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Food Deserts and Supermarket Culture in Denver, Colorado

Sasha Breger Bush

Abstract: While the food desert-supermarket (FDS) approach remains a favored one among policymakers, scholars are growing increasingly critical of it. I contribute to this growing body of critical literature by examining the FDS approach through the lens of "cultural appropriateness." While much of the critical academic literature has thus far focused on the food desert side of the approach, here I turn my attention to the proposed solution: supermarkets. The essay focuses on ethnicity, nationality and language as cultural dimensions important in thinking about and devising policy intended to mitigate food insecurity in food deserts. Field research in supermarkets in the Denver metropolitan area found that supermarkets routinely and systematically promote Western cultural norms, marginalize non-Western cultures and foods, and ostracize non-English speakers.

Keywords: food security, food deserts, supermarkets, language, ethnicity, nationality

JEL Classification Codes: D02, B52, F54, Q18

The food desert approach to addressing food insecurity has become a favorite among policymakers, analysts, and activists across the United States. A food desert is a geographic area in which affordable and nutritious food is difficult for residents to procure. Food deserts are places where food retailing is often limited to fast food outlets, gas stations, convenience stores, and liquor stores, with residents forced to purchase unhealthy and often overpriced, processed foods. The concept has helped focus attention on some of the structural and environmental causes of food insecurity, and has assisted in moving policymakers away from approaches that "blame the victim" (Alkon et al. 2013).

In the metropolitan area of Denver, Colorado, as in many other cities, application of the food desert concept has led to governmental and community support for supermarkets as a solution to problems of food insecurity and poor health in neighborhoods designated as food deserts. The Colorado Health Foundation notes, "In general, individuals who have better access to supermarkets and limited access to fast food restaurants tend to have healthier diets, lower rates of chronic disease, and increased food security. Unfortunately, access is not a simple process or even possible for many Coloradans" (2009, 4). The Food

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Trust (an important non-profit actor in Colorado's food security policy arena) agrees: "In order for residents to eat better, Colorado must address the significant need for supermarkets and food resources in its communities . . . Solutions that have proven helpful elsewhere in the country include strategic investments with public funds to reduce risks associated with the development of more supermarkets in lower and moderate-income communities" (Food Trust 2009, 1; see also Sachs 2019; Denver Food Vision 2017).

In recent years, policymakers in Denver have focused on attracting supermarkets to food desert neighborhoods, where the low incomes of residents, higher insurance premiums, low food stamp subscription levels, and other barriers deter supermarkets from establishing stores. The Denver Food Access Task Force—comprised of representatives from state and local governments, prominent non-profit organizations, local food retailers, and supermarket chains like Safeway and Walmart—formed in 2009 for the specific purpose of generating strategic approaches to cultivating supermarket and other retail interest in food desert neighborhoods in Denver. Colorado Governor John Hickenlooper writes in the preface to the Task Force's recent report: "Access to affordable fresh food is a critical component for healthy eating. Many of our communities don't have nearby grocery stores, making it difficult to get healthy, affordable food . . . I strongly support public policy that helps bring new grocery stores and supermarkets to our underserved communities . . . (Denver Food Access Task Force 2011, 2). Denver Mayor Michael Hancock notes that "the City of Denver has focused on making nutritious foods like fruits and vegetables more readily available to our residents by supporting investments in supermarkets and grocery stores" (Denver Food Access Task Force 2011, 3).

While the food desert-supermarket (FDS) approach remains a favored one among policymakers, scholars are growing increasingly critical of it. A variety of studies have interrogated the very idea of a food desert, arguing that what appear to be "dry" neighborhoods bereft of healthy food options are actually quite food-rich (Lee 2012; Raja, Ma, and Yadev 2008). Other studies have failed to find a statistical relationship between health indicators (e.g., obesity) and proximity to a grocery store (e.g., An and Sturm 2012; Pearson et al. 2005). Moreover, and related to the previous critique, some argue that the geographically-based perspective central to the food desert concept masks deeper, underlying causes of food insecurity and malnutrition like poverty, racism, and class inequality (e.g., Gilligan 2014, Alkon et al. 2013). Still others have criticized the food desert approach on the grounds of "neoliberal paternalism," given that the concept frames food insecurity as a problem particular to low-income neighborhoods of color (Shannon 2014).

Below, I contribute to this growing body of critical literature by examining the FDS approach through the lens of "cultural appropriateness." While much of the critical academic literature has thus far focused on the food desert side of the approach, here I turn my attention to the proposed solution: supermarkets. Are supermarkets culturally appropriate institutions for promoting food security? The issue of "culturally appropriate" or "culturally acceptable" food, as well as of culturally appropriate programs for promoting food security, has recently become an important issue in the literature on food justice and food security. The literature on cultural appropriateness, combined with extensive recent research on supermarkets and their behaviors in the global economy, raise a variety of concerns important to thinking about the appropriateness of supermarkets as food marketing institutions. Not least, this literature suggests that inattention to issues of cultural appropriateness and supermarket

culture in the policy context can result in well-meaning programs that may inadvertently undermine consumer well-being and aggravate structural inequalities in the food system.

My research homes in upon ethnicity, nationality, and language as cultural dimensions important in thinking about and devising policy intended to mitigate food security problems in food deserts. Field research in supermarkets in the Denver metropolitan area found that supermarkets routinely and systematically promote Western cultural norms, marginalize non-Western cultures and foods, and ostracize non-English speakers. In a metropolitan area like Denver, where food deserts overlap considerably with communities of people characterized by foreign nationalities, minority ethnicities, and primary (or sole) proficiency in languages other than English, this is cause for additional concern. Among other implications for policy, this research suggests that attracting supermarkets to certain food desert neighborhoods may be counterproductive and may further marginalize, disempower, and undermine the well-being of precisely those communities of people the interventions intend to assist. At the very least, these findings imply that further research is necessary into cultural preferences surrounding food marketing institutions in communities that have been isolated by policymakers as sites for future supermarket investment.

In the first section below, I review the literature on the cultural appropriateness of interventions designed to mitigate food insecurity and injustice in various communities across the United States. In the section following, I draw upon the interdisciplinary literature on supermarkets, their history and their global behaviors to create a "cultural profile" of the supermarket as an institution. In the section after that, I provide background and demographic information on Denver's food deserts and the people who live there, and then relate the findings of field research in supermarkets in Denver. In the final section, I conclude with implications for policy.

"Culturally Appropriate" Food

There is a large and growing literature that foregrounds the several topics that frame this research: cultural difference and cultural bias in the context of food systems and food security policy. Here, I look to this literature for practical policy and research insights relevant to the current policy practice at issue in this article (i.e., local and state policies and programs designed to attract supermarkets to ethnically- and linguistically-diverse food desert neighborhoods).

The first take-away from the literature is simply that while there is no universally agreed upon understanding of "culturally appropriate" food, most seem to agree that the concept is important in thinking about and devising policy and activism around "food security" and "food justice." The USDA defines food security as the ability of "all persons [to] obtain a nutritionally adequate, *culturally acceptable* diet at all times through nonemergency sources, including food from local production" (USDA 2002, 60, italics added). The Food and Agriculture Organization of the United Nations (FAO) references the definition of food security decided at the 1996 World Food Summit: "Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and *food preferences* for an active and healthy life" (FAO 2003, chapter 2.2, italics added). Alison Hope Alkon and Julian Ageyman, quoting the non-profit Just Food, note that food justice is "communities exercising their right to grow, sell, and eat food that

is fresh, nutritious, affordable, *culturally appropriate*, and grown locally with care for the well-being of the land, workers and animals" (2011, 5, italics added).

Despite this general convergence, there is little consensus as to what "culturally appropriate" actually means. During recent FAO negotiations about guidelines for "responsible investment in agriculture and food systems," the United States delegation offered the following definition: "For the purposes of this document, consumers, through the free exercise of their choices and demand, determine what food is culturally acceptable" (Charles 2014). Responding to pushback to this wholly market-based understanding from other parties to the negotiations, the FAO guidelines ultimately noted that "culturally acceptable" is "understood as food that corresponds to individual and collective consumer demand and preferences, in line with national and international law, as applicable" (FAO 2014, 32). The more radical and critical food justice literature, while it does not strictly define cultural acceptability, uses the concept to interrogate the sensitivity of food security interventions to racial and class differences. For example, Rachel Slocum discusses culture in the context of the "whiteness" of the alternative food movement in Minnesota (2007).

Second, scholars point to the dangers of overlooking cultural difference in the food security context, arguing that such neglect can reproduce structural inequalities and undermine the effectiveness of food security interventions. Katharine Bradley and Hank Herrera argue, "Over the past 15 years social movements for community food security, food sovereignty, and food justice have organized to address the failures of the multinational, industrial food system to fairly and equitably distribute healthy, affordable, culturally appropriate real food. At the same time, these social movements, and research about them, re-inscribe white, patriarchal systems of power and privilege" (2015, 1; see also Guthman 2008; Slocum and Cadieux 2015). Speaking to the pervasive and marginalizing influence of whiteness in national and local food movements, Delores James's research among African American focus groups in north central Florida uncovered the perception among participants that eating "healthfully" meant "giving up part of their cultural heritage and trying to conform to the dominant culture" (2004, 349). One focus group participant commented specifically on the effectiveness of outside interventions in this context: "I know that some of our traditional foods are not full of nutrients but they bring back good memories of childhood and I'm not giving them up just because some researcher says they are bad" (James 2004, 358).

In this context, two authors speak specifically to the cultural appropriateness of supermarkets as food security institutions. Samina Raja, Changxing Ma, and Pravan Yadav's (2008) study of food deserts in upstate New York found a wealth of small, independently-owned grocery stores in African American neighborhoods that had been designated as food deserts. Their work suggests that a racially-sensitive approach to mitigating food insecurity in these neighborhoods involves support for existing small businesses, rather than attempts to attract large supermarkets from outside. Our research, presented below, similarly argues that an approach to mitigating food deserts in Denver that is sensitive to ethnicity, nationality, and language may require policymakers to think beyond supermarkets.

Similarly, Isabelle Anguelovski's (2015) case study of the politics of food justice in the Boston area—one that deserves special attention for its direct attention to ethnicity and nationality in the supermarket context—suggests that traditional supermarkets may be culturally inappropriate as food security institutions in certain neighborhoods. Examining a recent battle between largely white and U.S.-born food justice activists (who supported

a new Whole Foods in the Hyde Park neighborhood in order to cure the perceived "food desert problem" there) and local Latino residents (who argued that the already-existing Latino grocery store in the neighborhood, called Hi-Lo, was more than adequate), the author argues that food justice interventions sometimes act as pathways to gentrification and can undermine the food security of people in ethnically diverse neighborhoods. In this case, the Hi-Lo grocery was replaced with a Whole Foods, substituting a high cost and culturally inappropriate supermarket for a lower cost and culturally beloved local grocery. "The closing of Hi-Lo and opening of Whole Foods signified the loss of a socio-cultural food haven through which Latinos' individual and collective identities had become showcased and strengthened and food sovereignty exercised . . . one of the ironies of Whole Foods' opening is that while it will enhance for all residents the proximity of more organic foods, including fresh produce, it does not enhance access to healthy foods for the lower-income households and residents of color living in Hyde Square and its surroundings" (Anguelovski 2015, 192).

Third, the literature suggests that the ways in which we portray, market, and consume food items that originate from outside of our own food culture (e.g., from other countries, nations, regions) are potent reflections of our regard for people and traditions from elsewhere. If we are not careful, these representations can marginalize and disempower people and communities with food cultures that are different from our own. For example, Lisa Heldke (2001) wrestles with her love of eating Indian, Vietnamese, and Peruvian foods, raising important questions about the imperial nature of her consumption of foods originating from cultures and communities in the global South. She notes, "Eventually, I put a name to my strange penchant for cooking and eating ethnic foods—most frequently and most notably the foods of third-world cultures. (And yes, that's a term I worry about.) The unflattering name I chose for my activities was "cultural food colonialism," which made me your basic colonizer" (2001, 77).

Mikki Kendall (2014) similarly argues that white, upper-middle class food trends reproduce relations of domination and oppression in relation to poorer communities of color from which these trendy foods often originate. She argues that cheap cuts of meat (like oxtail and offal), historically consumed by African American communities in the United States, have recently been subject to "food gentrification," a process that drives the price of these foods out of reach of the communities that have traditionally consumed them: "[A]s consumers range further and further afield from their traditional diets, each new "discovery" comes at the expense of another marginalized community" (Kendall 2014). Interviews with Latino residents of Jamaica Plain, Boston in Angeulovski (2015) revealed similar sentiments about traditional foods like quinoa and yerba mate:

> privileged groups have appropriated them in their discourses and practices of natural eating, thereby reflecting whiteness and metaprivilege, that is a lack of conscience and/or reflection on how their (white) discourses annihilate the role of Latino ingredients and traditions in shaping food practices—including so-called alternative practices—in the country. (2015, 191

Our research in Denver supermarkets reveals these tendencies in the representation of foods from other (minority) cultures.

As will be seen below, the ethnic food aisle in the supermarket, by commodifying the foods of other cultures and promoting consumption without national, cultural, or historical

context, likewise works to promote "cultural food colonialism" and "food gentrification." Along these lines, Emma Dressler-Hawke and Juliana Mansvelt's (2009) study of the representation of ethnic foods in grocery stores in New Zealand reveals that the vast majority of ethnic foods in the grocery store have achieved "mainstream status," meaning that they are not shelved in the ethnic aisle but rather alongside the products of the dominant culture without recognition of their cultural origins. Interesting too, is that these authors find that less than half of the products in the ethnic food aisle are labeled in their native languages. The authors thus recognize several cultural tensions in the supermarket's treatment of the foods of foreign and ethnic minority cultures, tensions that we also locate in our research.

Fourth, research on the impact of migration on the health of immigrant communities suggests that "cultural mismatches" (i.e., between food culture at home and the food culture of host cities or countries into which people migrate) can seriously compromise the health and well-being of immigrant communities. Similar findings are evident in the research on globalization and food culture, with globalization exposing communities to Western food culture with negative consequences for the well-being of local residents. Quite salient to the policy matter of promoting supermarkets in foreign-born and immigrant communities, much of this research suggests that prolonged contact with the Western diet can lead to obesity, heart disease, diabetes, and other so-called "diseases of civilization." To the extent that supermarkets promote consumption of Western food in Western quantities (more in the next section), they may promote some of the very food security problems (i.e., malnutrition) that food security activists intend to prevent.

For example, Harriet Kuhnlein and Olivier Receveur (1996) note that the loss of traditional food cultures among indigenous communities in North America, associated with encroachment by white settler societies, has resulted in a more sedentary lifestyle, poor diet, and a variety of diseases associated with poor diet. Susan Whiting and Michelle Mackenzie (1998) argue that the transition among indigenous communities from a traditional diet to a mostly "store-bought" diet has resulted in a rise in diet-related chronic disease. Cecilia Albala et al. (2002) find that economic growth associated with the globalization of the Chilean economy has changed dietary patterns in the country, resulting in a rise in chronic disease in Chile: "this growth produced negative effects on lifestyle, such as the turning to a 'Western diet' and its predominance of fast food consumption, and a decrease in physical activity" (2002, 123). Penelope Gilbert and Santosh Khokhar's review of the literature on the health of immigrant communities in Europe reveals that,

> Following migration, the majority of ethnic groups alter their eating habits, combining parts of their traditional diet with some of the less healthy elements of the Western diet. This has been particularly evident among African Caribbeans, South Asians, Turks, Greeks, Mexicans, and Chinese. (2008, 211)

Fifth and last, it deserves mention that there is very little research in the food systems, food security, or food justice literature that discusses the issue of language and linguistic capabilities in the food context. One group of scholars has developed a Spanish-language version of the Household Food Security Survey implemented by the USDA and the Census Bureau, arguing that this tool more accurately portrays food insecurity among Spanish-speakers than the previous practice in which translators "free translated" the survey (Harrison et al. 2003). A 2002 study by Lucia Kaiser et al. of food insecurity among preschool-age

Mexican-American children revels that food insecurity is higher in families that are less proficient in English (though it is unclear whether this variable acts independently of income and education levels).

A 2003 study by Robert Mazur, Grace Marquis, and Helen Jensen speaks to the impact of "acculturation" on food security among Hispanic youths, independent of the impact of income/poverty and education (in the study, "acculturation" was measured as "language spoken at home by the household head," and was recorded as "English," "Spanish and English," or "Spanish"). Hispanic youth in households where the head of household spoke Spanish or only some English were less likely to suffer food insufficiency and more likely to have diets with a low percentage of energy from fat than youth in households where the parents spoke English. In a similar vein as the studies above about contact with the Western diet, the authors note:

> This culture-based protection, or buffering, has also been shown for other risky behaviors (e.g., smoking and abuse of alcohol or drugs) via stronger familial and social support networks. *It is important to identify pathways to retain positive aspects of culture, because the benefits of culture based protection appear to diminish as acculturation proceeds.* (Mazur, Marquis and Jensen 2003, 1125, italics added)

To the extent that food marketing institutions (for example, ethnic groceries or other marketplaces that cater specifically to ethnic minorities and immigrant groups, e.g., by using native languages in the store and selling a wide variety of especially fresh foods from the countries of origin of residents) can help to slow the acculturation process and help to preserve this "culture-based protection," this last finding in conjunction with our own research (below) suggests that such outlets may improve food security and health outcomes relative to supermarkets in Latino and Spanish-speaking communities.

In the section directly below, I extend this important conversation about cultural difference, cultural bias, and food security by providing a cultural profile of the supermarket as an institution. In the penultimate section, I elaborate on the importance of considering ethnicity, nationality, and linguistic background in thinking about supermarkets as food security institutions in food desert neighborhoods in the Denver area.

Supermarkets: A Cultural Profile

A growing body of literature on the incredible growth and expansion of supermarkets around the world provides key insights into the culture of supermarkets as social institutions. Supermarkets are distinctly Western inventions, rising to prominence in the United States and Europe between the 1920s and 1940s. These "consumption factories," designed specifically to cut labor costs and promote the "rationalization" of food retailing, did for food acquisition what Henry Ford did for automobile production. Supermarkets thus embody and reproduce many of those central values and ethics traditionally associated with cultures in Western, capitalist, and industrial societies: efficiency, profit-maximization, individualism, and over-consumption, among others. Further, the supermarket has, with neoliberal globalization over the past three decades, extended its dominion in imperial fashion into the global South, marginalizing and disempowering local competitors and suppliers alike. Below, I first present the values and practices that generally characterize the interior of the supermarket and shape

the shopping experience of customers, followed by a discussion of supermarket expansion around the world.

Political economist Raj Patel notes that "the moment you step into a supermarket you are in the belly of the new giants of the food system. The moment you step into a supermarket, you surrender a great deal of freedom" (Patel 2008, 0:38–0:47). Indeed, the supermarket is not mainly organized and run in the interests of consumers, but in the interests of efficiency and profit maximization for its owners. As is indicated below, this orientation often works to actively undermine the well-being of consumers. This should perhaps lead me to question the cultural appropriateness of supermarkets as food marketing institutions in general, and to think about how to use public policy and public funding to promote different kinds of food marketing arrangements that promote different kinds of values and ethics.

Patel speaks clearly to the cultural specificity of the supermarket, with its origins in twentieth century industrialization in the West. He notes that during the early 1900s in the United States, manufacturers, turning out increasingly large quantities of industrial products, had two big concerns: (1) that too much was being manufactured relative to the purchasing power of consumers; and, (2) that even if consumers could afford these new products, they would not buy them "because they didn't strictly need them" (Patel 2007, 216). In the early twentieth century, the Great Atlantic and Pacific Tea Company (the A&P), a prominent food shipping company, helped to solve this problem by creating a logistics and distribution system that allowed for cheap transport of manufactured food products nationwide into the A&P's new network of grocery stores. This allowed the company to cut prices on retail food items, a strategy that encouraged greater consumption. At roughly the same time, Albert and Hugh Gerrard developed a food retail system that most of us now know quite intimately—the self-serve grocery store.[1] "[R]ather than have grocery clerks do it for them, consumers themselves might pick their own groceries. This, certainly, would persuade people to buy more, and at less cost to the retailer" (Patel 2007, 218). These innovations paved the way for the modern-day logistical empires operated by multinational self-serve supermarket chains.

This origin story is telling of the values that are central to the supermarket as a social institution. From the very beginning, supermarkets have been intended to maximize profits for distributors of manufactured food products, a goal to be reached via the realization of economies of scale (in logistics and retail) and by encouraging consumers to buy as much as possible by having them help themselves to grocery items, among other techniques. In this context, some scholars (like Humphery 1998) caution against portraying consumers as passive victims of manipulation by retailers. While supermarkets arguably provide a more "convenient," one-stop grocery shopping experience for consumers, it remains that supermarkets devote significant resources to developing marketing devices and techniques that—like the self-serve concept—are intended to maximize consumer purchases of processed foods (leading me to wonder how convenient such institutions actually are). That processed foods are less nutritious relative to fresh foods and are consumed in greater quantity than in the past, especially by Western consumers, is connected by many researchers to the greater prevalence of diet-related health problems like obesity, diabetes, and hypertension (see, e.g., Nestle 2007; Pollan 2006; Cordain et al. 2005; Patel 2007; Lustig, Schmidt, and Brindis 2012). As Michael Pollan notes, "the surest way to escape the Western diet is simply to depart

[1] Please note that there seems to be some disagreement about who invented the self-serve concept. Kim Humphery argues that it was Clarence Saunders, the founder of the Piggly-Wiggly, who developed the concept (1998, 66).

the realms it rules: the supermarket, the convenience store, and the fast-food outlet" (2009, 158).

For example, supermarket circulars, advertising sales and specials, have been found to devote more space to promoting sweet snacks and beverages in regions of the United States with higher obesity rates: "the highest obesity-rate region devoted significantly more space to sweets than other comparable regions, and these sweets were mostly sugar-sweetened beverages" (Martin-Biggers et al. 2013). Along similar lines, supermarkets have been criticized for their use of multiple strategies that market calorically-dense processed foods to children (like candy, cookies, cereals, and frozen desserts). Karen Glanz, Michael Bader, and Shally Iyer note that supermarkets utilize aisle placement strategies to encourage the consumption of unhealthy cereals by children (2012, 507). Jason Horsley et al. found in their study in the UK that the checkout line was utilized by supermarkets to market unhealthy foods to children by placing them at or below children's eye level (2014). Interestingly, one study notes a correlation between proximity to a supermarket and higher body mass index levels among children (Feichtner et al. 2013). Other tactics employed to increase the time consumers spend in the supermarket and the quantity of products they buy include music choice (depressing music has been found to encourage more consumption), strategically locating milk at the back of the store (so that one has to pass by lots of processed food products before getting to this most commonly purchased one), and setting up bakeries (the smells that issue from bakeries encourage more consumption) (Zerbe 2009).

The self-serve grocery store also had the effect of individualizing the food shopping experience for consumers, reducing social interaction between customers and clerks. Indeed, in contrast to many other food marketing institutions—such as sole proprietor specialty shops and farmers' markets—shopping for food at the supermarket is an intensely lonely experience. Kim Humphery notes, "In the self-service store the shopper was to be left entirely alone, to be fully individualized and left to interact with almost nothing but the shop" (1998, 65–66). Among other directions for future research raised here, I wonder if shopping alone engages the same tendency to overconsume as studies have shown with eating alone (Pollan 2009, 192). Moreover, the supermarket's embrace of a culture of individuality calls into question the capacity of the institution to serve as a place for social gathering and networking, an issue raised above in the context of food security and culture by Anguelovski (2015) and Mazur, Marquis, and Jensen (2003).

A relatively few supermarket chains have come to dominate food retailing in the West. Several waves of mergers and acquisitions have resulted in two supermarket chains—Walmart and Kroger—controlling more than 40% of the U.S. food retail marketplace in 2013. Coles and Woolworths together controlled more than 70% of Australia's food retail market in 2013. In Europe in 2011, the largest five retailers had a combined share of more than 60% in thirteen countries (Austria, Belgium, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Portugal, Sweden, and the UK). In Canada in 2011, three retailers held more than 55% of the marketplace.

Globally, five supermarket chains dominate the market for food retailing: Walmart (U.S.-based), Tesco (UK-based), Costco (U.S.-based), Carrefour (France-based), and Kroger (U.S.-based). "The net result is an hourglass-shaped global food system. Masses of farmers and small producers compete to supply a smaller number of processors, manufacturers, and wholesalers. These supply the handful of large retailers at the choke point, who sell directly

to the global population of consumers" (Rioux 2015; see also Seth and Randall 2011 for market concentration data).

Indeed, over the past several decades, these chains have become multinational empires with vast networks of foreign suppliers, many of whom are low-cost producers located in the global South. The literature on agro-food chains note that these powerful institutions leverage their size, market power, global transport and logistics networks, and access to large consumer markets in the West to control and manipulate suppliers, much as supermarkets manipulate consumers inside the store. For example, Catherine Dolan and John Humphrey (2000) note that European supermarket chains place significant downward price pressures and pressure for enhanced quality on hosts of vegetable producers in East Africa. While producers are paid poorly for their crops and also risk being excluded from the production chain altogether, owing to the high quality standards demanded by the supermarkets, the retailers enjoy wide margins and a dedicated supply network. Thomas Reardon, C. Peter Timmer, and Julio Berdegue argue that while supermarkets offer real opportunities to those suppliers who can meet their standards and production requirements, "evidence is mounting that the changes in standards and the implied investment have driven many small firms and farms out of business in development countries over the past 5–10 years and accelerated industry concentration" (Reardon, Timmer, and Berdegue 2008, 62). Patel notes that supermarkets pit produce suppliers in different countries against one another to realize the lowest costs: "South Africa, like New Zealand and Chile, is in the position of being able to provide large quantities of counter-seasonal fruit to Europe and North America. With deregulations in global trade, the fruit growers in these countries compete directly against one another, at the mercy of the weather, the exchange rate, and the distributors and supermarkets who deign to make contracts with them" (Patel 2007, 236).

The low prices that supermarkets can offer, partly owing to these extensive and low-cost supply networks, have led to intense competition for smaller stores and local retailers in the global South, where regulatory changes associated with globalization have in a variety of countries allowed for increasing amounts of foreign direct investment in food retailing. Andrew Seth and Geoffrey Randall note that supermarkets, no matter where they are located, negatively affect smaller scale retailers in the "town center," including "independent grocers, butchers, greengrocers, fishmongers [and] dairies" (2011, 167). In many countries in the global South, supermarkets are competing heavily with traditional "wet markets," stimulating retail market concentration and limiting customary outlets for the produce of small and peasant farmers (Gorton, Sauer and Supatpongkul 2011 discuss this issue in the context of the Thai food retailing sector). Ali Koc, Gulden Boluk, and Surevya Kovaci (2010) find that foreign supermarket chains in Turkey are engendering market concentration in food retailing, in part, thanks to the employment of anti-competitive practices that are illegal in the UK. James Biles notes that foreign direct investment by Walmart in Mexico has "provoked widespread consolidation among food retailers in Mexico, particularly regional supermarket chains and international firms with smaller operations" (Biles 2006, 349). William Robinson notes that between 1990 and 2000, supermarkets increased their share of the Latin American food retail market from 10% to 60%: "The arrival of the Global Supermarket has involved the invasion of transnational retail conglomerates like Walmart, K-Mart, Costco, Carrefour, and Royal Ahold" (Robinson 2015).

Our research in Denver supermarkets, presented in the next section, indicates that the supermarket's imperial and marginalizing practices abroad are reproduced and reflected

internally in stores in the Denver metro area. Further, in many Denver grocery stores, the Spanish language is found only on processed food packaging, a practice that rather clearly indicates a rather cruel cultural bias with potentially serious implications for the food security of foreign-born and non-English speaking residents of Denver neighborhoods.

Food Desert Demographics and Supermarket Culture in Denver

I conducted field research in Denver supermarkets to tentatively answer two general questions: (1) Where and how are non-Western cultures represented in Denver supermarkets?; and, (2) how and where are languages other than English represented in Denver supermarkets? I found that non-Western cultures are typically relegated to the "ethnic food" aisle in the supermarket. I also found that the Spanish language—the language spoken by a large number of residents of food desert neighborhoods in Denver—if it is represented at all, is located in marginal locations or places in these stores that clearly indicate a subjected status. These findings give reason for real concern in thinking about the "cultural acceptability" of the typical Denver supermarket as an institution for food security, particularly given that Denver food deserts are home to large populations of ethnic minorities, foreign-born people, and people who speak languages other than English.

Below, I first present relevant data on food deserts in Denver and the people who live in them. Then, I present and discuss my research findings from Denver-area supermarkets.

Food Desert Demographics in Denver

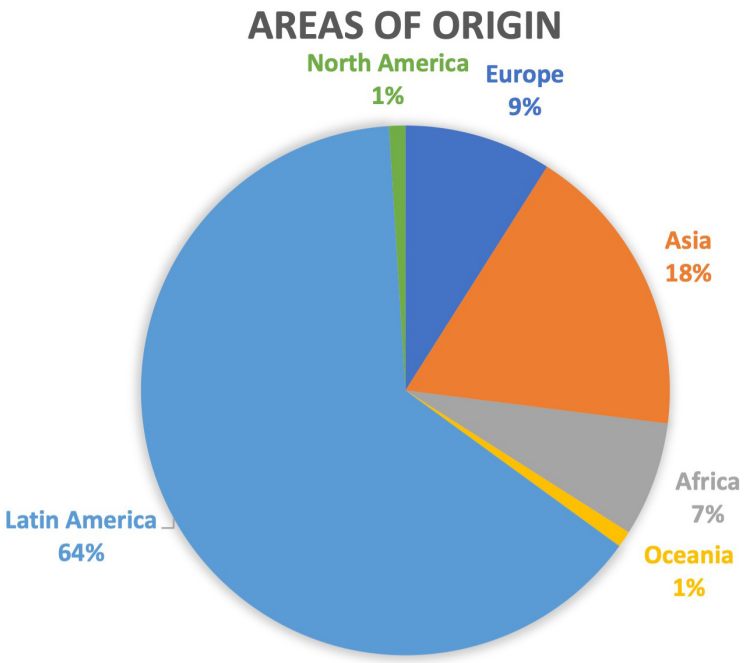
Denver is home to diverse ethnic, immigrant, and linguistic communities. The U.S. Census Bureau found, based on 2010 Census data and the 2013 American Community Survey, that the population of the City and County of Denver is almost 32% Hispanic or Latino (with almost 25% of residents of Mexican origin), about 10% African-American, 3.5% Asian (the largest group here is Vietnamese, comprising about 1% of the city's population), and 1.1% American Indian and Alaskan Native. Twenty-seven percent (27%) of the population speaks a language other than English at home, while over 11% speak English less than "very well." Of the roughly 16% of people in Denver who are foreign-born (most are from Latin America, see Figure 1), more than 88% speak a language other than English at home and more than 65% speak English less than "very well." Languages spoken around the city, other than English, include Spanish, Vietnamese, Russian, Somali, Arabic, Nepali, Korean, Burmese, Chinese (Mandarin), French, Khmer, and Amharic (Denver Office of Community Support 2014, 10–11).

Denver is classified in a recent Brookings Institution report as a "re-emerging immigrant gateway" city, meaning that since 1980 the percentage of foreign-born residents of Denver has exceeded the national average (see Figure 2). Overall, the foreign-born population of Denver increased by almost 200% between 1990 and 2000 (Singer 2004, 23–28). Relevant to the matter of food security among immigrant communities, the report also notes that the poverty rate among immigrants in Denver is more than twice the level for natives (Singer 2004, 14).

Policymakers and researchers in Colorado have determined a series of Denver neighborhoods to be "food deserts," in this case defined as low-income neighborhoods in need of a supermarket. As indicated in Table 1 below, in many of these neighborhoods the percentage of foreign-born persons far exceeds the level for the city in general (which was 16% according to the Census Bureau in 2013). Note, for example, that 47% of residents of

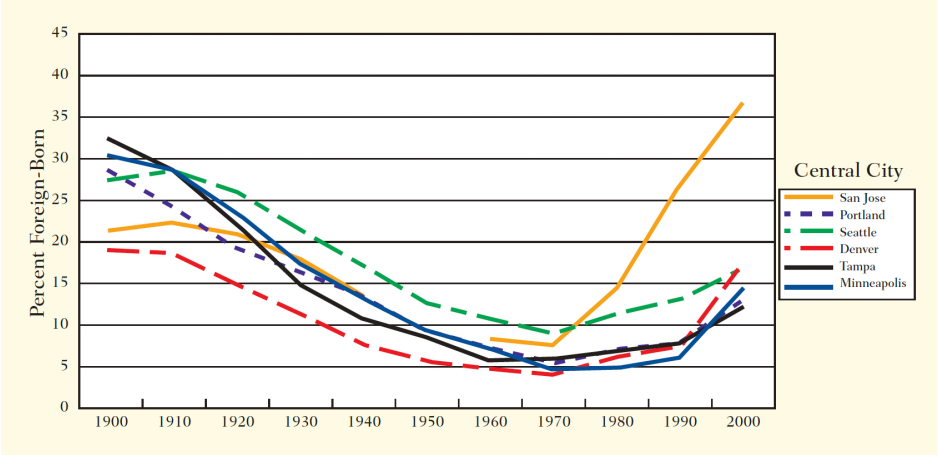
the Westwood neighborhood, 36% in Barnum, and 32% in Elyria-Swansea are foreign born. Further, Spanish is the language spoken at home in a large number of households in these neighborhoods.

Figure 1. Denver's Foreign Born Populations: Areas of Origin



Source: Denver Office of Community Support (2014, 6)

Figure 2. Re-Emerging Immigrant Gateway Cities, 1900–2000



Source: Singer (2004, 8)

Table 1. Foreign-born and Spanish-speaking Residents of Denver Food Deserts

Neighborhood	Foreign-Born Residents by Neighborhood	Number of Students in this Neighborhood who Indicated that Spanish was Spoken at Home
(Identified by key players in Colorado food security movement as low income and in need of a supermarket [2])	*(% of total)*	*(Data indicates a range of 1 student in the Central Business District to 4631 students in Montbello)*
Westwood	47%	2631
Barnum	36%	884
Barnum West	21%	613
Villa Park	25.5%	959
Sun Valley	12%	55
North Park Hill	8%	168
Northeast Park Hill	14%	484
East Colfax	25.5%	458
Elyria Swansea	32%	1148
Clayton	18%	449
Cole	30%	518
Globeville	26%	355
Five Points	8%	177
Montbello	33.8%	4631

Sources: Denver Office of Community Support (2014); Food Trust (2009); Denver Food Access Task Force (2011)

While it is not available for all of them, a recent report from the Denver Office of Community Support does provide finer demographic detail for some of these food desert neighborhoods. Figures 3, 4, and 5 provide more detail for the Barnum, Elyria-Swansea, and Westwood neighborhoods.

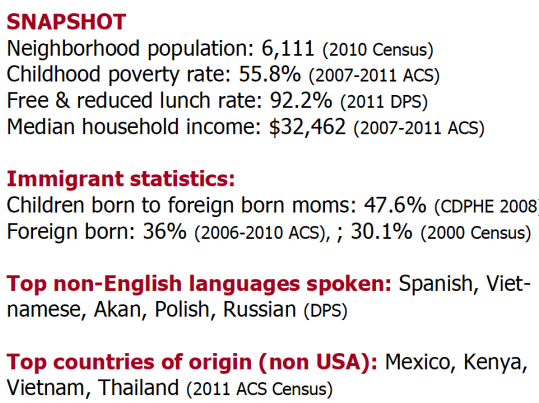
In addition to the high percentages of foreign-born persons, please also note the relatively low incomes, relatively high child poverty rates, and diversity of countries of origin and languages spoken. Relatively low incomes and high poverty rates contribute to the lack of supermarket interest in these neighborhoods (hence the need for incentives and programs to attract them). The ethnic and linguistic diversity apparent in these neighborhoods is critical in thinking about the cultural appropriateness of supermarkets as means of mitigating food insecurity in these so-called food deserts (with the critical food desert literature cited in the introduction, I am reluctant to suggest that these neighborhoods are actually food deserts just because they lack a supermarket).

[2] Two recent policy documents focus on these neighborhoods: The Need for More Supermarkets in Colorado (2009) by The Food Trust and the University of Colorado; and, Healthy Food for All: Encouraging Grocery Investment in Colorado (2011) by The Denver Food Access Task Force, prefaced and endorsed by CO Governor Hickenlooper, Denver Mayor Hancock, Hunger Free Colorado, Safeway, among other prominent contributors to the work of the Task Force.

Supermarket Culture in Denver

After review of the demographics of each neighborhood in the City of Denver seven were selected (Barnum, Barnum West, Villa Park, Sun Valley, Elyria-Swansea, Westwood, and Globeville) in West, Northwest, and North Denver that policymakers and researchers determined were in need of a supermarket to alleviate food insecurity (Food Trust 2009; Denver Food Access Task Force 2011; see Appendix for list of supermarkets surveyed). The foreign-born population of each neighborhood varies from 12% to 34%, as seen in the data in Table 1. Since these neighborhoods were identified based on their apparent need for a traditional supermarket, I located large grocery stores in adjacent neighborhoods that were within one to three miles and/or located along a bus route that directly connects the two neighborhoods. I searched for "big box" supermarkets, as those are regularly seen as the appropriate solution to a food desert. While several of the aforementioned neighborhoods have a number of smaller grocers and ethnic food stores, they are not regularly included in the dialogue of food security solutions and consequently, they are not pertinent to the study at hand. As a result, the study includes a review of Target, Safeway, Save-A-Lot, and Walmart stores. One implication of our research for policymakers is that these other types of food marketing institutions should perhaps be integrated more deliberately into policy discussions about how to mitigate perceived food deserts. Not only might so-called food deserts actually be quite rich in food options if studies consider a broader range of food marketing institutions (i.e., beyond supermarkets), but policymakers may also want to consider how to support and/or attract other kinds of food stores (like ethnic groceries) to food desert neighborhoods.

Figure 3. Barnum Neighborhood Demographic Profile

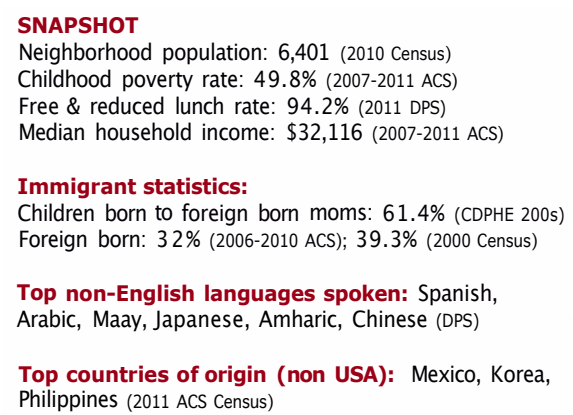


Source: Denver Office of Community Support (2014, 15)

In surveying language and representations of non-Western cultures in Denver supermarkets I found that most grocery stores fail to represent non-Western cultures outside of the "ethnic food" aisles and a few select promotional items. All grocery stores contain some type of ethnic food aisle, either "Asian Food," "Hispanic Food," "Latin American Food," "International," or "Mexican Food." In addition, within all of the grocery stores observed for this study, these aisles are located near the center of the grocery store. More often than not, only one aisle represents non-Western cultures. For example, if a grocery

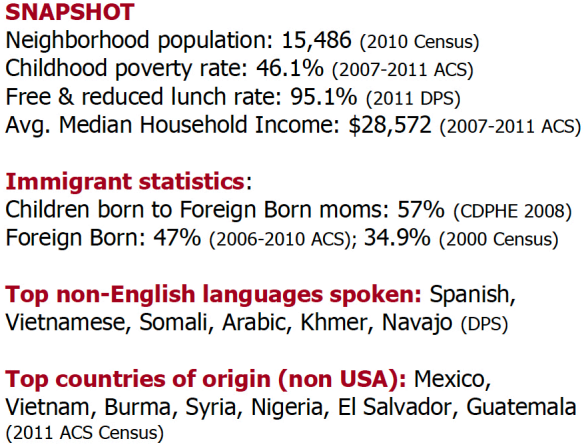
store has a section of Asian food, Hispanic food, and International food, all of these cultures can be found in the same aisle, as if the only meaningful thing about them is that these foods are not found in traditional Western diets. In addition, the "ethnic food" portion is often a very small section within a rather large and diverse selection of foods in this aisle.

Figure 4. Elyria-Swansea Neighborhood Demographic Profile



Source: Denver Office of Community Support (2014, 15)

Figure 5. Westwood Neighborhood Demographic Profile



Source: Denver Office of Community Support (2014, 19)

Besides the fact that grocery stores group entirely different cultures together into one manageable aisle (clearly indicating the prioritization of convenience over other values and ethics), there is no guarantee that food within these specified "ethnic food" aisles are labeled in a language that is appropriate for the expected consumer. In fact, quite the opposite is true, leading us to wonder *who* the ethnic food aisle is actually intended to serve (I am thinking about "cultural food colonialism" here, see Heldke 2001, cited above). The English language dominates ethnic food aisles. Most products that contain a language other than English are regularly found on the lower shelves of the aisle and, therefore, out of direct

eyesight of consumers. It is notable here that in other aisles of the supermarket, these lowest shelves are reserved for the cheapest and lowest quality generic and store-brand processed foods. Furthermore, if there is another language represented, it is in addition to English. For example, Goya, Knorr, and Maggi are brand names regularly found in the "Hispanic" foods section whose primary label is in English, but below the English word the same term is displayed in Spanish, indicating a clear language hierarchy. Further, it should be noted that the ethnic food aisle is generally the domain of processed foods, not fresh foods. That processed foods are those most likely to be labeled in a language other than English is cause for serious concern in the context of food insecurity and malnutrition.

Other languages, Spanish in particular, are present in areas other than the ethnic food aisles of various supermarkets. For instance, I consistently found an independent display of spices by El Guapo in the produce department on the outer section of the stores. These spices, however, were the only products in Spanish that were actively promoted by the supermarket. Other ethnic products, perhaps deemed less desirable for most consumers, receive the same treatment as those within the "ethnic food" aisles: they are relegated to the lower shelves. Maseca (masa), Nestlé (dulce de leche), Juanita's, La Costena, La Preferida, Kuners, Gamesa, and Huy Fong are all brand names that represent a language other than English, though often only one or two particular items of each brand are labeled in another language and can be difficult to find unless a consumer is actively looking for them (note: Maseca's masa and Nestlé's dulce de leche are the only two "Hispanic" products consistently found in every store surveyed). In contrast, some specialty items, like Mexican cheeses and tortillas are prominently displayed in a high traffic area of the store and contain Spanish brand names (El Mexico, Cacique, and Guerrero). However, the brand name is the only word (or words) on the product package in a language other than English, indicating that the Spanish language is employed as a tool of commodification and marketing rather than for communication. Along similar lines, please be aware that many of these apparently "ethnic" foods are brands owned by Western multinationals that use foreign language branding to boost profits and market share (e.g., Maggi is owned by Nestlé, Gamesa by PepsiCo, El Guapo by McCormick, and Rumba meats, below, by Cargill).

It is important to draw attention to the exclusive use of English throughout specific areas of the supermarkets. I found very little, if any, other languages in areas of the store that market fresh foods (i.e., in the produce, bakery, and meat departments). Although in a few stores (those that seemed to cater more to the Latino community, see below), I found the brand Rumba in the meat department. This is significant because the brand only includes offal (tripe, oxtail, tongue, and cheek), which, as noted above, have only recently begun to make inroads into the mainstream Western diet.

There are exceptions to the general trends outlined above: one specific Walmart located in Elyria Swansea and two Save-A-Lot stores in the Mar Lee and Chaffee Park neighborhoods. Over 18.6% of the population of Chaffee Park, 25.6% of Mar Lee, and 32.6% of Elyria-Swansea are identified as foreign born by the *Immigrant and Community Neighborhood Assessment* (Denver Office of Community Support 2014). Paradoxically, the Save-A-Lot store in Chaffee Park, with the relatively smaller population of foreign-born individuals, could arguably be characterized as the most culturally appropriate supermarket for a Spanish speaking population. The majority of items in the store were either labeled in Spanish or advertised independently by the store in Spanish. This includes the produce, bakery, and meat departments. In fact, the only meat products labeled in English were

chicken drumsticks, chicken strips, and pork ribs, all of which are regularly seen in Western diets, while all other items were non-traditional cuts of meat labeled in Spanish. Spanish is prominently used throughout every section of the store, even in the "Comida Hispania" aisle.

The Walmart in Elyria-Swansea also used an unexpected amount of Spanish throughout specific departments within the store. In fact, it was the only store that had a "Mexican Beverage" section, although it is located in a dark corner by an employee entrance. The Walmart also included an extensive "Hispanic Foods" section that encompassed an entire aisle. It had an aisle with "Family Size" products that included a variety of labels in Spanish as well as an independent candy section where every label was in Spanish (the fact that products designed to meet the needs of large families and sugary snacks were, relative to all the other products in the store, deemed to require Spanish labels is worth considering critically, I think).

The most surprising finding in our study of supermarkets in the Denver area is not the limited representation of other cultures and languages, rather it is that the supermarkets studied readily acknowledged that many of their customers' first language was not English. In Target in the Sloan's Lake neighborhood, for instance, I found just a handful of products in a language other than English, but the aisles' labels themselves were in Spanish. Similarly, at Safeway in the Jefferson Park neighborhood I also found just a few products in another language, but check-cashing services and cigarettes were in Spanish. These practices speak to a tendency among supermarkets to try to exploit and capitalize on non-English speaking peoples without substantively accommodating or respectfully representing them.

These findings clearly illustrate a cultural and language hierarchy in Denver supermarkets, one in which the dominant (hegemonic) diet, culture, and language are privileged. Other cultures, traditions, and languages are relegated to a subjugated position in the store, along multiple dimensions (e.g., on packaging, in the layout of ethnic food aisles, and in the layout of the store in general). I also found that Spanish was the only language other than English regularly represented in Denver supermarkets—Vietnamese, Arabic, Russian, and other languages often spoken in the city were poorly represented, if at all. That said, there were a subset of supermarkets that did seem to do a better job accommodating the perceived needs of Spanish-speaking customers.

Conclusions

Overall, this research on supermarket culture suggests that this is an issue that warrants further consideration among policymakers and activists, and additional research by scholars. Specific findings of interest for policymakers and activists are that supermarkets promote processed food consumption (including in the "ethnic" food aisle) and an individualized food shopping experience that may undermine cultural and social networks that buffer against food insecurity and malnutrition. Supermarkets also routinely marginalize non-Western cultures and languages, leading us to question their efficacy as food security institutions, particularly in communities with large ethnic minority populations, large foreign-born populations, and large populations of people who speak languages other than English. Policymakers should be aware of the marketing priorities of supermarkets and how this interacts with, and potentially undermines, the well-being of the populations they serve. Further scholarly research at the intersection of supermarkets and culture can assist policymakers in determining how public

policy and public funding can be utilized to best meet the cultural needs and preferences of *all* residents of the city, in Denver and elsewhere.

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Appendix: Supermarkets Surveyed

- Walmart Supercenter
  Wadsworth Blvd.
  Lakewood, CO 80226
- Walmart Supercenter
  5990 Dahlia St.
  Commerce City, CO 80022
- King Soopers
  1725 Sheridan Blvd.
  Edgewater, CO 80214
- King Soopers
  Parkway Market Center
  4850 E. 62nd Ave.
  Commerce City, CO 80022
- Target
  1985 Sheridan Blvd.
  Edgewater, CO 80214
- Target
  460 S. Vance St.
  Lakewood, CO 80226
- Safeway
  2660 N. Federal Blvd.
  Denver, CO 80211
- Save-A-Lot
  4860 Pecos St.
  Denver, CO 80221
- Save-A-Lot
  4255 West Florida Ave.
  Mar Lee Manor Shopping Center
  Denver, CO 80219