-business entrants.

1. Research Questions, Evidence and Methods

Building upon methods previously developed in my published work, I will test these hypotheses by answering the three questions posed at the beginning:

1) What is the genesis, development, and current structure of the California organic produce sector as a whole, which includes those institutions which claim to produce food with organic techniques, whether or not they actually meet existing standards of organic?

To answer this question, I will need historical and current survey data on number of farms, their acreage, sales, ownership, location, and crops grown in order to establish the range, scale and structure of the sector. During my preliminary research, I was able to find out what information is available and where to get it. I will obtain the official records (since 1990) of "registered" organic farms from the California Department of Food and Agriculture (CDFA) in Sacramento. I will supplement this data with the detailed database of California Certified Organic Farmers (CCOF), which certifies about one-half of California's farmers, and the other five certifying agencies who do business in California, to the extent they are willing to disclose this information. I will also use the database of the California Institute for Rural Studies which surveys all farms in California. For a historical perspective, I will use earlier surveys, conducted by CCOF and Organic Farming Research Association (OFRA), of self-proclaimed organic growers. To establish the history and significance of the "unregistered" sector, I will contact county and city permitting agencies for farmers' markets and other direct sales, and contact individual growers. To establish the significance of agri-business capital, I will use expert contacts and business databases to identify firms, and then use the state Attorney General's office and Franchise Tax Board, and SEC disclosures when applicable, to obtain information on sales, related businesses, and ownership. Collecting this statistical information will require several trips to Sacramento to visit state agencies, and at least two trips to Santa Cruz to visit CCOF and OFRA. Some information, such as county permitting, will be collected by mail and phone.

2) What are the various ways that production, distribution, and marketing are organized within the sector? To answer this question, I will need descriptive data from a broadly representative sample of producers, handlers, marketers and retailers that captures the range of strategic choices within organic enterprises. I was able to develop a basic schemata of the marketing end of the commodity chain in my prior research, which will be filled out as variances come to my attention. The bulk of this research, however, will focus on the wholly unknown organization of production. Using the data obtained in answering the first question, I will develop criteria to ensure broad representation of the sector (and to include important anomalies). I will seek out approximately one hundred producers by a "snowball" sample with which to conduct in-depth semi-structured interviews and site visits. Interviews will focus on 1) structure and ownership of holdings, including land tenure, acreage, and enterprise age; 2) producer strategies (cropping patterns, agronomic practices, employment); 3) "commodity chain" analysis i.e., sourcing (of inputs) and marketing strategies; and 4) motivations and ideologies. I will use on-site observation to confirm the type of farming practices and post-harvest practices

employed. This phase of research will necessitate extensive travel throughout the state, but particularly to the primary centers of organic production such as Monterey, San Diego, Santa Cruz, and Yolo counties.

3) What are the politics and history of the regulation of organic production in California, and in what exact ways has the regulation of organic production become a vehicle by which agribusiness appropriation is taking place? To answer this question I will need documentation of the legislative history of state and federal organic regulation, any records of litigation pertaining to organic regulation, documents (historical and current) of all regulatory standards (from the state and all certifying agencies), and descriptive data regarding the process by which the regulatory standards came to be. I will collect legislative documents, including drafts and hearings, and case histories from the UC Berkeley law library. I will collect past and present certification requirements from the six certifying agencies who do business in California, and analyze them for differences in stringency and foci of regulation. Following this preparatory work, I will conduct in-depth interviews with key representatives from each of the certifying agencies, the CDFA organic division in Sacramento, the USDA organic division in Washington, D.C., any lobbyists concerned with organic regulation at both the state and federal levels, in addition to relevant consumer, grower, and other nonprofit associations. I will also interview technical experts at the UC Davis Small Farm Program, the UCSC Agro-Ecology Program and the UC Davis Sustainable Agriculture Research and Education Program. These semi-structured interviews will document stories of the origins of the regulations, the direction they are headed, and the impacts they may have on the sector. In order to substantiate the relationship between the regulatory strategies of individual producers (e.g., whether or not to register, certify, and with whom) and the way that production is organized, I will identify the registration and certification status of all the enterprises in my sample, and all agri-business producers. As part of the in-depth interviews with producers, I will ask questions about regulatory choices, including past and potential impacts of regulation on the enterprise.

2. Research Schedule

Phase I: July - August 1996: The objective of this first phase is to collect historical and recent data on the overall scale, scope and structure of the sector.

Phase II: August - December 1996: The objective for this second phase is to develop a historical account of organic regulation.

Phase III: January - June 1997: The objective of this phase is to identify patterns and trends in the organization of production and their relationship to regulations through extensive interviews and site visits.

Phase IV: July 1997 - June 1998: Following the data-gathering phase of research, I will write up the results in my dissertation, which I intend to publish as a book.

3. Preparation and Research Qualification

My pre-dissertation research laid the foundation for the proposed research. It enabled me to establish important personal connections, to get an overall sense of the dimensions of the sector, and to generate my hypotheses (note Buck et al., along with two additional manuscripts under consideration in refereed journals). Meanwhile, I am extending my list of contacts through colleagues, conferences, and site visits at farms and markets. I have also collected some publications and surveys from University of California's cooperative extension, CCOF, OFRA

and several other important organizations. I am working with David Goodman and Michael Watts as part of a larger project that they have initiated on California agriculture, which is relevant to the larger state context of my study.

Addendum to NSF Proposal 97-11262

A "New" Environmentalism or Agribusiness as Usual

Michael Watts/Julie Guthman

Research Design and Methods

One of the key purposes of my research design is to ascertain the basis of differentiation within the organic sector *vis-a-vis*, as the peer review puts it, "the ability and willingness of different sorts of producers to employ agro-ecology" and to gain insight into how these patterns are shifting in the context of new markets and regulatory changes. Specifically, I intend to test the degree to which "agribusiness" involvement in organic flies in the face of the putatively sustainable agronomic and marketing practices that are popularly associated with organic food provision. Here I use agribusiness as a code word for diversified corporate players, specifically those with non-organic and/or non-agricultural product lines. (Thus, one of the pieces of information I will be seeking is whether so-called organic growers also farm non-organic acreage.) Therefore, my method must necessarily take the type of producer as the "independent" variable and seek to draw correlations with differences in both degree and kind in the ways in which organic production is organized. The following is to further describe my research methods in regards to the above purpose.¹

Research Population

In 1992-93 there were 1,159 registered organic growers in California (Klonsky and Tourte 1995). It is currently estimated that 2,000 such growers exist. The survey data that I collect and consolidate in answering Question #1 should approximate the entire population of organic producers in California and additionally provide basic data regarding farm size, ownership, location, and sales (although sales information may be inaccessible for reasons of confidentiality). Working with the survey data as well as other sources (e.g., corporate reports, business databases) will enable me to determine the overall "frequency" of agribusiness, as well as other types of producers.²

In answering question #1, I will also attempt to amass parallel information on the "unregistered" subsector, through farmers' markets registries and growers' associations. By "unregistered," I refer to those growers who incorporate a wide range of agro-ecological practices, but cannot be considered "organic" producers because they have declined to register with the state of California. This information will necessarily be incomplete, and therefore it can only serve as a basis for extrapolation, not only because no central database exists, but because it is solely on the basis of their own claims that these growers can be considered organic or near-organic. Nevertheless, I feel that this information will provide a crucial piece of the puzzle, as it will go to ascertain how and to what extent certain types of growers are excluded from the aegis of organic codification.

¹Since the reviewers seemed satisfied with my methods in answering Questions #1 and #3 in the original proposal, this addendum will primarily focus on clarifying my approach to Question #2.

²That said, it is already known that most organic growers are sole proprietors or family partnerships. A survey of the Organic Farming Research Association [1996] estimates that 83% of U.S. organic farms are in that category.

Research Sample

The research sample must be designed so as to enable an intensive examination of how practices and motivations vary among different categories of growers. Accordingly, I will generate a stratified sample to ensure sufficient representation of each category. Registered organic respondents will be grouped into the following four categories: 1) corporate for-profit (including limited partnerships) with outside interests, including conventional farming; 2) corporate for-profit farming organic only; 3) family partnerships and sole proprietorships; and 4) other (e.g., collectives, non-profit corporations, community associations). I expect to create a sample size of 100 producers, representing approximately five percent of the research population. I will also generate an additional sub-sample of twenty "unregistered" producers.

Methods

Friedland's (1984) path-breaking work in "commodity systems analysis" isolated five basic foci as relevant for the study of agricultural commodities. They are: 1) production practices; 2) grower organization and organizations; 3) labor as a factor in production; 4) scientific production and application; and 5) marketing and distribution systems. Others have amended this schema to include other influences on production such as regulation, or have extended it (as with commodity *chains*) to further highlight the vertical "slice" of a given product's trip from design and inputs to consumption (see for instance Fine and Leopold 1994, Gereffi 1994, Hopkins and Wallerstein 1994). The advantage of these methodological approaches is that they not only consider processes within individual "nodes" of the chain, but also look at linkages between nodes, and in particular how changes in one node of the chain affect strategies and outcomes in other nodes. As such, they potentially highlight the interaction and power relations between actors at different levels (Bernstein 1995).

My methods borrow heavily from commodity systems analysis where here I take "organic produce" as a proxy for one commodity. My pre-dissertation work focused primarily on the distribution and retailing nodes of the organic commodity chain. Other nodes will be addressed in answering Question #3, where I interview representatives from growers' organizations, regulatory agencies, and technical support and extension services. In answering Question #2, however, I will focus on growers themselves. Semi-structured interviews will address 1) structure and ownership of holdings, including land tenure, sales, acreage, and enterprise age; 2) production practices (e.g., cropping patterns, agronomic practices, employment); 3) relationships with markets; and 4) motivations and ideologies. The purpose of addressing producer interactions with upstream and downstream markets is to ascertain on one end the degree of dependency on external inputs and on the other the directness of producer to consumer links. These questions, I believe, directly speak to motivations and ideologies, as they help situate producers in the matrix of ideals and objectives that drive organic - - in this case those having to do with encouraging farm self-sufficiency and reducing the costs of food delivery. I will confirm the type of farming practices and post-harvest practices employed with on-site observations.

Data Compilation

Some of the data collected in the structured parts of interviews will be manipulated into variables, both categorical and continuous, grouped so as to be used in cross-tabulations. These would include location (based on what I hope to be self-evident regions), sales volume (as

available), organic acreage, total acreage, proportion of organic to total acreage, proportion of leased versus owned land, years in business, and number of crops grown, and types of crops grown.³ Also included in the cross-tabulations will be some measures of both employment of agro-ecological method (which would include independence of outside inputs) and labor conditions and practices. These measures will necessarily be imputed from my own observations and assessments. In all cases, correlations will be verified by chi-square statistics.

Other (more qualitative) data from the structured portion of the interviews will be segmented into coding categories but not subject to statistical analysis.⁴ Instead, I intend to compile and analyze these data using a database program that is friendly to textual material. The more open-ended portions of interviews will be treated as mini-case studies, rounded out by my site observations and ethnographic interpretations. These data will be compiled in a narrative report that I will complete at the end of each interview. These interview reports will be coded by date and producer type, and will eventually serve as the basis for some of the narrative portions of my dissertation.

Data Analysis

In addition to correlations established from statistical manipulations, I will present more qualitative data in matrices classified by grower type. The purpose of this largely taxonomic exercise is to distinguish patterns in the organization of production by ownership category. I would expect to see patterns such that at one extreme there will be nonprofit growers, who will have been farming organic for the longest period. They will likely have smaller farms located in more "marginal" zones, farm no conventional acreage, employ rotations and other agro-ecological practices, and develop most inputs on the farm. At the other extreme would be corporate growers, who will have more recently entered into organic production. They will likely farm the most acres in the more traditional growing regions, farm conventional acreage in addition to organic, employ mono-cropped production as far as possible, and purchase their organic inputs. An anomaly, therefore, would be a agribusiness grower cultivating marginal value crops with a complicated agronomic strategy. I expect to see the practices of sole proprietors and family partnerships to fall across the spectrum. I also expect "unregistered" growers to be relatively devoted to agro-ecological practices but to either be extremely under-capitalized and/or to rely heavily on personal relations of trust to market their products. In terms of labor conditions and practices, I do not expect significant variability between categories, in no small part a legacy of California's unique farm labor history.

Budget

³The variable "type of crops grown" has important and complicated interactions. Growers committed to a an ecological cropping strategy are more likely to have a greater mix of crops, certainly including cover crops, but also some field crops. But field crops are likely to correlate with higher acreage relative to high value horticultural crops, the latter which are more likely to come under the purview of agribusiness.

⁴At one level, I do not want to create too many variables in a limited sample size. At a deeper level, I do not want interviews to be limited to questionnaire material, in part because I want to be open to the unexpected, but also because I do not want to needlessly reduce complicated answers to binary or overly simplified variables. At the most fundamental level, I am wary of mistaking correlation for cause, and heavy reliance on statistical method is not in keeping with ontological assumptions that are the basis of my theoretical framing (Sayer 1992).

Since preparing the proposed budget, a few items have come to my attention that necessitate some revisions - some of which are additions! Therefore, I would like to amend the budget in the following ways:

Additions:

Software: +\$150

Besides WordPerfect for recording narrative data, I will need a database program that can manipulate textual material, as well as variables (similar to HyperQual for the MAC), that can be used at the research site. Statistical manipulations, on the other hand, can be done away from the research site, and therefore I can use software available at my university.

Conference Fees: +\$800

The Organic Farming Research Foundation puts on an annual conference that specifically looks at current topics in organic regulation, and the impact they are likely to have on organic practices. This year the conference will also include a financial and investment symposium. Topically, this conference is indispensable for my research. It will also enable me to make contact with key people for setting up interviews. Cost \$350.

The annual Ecological Farming Conference is a series of workshops and presentations on a range of technical, business, social, and regulatory issues. This will be a critical place to make contacts, do short supplementary interviews, and interpret the ways in which the organic industry presents itself. Cost \$450, including meals and lodging at conference grounds.

Document Purchase and Photocopying: +\$150

My original budget grossly under-estimated archival fees and purchases of surveys and other reports. The 1997 National Organic Directory alone costs \$50.

Reductions:

Washington D.C. flight: -\$200

Local Travel: -\$370

Local travel is indispensable to my methodology, and on the basis of my pre-dissertation work, the travel time and distances herein are non-negotiable. I have, however, reduced the local travel budget to 70 days of per diem support in order to meet the overall budget guidelines. With 120 planned grower interviews, at two per day (based on an interview duration of 2+ hours, and adequate time allotted for data input, interview write-up, and travel time), this will leave me only 10 days for all other travel related work such as archival research, technical site visits, and interviews with growers' organizations, regulatory agencies, and extension agents (for which I will clearly need to seek additional funding). The per diem rate of \$37 is the approved rate for my university and the Sponsored Projects office has informed me that it is standard for California travel for less than 30 days duration. I am also saving on motel costs by staying with friends and relatives as much as possible. As far as mileage goes, I envision three longer trips: one to southern California, one to the far north, and a more extensive trip to the San Joaquin valley. These trips will average 1000 miles each (based on 400 miles each way plus 200 miles of travel between sites). This leaves 2000 miles for more "regional" trips, which at 200 miles each, would be limited to 10.

Phone: **-\$250**

Total Change: **+\$280**

Additional justification for a laptop computer:

I want to reiterate the importance of a laptop computer here. Two types of data will be captured immediately after interviews: the data base information and the narrative report. A laptop is especially critical for the latter, to capture as much of the ethnographic dimensions when fresh in my mind. But even for the data base info, it is simply far more efficient to code and enter just once. The reviewer's alternative suggestion of using a tape recorder at interviews is problematic. For one, it would possibly undermine the honesty and spontaneity of the interview. Two, transcribing interviews is obviously time-consuming and would substantially extend my period of research. Tape recorder use would most certainly necessitate revision of my human subjects protocol, and create a requirement of written consent from which I have been exempted. Written consent would make phone and conference interviews near impossible, and again, would possibly deter a more honest exchange. No other lap top is available from my university on either a short term or long term basis. I will be using it continuously for over one year; it will also be crucial for archival and regulatory research, where photocopying is especially costly or difficult.

Revised Budget

Line	Line Item	Description	Detail		Amount
D	Equipment	Toshiba T105 Laptop Computer	P-100 8M RAM, 900MHD, Windows Lithium Battery Database Software Word Perfect	2200 200 150 125	\$2675
E	Travel	Trip to Washington, D.C.	round trip airfare hotel 4 nights @\$100/night 5 days per diem @ 37/day	350 400 185	
		Travel within California	5000 miles @ \$.24/mile 70 days per diem @\$37/day hotels 20 nights @ \$40/night	1200 2590 800	5525
G	Misc	Phone		250	
		Document purchase and photocopying		450	
		Postage		200	
		Supplies		100	
		Conference Fees		800	1800
TOTAL					\$10000

Postscripts

- 1) Funding pending: EPA
- 2) The committee may also be interested in knowing that since submitting my vitae as part of this proposal, I received the Best Student Paper award of the Energy and Environment Specialty Group of the AAG (for the Ft. Worth meetings), for a paper that was largely based on this proposal.

References Cited

- Bernstein, H. (1995) *A short paper about filieres*. Unpublished paper presented at Restructuring Agriculture in South Africa Workshop, Durban.
- Fine, Ben and Ellen Leopold (1994) *The World of Consumption*. London: Routledge.
- Friedland, William H. (1984) "Commodity Systems Analysis" in *Research in Rural Sociology and Development*, vol 1. JAI Press.
- Gereffi, Gary and M. Korzeniewicz, eds. (1994) *Commodity Chains and Global Capitalism*. London: Praeger.
- Hopkins, T. and I. Wallerstein (1994) "Commodity chains: construct and research" in G. Gereffi and M. Korzeniewicz eds., *Commodity Chains and Global Capitalism*. London: Praeger.
- Klonsky, Karen and Laura Tourte (1995) "Statistical Review of California's Organic Agriculture: 1992-1993" Cooperative Extension, Department of Agricultural Economics. UC Davis: September.
- Sayer, Andrew (1992) *Method in Social Science*. London: Routledge.

REFERENCES

Julie Guthman, Geography, UC Berkeley

Title: *A "New" Environmentalism or Agribusiness as Usual: A Case Study of California's Organic Produce Sector*

Altieri, Miguel A. *Agroecology: the Science of Sustainable Agriculture*. Boulder: Westview, 1995.

Arce, A. and T. Marsden. The Social Construction of International Food: A New Research Agenda. *Economic Geography* 69(3): 293-311, 1994.

Bardhan, Pranab. "Interlocking Factor Markets and Agrarian Development: A Review of the Issues" *Oxford Economic Papers* 32: 82-97, 1980.

Barham, Bradford, Stephen G. Bunker and Denis O'Hearn. *States, Firms and Raw Materials: The World Economy and Ecology of Aluminum*. Madison: University of Wisconsin Press, 1994.

Bonanno, Alessandro. *Small Farms: Persistence with Legitimation*. Boulder: Westview, 1987.

Boyes, Robert and Gilles Allaire, eds. *La Grande Transformation*. Paris: INRA, 1995.

Buck, Daniel, Christine Getz and Julie Guthman. "A Preliminary Study of the Northern California Organic Vegetable Commodity Chain." Oakland: Institute for Food and Development Policy Development Report No. 11, in press.

Bunker, Stephen G. "Staples, Links and Poles in the Construction of Regional Development Theory." *Sociological Forum* 4(4): 589-610, 1989.

Burawoy, Michael. *The Politics of Production*. London: Verso Press, 1985.

Buttel, Fred. "Agricultural Change, Rural Society and the State in the Late Twentieth Century" in D. Symes, ed. *Agricultural Restructuring and Rural Change in Europe*, Studies in Sociology, Wageningen, 1994.

Buttel, Fred. "Environmentalization: Origins, Processes, and Implications for Rural Social Change." *Rural Sociology* 57(1): 1- 27, 1992.

Buttel, Frederick and Pierre LaRamee. "The 'Disappearing Middle': a Sociological Perspective" in Friedland, William H. et al., eds. *Towards a New Political Economy of Agriculture*. Boulder: Westview, 1991.

Buttel, Frederick H., Olaf F. Larson, and Gilbert W. Gillespie. *The Sociology of Agriculture*. Westport: Greenwood, 1990.

- Castells, Manuel. *The City and the Grassroots: A Cross-Cultural Theory of Urban Social Movements*. London: Edward Arnold, 1983.
- Chayanov, A. *The Theory of Peasant Economy*. University of Wisconsin Press, 1986 (original 1924).
- Clark, G.L. "'Real' Regulation: The Administrative State." *Environment and Planning A* 24: 615-627, 1992
- deJanvry, Alain. *The Agrarian Question and Reformism in Latin America*. Baltimore: John Hopkins, 1981.
- Dunn, Julie Anton. "Organic Food and Fiber: An Analysis of 1994 Certified Production in the United States." USDA Agricultural Marketing Service: September 1995.
- Epstein, Barbara. "Rethinking Social Movement Theory" *Socialist Review* 20(1): 35-65, 1990.
- Fine, Ben and Ellen Leopold. *The World of Consumption*. London: Routledge, 1994.
- Friedland, William H. "Commodity Systems Analysis." *Research in Rural Sociology and Development*, vol 1. JAI Press, 1984.
- Friedland, W. "The New Globalization: the Case of Fresh Produce" in A. Bonanno et al. eds., *From Columbus to ConAgra*. Kansas City: University Press of Kansas, 1994.
- Friedmann, Harriet. "The Political Economy of Food." *New Left Review* 197: 29-57, 1993.
- Friedmann, Harriet. "Changes in the International Division of Labor: Agri-food Complexes and Export Agriculture" in William H. Friedland et al., eds. *Towards a New Political Economy of Agriculture*. Boulder: Westview Press, 1992.
- Friedmann, Harriet. "World Market, State, and Family Farm: Social Bases of Household Production in the Era of Wage Labor." *Comparative Studies in Society and History* 20(4): 545-586, 1978.
- Goodman, David, Bernardo Sorj and John Wilkinson. *From Farming to Biotechnology*. Oxford: Basil Blackwell, 1987.
- Goodman, David and Michael Watts. "Reconfiguring the Rural or Fording the Divide" in *Journal of Peasant Studies* 22(1): 1-49, 1994.
- Granovetter, Mark. "Economic Action and Social Structure: the Problem of Embeddedness." *American Journal of Sociology* 91(3): 481-510, 1985.
- Hart, Gillian. "Interlocking Transactions: Obstacles, Precursors, or Instruments of Agrarian

- Capitalism?" *Journal of Development Economics* 23: 177-203, 1986.
- Kautsky, Karl. *The Agrarian Question*. London: Zwan Press, 1988.
- Klonsky, Karen and Laura Tourte. "State Registration and Organic Certification: A Guide for California Growers." Paper for U.C. Cooperative Extension, 1994.
- Klonsky, Karen and Laura Tourte. "Statistical Review of California's Organic Agriculture: 1992-1993" Cooperative Extension, Department of Agricultural Economics. UC Davis: September 1995.
- LeHeron, Richard. *Globalized Agriculture*. Oxford: Pergamon Press, 1993.
- Lenin, V. *The Development of Capitalism in Russia*. Moscow: Progress Publishers, 1899.
- Lipietz, Alain. (1986) "New Tendencies in the International Division of Labor: Regimes of Accumulation and Modes of Regulation," in Scott, A. and M. Storper, eds. *Production, Work and Territory: the Geographical Anatomy of Industrial Capitalism*. Boston: Allen & Unwin.
- Lowe, Philip, Terry Marsden and Sarah Whatmore. "Changing Regulatory Orders: the Analysis of the Economic Governance of Agriculture" in Lowe et al., eds. *Regulating Agriculture*. London: David Fulton, 1994.
- Mann, Susan Archer. *Agrarian Capitalism in Theory and Practice*. Chapel Hill: University of North Carolina Press, 1989.
- Markusen, Ann. *Profit Cycles, Oligopoly, and Regional Development*. Cambridge: MIT Press, 1985.
- Marsden, Terry. "Exploring a Rural Sociology for the Fordist Transition." *Sociologia Ruralis* XXXII(2/3): 209-230, 1992.
- Marsden, T. and A. Arce. "Constructing Quality: Emerging Food Networks in the Rural Transition." *Environment and Planning A* 27: 1261-1279, 1995.
- Marsden, Terry and Neil Wrigley. "Regulation, Retailing and Consumption." *Environment and Planning A* 27: 1899-1912, 1995.
- Mergentime, Ken and Monica Emerich. "Organic Sales Jump Over \$2 Billion Mark in 1994." *Natural Foods Merchandiser* 16(6): 74-76, 1995.
- Mooney, Patrick H. "Toward a Class Analysis of Midwestern Agriculture." *Rural Sociology* 48(4): 563-584, 1983.

- Nicolas, François and Egizo Valceschini, eds. *Agri-Alimentaire: une Économie de la Qualité*. Paris: INRA, 1995.
- Offe, Claus. "New Social Movements: Challenging the Boundaries of Institutional Politics." *Social Research* 52(4): 1985.
- Page, Brian and Richard Walker. "From Settlement to Fordism: the Agro-industrial Revolution in the American Midwest." *Economic Geography* 67: 281-315, 1991.
- Piore, Michael and Charles Sabel. *The Second Industrial Divide*. New York: Basic Books, 1984.
- Sayer, Andrew and Richard Walker. *The New Social Economy*. Cambridge, MA: Blackwell, 1992.
- Schilling, Elizabeth. "Organic Agriculture Grows Up." *California Journal*: May 1995
- Scott, Alan. *Ideology and the New Social Movements*. London: Unwin Hyman, 1990.
- Sylvander, Bertil. "La Qualité: du Consommateur Final au Producteur." *Études et Recherche Systématique en Agraires Développement* 28: 27-49, 1994.
- Warde, Alan. "Industrial Restructuring, Local Politics, and the Reproduction of Labour Power." *Society and Space* 6: 76-96, 1988.
- Watts, Michael. "Life under Contract" in Michael Watts and Peter Little, eds. *Life Under Contract*. Madison: University of Wisconsin, 1993.
- Weber, Max. *From Max Weber: Essays in Sociology*. H.H. Gerth and C. Wright Mills, eds. New York: Oxford University, 1946.
- Wells, Miriam. "The Resurgence of Sharecropping." *American Journal of Sociology* 90: 1-29, 1984.
- Whatmore, Sarah. "From Farming to Agro-business" in R. Johnston et al., eds. *Geographies of Global Change*. London: Blackwell, 1995.
- Williamson, O. "Calculativeness, Trust and Economic Organisation." *Journal of Law and Economics* XXXVI, 1993.