

The Dynamics of Alternative/Sustainable Economies: Modes of Governance as Everyday Forms of Collaboration

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Abstract

A major strategy in the creation of sustainable economies has been the establishment of alternative market institutions. However, the dynamics of these markets are poorly understood. What are the rules of behavior by which these markets function? How do these markets maintain their separate identity as “alternative” and apart from the conventional (“free”) market system? Building on Lyson’s notion of civic agriculture interpreted as a “mode of governance” (Bulkeley, et al, forthcoming) and through a micropolitics of collaboration as developed in the discipline of science studies, we see modes of governing as forms of collaboration that focus on the particular material objects created by those collaborations (Rhineberger, 1997). We will then illustrate the use of these tools through an extended case study of the mode of governance in the national organic market, looking specifically at the current governance crisis in organic: the Harvey case.

Recent assessments of the politics and potentials of sustainable economies have focused on the role of alternative market institutions, the establishment of “economic alterity” (McCarthy, 2006). Nowhere is this more prominent than in more recent work on alternative food systems, which has emerged from the more obscure study of alternative forms of consumption that comprise 3-5% of all food purchases to a more prominent role as the topic of focus for studies of alternative – sustainable, local, and/or fair -- economies as a form of resistance to globalization. As a result, the somewhat parochial interests of rural sociology, rural geography, and food studies have become the major empirical research topic of the sustainable economy movement (see McCarthy, 2006 for an overview). These analyses of have included the studies of direct marketing, farmers’ markets, Community Supported Agriculture (CSAs), organic, local and ethical or “fair-trade” markets as models of alternative, sustainable forms of economic governance in the more academic literature and as model forms of marketing alternatives for economic development in the policy literature. In science studies terms, one might describe alternative food networks as the “model organism” of research in alternative economies.

The definition of alternative food networks as the iconic ideal for the study of alternative economies, however, has not gone entirely unchallenged. Many have challenged the claims of true economic alterity in alternative food systems, arguing that the promises of sustainability, equality and local empowerment need to receive careful, if respectful, scrutiny (Guthman, 2004a; Allen and Kovach, 2000; DuPuis and Goodman, 2004). Ironically, many of these more critical analyses of alternative food networks has come from one particular institution: UC Santa Cruz, a university that exists in ground zero of the major organic agriculture regional agglomeration in the US, a place which includes some of the major “conventionalized” organic agriculture firms such as Earthbound Farms (founded by UCSC alumni) (Guthman, 2004a). The “Santa Cruz School” of alternative food systems argues for a clear-eyed view of alternative economies that will avoid the pitfalls of past romantic utopian panaceas, creating a more pragmatic, if imperfect, realist politics that hold up better than the alternative social movements of the past (from Fruitlands to Food Coops) (DuPuis, 2007).

It is time, however, for both those more positive and those more skeptical to admit that the micro-political dynamics of alternative markets are poorly understood, to say that it is time to ask the empirical

and micropolitical question: “What are the rules of behavior by which these markets function? How do these markets maintain their separate identity as “alternative” and apart from the conventional (“free”) market system?” Using data from (1) the internet, (2) other media outlets and (2) government documents on the Harvey case, we will attempt to answer this question, drawing upon the insights of science studies, sociology of knowledge and a the broader literature on market governance as our framework as laid out below. Our answer to the question is as follows: alternative economies, unlike conventional economies, are created and re-created on an everyday basis through forms of civic engagement. Drawing upon Scott’s idea of “everyday forms of resistance” we argue that there is also an “everyday form of alterity” that deserves more careful study. This paper is therefore one of a set (and one of a set of chapters in a book) on the “dynamics of alterity.” The book will begin with a discussion on how to frame a study of the dynamics of alterity, the beginning of this paper providing a draft of that discussion. The chapters will cover four specific cases of everyday alterity creation: milk market orders, organic strawberry production, farmers’ markets and the case discussed here: the Harvey lawsuit and the National Organic Program.

Framing Alterity

The literature on collaboration, conventions, modes of governance, networks and “worlds of production” (Morgan et al., 2007) are useful to creating an intellectual framework by which to articulate everyday processes of alterity. Bulkely et al’s concept of “modes of governance,” seeks to understand “the rationalities, agencies, institutional relations, and technologies of governing that coalesce around particular objectives and entities to be governed” (Bulkely, Watson and Hudson, forthcoming). A mode of governance is therefore a set of rules, a set of knowledges (“rationalities”) and a structure of collaboration for day-to-day decisionmaking. We see strong relationships between modes of governance as a concept and convention theory, which “proceeds from the assumption that any form of coordination in economic, political, and social life (such as that which exists in chains and networks) requires agreement of some kind among participants (as opposed to simple imposition of power relations by one dominant party)” (Morgan et al., 2006). Convention theory lays out different logics of collaboration, from

industrial to civic (Lyson, 2004) to environmental, and convention theorists “suggest that social scientific analysis should examine the way different cultural formations weave together the differing combinations” (Morgan, et al., 2006).

None of these frameworks, however, provide an adequate conceptual apparatus by which to examine alterity as an everyday practice, as a micro-dynamics. Both Goodman and DuPuis (2000) and Hess (2007) argue that the conceptual tools of science studies can be useful to study alternative food systems. We therefore utilize conceptualizations of alterities developed through studies of the emergence of new forms of scientific practice to understand alterities in economy.

We therefore draw upon work which examines the micropolitics of collaboration in science studies. We rely on Science Studies frameworks not because we think markets are scientific but because as a discipline it has gone farthest in terms of understanding micro-processes of interactive collaboration and concomitant requirements for trust and credibility. There is very little work outside of science studies that looks as closely and as intensively at the processes of network collaboration and the creation of objects through that collaboration. It is therefore useful to borrow these concepts, generally used to describe laboratories, to understand how civic processes of collaboration create alternative markets and the objects of value in these markets.

From a science studies perspective, the notion of “experimental field” (Rhineberger, 1997) or (drawing upon Bourdieu) “research field” (Hess, 2004) describes forms of collaboration and the particular material objects created by those collaborations. An experimental field is not just a set of regulations. It is the process by which the field of possible actions is formed, the underlying formal (legal) and informal (community consensus) authority upon which the field of action is based, who gets to form them, how they are implemented, the social world they create in terms of both the subjectivities of the actors and the material objects that are produced. We see the concept of “experimental field” as parallel to the concept of “regime of practice” in modes of governance, but one which takes this concept to a more micro-level in terms of examining the practice of creating alterity as a new “field.”

Much of what has been written about organic governance to date has involved exposing the dilution of organic by industrial interests (Mutersbaugh, 2005; Guthman, 2004a). These studies show

how industrial capitals have a desire “to outflank’ the biological systems that traditionally have lain at the heart of food production” (Murdoch et al. 2000). Conversely, rural development strategy work, particularly in the EU (Morgan, et al., 2006), has focused on alternative food systems as providing countervailing power to less powerful food systems actors, particularly consumers and smaller producers. While we agree that the political economy of organic is important, especially the issue of large-scale industrial food company power in overtaking and “watering down” what is considered “natural” in organic, the story we seek to tell is different. We seek to focus on the process of creating the alternative organic market as an experimental field, or, in mode of governance terms, a “regime of practice,” “through which rationalities, technologies, authorities, and subjectivities are created and sustained” (Bulkely, et al, forthcoming, p. 5; see also Dean, 1999). Rather than, like conventions theory, typologizing various multiple logics of production, such as “local” and “trust-based” or “environmental,” we conceptualize these logics as emerging from civic processes. The focus on modes of governance is therefore concerned with the processes of how we govern ourselves rather than specific judgments about whether or not we govern ourselves through one or another logic (while Foucault asked the first question, his own work often focused on the second). For example, we do not judge whether or not organic is truly “environmental” and focus instead on the processes by which market actors believe in the legitimacy of organic as “environmental” through the legitimacy of governance. In this way, we take an “imperfect politics” (DuPuis, 2001; DuPuis et al., 2006) approach which observes the logics of alterity as “co-produced” (Jasanoff, 2004) along with the alternative system itself.

Countervailing strategies used as a rural development tool require the kinds of information and understanding of the process of alternative market creation and maintenance we seek to provide here. The current rural development understanding of alternative markets tends to assume that markets niches are “out there” simply waiting for someone to discover them. That perspective also tends to see actors in the chain as involved primarily in a private set of bilateral – one-on-one -- interactions to meet pre-determined, private demands. From the modes of governance/experimental field perspective, the organic market is not “out there” a priori, but is created by the set of institutional practices of social interaction embedded in larger fields of authenticity, authority, credibility, and the possibilities and impossibilities of

institutional structures.

In other words, this study is not concerned with the creation of an “authentic” organic system; it is concerned with how notions of authority, fairness and credibility are created and destroyed in the practices around the creation of alterity, in this case the US organic market. If people – particularly consumers, although also farmers -- think governance is unfair, they may exit the system and thereby threaten the continued existence of the market as a field. Alterity depends upon active participation of actors. This perspective builds upon the notion that organic and other alternative food systems are built around the creation of networks of trust (Whatmore, XX). However, as Goodman and DuPuis (2005) have argued, "trust" tends to be "black-boxed," as a concept that is evoked but not closely examined as a process. Jessop (2002), in his identification of multiple modes of governing, called trust-based systems modes of “unconditional solidarity.” Organic, we would argue, depends on solidarity but it does not have the benefit of unconditionality. It must remake its credibility in continual practice, what we call a “credible solidarity.” As Lyson’s (2004) work has shown, the credibility of solidarity must be maintained through civic practices that maintain the solidarity and the legitimacy of market actors. It is therefore necessary to open up the black box of trust and solidarity to understand the micro-politics of alternative networks. Understanding modes of alternative market governance is one way to do this, to thereby understand how and when the rules of interaction are set in ways that allow the maintenance of notions of fairness and trust.

To put it more simply: because of the need to maintain legitimacy and solidarity, alternative markets actors engage in ongoing processes of civic deliberation (DuPuis, 2006; Lyson, 2004). It is clear that the vitality of organic markets and local depends on maintaining its “civic” nature, that is, its openness to ongoing public deliberation about the goals achieved through the maintenance of organic standards (Lyson, 2004). Otherwise, consumers will become doubtful as to why they are paying a premium or otherwise going out of their way for organic and local products. This paper will therefore attempt to open the black box to understand the issue of credibility in the creation of alternative market governance. The first section will lay out the notion of governance as a process and the role of legitimacy in that process. The second section will look closely at the construction of legitimacy in alternative

markets. Finally, we will illustrate the use of these tools through an extended case study of the mode of governance in the US National Organic Program, looking specifically at the current credibility crisis in organic: the Harvey case.

Collaboration and Governance

According to John Humphrey and Hubert Schmitz of Britain's Institute of Development Studies, governance is "the inter-firm relationships and institutional mechanisms through which non-market coordination of activities in the [marketing or "value"] chain is achieved." (iv). In other words, "markets" here do not necessarily mean just buyers and sellers, it also means a network of other actors that affect the exchange of commodities, along the value chain including government (both as regulators and as rural development policymakers), NGOs, business and citizens lobbying groups, and consumers, organized or not.

However, alternative marketing strategy is more than just a matter of producers discovering a group of consumers who wait in desire for a pre-defined alternative product. Instead, the modes of governance perspective sees markets as dynamic processes based on social interaction. A number of recent studies of organic and alternative agriculture have found that these systems are more "civic" in nature than conventional markets. For example, Thomas Lyson (2004), Neva Hassenein (1999) and Michael Bell (2004) have shown that alternative agriculture is a dynamic, interactive process that relies on civic engagement. The idea that civic engagement is a part of market governance combines two major sociological perspectives. First are the notions of civic engagement most prominently put forth by Robert Putnam (2001) and Robert Bellah (1996), building strongly on the sociological theories of Alexis de Tocqueville. Research by economic sociologists has also demonstrated that markets are socially "embedded": creations of their particular social and political context (Granovetter, 1985). The creation of market governance rules is therefore a social activity. Ideas about civic engagement often include talk about a "public sphere," a social arena in which people discuss possible social rules of interaction,

including rules of governance.

If one looks at organic agriculture from a modes of governance perspective, one can also argue that organic marketing strategies will always include public deliberation and that the vitality and growth of these markets will always depend upon democratic engagement. The creation of alternative markets involves negotiations over the way commodities are made and sold, and "supply" and "demand" is the mutually-constituted product of these interactions. Civic markets are those that are created through this transparent public conversation. Because both trust and solidarity are important to the maintenance of participation in alternative markets, modes of governance in alternative markets are more "civic" than conventional markets. However, this observation is not unique to the food sector. For example, social scientists have studied the ways in which water and electricity markets are civic markets, with rules of transaction set through public processes that are participatory (Pechman, 1993; Haddad, 1999). As students of the history and political economy of agricultural market institutions have noted, private, bilateral contract markets have largely replaced the traditional, more public and transparent, auction-based markets for agricultural commodities (Lyson, 2004). "Civic markets," in some ways recalls the earlier public market era but also describes a newer, more public form of exchange in which the rules are transparent and are generally open and negotiable by a larger group of buyers and sellers.

From this perspective, it is possible to see that each alternative market has its own mode of governance; that is, each follows a distinct set of rules, including rules for public deliberation. Each kind of market governance has its own civic dynamic, which will affect how and whether these markets will grow and/or maintain themselves. These social contexts are the product of particular agreements between actors who are both buyers and sellers as well as members maintaining (or failing to maintain) the necessary credible solidarity in the public sphere.

These instances of credible solidarity also have their own embedded controversies, their own ways in which fairnesses and unfairnesses arise. In particular, alternative markets work by creating a separate identity for themselves through the setting of market boundaries. Part of the process of boundary creation involves exclusion. "Boundary conflicts" (Hess, 2007) can arise, which can threaten the legitimacy of these markets. Boundary conflicts also result in "object conflicts" in which the

controversies about boundaries are reflected in the creation of the objects themselves as inside or outside the experimental field. If exclusion is seen as illegitimate, then these alternative modes of governance will lose legitimacy, or at least fail to engage more than a small niche public. The extent to which each of these alternatives markets expand is to a great extent dependent on whether or not buyers and sellers find them worth participating in – credible -- because they perceive these markets as offering a more attractive — or more fair — deal.

Civic Markets as Boundary Work and Object Creation

To talk about the civic creation of alternative markets requires an in-depth understanding of the process of the civically-engaged, collaborative creation of these markets. Science Studies approaches to the creation of experimental/research fields, epistemic objects and object conflicts provides useful concepts that can be applied to civic markets as “exchange fields” that create objects of value dependent on the credibility of the field.

Science Studies researchers look closely at how scientists collaborate (and compete) to create forms of scientific knowledge. These collaborative processes, the networks of scientists involved in these processes, and the material culture both acting within (Latour and Woolgar, 1986) and created by these processes are what comprise the “experimental field.” A number of studies looking at experimental fields have shown that the object of study is created through this process, whether it is a “model organism” (Keller, 2002) or a new scientific concept (Rhineberger, 1997). The organic commodity as an object with economic value does not exist without the processes of boundary work necessary to make a distinction between this object and the objects of the conventional system. Only with the collaboration necessary to create this “symbolic capital” (Bourdieu, 1984) can the organic object gain credibility – and therefore greater value -- in the eyes of consumers and greater value-added for the producer, because the consumer is willing to pay this value.

“Boundary work,” in science studies, is a concept that describes the work that people do establishing, maintaining and struggling over the existence of boundaries between what is considered

science and what is considered not science (Gieryn, 1999). This idea has been extended to encompass work on the preservation of other forms of symbolic, technical, and social boundaries (Lamont and Molnar, 2002). “Object conflicts” (Hess, 2007) describes the contentious politics around the collaborative creation of objects in a field. We argue that many aspects of civic markets, as alternative markets outside of conventional trade, concern the often contentious public political discussion about the setting of market boundaries, that is, the determination of who can participate in the market and who cannot, of who is “conventional” and who is “alternative,” whether the alternative is defined by locality (such as Napa wines or French Terroir), process (such as biodynamic), or actual market venue (such as who gets space in the local farmers’ market or the local food coop).

Not all market boundaries are between conventional and alternative forms of exchange. For example, milk market orders demarcate which processing plants (and their dairy farmer patrons) are participants in the fluid milk market and which are outside of this market (DuPuis and Block, forthcoming). In some cases, the market is an actual market, like the milk market or the farmers’ market, while in other cases (such as locality or organic) the market may be a niche segment in a broader market, such as organics sold in a section of a grocery store. In either case, there is a determination of market membership, in terms of who is allowed to participate in an exchange based on a particular market value, such as organic or fair trade. The marker that represents this determination is usually a label, which signals to the consumer that the product – generally sold at a premium, promises a particular value not promised in conventional trade (Guthman, 2004a). The participant in this exchange gains a commodity but also a “value-added” – the organic nature of that commodity. Yet, what that organic nature consists of is an object of struggle and the establishment and stabilization of the organic commodity as an object is important to the creation of the alternative system.

Necessary to these civic processes is the notion of credibility, or legitimacy. The creation of an object of value requires a belief by the consumer that the object is in fact worth paying more for. In science studies, the process of boundary work involves contentious discourse about what can count as scientific knowledge and what cannot. It is tied in to notions of who is a legitimate scientist as the creator of that knowledge (Gieryn, 1999; Lamont and Molnar, 2002). Therefore, boundary work is a kind of

creation of “distinction” (Bourdieu, 1984) that gives credibility and authority for “legitimate domination” (Weber, 1947) to the object created and to the creator of that object. Without this process of boundary creation, the alternative market cannot exist as a market that repays producers for the creation of greater value.

It is common to hear today that the organic market is facing the possibility of a credibility crisis through loss of consumer confidence (Sassatelli and Scott, 2001). Questioning articles are turning up in the US mainstream new media, with quotes such as the following: “The corporate takeover of organics, some say, is eroding the ethic that many take for granted as they throw an organic zucchini into the grocery cart” (St. Louis Post-Dispatch, March 4, 2007, pg. A1). Without that confidence, the organic market ceases to exist. Struggles over the boundaries between organic and nonorganic and struggles over the construction of the organic object can be seen as struggles for the creation of legitimacy necessary for the continued existence of the organic market.

Nowhere is this struggle more evident than in the current controversy over the Harvey lawsuit. The ideas of boundary work and object of value give us significant tools to analyze this case in a way that puts the process of civic politics of organic credibility into clearer focus. The next section will outline the history of the Harvey case. The subsequent section will tell a careful story about how this case illustrates the ways in which the organic market is a civic market that engages in both boundary work struggles and struggles over the organic object. These struggles are public and political. We argue that the extent to which these struggles are seen by the public as a civically engaged process – that is, a process of open participation in the public sphere – defines the ability to create the organic object as a credible object of value in this alternative market.

Our view of organic markets as civic markets and the creation of organic objects is therefore counter to notions that organic is a set of standards that are simply set and followed. Akin to the recent critiques of organic production as standard vs. process in agricultural production (Guthman, 2004), we see the creation of the organic object on the consumption side as an ongoing civic process that remains open-ended rather than the a priori creation of a set of static standards and the following of those standards. On the production side, Guthman has argued that the conventionalization of organic agriculture through the

cooptation of organic production by large industrial agriculture is conjoined with the creation of organic as simply a set of standards to be followed – a system that creates the ability to meet standards through industrial processes. Instead, both Guthman and Vos (2000) argue that a definition of organic agriculture in terms of production processes could have created a different kind of production economy not open to conventionalization. We therefore argue that the very existence of organic as a form of alternative market depends as much on maintaining civic processes of interaction between consumers and producers as it does on maintaining active processes of interaction between farmers and nature.

From a political economy perspective, the maintenance of organic object production in the realm of consumption as a ongoing and interactive process challenges the ability of large scale industrial food processors attempting to gain power in the organic value chain. In the struggle over boundary setting and over the creation of the organic object, the representatives of the industrial food processors have acted on behalf of a socially static standards-based definition of organic. To do this has involved significant moves against a civic, democratic definition of organic and the diminishment of democratic processes of organic alternative market creation. As the Harvey case study will show, this anti-democratic definition of organic is increasingly leading this alternative market into a credibility crisis.

Background to The Harvey Case

The organic food movement began with a focus on ecologically sound agricultural production processes (Guthman 2004, Vos 2000, Goodman 2000). As organic food has gained popularity it has taken on multiple identities as the product of a movement, a small niche market, and the fastest growing food sector in the country (Klonsky 2000, Warner 2005). In response to the rapid expansion of this food sector the USDA developed standards, certification and labeling practices to eliminate consumer confusion in the marketplace (OFPA 1990). The Organic Foods Production Act of 1990 put into place the legal mandate for the formulation of a national set of standards that defined what agricultural products could be certified as organic. Previous to this legislation, private and state entities certified products as organic according to a variety of standards set at the state level.

The legislation also called for a board, called the National Organic Standards Board (NOSB) to resolve issues involved in the setting of these standards. The NOSB has represented the center of civic discussion about issues of process and boundary setting in the organic market. It is a standing board that meets regularly and considers various publicly proposed changes to the organic standards, based on board members' interpretation of the legislation. Part of the NOSB mandate was the formulation of a national list of synthetic substances that could be used by organic farmers. As processed food corporations entered the organic market, they increasingly petitioned for various food processing additives to be added to this 'national list'.

The development and implementation of these standards was a highly contested process. USDA attempts to allow the "Big Three" (irradiation, sewage sludge and genetically-engineered organisms) into organic production moved the debate into a battle between movement advocates and the USDA that saw "organic products as commodities while ignoring the socio-ecological processes and practices of organic production" (Vos 2000). Though grassroots organizers and organic movement activists emerged triumphant in eliminating the "Big Three," before the release of the final rule, negotiations of what else may or may not be included within the organic standards were, until the Harvey case, carried out through the NOSB. The product versus process debate has shown up in NOSB deliberations over the addition of synthetic substances and nonorganic ingredients into the processing of organic foodstuffs.

On the production side, increased popularity and the institution of minimum standards has created a paradox in organics. More large-scale, input-output oriented industrialized growers have entered into organic production seeking the economic rents that come with the high-value produce making it difficult for 'movement' growers to compete while adhering to the process-based ecologically-oriented farming methods that organic practices sought to establish (Guthman 2004). Further, the economic rents are shifting away from competing growers selling for less and toward retailers receiving the high prices paid for organic food (Guthman 2004). The scaling-up of production processes in organics has also begun to run into contradictions between the notions of quality that organics are purported to embody and the more and more industrial processes that bring these products through the marketplace and to consumers.

Contestation to the 'product-based' focus has been precipitated, in part, by the filing of a court

challenge by a Maine organic blueberry grower and professional certifier, Arthur Harvey, against the USDA and the subsequent reactions of consumer and industry representatives to the Harvey rulings. Harvey successfully argued that the allowance of synthetic materials into production contradicted the mandates for standards set by the Organic Food Production Act (1990).

Harvey filed his case against the USDA in 2002, after the organic standards became law. He challenged the integrity of the organic standards, alleging that multiple provision establishing standards contained in the USDA's National Organic Program's Final Rule (2000) were not consistent with the original legislation: the Organic Foods Production Act of 1990 (OFPA). Harvey appealed his initial loss on all counts and the suit culminated in a ruling issued on January 26, 2005 (Harvey vs. Veneman, Harvey vs. Johanns). On that day, a Maine Appellate court ruled for Harvey on three of the nine counts (counts 1, 3, and 7) he brought against the USDA. While count 7, on organic feed requirements for organic dairy cattle, has had important ramifications in that sector, this paper will focus on counts 1 and 3.

In the first count filed against the USDA, Harvey argued that the Final Rule allowed for a "blanket exemption" for nonorganic products "not available in organic form." He claimed that current practice exempted them from essential review processes before being placed on the National List of approved substances for organic products. The court agreed with Harvey that, according to the OFPA, clearer guidelines and greater restrictions should be placed on nonorganic agricultural products' usage and demanded that the USDA clarify and follow the procedure for allowing nonorganic products into organic production.

Count three was the most significant filed by Harvey; he succeeded in challenging the allowance of synthetic substances in the production or processing of foods labeled "organic" or "100% organic." Harvey charged that current practices allowing synthetics into production contravened the plain language of the OFPA. The court agreed, finding that the law explicitly forbade the introduction of synthetic additives into production processes. The inconsistencies illuminated by the Harvey case were to be addressed by drafting new clarified NOP regulations within two years.

This ruling led to a scramble in which various organic market actors -- USDA regulators, the NOSB, the Organic Trade Association (OTA), certifiers, farmers and consumers -- argued for or against

the decision and for or against various resolutions of the challenge. Interested parties disagreed on whether to amend the OFPA in Congress, through USDA regulatory action or to resolve the contradiction through the National Organic Program's (NOP) rule-making process that is open to public comment. That decision never needed to be made.

While Harvey declared the case a victory for small-scale organic producers the OTA, the leading organic industry group, called the Harvey case a "court ruling [that] found a few technical inconsistencies between the 1990 organic law and the final standards" (OTA 2005b). They subsequently helped to craft a piece of legislation, known in the industry as "the OTA rider," to be attached to the 2006 Agriculture Appropriations Bill; it was signed into law on November 10, 2005. Without opportunity for public input, the legislation altered the OFPA to comply with the Final Rule as it stood, rendered the Harvey ruling moot on counts one and three, thereby allowing for the admittance of synthetics and nonorganics in production processes while altering important procedures for their allowance.

The Organic Market as a Civic Mode of Governance

At the heart of the Harvey controversy and its fallout was a concern over the process by which the standards for organic food production as they related to the 'national list' would be reconstructed. There are two main kinds of substances that get placed on the national list in order to be allowed in organic foods production: nonorganic agricultural products and synthetic materials. The first count deals with the former; the third with the latter.

The Harvey lawsuit was not the first time that concerns over 'national list' procedures had been addressed. In 2004 Jim Riddle, the former chairman of the NOSB, wrote an open letter to the Secretary of Agriculture asking USDA's NOP to restore the "due process" in standards rulemaking. Citing several examples Riddle argued that the USDA had not complied with the OFPA because it had not incorporated NOSB or public input when deciding on whether certain substances should be placed on the National List of allowable materials. In summary, Riddle wrote, "I urge you to ensure that the NOP actually do what it is supposed to do under the OFPA and require that proper administrative procedures be followed when

new policies, letters, and directives are formulated and new technical advisory panels are contracted.” The USDA did not immediately comply with Riddle’s requests. They were, however, forced to by the court’s decision in favor of Harvey on the first count.

A closer examination of the Harvey case shows that the credibility of organic is dependent on its mode of governance as a complex and deliberative civic process rather than the simple setting of the standard. Representatives of industrial agriculture were dependent for their participation in market growth through the defining of organic as simply as standard and in the denial of the needs for ongoing processes of governance. The retention of a deliberative mode of governance, however, was necessary to define, on an ongoing basis, what exactly is to be communicated by the organic label. In particular, this deliberation needs to pay attention as to whether or not changes to the organic standards might serve to legitimize or de-legitimize the credibility of the market based on what is included in the definition of the ‘organic object’. The next section describes the struggle between parties defining organic as a standard and those who had a more deliberative definition of organic as an alternative mode of governance. This section shows how the definition of organic differs between those with a process vs. those with a standards-based conception. Those with a process-based definition contend that attention to organic as a deliberative and civic mode of governance is necessary for its legitimation and survival. Those with a standards approach see the standards as a static definition of organic in which individual companies petition for exemptions to the rule.

In the creation of marketable objects, the “practice” by which those objects get made has not been fully understood. Science studies looks at science in “the context of practice” where “the quest for the social context of practice commences” (Rheinberger, 1997: 17). In the same way, the creation of organic as an epistemic object can be seen in the context of practice – in this case public, civic, practice taking place in the government, agency and legal arenas. Rheinberger (1997) sees the experimental system as an epistemological practice, a practice of creating knowing, of knowledge production. In the same way, the creation of organic is a process of creating what we know as organic, it is both material and epistemological.

Organic as Boundary Work and as Epistemic Object

Many researchers have argued that consumers, in the market arena, have the ability to express their preferences with a hope to create change in a marketplace or beyond. In terms of standing, the power of the consumer in the market is reflected also in the legal arena. Indeed, Arthur Harvey – while both a producer and a certifier – did not have standing in the case in these capacities. Instead, he received his standing in court as a consumer concerned about the quality of organics communicated by the label (Harvey v. Veneman 2005). Therefore, the boundary work around the creation of organic also creates boundaries around who can, and cannot, do this work in which arena. In the agency arena, the National Organic Standards Board, representing different actors in the organic food system – farmers, processors and consumers – had power over the definition of the market boundary. In Congress, the rider proved that the party with standing – with the ability to affect change – were the representatives of large food business, as represented by the Organic Trade Association. Boundary work in the creation of organic food involved all of these parties working in all of these arenas.

When the USDA's NOSB (1995, authors' emphasis) drafted the definition of organic, they focused on production processes that were to be represented in the label:

Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity... The principal guidelines for organic production are to use materials and practices that enhance the ecological balance of natural systems and that integrate the parts of the farming system into an ecological whole. ...Processors and retailers adhere to standards that maintain the integrity of organic agricultural products...that optimize the health and productivity of interdependent communities of soil life, plants, animals and people.

This quote, along with Riddle's letter above, are illustrative of the NOSB's awareness that boundary work takes place both in the distinction between what is organic and what is not as well as in their understanding that the production of organic foodstuffs is composed of a process that includes processors and retailers so long as they are aware that it is in fact a process. Friends of the court, in the Harvey case, aware of the NOSB's important role, argued that the OTA rider threatened the status of the NOSB as an ongoing arena for civic discussion about the boundaries of organic: "...organic farming and food handling

to continue to evolve. As a consequence, Congress left some gaps in the law. Congress specified the public, participatory process that was to be used to fill in the remaining details of the requirements of the organic certification program authorized by OFPA. In addition to formal rule-making, that process included appointment by the Secretary of a 15-member National Organic Standards Board (“NOSB”) to develop a proposed “National List” of (1) natural substances prohibited in organic farming and food handling, (2) synthetic substances allowed in organic farming and (3) non-synthetic substances allowed in organic food handling, even if not organically produced. 7 U.S.C. §§ 6517 and 6518. The NOSB was also to make recommendations to the Secretary on other aspects of organic program.”

The OTA, ascribing to a more standards-based logic, drew the market boundaries large and loose. They saw their own relationship to market competition as between the alternative organic market and the larger ‘conventional market’: “Market led growth is only possible if organic farmers and processors compete on level ground with nonorganic farmers and processors” (OTA 2005c). In contrast, other economic actors expressed concern about the credibility and goals of the organic market itself. In an interview with a Maine newspaper, Arthur Harvey characterized his challenges to the USDA as a move that would be largely a benefit to small farmers, rather than the “factory farmers” who have been rapidly entering into the organic market seeking the economic rents associated with the high value produce (cite).

Contrasting this position and foreshadowing the upcoming rider that would overturn main provisions in the decision, the OTA characterized the Harvey case as highlighting “technical inconsistencies” in the market-facilitating standards that were implemented in 2002 (OTA 2005b). This position aptly represents, the executive director of the OTA, Katherine DiMatteo’s opinion that the standards should “remain intact to minimize disruption and marketplace confusion and to protect the growing marketplace for organic farmers” (ibid). Subsequent to the Harvey rulings, the OTA worked for months on what they called “a discreet, very limited, legislative action” that would restore their notion of “strong organic standards,” a process that revealed the relative relational powers at play (OTA 2005a). Although their “discreet” process of standards-making clearly did not incorporate any sort of public input or deliberation, their lobbying did not take place in isolation: the OTA’s network extended into congress. The New York Times (1 November 2005) reported on the OTA rider and the rapid growth in the organic

industry; by calling attention to Abigail Blunt, they highlighted the reach of the industries' network. Mrs. Blunt, lobbying on behalf of Altria (owner of Kraft foods and Phillip Morris) and consequently OTA, is married to then interim House majority leader, Representative Roy Blunt. Though this was not necessarily the cause of the rider's passage, this form of lawmaking is representative of methods that would challenge the legitimacy of the boundaries around organic as epistemic object.

While the OTA may have been correct about the close relationship between the court rulings and the marketplace, they failed to recognize or moved to obscure the contentious nature of that market's construction through a deliberative mode of governance. The OCA described the most explicit challenge to a deliberative mode of governance in organic standards as the authorization for the creation of "emergency procedures" included in the OTA rider that authorize the USDA secretary to create and use an expedited process to for the addition of nonorganic agricultural substances not "commercially available" (CITE OCA). These new procedures could circumvent the usual NOSB consultation and public comment that Riddle argued for in his 2004 letter. In other words, in addition to nullifying the majority of Harvey's successful court challenges, the OTA rider also has potentially changed USDA mode of governance for the management of the boundary between organic and nonorganic commodities via the rules for substance addition to the National List (Squires, LA Times, 2006).

As mentioned, and as is the case here, particular emphasis was placed on the procedure and guidelines that would govern the boundary work done to establish the organic products for market for deciding what is or is not allowed onto the National List. The next section looks specifically at the creation of the epistemic object, that is, what practices, such as boundary work, enable objects to gain an identity as organic and how the legitimacy of the object is maintained through a civic process of collaboration and deliberation and degraded when those processes are dominated by particular powerful actors, specifically mass market organic companies.

According to the court's ruling for Harvey on the first count (not overturned by the OTA rider), certifiers of organic products would no longer be able to provide a "blanket exemption" for using nonorganic agricultural products in organic foodstuffs when they determined an organic alternative to be not "commercially available". Despite this victory on count one and amendments requiring proper

procedure in the addition of nonorganic agricultural products, the struggle over the construction the organic object has far from finished. Instead, the process of NOSB review and public comment is to be followed as each nonorganic ingredient is added to the national list. In order to avoid disruptions in the marketplace stemming from the prohibition of these materials and the requirement that they be reviewed, organic food processors were given two years after the enactment of the ruling to comply; this deadline came on June 9th, 2007. On this date, if no further action had been taken, products bearing the organic seal that included previously certifier-approved nonagricultural products not on the National List would be rendered non-compliant with USDA organic standards.

Since the Harvey rulings, organic food processors have been busily petitioning the NOP for the addition of nonorganic minor ingredients to the National List of allowable substances. A “minor ingredient” can comprise only 5% of an organic product. In response to industry requests for the continuation of use of over 600 nonorganic minor ingredients in organic food production, the USDA and the NOSB decided to allow 38 nonorganic minor ingredients. In order to quickly approve these 38 substances and avoid lapses in compliance for the products in question the USDA initially determined that a public comment period of a short seven days would be sufficient. In one week, the USDA received approximately 1,250 public comments; some of which expressed concern about the extremely short public comment period. In response, the USDA lengthened the public comment period to 60 days (not concluded at the time of this writing).

The way in which boundary work creates epistemic objects is best illustrated through examples. Below, we look at three exempted nonorganic objects from the list of 38 minor ingredients accepted onto the National List through the emergency procedures: hops, intestinal casings and Inulin/fructooligosaccharides.

Hops

The addition of these 38 substances through an ‘Interim Final Rule’ has sparked much public confusion and controversy over the ‘watering down of organic standards’. One ingredient, determined to be not

sufficiently available in organic form, and therefore on the list of 38, was hops, an essential ingredient used in the brewing of beer. While the National List represents “minor ingredients” in a product – defined as less than 5% of the ingredients in a product, in the case of beer, which is 90% water, 5% most likely represents much of the hops necessary for brewing this product (the other ingredients are grains like barley malt and fermentation ingredients like yeast). Therefore, while the product might be 5% nonorganic hops, it is likely to represent a significant percentage of the remaining the ingredients (that aren’t water). This is a significantly different case from most other minor ingredients on the National List, which tend to be food-based nonorganic flavorings and food colors (such as carrot-based annatto).

The process of determining commercial availability is laid out in the OFPA and requires the processor to document the lack of supply of a particular ingredient in its petition, by showing where and ingredient is made and how much is made (on a global basis) (see appendix). However, whether or not this supply is sufficient depends upon the quantity demanded by producer. Large food producers and processors such as Anheuser-Busch in the case of organic beer production need organic products in such a quantity that they may not in fact be immediately available in such vast quantities.

Such findings elide the question of whether or not the boundaries constructed around the organic market ought to change the definition of organic in order to let such actors participate. As has been well documented and referenced by others (Mutersbaugh, 2005; Guthman, 2004), the entrance of powerful food manufacturers into the organic market has had a tendency to dilute both movement ideals within the market as well as marginalize those who seek to maintain a process-based focus. In the case of the hops exemption, the dilution of standards is clear. The precedent is set for any large-scale processor to demand nonorganic input exemptions if these inputs are not available on a large scale. In other words, any processor could request an exemption to sell a nonorganic ingredient as organic if it comprises less than 5% of the product and if there is no large-scale organic production system that allows for the creation of the quantities necessary for these processors. Needless to say, these exemptions can apply to companies of any size, but only smaller companies had been able, previously, to create organic beer from smaller sources of organic hops. Also, because these smaller processors have been sources organic hops already, they are obliged to continue this sourcing, since they have shown that they have an available source.

They are therefore competing with a higher-priced input against a larger company that now has access to a lower-priced input for its organic beer production. Therefore, for ingredients like hops, that are essential to beer brewing but which comprise a small percentage of the final product, the exemption degrades the value of organic hops in the market. Consequently, Anheuser-Busch can now compete on the same playing field with these smaller beer companies, but with the economies of scale to offer their product to consumers at a lower price, leaving these smaller companies to compete on the basis of price. This will seriously affect the ability of small organic hops producers to survive, since organic hops no longer has value as an epistemic object (with value both as a product and as a concept).

This sleight-of-hand has not gone unnoticed in media discussion about organic: a Los Angeles Times article reported that Anheuser-Busch, in a flier aimed at selling their two new lines of organic beer to wholesalers, urged retailers to “Capitalize on this growing market with Wild Hop Lager and Stone Mill Pale Ale.” (Wilson 2007). The same article went on to report that a smaller producer of organic beer, Milwaukee’s Lakefront Brewery has had no trouble finding organic hops and was confused as to why it was unfeasible for Anheuser-Busch to arrange for their purchase or production; a statement likely contingent upon their small relative size. In addition, vociferous public comments against such actions, even in an extremely short comment period of seven days, showed a strong reaction against the addition of nonorganic hops to the list (USDA NOP website)

Intestine Casings

The National List of exemptions includes a bovine product, intestine casings. Under the exemption, nonorganic intestine casings can be used in products labeled “organic.” The Organic Consumers Association, a lobby group, was quick to note in its comments that such an exemption degrades the value that consumers find in organic beef labeling:

Surveys of organic consumers find that a high percentage of beef eating organic consumers choose organic products to avoid diseases associated with conventional meat production. Specifically, the organic beef industry has enjoyed a considerable boom as more consumers are concerned with bovine spongiform encephalopathy (BSE) which has

only been detected in animals raised conventionally (OCA website)

In this case, correctly or incorrectly, consumers have been using the organic system as a form of protection from what many consider a failed inspection system in the conventional beef production sector (while there are many popular media articles following these consumer trends, the most prominent example is probably Pollan, 2002). Yet, while the scientific proof necessary to condemn conventional beef does not exist, organic beef has been able to gain value as an epistemic object created through a collaborative process that would not allow for BSE (and hormone) contamination in the epistemic object, since organic beef requires greater traceability along the chain. Therefore, part of the credibility, and therefore the added value -- of organic beef comes from the (perceived) failings of the conventional beef system. By allowing in a nonorganic beef ingredient, organic meat production has broken the boundary between BSE risk and no BSE risk. This is a significant boundary rupture that could degrade the value of organic beef as a whole.

Inulin and fructooligosaccharides

These are nutraceutical ingredients which were added to the list because of health claims. As the interim final rule states: “The inclusion of this non-digestible carbohydrate is thought to promote a more favorable intestinal microbial composition which may be beneficial to human health” (7 CFR Part 205). Once again, this provides a significant rupture of boundaries, in which a “functional food/nutraceutical” input definition of healthy food replaces the more common organic definition of healthy food as created through pesticide free, sustainable agricultural growing processes. Other exempted ingredients, such as nonorganic fish oil, were allowed because of their use increases omega-3 fatty acids in the product. In this case, the functionality of the food as an input trumps the more process-based definition of healthy commonly associated with organic. However, one board member’s comments illustrate the ways in which the definition of organic differs from definitions of health FOS supporters made substantial claims for the benefits of this substance in terms of calcium uptake and painted dark pictures about the downside

of removing this product from organic food. A nutritionist, Coni Francis, for Stoneyfield Farms, stated statistics for the prevalence of digestive diseases in the American populace, as well as calcium deficiency among children: “Now, if we think that those of us who are in our fifties and sixties are looking at an issue with osteoporosis, I am very frightened about what's going to happen when these children reach their thirties and forties” (NOSB Public Hearing, March 28, 2007). This calcium deficiency story, so familiar to milk industry promoters, was being used to justify the inclusion of nonorganic materials on the National List. However, one committee member rejected this argument, responding: “I think that the side effects of a poor diet are not necessarily the responsibility of organic agriculture” (NOSB public hearing, comment by committee member James, March 28, 2007).

The addition of FOS/Inulin also problematizes other boundaries important to the maintenance of organic standards. First is the boundary between synthetic and non-synthetic ingredients. NOP personnel noted that they began their review of ingredients by trying to make a strong definitional distinction between synthetic and non-synthetic ingredients, as well as agricultural vs. non-agricultural ingredients (NOSB public hearings, March 27, 2007). However, they abandoned the creation of these definitions, leaving the boundary somewhat ambiguous, and leaving NOSB board members uncertain as to how to define certain ingredients. For example, addressing a commentator on flavorings, one board member commented: “When does an organic essence stop being agricultural, after how many cuts and splits? You know, where do we draw a line and so we'll be looking for industry expertise such as yours to help us determine when does something stop being agricultural and become non-agricultural through the distillation process” (NOSB hearings, March 28, 2007, pg 349). Thus non-agricultural/agricultural, and synthetic/non-synthetic ambiguities in definition played on ambiguities between “the natural” and “the artificial” which were so much a part of the birth of the organic movement (Vos, 2000) and contributed to the ambiguities and boundary struggles between organic and nonorganic. In this case, however, the NOSB was giving industry the power to draw the boundary line between the natural and the artificial.

The discussion of FOS also brought to the fore a question of the function of the ingredient. As the discussion developed, it became clear that FOS was not only a nutraceutical, it was also a preservative. As the Stoneyfield Farm representative noted, they had decided to use FOS as an ingredient: “Because it

improves the product, (p 71) as far as now we are shipping more product further. And when it gets handled, you have more whey separation, and so forth. And because of the added benefit of the calcium absorption. With so much competition on the shelves right now, in natural and in mass market, we are much deeper into mass market now, that having, if you have choice between two markets and one says on it, increases calcium absorption by 30 percent, that's a very important claim for our, you know, it's an important attribute for our consumers" (NOSB public hearings, March 27th, 2007). In this comment, it is possible to see once again the ways in which the forces of the mass market as competitor and as requiring a more preserved product for mass distribution bring to the fore new ways of understanding the organic as epistemic object and as formulated through the definition and setting of boundaries.

Conclusion: The Organic Credibility Crisis

Rather than simply "diluting standards" the entry into mass market competition on the part of organic industrial actors has ruptured the boundaries of the organic epistemic object and reoriented the focus of the boundary work between the natural and the artificial. This reorientation has narrowed the debate over the merits of allowable inputs while removing from view the troubling re-ordering the organic object that occurs when the door is opened to different boundary settings. This is also clear in the third count, the challenge of the inclusion of synthetics on the national list, the OTA stated, "The rules themselves are written so that standards evolve as new organic ingredients become available," and "As organic products become available to replace ingredients on the [National] list, OTA will work to see associated synthetics dropped from acceptance" (OTA 2005a). Here, substitution becomes the norm and organic ingredients can be re-substituted for synthetics as an organic version becomes available. The OTA language indicates the priority of input-oriented, product focused (processing) standards contrary to what the voices in the organic food and farming movement have expressed in their agroecological process-oriented construction of organic.

The question here is not whether or not an "authentic" organic object has been degraded. Instead, from a conventions/mode of governance perspective the creation of an object of confidence is a product

of interaction, is “coproduced” as a part of the process of standards creation. The conventional perspective on “standards dilution” shows how industry actors to continue to reap the benefits of a “green reputation” while reducing the risk of a failure to comply with standards (Mutersbaugh, 2005). From a credible solidarity perspective, it is possible to see the specific ways in which the process of boundary work can degrade the epistemic object through questioning its legitimacy.

The agroecological community has responded to the Harvey case by arguing that the changes threatened the continued existence of organic itself. Immediately after Harvey’s successful challenge on three of his nine counts filed against the USDA, Michael Sligh, founding chair of the National Organic Standards Board, said: “Basic principles of good government process and the integrity of the USDA Organic seal were at stake” (CFS 2005). Joseph Mendelson, a representative for the Center for Food Safety (CFS), stated that the Harvey rulings “affirmed the basic principle that no one - not even the United States Department of Agriculture - is above the law” (ibid). However, skeptical of the USDA’s power, and echoing Harvey’s own distrust, the OCA stated: “We do not trust the USDA – because of their long and obvious track record in promoting chemical-intensive agriculture, corporate globalization, and genetic engineering – to determine and police these standards and practices.” Going on, the OCA threatened to create an alternative labeling system “if the USDA and the dominant companies in the OTA continue to ignore consumer and organic community expectations, especially the expectations of small and medium-sized farmers, retailers and companies” (OCA 2005b).

In a ‘Friends of the Court’ brief submitted during the Harvey lawsuit, several sustainable agriculture advocates argued that “consumers and farmers will not accept “exceptions” to the law, and that their reaction to these exceptions could deliver a fatal blow to the organic market. Any lessening in the integrity of the National Organic Program and of the USDA Organic seal will have a deleterious effect upon the options in the marketplace...” (amicus brief). This statement reflects a contestation of the USDA’s construction of a particular organic market inclusive of synthetic processing aids. Not advocating for a particular conception of the NOP law, they instead argue that the market’s credibility itself should be protected through the legislation’s maintenance and suggest that the market would quickly lose meaning for them otherwise (ibid).

Consumer groups continued with this argument in light of the OTA's legislation that amended the OFPA subsequent to the Harvey rulings. As mentioned, the OTA rider attached to the 2006 Agriculture Appropriations Act amended the OFPA without public comment or NOSB input, rather than reworking NOP regulations, a method that would have been subjected to such a process. This action eliminated the need for collaborative negotiation over additives while allowing synthetics back into production processes. At this juncture, the Organic Consumers' Association (OCA) derided the OTA's "sneak attack". The OCA stated, "In the broadest and most basic sense, the OTA rider takes away the organic community's leading role in setting and monitoring organic standards for processed organic foods, and instead places this power in the hands of the USDA and industry" (OCA 2005a).

In response, several organic producers are arguing for an "opt-out" position on organic (Vos, 2000). Eliot Coleman, a Maine farmer and writer renowned for his four-season organic growing practices, has gone so far as to refuse USDA certification altogether. When interviewed about the Harvey case he stated, "When we said organic, we meant local, healthful, mutually respectful growers and eaters... that isn't reflected in the paint-by-the-numbers organic certification" (Maine Biz 25 November 2002). Coleman went on to criticize what he deemed "large, industrial, el cheapo food" and solidified his opting out of a USDA-certified organic agriculture that allows for the addition of synthetic materials to aid in the production of food.

The OTA rider opened the national list to the addition of synthetics and nonorganic ingredients in order to both ensure compliance with standards (when non-compliance would be devastating to the industries' image) and reduce the barriers to entry in the organic market. The high priority of input-oriented organic (processing) standards is clear here. However, in the eyes of many not heard in the rider's passage and subsequent negotiations over the Harvey rulings unchecked allowances of myriad additives into production processes of organic foods threatens the quality of the 'organic object' and the credibility of the market itself. This accommodates the desires of a competitive mass market-oriented production scheme that prioritizes durable, transportable, value-added foods.

In addition to diluting standards, the OTA has reoriented the focus of the discussion. It has been narrowed to a debate over the merits of allowable inputs while removing from view the troubling re-

ordering the organic object that occurs when the door is opened to weakened processing standards in the first place. The OTA states, "The rules themselves are written so that standards evolve as new organic ingredients become available," and "As organic products become available to replace ingredients on the [National] list, OTA will work to see associated synthetics dropped from acceptance" (OTA 2005a). With a discursive slip, synthetics and nonorganics become the legitimized norm for the organic object and organic ingredients can be re-substituted as an organic version becomes available.

References

Bell, M. 2004. *Farming for Us All: Practical Agriculture and the Cultivation of Sustainability*. University Park: Penn State University Press.

Bellah, R. 1996. *Habits of the Heart*. Berkeley: UC Press.

Bourdieu, Pierre. (1984). *Distinction: A Social Critique of the Judgement of Taste*. (Cambridge, MIT Press).

Cavallaro, M. (2002). "Lawsuit Launched Against USDA Over Organic Standards." *Maine Biz*. 25 November 2002. Portland.

The Center for Food Safety. (2005). *USDA Asked to Bring Organic Food Regulations Into Compliance with 1990 Law*. http://www.centerforfoodsafety.org:80/press_release6.22.2005.cfm. Accessed on 17 March 2006.

Clause, Bonnie Tocher. 1993. "The Wistar Rat as a Right Choice: Establishing Mammalian Standards and the Ideal of a Standardized Animal." *Journal of the History of Biology* 26(2): 329-349.

Collins, Kristin. 2007. "Organic Food Goes Corporate: Mass Distribution Belies Organic Image." *St. Louis Post-Dispatch*, March 3:A1.

Cummins, R. (2005). "The Organic Consumer Association's Stance on the Arthur Harvey Lawsuit and 2007 Farm Bill." <http://www.organicconsumers.org/organic/harvey-farmbill.cfm> Accessed on 17 March 2006.

Dean, M., 1999. *Governmentality: Power and Rule in Modern Society*. Sage, Thousand Oaks, CA.

DuPuis, E. Melanie. 2006. "Civic Markets: Alternative Value Chain Governance as Civic Engagement." *Crop Management*. Online. doi:10.1094/CM-2006-0921-09-RV.

DuPuis, E. Melanie and Daniel Block. Forthcoming. "Sustainability and Scale: US Milk Market Orders as Relocalization Policy." *Environment and Planning A*.

DuPuis, E. Melanie and David Goodman. 2005. "Should We Go Home to Eat?: Toward a Reflexive Politics of Localism." *Journal of Rural Studies* 21: 359-371.

Gieryn, Thomas. 1999. *Cultural Boundaries of Science: Credibility on the Line*. Chicago: University of Chicago Press.

Goodman, D. (2000). "The changing bio-politics of the organic: Production, regulation, consumption."

Agriculture and Human Values 17: 211-213. Goodman, 2000

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *The American Journal of Sociology* 91:481-510.

Guthman, Julie. 2004. *Agrarian Dreams: The Paradox of Organic Farming in California*. Berkeley: University of California Press.

_____. 2004a. "The Trouble with 'Organic Lite' in California: A Rejoinder to the 'Conventionalization' Debate." *Sociologia Ruralis* 44: 301-316.

Haddad, B. 1999. *Rivers of Gold: Designing Markets to Allocate Water in California*.

*HarveyAmicusBrief6.15.2004 – detailed summary of legal events, from Harvey sympathizers

*HarveyAppealsDecision1.27.2005 – the major court case

HarveyFinalRuleRelease138_06_(4) 6.6.06

Harvey v Johanns 6.9.05 –

Harvey? Sunset Fed Reg 6.05 – required rule changes – pre-OTA rider

Harvey v Johanns Notice 7.1.05 – notice of rule change through clarification with regard to count 1 (exemptions for conventional products)

Harvey v Venneman

Hassanein, N. 1999. *Changing the Way America Farms: Knowledge and Community in the Sustainable Agriculture Movement*. Lincoln: University of Nebraska Press

Hess, David. 2007. *Alternative Pathways in Science and Industry*. Cambridge, MA: MIT Press.

Jasanoff, Sheila. 2004. *States of Knowledge: The Co-production of Science and Social Order*. London: Routledge.

Jessop B, 2002 *The Future of the Capitalist State* (Polity Press, Cambridge)

Keller, Evelyn Fox. 2002. *Making Sense of Life: Explaining Biological Development with Models, Metaphors, and Machines*. Cambridge: Harvard University Press.

Klonsky, K. (2000). "Forces impacting the production of organic foods." *Agriculture and Human Values* 17: 233-243.

Klonsky, Karen.

Lamont, Michele and Virog Molnar. 2002. "The Study of Boundaries in the Social Sciences." *Annual Review of Sociology*.

Latour, Bruno and Steve Woolgar. 1986. *Laboratory Life: The Construction of Scientific Facts*. Princeton: Princeton University Press.

Lyson, T. 2004. *Civic Agriculture: Reconnecting Farm, Food and Community*. Penn State University Press.

Murdoch, J., T. Marsden and J. Banks (2000). "Quality, Nature, and Embeddedness: Some Theoretical Considerations in the Context of the Food Sector." *Economic Geography* 76(2): 107-125.

Morgan, K., T. Marsden, and J. Murdoch. 2006. *Worlds of Food: Place, Power, and Provenance in the Food Chain*. Oxford: Oxford University Press.

Murdoch J, 2000, ``Space against time: competing rationalities in planning for housing" *Transactions of the Institute of British Geographers, New Series* 25 503 ^ 519

Mutersbaugh, Tad. 2005. "Fighting Standards with Standards: Harmonization, Rents and Social Accountability in Certified Agrofood Networks." *Environment and Planning A* 37 (11): 2033-2051.

OTA Rider 10.26.05.pdf

Harvey report for Congress 11.8.05

National Organic Program's Final Rule (2000) – the standards

NOP Congressional Study 1.6.06 – more elaborate summary
Nonsynthetics Public Comment 2.1.06

Organic Foods Production Act (OFPA) (1990) – the law requiring standards

OTA Letter to USDA 3.9.06 .doc

Organic Trade Association. (2005a). "Just the Facts: Questions and Answers about Restoring Organic Regulations." http://www.ota.com/pp/legislation/Restoring_Organic_Program/index.html. Accessed 17 March 2006.

Organic Trade Association. (2005b). "Organic Trade Association asks Congress to take action to keep organic standards strong." <http://www.ota.com/news/press/181.html> Accessed 17 March 2006.

Organic Trade Association. (2005c). USDA: Support Organic Agriculture and the Organic Industry Through Targeted Programs: Comments of the Organic Trade Association on "Notice of meetings and request for comments", *Federal Register*, Friday, June 17, 2005. Accessed 17 March 2006.

Pollan, Michael. 2002. "Power Steer." *New York Times*, March 31.

Pechman, C. 1993. *Regulating Power: The Economics of Electricity in the Information Age*. Kluwer.

Putnam, R. 2001. *Bowling Alone: the Collapse and Revival of American Community*. New York: Simon and Schuster.

Rheinberger, Hans-Jorg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Palo Alto: Stanford University Press.

Squires, Sally. 2006. "What's the Beef?" *LA Times*, August 1:F01.

Vos, T. (2000). "Visions of the middle landscape: Organic farming and the politics of nature". *Agriculture and Human Values* 17: 245-256.

Warner, M. (2005). *A Struggle Over Standards In a Fast-Growing Good Category*. *The New York Times*. 1 November 2005. New York City: C1.

Weber, Max. 1947. "The Types of Legitimate Domination" in *The Theory of Social and Economic Organization*, edited by Talcott Parsons (New York: Simon and Schuster).

Wilson, S. J. 2007. USDA may relax standards for organic foods: The agency is considering a list of 38 nonorganic spices, colorings and other ingredients that would be allowed in products it deems 'organic'. *The Los Angeles Times*, June 9, 2007.