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# *Campus Alternative Food Projects and Food Service Realities: Alternative Strategies*

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As United States colleges and universities have developed campus projects to contribute to alternative food networks, strategies have matured from event-based, on-ramp activities to purchasing commitments, statistical tracking, and new food service contract requirements. Critiques in the literature query the extent to which financial flows are redirected; power shifts towards greater social integration and mutual accountability occur; and new food system values, worldviews, and imaginaries are disseminated. Information from twenty-six United States higher education institutions, involving interviews, campus visits, and discussion groups, foregrounds variability in food service structure, mission, and location and the lived realities of food service personnel. Two general strategies to support alternative food networks emerge: *relational approache*s that involve long-term ties with farmers, mutually agreed upon pricing, and direct deliveries; and *metrics approaches* that re-embed environmental and social values in market relations through commitments to particular food purchases, usually verified by third-party certifications. Both approaches can insert social and ethical concerns into market relations, but each—or a hybrid combination—is more feasible, depending on the school. The opportunities and constraints of each approach are explored, as they address the academic critiques and also the concerns of food system personnel, ending with implications for expanding campus alternative food projects and for future research.

**Key words**: alternative food networks, sustainability, institutional purchasing, campus food projects, local food

## Introduction

Growing national interest in a more sustainable food system can be seen in the expansion of farmers markets and farm to table restaurants, emergence of the USDA's "Know Your Farmer, Know Your Food" program, and farm to school projects around the country (Fitch and Santo 2016). Such initiatives reflect increasing public awareness of current health consequences, environmental externalities, and social justice concerns and seek "a sustainable alternative to the socially, economically, and environmentally destructive practices that have come to be associated with conventional agriculture" (Lyson 2004:1).

Gottlieb and Joshi (2010:5) define the food system as the entire set of activities and relationships that make up the various food pathways from seed to table and that influence "how and why and what we eat." Slocum (2007) defines alternative food projects as those that advocate for any or all of the following: healthier food options, more ecologically sound and socially just farming practices, food marketing, and distribution practices. This definition locates alterity in the actors' attempts to rearrange social and material relations to improve agri-food practices towards social and environmental ends.

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"Colleges and universities are leading the sustainable food movement and have been for a while," observed Roberta Anderson (personal communication, June 8, 2010) of the Food Alliance; they create "spaces of possibility" (Goodman, DuPuis, and Goodman 2011:4). Local food initiatives seek to rebuild forms of economic relations that are no longer purely profit driven but include as well dimensions of environmental care and social justice characterized by direct market links between producers and consumers, rather than links between wholesalers, brokers, or processors (DeLind 1999; Lyson 2004). From the consumer's perspective, the lack of knowledge created by "food from nowhere" is replaced by "food from somewhere" that includes place-based dimensions of meaning and identity (McMichael 2009; Trubek 2008). The potential impact is large; the food service industry's annual revenue is over $40 billion (IbisWorld 2016).

An on-ramp for campus sustainable food efforts is often a focus on a particular product (local apples), issue (sustainable seafood), or event (100-mile meal), constituting a "do something" approach that begins the conversation towards more substantive purchasing shifts (Nina Mukherji, personal communication, April 18, 2013).

This article focuses on the more systematic campus projects that commit to regular purchases of local food or sustainably-grown products that seek to incubate alternative nodes in a values-based food chain (Stevenson et al. 2007). From a general alternative food intentionality, some campuses have moved to comprehensive policies involving lists

of desired criteria and websites naming farmers who supply the cafeteria. Accountability through statistical tracking of food service expenditures for sustainable food has emerged in recent years and has spread with the rise of national assessments such as STARS (AASHE 2017). A more recent stage in higher educational efforts is the incorporation of ethical purchasing qualities into formal food service contracts.

## Academic Concerns

As the concentration of wealth and power in the hands of international corporations restructured the global food system, social scientists have explored the emergence of locally-based food initiatives and their efforts to promote community and social and economic development, as well as healthier conditions for workers and food for consumers (Heffernan 1999; Kloppenburg and Hassanein 2006). Food purchases present a transformative opportunity through which social relations can be altered and power enacted (Paxson 2013). Higher education commitments seek to support a movement toward critical consumption that re-embeds market transactions in social relations (Polanyi 1963) and imbues routine market transactions with environmental and social concerns, "reconstituting the relational basis of society" (Conner at al. 2011; Grasseni 2013:60; Hassanein 2008). Alternative food experiments suggest a path forward towards new possibilities of food provisioning (Bellante 2017), based on coalitions that orient towards active, pragmatic, and incremental action (Hassanein 2003). Through reconnecting producers and consumers and expanding existing markets to small and mid-scale farms, higher education projects also seek to enhance public and environmental health (Campbell, Carlisle-Cummins, and Feenstra 2013; Papaoikonomou and Ginies 2017; Sachs and Feenstra 2008).

Work on the political economy of alternative food movements has identified potential pitfalls and shortcomings (Allen at al. 2003; DuPuis and Goodman 2005; Hinrichs 2003). The potential for large scale change through the development of community economies and the extent to which localism can downplay environmental and social justice issues, particularly biases of race and class, are two concerns that have emerged (DuPuis et al. 2006; Goodman 2004; Goodman, DuPuis, and Goodman 2011). Holt-Gimenez (2011) points out that the food movement is actually a "movement of movements," joining a range of activists who do not necessarily share priorities, and therefore local projects are likely to reflect several streams of political alterity.

The capacity of alternative food networks to shift power relations while constructing new markets has been raised in a number of studies (Allen and Guthman 2006; DuPuis, Goodman, and Harrison 2006, Friedmann and McNair 2008; Guptill 2009). So long as alternative food projects are embedded in neoliberal economies and globalized, corporate structures, their ability to enact truly alternative trade and production relations may be compromised. This conventionalization critique points to the ways in which promising alternatives have been watered down, co-opted, or derailed (Constance, Kleiner, and Rikoon 2003; DuPuis 2000; Grey 2000). Several studies of alternative food networks question whether new economic relations represent shifts in power relations, helping to construct a new politics of food (Allen and Guthman 2006; Goodman, DuPuis, and Goodman 2011; van der Ploeg, Douwe, and Renting 2004). In question is whether farm-to-school programs are characterized by democratic processes of multi-partner negotiations and mutual accommodation, including a degree of equitable exchange and transparency (Campbell, Carlisle-Cummins, and Feenstra 2013; Conner et al 2011; Lyon 2011).

Gibson-Graham (2006) raises the possibility of hybrid forms of economy that lead to ethical transformations within capitalist firms. The question is whether alternative food networks can transcend the formalist economics of price formation and competition and direct significant flows of resources to alternative production and distribution systems (Grasseni 2013). Kjeldsen and Ingeman's history of organic food in Denmark also argues that changing social realities of alternative food systems do not necessarily undermine its original goals. The Danish expansion of organic food sales from very small farm units and local food chains to larger farm units, grocery store distribution, and Internet orders demonstrates change in the degree of social integration, mutual obligation, and place-based connections but still upholds desired dimensions of alterity (Kjeldsen and Ingeman 2010). Other studies argue that complex, hybrid, market-based efforts can construct alternative economic communities (Bellante 2017; Clancy and Ruhf 2010), and local food movements have a role to play in building the sentiment that supports awareness of conventional agriculture's shortcomings (Colloredo-Mansfeld et al. 2014).

Transparency and accountability are also issues that have emerged in the literature. As sustainability projects extend beyond the life of one champion to become institutional policy, Newman (2013) calls for policies and metrics that reduce the impact of personnel turnover and support longer-term commitments. Certifications help increase transparency of hidden qualities of food—and externalized costs. But certifications can also narrow considerations to what can be audited and how (Fouilleux and Loconto 2017). Some alternative food projects may actually strengthen the conventional food system (Allen and Sachs 1993; Guthman 2004; Hatanaka 2014), and any innovation is vulnerable to reversals, co-optation, and erosion by various actors (Holt-Gimenez 2011). The alternative goals embedded in the certifications can also be side-lined, as explored by much recent scholarship on fair trade and organic standards (Allen et al. 2003; DeLind 2000; Guthman 2004; Jaffee and Howard 2010; Lyon 2015; Lyon and Moberg 2010; Raynolds, Murray, and Heller 2007).

It is also argued that the imposition of new sustainability-related criteria and certification systems imposes new forms of governmentality, an "audit culture" that imposes neoliberal logics and subjectivities (Bellante 2017; Lyon 2011; Strathern 2000). Fouilleux and Loconto (2017) trace how governance structures in the organic certification movement have restricted

the debate to market-compatible action, and Hatanaka (2014) documents how external and poorly-adapted criteria may be harmful to farmers or inhibit the growth of practices more ideally suited to particular locales (see also DeLind 2003).

Of concern not only are dollars redirected from conventional food purchases and the political balance of power but also the extent to which ethical concerns and new worldviews can be constructed, disseminated, and strengthened. The political goals of the alternative food movement to support food democracy and expand food system transparency draw attention to the process by which alternative food networks seek to reframe consumer-producer relations (Goodman, DuPuis, and Goodman 2011; Hassanein 2008). As Grasseni shows in her analysis of consumer purchasing networks in Italy, personal satisfactions can emerge from combining political, personal, and economic agendas. "One of the things that both consumers and producers value in local food participation is the person-to-person interaction, which allows them to build relationships and trust with one another" (Trivette 2015:477; Cone and Myhre 2000; DeLind 1999). Trust relations, by bringing in affect and the dimension of meaning, construct community within the alternative economy (Gibson-Graham 2006). Alternative food networks have the capacity to contribute to new imaginaries, reframing the politics of consumer-producer relations through increased social integration and a sense of mutual obligation (Goodman, DuPuis, and Goodman 2011; Trivette 2015).

These academic perspectives draw attention, then, to three critical issues—the extent to which:

- Financial flows are redistributed in new directions, supporting local producers and taking into account environmental and social justice concerns.
- Power shifts, whereby anonymous market transactions based on economic concerns alone, are replaced with trust-based social integration, characterized by mutual obligations and more equitable benefits between farmers and institutions.
- Dissemination of new imaginaries, worldviews, values, and meanings that support wider understandings of alternative food system goals and practices.

Beginning with the perspective that alternatives are made, remade, (and unmade) through performance and discourse (Jonas 2010), the evolution of campus projects over the last decade reveals diverse constraints and capacities with regard to mission, personnel, and location of each college and university and its food service. Within that diversity, two different strategies to enact sustainable food projects are identified: *relational approaches* that build personal ties with local farmers or cooperatives and *metrics approaches* that emphasize purchases that meet sustainability criteria verified by third-party certifications. Though aspects of these two strategies can be combined and many schools do pursue a hybrid approach, their implications are distinct and can be usefully explored as alternatives.

This discussion will begin by describing the relational and metrics approaches in greater depth, using a case study for each. Then, it will link the dimensions of variability in campus food service structures and the concerns of food service personnel to the ways they constrain alternative food strategies. This institutional context will offer some new insights for the three critical issues identified above and lead to some recommendations for campus action and further research.

## Method

This analysis is based on interviews with individuals from twenty-six colleges and universities, at diverse stages of building campus sustainable food projects: ten small liberal arts colleges, eight large or medium public universities, and eight private research I universities. On-campus visits at eighteen schools were expanded with semi-structured, open-ended interviews with scholars, sustainability directors, or food service personnel—and in three cases, student food movement leaders. A total of thirty-seven food service personnel were interviewed, both campus-based and corporate leaders, as well as four individuals with certification organizations, for a total of forty-one individuals. The sample was both purposive and opportunistic, and in several institutions, interviews were conducted with two or three people in different roles in the food service. The interviews are mainly discussed anonymously to protect privacy and institutional preferences for confidentiality, but some individuals have given permission to be quoted, and some information is publicly available. Websites and public documents were also used in the analysis.

Clarity about the contrasts between the relational and metrics strategies emerged from two conference calls in the summer of 2013, in which a total of fifteen researchers, activists, and food service directors from around the country discussed alternative strategies for sustainability in campus dining. This report also draws on the author's ten years as chair of the Emory University Sustainable Food Committee. A group of twelve to fifteen faculty, students, administrators, and food service staff (and, recently, one farmer), the committee shepherded the initiatives described here and provided the author much-needed training in the language, culture, and economics of corporate food services. Over the last fifteen years, Emory University has worked with all three of the major food service corporations: Aramark, Sodexo, and Bon Appetit.[1]

## Two Strategies and Two Examples

### The Relational Approach

Relational approaches have emerged among schools that seek to have a local and more systemic impact in support of an alternative food system. A relational approach seeks values-based supply chains based on trust relationships between dining service personnel and nearby or regional

farmers (Stevenson and Pirog 2008). Schools can adopt a relational approach for the fresher, tastier product that comes direct from a local farm (Vilma et al. 2015), but in most cases, a primary goal is to build an alternative food network that supports more environmentally sound production methods, small family-owned and -operated farms, and regional economic development through diversified agriculture. Social justice concerns about farm workers may also be involved. Distribution can be carried out by direct deliveries to the campus loading dock—where farmers are paid directly—or by cooperative deliveries by groups of farmers or through conventional distributors. Some institutions have addressed difficulties with sustainable food deliveries by working with food hubs that bulk and pre-process items for institutional convenience. Financial gains from cutting out corporate distributors can help provide a higher price to farmers without harming the dining hall budget.

A relational approach emphasizes seasonality where possible. From September to Thanksgiving at one Midwestern college, students are provided lots of fresh broccoli: "It's astounding the amount they will eat," said the sustainable food director. Then, "students slide right on to winter squash, heavier sauces." Seasonal foods often have lower prices, which offer savings for the university, but selling all of a harvest can be helpful for local farmers as well.

The relational approach can incubate fragile new projects and shepherd growers through the early stages of adaptation to new crops. At one liberal arts college, a food service director recounted how his previous farming experience allowed him to distinguish and encourage environmentally-friendly practices in his farm visits. His expertise gained him farmers' trust, as he sought to listen to their challenges and devise solutions. He helped several farmers develop stronger CSA networks, to support their summer crop sales, and farmers then directed available produce to the college in the other seasons: "Now they're going gangbusters." Farmers who resist the expense, hassle, and standardization of formal certifications but who have meritorious practices can be brought into the purchasing relationship without the need for third party oversight (Hassanein 1999). Relational approaches can also ignore certain quality issues—such as "slugs on the produce"—which may not be acceptable to a food service contractor.

A relational approach seeks particularly to expand economic opportunities in the region, often by promoting value-added products. One school contracted with both a local farmer for tomatoes and then a local processing firm to turn them into salsa for the college's use. Another school subsidized a small dairy to buy yogurt-making equipment in order to add local yogurt to menus. Rebuilding the food processing infrastructure is also necessary in most areas. Meat and grain processing plants, storage facilities, and small value-added processing operations have often disappeared with food system concentration and have to be rebuilt.

The concern that local food projects may not attend sufficiently to farm workers or other social justice concerns is clearly valid for some of the schools using a relational strategy. Because of the nature of the college-farm relationship, some leaders report it was difficult to make queries, especially about worker pay. In the Northeast, one food activist said raising concerns about worker pay was "a taboo subject" with farmers and was not included in her school's project, to preserve the trust in those relationships.[2] A Midwestern college prioritized the economic benefit of a local food network and did not screen for environmental or social practices: "We didn't want to come down on conventional farmers…it would cast a black cloud over what we want to do."

A relational strategy can scale up to have regional impact (Ruhf and Clancy 2010). Some institutions seek to build food innovation districts that link universities in public-private partnerships that include job training, food hubs, and other development tools (Center for Regional Food Systems 2015; Galarneau, Millward, and Laird 2013). Relational approaches to campus food can go beyond campus-farmer relationships to include faith-based groups and other non-profits, businesses, and governmental entities. Wider governmental planning conversations link food access and quality with transportation and housing decisions (Hamm 2015). Several statewide and multi-state regions have also seen the emergence of coordinated planning, such as Michigan's Good Food Charter (2016), the Minnesota Food Network (2016), and the New England Farm and Sea to Campus Network (FINE 2016). Though it is early days to assess the impact of these regional efforts, they are proof that conversations begun within higher education can have effects at larger scales.

Relational approaches are not always local. In the case of one New England college, the school's alumni connections with a fishing family in Alaska led it to prioritize salmon purchases from that source, out of respect for its environmentally-responsible practices (and despite the firm's lack of formal certification of those practices). Some campuses develop Direct Trade relationships with a particular coffee farm and thereby support more favorable market relationships with a known supplier in a developing country.[3] Because such long distance trust relations are less common than building local/regional ties, this analysis will focus on the latter.

## The Metrics-based Approach

A metrics-based approach involves the commitment of a college or university to spend a specified portion of its food service budget on products having certain characteristics or carrying particular certifications. It allows the institution to redirect purchase dollars and take an ethical stand for food system change, re-embedding environmental or social values previously excluded from conventional economic market relations (Kloppenburg, Hendrickson, and Stevenson 1996; Paxson 2013). For example, the director of Cal Dining at University of California Berkeley said, "We wanted to incorporate organic products into our program because it's the right thing to do for our community, and our customers were asking for it" (Greensfelder 2006). In the process of demanding alternative products, the metrics approach begins to challenge the

lack of transparency about where food comes from and how it is produced that characterizes the conventional system, thus contributing to some expanded level of food system accountability (Hatanaka 2014:5).

Perhaps the most widely-used system of metrics on campuses today is the Real Food Challenge (2016), which encourages student-led auditing of all campus food purchases for two months (or longer) and a calculation of the percentage of "real food," as measured by several goals: local/community-based, fair, ecologically sound, and humane. Roughly two dozen certifications and qualities are used in the assessment of real food, and over thirty-five campuses have committed to a goal that 20 to 40 percent of their total purchases will fulfill at least one of the real food criteria by a particular date (often 2020). Criteria such as "within 150 miles," "all employees receive living wage," Rainforest Alliance certified, and Food Alliance certified are used to determine the percentage of real food in a three-tier system of "green light" (best representation of real food), "yellow light" (not as strict but counts as real food), and "red light" (does not count as real food) (Real Food Challenge 2016). Nearly 200 institutions have participated in the Real Food Challenge.

Metrics-based approaches require new tracking systems, and institutional distributors have to adjust to these new demands. In the ten-school University of California system, not only dining halls but fast food franchises are asked to track certifications, which provides the opportunity for new market nodes and greater transparency. If metrics are adopted in a participatory and thoughtful way, such as when campus forums or classes discuss the issues, educational impacts are even wider and can extend to academic partners as well.

A metrics-based strategy can address a range of social, economic, and environmental concerns, and campus purchases add to market momentum in other sectors. For example, fair trade products have seen substantial market growth and widening circles of participation over the last two decades; there are now certified producer organizations in sixty-three countries, and certified products sold in sixty countries (Hatanaka 2014:6; Lyon, Ailshire and Sehon 2014). For over twenty years, sales of certified organic foods in the United States have also grown by double-digits (Organic Trade Association 2015). The Fair Food Campaign of the Coalition of Immokalee Workers in Florida and efforts of Compassion in World Farming and other animal welfare groups have led both fast food chains and retail multi-nationals to shift to different production systems for tomatoes and eggs. With immediate benefits to farm workers and animal welfare, such large-scale interventions may also provide the benefit of these products to nearby neighborhoods served by these corporations. In general, however, metrics are not able to take account of social justice issues in farm production since few certifications address labor justice issues (Anderson 2008). And, in a different kind of scrutiny, in one student fieldtrip to a seafood distributor, "local" seafood was observed actually to be imported.

Increased local and sustainable purchasing using a metrics approach can sometimes increase dining purchase costs, but it does not always result in higher dining fees for students. Yale University began with a grant to support its Sustainable Food Initiative but also managed the higher costs of locally grown, sustainable, and some organic food by reducing the wide variety of options offered at each meal, lowering waste, adding more vegetarian options, and emphasizing lower-cost seasonal items. Some schools choose to increase student meal plan fees as a result of their sustainable food efforts, but many have not (Barlett 2011). One school allocated a 10 percent increase in annual food expenditures to the project in the first year to offset the added expenses. In later years, the subsidy was phased out through judicious use of seasonal purchases and in-house processing. Students at several schools have spearheaded trayless dining, with the understanding that savings through reduced food waste would be allocated to local and sustainable procurement.

Market impact can be significant from one school's actions, but metrics can be even more powerful when adopted by multiple institutions (Hignite 2009; University of California 2015). An example of market impact of sustainable seafood standards can be seen in the inclusion of Louisiana wild-caught shrimp on the Monterey Bay Aquarium's Seafood Watch "avoid" list. State law prohibited Louisiana agents from inspecting for fishers' compliance with use of federal turtle exclusion devices, and the Oceana environmental group indicated that commitments to Seafood Watch guidelines among 13,000 stores and restaurants—and presumably some campus dining services, as well—led to a boycott of Louisiana shrimp (Alexander-Bloch 2015). Citing this market disadvantage, in July 2015, the Louisiana legislature repealed the prohibition, and Seafood Watch shifted its rating to "good alternative," thereby expanding the market opportunities for Louisiana shrimp.

## Two Examples

The University of Montana can serve as a useful example of an institution that has embraced the relational approach. Students working with professor Neva Hassanein and dining director Mark LoParco began in 2003 to explore ways to strengthen sustainable agriculture and economic development in the Missoula area (Hassanein and LoParco 2013). From 2003 to 2016, the University of Montana's local purchases grew from $80,599 to $936,800 (Trevor Lowell, personal communication, March 7, 2017). Over 100 farms now participate, and the proportion of the dining budget directed to the Farm to College state-wide program grew from 3 percent to 26 percent (Ian Finch, personal communication, June 17, 2015; Trevor Lowell, personal communication, March 7, 2017).

The relational strategy supports negotiations that take into account the mutual needs and constraints of both growers and the institution. For example, to expand the university's supply of sustainably produced, grass-fed, and grass-finished beef, dining personnel met with two local ranchers to look at

the possibility of expanded production with attention to available land and breeding stock, coordination with the packer, and delivery schedules. Within three years, the university was purchasing 300 percent more meat from them, and the ranchers benefitted from a fixed price and a secure market. Less meat was coming from industrial feedlots, with their heavy environmental footprint, and the university benefitted from the taste and more healthful nutritional profile of the grass-fed meat (American Public Health Association 2003; Clancy 2006). Overall, the University of Montana's relational approach to supporting an alternative food system in their area strengthened farmer cooperatives, diversified available farm products, and expanded the number of viable small- and medium-sized farms in the region. Dining service personnel report high student satisfaction with food quality, which has been achieved with stable or declining overall food expenditures, in contrast to other similar institutions that have not used Farm to School strategies (Mark LoParco, personal communication, June 17, 2015; Trevor Lowell, personal communication, March 7, 2017). The financial performance of the program contradicts the widespread assumption that for farmers to benefit from an alternative food system, consumers, and especially students on a meal plan, have to be charged more. A study of eighty-five California colleges and universities found that shifts to local purchasing did increase prices paid to farmers in most cases (from 0% to 35%), but overall food service budgets were able to adjust (Feenstra et al. 2011).

Relational approaches are usually connected to educational efforts, whether through posters, flyers, or other signage in the dining hall, or with programs such as "meet your local farmer" day. In some schools, students have internships on local farm operations to learn first-hand about food production. In other places, there is little connection to the academic life of students, or the programming can be episodic.

Emory University can provide an illustration of a metrics-based strategy—and also its evolution. Guided by innovations at Yale University and antedating the Real Food Challenge, Emory's Sustainable Food Initiative was based on an approved list of certifications and sources, with a goal that 75 percent of total purchases, for both campus dining and the university's hospitals, be either sustainably-grown or locally-grown. Early on, a two-day forum engaged almost 100 students in choosing which metrics to prioritize, and a Sustainable Food Committee comprised of dining service staff, faculty, graduate and undergraduate students, and administrators debated and recommended specific purchasing guidelines to meet the institution's goals. Instead of using a mileage radius as many schools do, the committee recommended defining "local" in two tiers, with Georgia-grown as first priority and the eight-state Southern region second (Emory University Sustainable Food Committee 2013). This regional definition recognized that major crops come seasonally to Atlanta from north Florida and then from seven other nearby states, a significant improvement in food miles when replacing products from California or Mexico. In fact, as Emory's primary distributor, Sysco, began to provide improved tracking for Emory's program, it found that sometimes onions or other products from both Florida and California were available simultaneously in the warehouse, and they were able to fill Emory's order with the more local product.

Criteria were also developed to encourage purchases of fair trade coffee, humanely raised meats, sustainable seafood, and other certifications, including USDA organic. This metrics-based approach gave Emory Dining and its corporate partner, Sodexo, maximum flexibility to take advantage of market opportunities as they arose. As more sustainably-produced meats and dairy became available, the goals allowed room for new suppliers, and a new organic distributor became an important partner in the food chain. Over time, the dining service utilized a range of suppliers, with considerable change from year to year. Over the first nine years of the Emory program, purchases that conformed to at least one of the desired criteria grew from 1 to 2 percent in 2006 (as estimated by the Sodexo sustainability coordinator at the time) to a high of 26 percent in 2012-2013 (based on tracking of invoices and product codes for the year).

In 2014, as Emory's food service contract came up for rebid, the metrics approach shifted to be less flexible. Several particular certified products were specified in the request for proposals for residential dining, non-branded retail, and catering. Most notable is the demand that all ground beef on campus be grass-fed, a requirement made possible by a rapid increase in supply in the state. Humane certification was a requirement for eggs, and antibiotic administration only for disease treatment was required for chicken, reflecting not only concerns about human and animal welfare but also water pollution. Monterey Bay Aquarium's good and best seafood or Marine Stewardship Council certification was required for all fish and seafood purchases.

This revised metrics approach is now being implemented by Emory's new contractor, Bon Appetit, and the strategy has expanded in two years to include twenty relationships with local farmers. Emory's purchases of either sustainably-grown or locally-grown food reached 38 percent in 2015-2016, for a total of over $2 million in purchases. This shift was motivated by Emory's sustainable food commitments but was also carried out with attention to relationships, since Bon Appetit's corporate strategy involves closer ties with individual producers. Emory Hospitals have also piloted shifting chicken purchases to a supplier that has addressed antibiotic resistance concerns by eliminating their use and have innovated with grassfed beef and even hyperlocal produce from a hospital-based garden. The Sustainable Food Committee continues to revise metrics and policies as needed, supports activities such as the weekly farmers market, and assists in educational outreach about the initiative.

## Matching Strategies with Food Service Structures

Appropriate strategies for contributing to a more sustainable food system are constrained by the particulars of

each campus's food service structure (Kimmons et al. 2012), including commitment to sustainability goals, food service mission, contractual constraints, staff capacity, financial situations, and geographical location. Public institutions and especially land grant schools often have a long tradition of support for local agriculture, and extending that support from research and extension to direct purchase for dining halls can be seen as part of the university's mission. Other schools have embraced local/sustainable food service goals, which can support dining innovations. But where sustainability commitments are weak, shifts in dining procurement have less traction (Conner et al. 2011). Likewise, the mission of the dining service itself is important. For some schools, dining is expected to be a significant revenue generator, similar to parking, and thus any proposal that might raise food costs is unwelcome. At one university, campus sustainability leaders were told, "If it's not cost-neutral, we can't think about it." Costs in such cases can refer to staff time as well as to dollars.

Other schools expect dining to contribute to a vibrant campus community life. Adding tastier food and/or an educational component around sustainable food can be an enhancement to the mission. For those schools that embrace ethical commitments and social justice, alternative food projects build on those commitments. Health concerns provide another institutional platform of support. In the original Emory University strategic plan for sustainability in 2006, the strong advocacy of two physicians serving on the visioning committee was essential to the adoption of the sustainable food goal. Their professional awareness of the obesity epidemic, diet links to heart disease, cancer, and stroke, and the emerging evidence of endocrine disruption by pesticide residues supported their desire to see new food options on campus and in Emory's hospitals. However, not every school benefits from the clout of medical expertise in service of sustainability goals.

Another factor of institutional variability is whether a school's food service is contracted or self-operated. Almost half of all institutional food services are provided by the "big three" corporations: Aramark, Sodexo, and Compass Group (which includes Bon Appetit) (Fitch and Santo 2016). In addition, purchasing flexibility can be limited by availability from local distributors. The two largest United States distributors—Sysco and US Foods—are estimated to control 75 percent of the national market for broadline distribution services (Fitch and Santo 2016). Several student activists reported the roadblock of being told, "Sysco doesn't carry it…." Corporate food service providers mostly make their profits from negotiating favorable long-term price points for key food items and by aggregating purchases from multiple campuses in their negotiations. Such business models require advance menu planning, leaving less opportunity to respond to seasonal local surpluses or favorable prices.[4] Some food service corporations also expect food suppliers to participate in rebate structures, in which a portion of the prices charged is refunded to the corporation, a critical part of their financial bottom line (Fitch and Santo 2016). Chefs can be financially rewarded in some cases for purchases from approved vendors and for coming in under budget, both of which create disincentives for farm-to-institution sourcing or to fair trade or other vendors who do not participate in rebates. In addition, some institutions face contracting complications from multiple campuses with different service contracts and from legal restrictions for system-wide contracting or choosing the lowest bidder.[5] Self-op allows much more flexibility in purchasing decisions, contracts, prices, delivery modes, and insurance requirements.

Dining service staff capacity also varies widely and can have a major impact on the ability of an institution to innovate in purchasing, especially using a relational strategy. Some food service personnel have personal interest in sustainability, agriculture, or environmental issues and are pleased to incorporate them into their daily work life. Others see the critiques of the alternative food movement as an attack on the excellence of United States farming or on their food service and are hostile to change. Some find the headaches of locating new suppliers or coping with insurance requirements to be overwhelming. Or, as was the case in a Midwestern college, challenges with local supply and new insurance arrangements are overcome with the cooperation of several administrative units.

As we have seen, relational strategies are assisted by staff with agricultural knowledge, who can enter easily into conversation with farmers and understand farm constraints. Others, especially chefs with only urban experience, may have neither the expertise nor the interest, making a metrics strategy more feasible. The traditional reward structures and training for food service administrators may not include the skills for either strategy, and demands for alternative food projects may threaten a leader's competence or performance evaluation. Of course, some food services respond to the challenge by hiring new people. National food service conferences have also greatly expanded training opportunities over the last decade, and all of the big food service corporations have developed templates for increasing local food purchases. In general, for campus staff with less interest, knowledge, skill, or institutional support, the metrics approach is more easily integrated into dining service habitus, involving mainly substitutions of suppliers and easy menu adjustment. In terms of institutional accountability, both approaches can be strong if they track purchases well.

Institutional geography, scale, and financial circumstances also vary widely and affect the feasibility of purchasing shifts. Location presents some limits to local sourcing, where desert environments, extremes of cold or heat, and availability of appropriate soils and slopes present agronomic constraints. Low population density or thin transport infrastructure can also restrict regional food system expansion. For a small liberal arts college located in an agrarian county, where faculty and staff are neighbors and friends with farmers who would like to do business with the college, building and sustaining relationships to support an alternative supply chain are more feasible and supported by existing ties. Though many adjustments of

insurance, timing, and payment have to be negotiated, the college benefits not only from fresh produce, dairy, and meats but also from having the reputation of benefitting the local economy. A small or large school in an urban area, however, particularly one surrounded by sprawling suburbs, can face a greater challenge in finding farmers with whom to partner and overcoming barriers of transport, congested delivery routes, and unfamiliarity on both sides. One food service director in such an urban area described how his school's commitment to a mileage radius severely limited local purchases because there were so few farms in the area.

Scale can be a constraint simply from the amount of product needed as well. Small farms with organic vegetables or pastured poultry may not be able to provide adequate volume for a big campus. Larger cafeterias may also be unwilling to deal with non-standard portion sizes from multiple vendors, favoring the ability of conventional distributors to meet large orders. Food hubs that bulk and pre-process produce from smaller farms seek to meet this challenge, but distribution remains a significant impediment to purchases of sustainably-grown and locally-produced food in many areas (Heiss et al. 2015). Schools that are struggling to survive financially are also less likely to innovate, but some have turned to improved quality in fresh, local food as a way to attract students. Each of these institutional contexts affects the feasibility of a relational or metrics approach.

## Food Service Concerns

Conversations with food service directors in schools that embrace sustainable food projects and with those who are reluctant or even hostile reveal several different concerns. As other studies have found, availability of adequate supply, on time, in desired portions and cuts, is a major issue (Feenstra et al. 2011; Vilma et al. 2015). Building farm to college relationships can be a lot of work, campus leaders testify, and both considerable knowledge of farming and patience with long-term enterprise development are needed for success. Transactions costs are high (Acheson 1994; Ensminger and Rutten 1991). One food service director saw that the college's desire for local lettuce was an opportunity for farmers, but it took several years to accomplish a steady supply: "You have to take farmers by the hand to learn lettuce—takes years." Food service personnel in many institutions do not have the specialized knowledge or inclination to pursue farmers' welfare and strong partnerships to this extent.

Small, local farms and cooperatives can come and go, as well; the sustainable farm economy in some areas is fluid. Hendrix College in Arkansas was a leader in sourcing local foods in the 1980s, but once the key administrative champion left and a grant ended, energy for the local-foods program diminished (Barlett 2011; Valen 1992). A series of misfortunes put several local farmers out of business, and student as well as administrative interest waned. Despite a general pattern of loyalty and institutional ties, when farmers retire, go out of business, or choose new directions, long-term investments in relationships can evaporate. In one case, successful efforts by a college leader helped one farmer expand vegetable sales to the dining hall. In subsequent years, the farm's expanded sales made it attractive to a wholesaler, who contracted for the farm's entire output, and the farmer abandoned college sales. Some schools opt for a metrics strategy, as a less risky time investment.

Alternative food projects can create new staff demands, especially to track purchases with a metrics approach. The workload can be enormous, requiring tracking of expenditures by food category. Many schools report it takes from a half to a full-time employee to track purchases, unless strong software systems are in place. Just one large distributor can provide over 100,000 distinct product codes (SKUs) to a single campus, each of which must be entered and categorized. Said one person knowledgeable about claims made at many institutions, "Most reporting today is made up—well, educated guesses." Clearly, development of standardized SKU codes that signal sustainable food certifications and criteria would greatly aid tracking. Similar staff demands can be made of suppliers. As Emory began to track locally-grown purchases, it requested Sysco to report state of origin for vegetables and fruits. This required the corporation to redo its computer system and took six months.

Metrics are also confusing, and some criteria change rapidly. There are costs in keeping up with fisheries science, glyphosate risks, or ionophore antibiotics. One food service operator admits, "It's hard to parse the certifications. We all fall prey to the salesmen of the certifications." In that regard, the work of groups like the Real Food Challenge can be helpful in sorting the wheat from the chaff, but not all experts will agree on the value of every designation. Some experts consider the profusion of metrics to be an indicator of the vitality of the movement, but it also creates opportunities for weakened standards, corporate greenwashing, and supplier confusion.

Metrics can have perverse outcomes, as well. In one area of the Northeast, a successful local dairy has been able to sustain many animal welfare and environmentally sound practices, but its financial success has shifted it into a category which no longer qualifies as "small, local." One college leader described the institution's desire to continue to support this dairy, but also the conflict presented, since to do so will lower the college's percentage of "local/sustainable" food purchases. When certifications do create effective supply for a large buyer, smaller, local sources may be displaced or barriers to entry erected. Friedmann and McNair (2008) note that Food Alliance certified berries from monocrop Cascadian Farms were able to displace sales of local berries from more diversified local farms near Toronto (2008). A similar result has been observed with Indonesian shrimp in which farmers ceased innovation once the rigidities of certification shifted their sense of control over production practices (Hatanaka 2014; see also Tran et al. 2013).

Demands on staff time also go up if new governance structures are put into place and require meetings, reports, and shared knowledge. These more democratic practices can have a real

benefit for institutions, however, allowing practical constraints, timing, and financial concerns to be addressed in ways that support new food chain viability. Integration of dining into the academic program, through food internships, demo meals, and student research projects can also increase staff workload. For some schools, this new integration into the academic mission is welcome—increasing partnerships across campus sectors—and even, in cases, increasing staff job satisfaction.

From the staff point of view, the academic concern of increased governmentality is not a clear-cut plus or minus. The lived reality can be seen as onerous supervision and intrusive new requirements but also can be seen as welcome campus publicity and approbation. For personnel who enjoy and identify with the project, proof of impact is valuable.

Some food service personnel also argue that common metrics allow a level playing field as schools compete for reputation; students making college choices can assess what level of commitment a school has demonstrated. Metrics allow institutions that are just getting started to choose the low-hanging fruit of sustainability goals and to benchmark their progress. One food service leader also pointed out, "From a pure management point of view, a business point of view, it's hard not to have a standard. It's the corporate mentality. If you have confusion, you have frustration."

A final issue from both staff and institutional perspectives that can affect the durability and impact of an alternative food project is expectations of personnel turnover, which can affect both relational and metrics approaches. At one school with a strong commitment to a metrics approach, local purchases exceeded 30 percent in one year and then dropped to less than half that when a new dining hall chef was hired. At Emory, in the first eight years of the Sustainable Food Initiative, there were four different dining service management leaders and three sustainability coordinators under the same food service contract. Corporate success may require employees to relocate, both for promotions and to seed sustainability expertise elsewhere, but the practice creates a rupture in purchasing habits and expertise. Turnover can be particularly difficult for a relational strategy. An urban area with plentiful job opportunities may particularly encourage personnel turnover. It is also the case, however, that some institutions enjoy food service personnel who remain for long-term careers in one place. At the University of Montana, some of the considerable success of their effort is attributed to the longevity of key—and loyal—personnel in the university. "From the president, throughout the institution, people are very, very committed to what we're doing," said the dining director (Mark LoParco, personal communication, June 17, 2015).

## Discussion

This analysis engages the considerations of the academic literature within the lived realities of food service personnel and campus institutional dining structures. When institutional projects are disaggregated to recognize distinctions between relational and metric strategies, their impacts, challenges, and tensions can be more easily explored. Especially when institutional structures and lived realities of food service personnel are taken into account, the value of recognizing the two strategies is clearer, though it is also possible for schools to pursue a hybrid approach. Taking the three critical issues in turn, some general patterns emerge, though all with exceptions.

### Financial Flows and the Breadth of Impacts

First, it is clear that both relational and metrics strategies can shift financial flows in new directions that can benefit local producers and more sustainable production practices. The two cases presented document $1 to 2 million of funding diverted from conventional sources, evidence of market clout. Self-operation allows a college or university even greater flexibility and easier reallocation of purchases, but as any dining director will say, "subject to availability," which includes price.

In geographical areas with suburban sprawl or undeveloped food hubs, metrics approaches allow commitment to principles regardless of the availability of food service personnel with strong interests or skills to build relationships with local farmers. Purchases of Fair Food tomatoes, fair trade coffee, sustainable seafood, or humanely-raised meats can be favored. Especially if the criteria chosen have the capacity to create new nodes in the food system or significant shifts in production methods, income can be redirected in ways that bring ethical concerns into campus dining purchases. If these purchases shift farm/food sources from year to year, as when a metrics approach involves a degree of market flux in search of new pricing or partners, the benefit to alternative modes is weakened. But as we have also seen, when institutions work with food service contractors, the market signals of metrics—particularly when shared among schools—can have a significant impact on distributors and suppliers.

Concerns about whether campus food projects attend to a full range of environmental, social, and economic issues have been shown to have some validity. Among those using a relational strategy, the desire to maintain positive ties with local farmers can hold some schools back from querying farm worker pay or pursuing social justice goals. At the same time, as Jussaume and Kondoh (2008) and colleagues emphasize for Washington State, the relational approach can build regional consensus for a more sustainable vision of economic prosperity, with a broader base of partners for effective action. Recognition of food service financial constraints and personnel turnover supports respect for the smaller on-ramp efforts that may lead to later expansion.

Metrics can promote farming practices that reduce externalized costs, such as opting away from feedlot meat or choosing organic certification to avoid pesticide residues on food. The metrics approach can also have drawbacks. As noted, few certifications are widely available for social justice issues. In addition, the claims of various certifications, such as USDA organic, fair trade, or sustainable seafood, have their critics. On the other hand, when metrics are coordinated across multiple

institutions, distributors and providers at larger scales can be engaged more quickly, as seen in the University of California system's adoption of multiple certifications and sustainable food criteria across many large campuses.

## Power Shifts in Market Transactions

On balance, relational approaches offer the possibility of a more equitable power sharing, as trust and long-term relationships lead to price and delivery negotiations. The Montana case is not alone in building mutual obligations and market relations that include non-economic dimensions; both small- and large-scale schools recounted similar experiences. In the end, relational approaches privilege the needs of farmers and ask institutions to spend extra effort to make new supply lines work. A metrics approach privileges the dining service's constraints, leaving farmers and fishers to bear the burden of certifications and conformity to rules that may not be ideal. Especially where metrics can be combined with some assurance of a stable, long-term purchasing relationship—which is possible with some corporate food service provider contracts—it can better support the development of alternative food networks, even with the extraction of corporate profit in the process. Where food service contractors shop around, however, and drop new suppliers frequently, the costs of certification and uncertain markets may present significant disadvantages to supporting a thriving alternative system. And a relational approach should, on balance, have a financial edge through the elimination of middle sectors.

Relevant to the issue of whether campus alternative food projects create a new politics of food, there is evidence that some campuses reproduce the conditions that led to the conventional system. As dining halls seek to serve thousands of meals a day, dining service personnel put pressure on farmers and distributors to cut costs, lower prices, standardize products, and expand delivery capacities. Some schools are willing to pay more for local or more sustainably-grown food in the beginning stages of a program but assume that growing competitive pressures from new farmers will lower future prices. Thus, there seems to be less opportunity to alter market relations with a metrics approach, though it can be true that some certifications have embedded within them a higher price for producers and somewhat altered market relations.

While some scholars lament the rationalization and standardization imposed through audit cultures, the resulting tracking and statistics can be a cause of celebration by student, faculty, and food service activists alike. While metrics do impose strictures of certification and tracking on farmers and dining staff, it would not be accurate to say that personnel are "objects of information, never subjects in communication" (Strathern 2000:75) because there is dialogue (and exit) around organic, fair trade, and campus commitments.

It is paradoxical that a metrics approach—vulnerable to the accusation that it supports standardization and enforcement of one-size-fits-all certifications on food producers—is able to accommodate many types of educational institutions, including those with high personnel turnover, poor climate, or unenthusiastic administrations. Because campuses vary so widely in their institutional characters and therefore in their capacities to engage in a more fundamental reordering of consumer-producer relations, there is an advantage to overlooking the shortcomings of a more inclusive metrics approach. Both strategies ask institutions to spend extra effort and involve a degree of higher transactions costs.

## New Imaginaries

Campus alternative food projects have clearly played an educational role in disseminating the critiques of the conventional food system. Such purchasing commitments readmit moral discourse around food and reincorporate missing social, environmental, or economic values into market transactions, promoting a learning community and some degree of cultural change at many nodes of the food chain. Both the relational and metrics approaches offer educational moments to food system personnel; they normalize the alternatives, expand the conversation, and recruit new partners. Both approaches allow food services to publicize their efforts on campus and with local media, and both offer administrations opportunity to claim the ethical accomplishments of the value chains.

These effects on imaginaries and worldviews reframe consumer expectations, and where staff embrace alternative food projects, there can emerge new personal meanings, even with a metrics approach. Ethical concerns become more deeply integrated into the functioning of the institution, and if campus governance structures are put into place to support such projects, there is a further opportunity for two-way learning that transcends academic-operational silos.

Because alternative food projects are relatively new, issues of institutional accountability and long-term trajectory are still uncertain. Personnel turnover is inevitable. Relational approaches seem particularly vulnerable to staff turnover since trust relations, skill, and knowledge have to be rebuilt. Fluctuations in the local farm economy present risks to supply, as well. But staff turnover is also a drawback for metrics approaches, especially if the institutional commitment for sustainable food is mainly personality-driven. Politically powerful acts such as integrating ethical goals into formal dining service contracts, demanding transparency through annual tracking of purchases, creating commitments to organizations like the Real Food Challenge, and creating governance structures to oversee these policies go beyond mere "spaces of possibility."

Since a metrics approach is not based on close interpersonal relationships and may not be limited in geographical space, it has been assumed to provide less opportunity for emergent new meanings or epistemologies. Conversations with individuals in various schools, however, reveal that some metrics programs have been championed not only by students and faculty—who can be very passionate—but also by food service directors and dieticians. Actors at any point in the system can take great pride in new purchasing goals and achievements. For some food service personnel, the

satisfaction of accomplishment comes from meeting client demands but also from their own ethical commitments and the new knowledge required. Some campus dining programs also publicize their activities well, which in turn generates excitement among students and other employees (Barlett 2012). Participation in national campaigns or knowing more about the international impacts of one's own food purchases can create other forms of social relationship across time and space (Kjeldsen and Ingemann 2010; but see also Lyon, Ailshire, and Sehon 2014).

## Conclusions and Opportunities for Action

At this moment in the history of higher education's contribution to a more sustainable food system, there is evidence that alternative values are entrenched "ever more deeply in everyday practices of food provisioning" (Goodman, DuPuis, and Goodman 2011:5). The good news is that there is diversity of opportunity, means, and resources. There is also diversity of institutional will, clarity, and commitment. To take advantage of growing public concern about healthy food and social justice throughout the food system, the challenge is to strengthen resolve among uncommitted schools and support further efforts from institutions that are currently engaged, even those with extraordinary programs. The alternative food movement offers anthropologists in alliance with other academics and campus personnel opportunities to call for and enact changes in food service policy and practice, towards embodied ethics and new forms of democratic engagement and participation.

The implications of the analysis presented here are that campus leaders who wish to strengthen their food service connections to the alternative food movement might well begin with broad dialogues to assess whether their goals are mainly reduction of environmental harms from agriculture, farm and food worker justice, social resilience, economic vitality for the region, or enhanced community and individual health. With that clarity, strategies using metrics or a relational approach can be matched to institutional context and locale, and plans for policies and accountability designed accordingly.

The review here of relational and metrics approaches reveals that a relational approach offers strong advantages, but that a "pragmatic, incremental" metrics approach also can be effective (Goodman, DuPuis, and Goodman 2011:145). Particularly where schools are small scale or favorably located geographically, or mandated to serve the economic development of the state, there can be opportunities for relational approaches that rebuild social integration with local farmers. Some leaders may wish to push for a combined approach that prioritizes certain metrics for out-of-state purchases. Institutions with high staff turnover, unfavorable location, or unenthusiastic administrations can redirect purchases using a metrics approach that embeds ethical concerns, especially if they can be written into contracts and policies. As many regions move towards resilience planning and are concerned about food access, the goals of an alternative food system can be carried forward into wider communities. Schools that seek to support a more reflexive food purchasing process can explore alliances with academic researchers, student internships, and governance structures that allow for democratic discussion and mutual education.

When it comes to the role of higher education to promote a wider conversation about desired futures, a relational approach has an advantage. It can more easily support bioregional planning and coordinated assessment of public and private investments to include a healthy food system along with other societal goals. Encouraging such new partnerships and information flow is best served by affiliative relationships, and the breadth of potential partners is one of the strengths of the relational approach (Heiss et al. 2015; Stevenson and Pirog 2008). Within diverse social and agricultural contexts across the country, regional cooperation can serve to discern appropriate goals, scales, and needed investments to support more resilient regional food systems.

In all these opportunities, the organizational capacity and mission of the school's food service has to be taken into account, recognizing that multiple goal orientations are common, within each individual as well as within any one institution. The diversity of alternative food strategies, projects, and institutional structures in higher education means that exemplars are available from different stages and with different templates for action; there is no need for any school to reinvent the wheel.

The range of experiments now underway is also a call for improved research, especially on the full effects of alternative food policies and strategies; on student consumption habits; farmer viability; patterns of inequity by gender, race, or class; and the long-term viability of institutional commitment. Shared information on impacts, roadblocks, strategies, and mistakes will allow an assessment of the extent to which core values are being enacted. Institutional change can be hard to document, especially when confidential records are involved, but there is an urgent need to document and analyze emerging process. As we pour billions of dollars into agri-food systems that degrade soils, poison rivers, underpay workers, and transfer power to corporate conglomerates, this analysis of higher education's sustainable food projects shows that inclusive approaches and multiple strategies are available to build momentum towards new practices, paradigms, and politics.

### Notes

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[2]There is also a justice dimension embedded in the standardization of food characteristic of large-scale food services. A desire to offer each patron a consistent portion of food for a consistent price is one component of food system regimentation and the desire for predictability. A form of fairness to the consumer is also linked to greater efficiencies and profit for the corporation, with resulting rigidities for the producer.

[3]Because there is no third party certification, however, direct trade cannot guarantee whether favorable prices are translated into farmer profits or farm worker earnings.

[4]Not all corporate business models are based on standardization, however; Bon Appetit allows each campus locale and chef to adjust menus and purchases to respond to such unexpected opportunities.

[5]One school circumvents requirements to choose lowest cost by adding a "freshness" component to food requirements.

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