

Mobilizing Food Vending:
Rights, Communication Technology and Urban Space in the American City

By

Ginette M. Wessel

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Architecture

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Margaret Crawford, Chair

Professor Nezar AlSayyad

Professor Paul Groth

Professor Emeritus Michael Southworth

Spring 2015

Abstract

Mobilizing Food Vending: Rights, Communication Technology and Urban Space in the American City

by

Ginette M. Wessel

Doctor of Philosophy in Architecture

University of California, Berkeley

Professor Margaret Crawford, Chair

Throughout US history, street food vending has rarely been considered an improvement to modern society or its capitalist economy. However, beginning in 2008, a new generation of mobile food vendors serving high quality, inventive foods became popular among affluent populations. This project investigates the contemporary shift in the American food vending industry using ethnographic and data-driven methods to unpack vendors' operational strategies and their social and economic roles in shaping the public realm of cities. This research investigates four US cities and considers vendors' unique social, technological, and mobile operations as well as the ways in which they navigate and challenge top-down planning practices. In Los Angeles, California, both loncheras and new wave food trucks chart parallel paths and encounter resistance in ways that respond to different social and cultural environments. In the San Francisco Bay Area, private and public sector interests align to create a robust industry of food truck markets at the expense of food vendors' long-term autonomy. In contrast, food vending in Portland, Oregon's artisan economy exemplifies a rare food cart democracy characterized by bureaucratic ease and impassioned local actors. Finally, Charlotte, North Carolina's more recent vendor growth relies on consumer education and strong vendor activism to resist and reconfigure regulatory pressures. In each of these cities, the project examines the ways "new wave" vendors alter conventional notions of urbanism both socially and politically. This study offers new insights into the ways food vendors support sustainable local economies and contribute to the public realm of cities while shaping regulatory policy from the bottom-up. Understanding the dynamics of mobile food vending is important for urban planners and policy officials whose policies and plans will govern the future growth of the industry and for the vending public who help sustain a progressive industry at the local level.

Table of Contents

List of Figures	iii
Acknowledgements	v
Chapter 1: Introduction	1
1.1 Kogi BBQ	1
1.2 Existing Limitations	4
1.3 Current Issues and Research Questions	6
1.4 Theoretical Framework	7
1.5 Research Approach and Design	8
1.6 Methodology.....	9
1.7 Organization of Dissertation	11
Chapter 2: Framing Mobile Food Vending	14
2.1 The Right to the City.....	15
2.1.1 Latino Urbanism	17
2.1.2 Tactical Urbanism	19
2.2 Urban Assemblages	21
2.2.1 Artifacts and Things	23
2.2.2 Assemblages and Urban Studies	24
2.3 Conclusion	25
Chapter 3: Early Peddlers to Mainstream Vendors in the US, 1870 to 2008	26
3.1 Introduction	26
3.2 Food Truck History.....	27
3.3 Early Peddlers in Immigrant America, 1870 – 1930	31
3.3.1 New York City Pushcart Peddlers	31
3.3.2 Southern Chili Queens and Tamale Kings	34
3.4 Urban Redevelopment and the Mass Production of Cultural Foods, 1930 – 1960	36
3.5 Immigration Reform, Political Agendas, & Economic Restructuring, 1960 – 2008.....	38
3.5.1 New York City Politics	38
3.5.2 Vending Landscape of Los Angeles	40
3.6 Conclusion	43
Chapter 4: Modern Food Trucks: Growth Factors, Assemblages, and the Regulatory Landscape ...	44
4.1 Growth Factors	45
4.2 Mobility and Daily Work	46
4.3 Communication Technologies and Spatial Encounters	48
4.4 Spaces of Vending and Tactical Arrangements	49

4.5 “Strategic” Vending Regulations	51
4.5.1 History of Vending Regulations in the US	52
4.6 Food Vending Organizations	55
4.7 Conclusion	56
Chapter 5: Parallel Assemblages: Loncheras and Gourmet Food Trucks in Los Angeles, California ..	57
5.1 24-Hour Commissaries	57
5.2 Route Trucks and Industrial Districts	60
5.3 Gourmet Food Trucks and The Miracle Mile	63
5.4 Vendor Freedoms and Restaurant Protectionism	66
Chapter 6: Organized Vending as Civic Placemaking: San Francisco Bay Area	68
6.1 La Cocina Vendor Incubation	69
6.2 Off the Grid Food Truck Markets	70
6.3 Civic Improvements and Festival Market Places	71
6.4 Managing Vendor Growth and Expanding Markets	74
Chapter 7: Food Vending Paradise: Portland, Oregon	77
7.1 The Bricolage of Food Carts and Pods	78
7.2 Local Leadership and Global Tourism	84
7.3 Municipal Cooperation	86
7.4 Flexible Vending Market	87
Chapter 8: New Landscapes and Local Activism: Charlotte, North Carolina	89
8.1 Food Truck Friday	91
8.2 Vendor Community and Local Networks	92
8.3 Middle Class Consumer Education	93
8.4 Regulatory Controls and Vendor Activism	95
Chapter 9: Conclusion: Vending, Space and the City.....	98
9.1 Findings	98
9.2 Pluses and Minuses	100
9.3 A Planner’s Toolkit	101
9.4 Theoretical Reflections	102
Works Cited	104
Appendix A: Latino Food Vendors in the Mission District	126
Appendix B: Tweet Communication in Mobile Food Vending	138
Appendix C: Research Limitations	154
Appendix D: Interview Guides and a Patron Survey.....	156

List of Figures

Figure 1-1. Map of Kogi BBQ trucks in Los Angeles.....	2
Figure 1-2. Kogi BBQ truck	2
Figure 1-3. Modern food trucks.....	4
Figure 3-1. Round-Up Chuck Wagon & The Autocar advertisement.....	28
Figure 3-2. Peter’s Ice Cream & Good Humor Ice Cream trucks.....	29
Figure 3-3. Ice cream truck & Ice cream van.....	29
Figure 3-4. New Departures Ball Bearings advertisement, General Motors.....	30
Figure 3-5. Mobile vending apparatus, inventor Tony Guard.....	30
Figure 3-6. Timeline of food carts and food trucks over the 20 th century.....	31
Figure 3-7. Pushcart peddler in the Lower East Side, New York City.....	32
Figure 3-8. Chili stand, Haymarket, San Antonio.....	35
Figure 3-9. Hot Tamale Man, historic sheet music & Hot Tamale Man and his horse drawn refreshment wagon.....	36
Figure 3-10. Home Cooking in a Can advertisement.....	38
Figure 3-11. Customers at a taco truck in Los Angeles.....	41
Figure 4-1. Interior views of a food truck.....	47
Figure 4-2. Facebook posting of an event in real-time & A patron tweet	49
Figure 4-3. Commissary space, Prepping space, Mobility space & Serving space.....	50
Figure 4-4. Map of areas forbidden to vendors in Chicago.....	54
Figure 4-5. Regulation strategies that control food vendors’ operations.....	54
Figure 4-6. Regional food truck associations across the US.....	55
Figure 5-1. Aerial view of a commissary	58
Figure 5-2. Commissary grocery and supply warehouse.....	59
Figure 5-3. Truck preparation at a commissary.....	59
Figure 5-4. A route truck food vendor	60
Figure 5-5. A route truck food vendor	61
Figure 5-6. Map of contemporary vendors along the Miracle Mile in Los Angeles.....	63
Figure 5-7. Modern food trucks.....	64
Figure 5-8. Map of vending locations before and after the 2012 amendment.....	65
Figure 6-1. Food vendor at the Mission Community Market.....	69
Figure 6-2. Fort Mason Off the Grid event.....	71
Figure 6-3. Fort Mason Off the Grid event.....	71
Figure 6-4. McCoppin Off the Grid market & South Berkeley Off the Grid market.....	73
Figure 6-5. Mobile food vending permit process simplified.....	74
Figure 7-1. Portland food cart examples: Cargo trailer, Customer built food cart & Travel trailer...	79
Figure 7-2. Food cart occupying a corner location.....	80

Figure 7-3. Food cart pod at 5 th and Stark	81
Figure 7-4. Cartopia food cart pod.....	81
Figure 7-5. Mississippi Marketplace food cart pod.....	82
Figure 7-6. Map of food cart pods in 2010.....	82
Figure 7-7. Rose City Garden Food Park & Alberta 15 Co-op Food Pod.....	83
Figure 7-8. Cartlandia food cart pod.....	84
Figure 7-9. Eat Mobile annual food cart festival.....	85
Figure 7-10. Nong’s Khao Man Gai food cart on the cover of <i>Travel Portland</i>	86
Figure 8-1. Restricted streets and sidewalks during the Democratic National Convention.....	90
Figure 8-2. Food vendor at office park & Food vendor at brewery	90
Figure 8-3. Appropriation of a vacant lot in the South End District.....	92
Figure 8-4. Commissary kitchen.....	93
Figure 8-5. Food truck at Morrocroft office park.....	94
Figure 8-6. Pairing attractions with food trucks.....	95
Figure A-1. Mission District vendor map.....	129
Figure A-2. Balmy Alley, San Francisco.....	130
Figure A-3. Street vendor on Mission Street.....	131
Figure A-4. Street vendors on the plaza of a subway station & Street vendor located on the edge of a car wash lot.....	133
Figure B-1. Eight topic clusters derived from k-means clustering analysis.....	143
Figure B-2. Total tweets and retweets organized by vendor and cluster topic.....	144
Figure B-3. A two-month timeline of each vendor.....	145
Figure B-4. Average number of one-time and repeated event locations per vendor.....	147
Figure B-5. Mapping of each event across time for vendor.....	148
Figure B-6. Mapping of location frequency for one year and movement for one week.....	149
Figure B-7. Four Charlotte vending locations.....	151

Acknowledgments

This dissertation could not be possible without the support and guidance from a variety of individuals who I owe much gratitude. First, I would like to acknowledge my dissertation committee: Margaret Crawford (chair), Nezar AlSayyad, Paul Groth, and Michael Southworth. Margaret's insightful critiques and continuous encouragement throughout my career at UC Berkeley aided my growth as a scholar. Our conversations challenged and expanded my views of urban history and theory, kept me endlessly inquisitive about the project, and improved my dissertation immeasurably. I also thank Nezar AlSayyad who continually met with me to discuss my topic and guide me through the crucial steps of the doctoral program. His robust scholarship guided my formulation of ideas and ways of critiquing the built environment. Nezar's constant attention to my dissertation ideas, drafts, and progress has been indispensable. Michael Southworth's generous attention to this document and other publications helped me to improve as a scholar. Conversations with Michael challenged my way of thinking about public space and encouraged me to believe in my writing and in myself as an urbanist. Paul Groth's gracious dedication to my progress throughout the program and friendly advice taught me the multiple roles of an academic. As a dedicated committee member, Paul was always available for a talk at critical moments, calming my nerves and offering sage advice. I appreciate all of the members of the committee for their encouragement in my pursuit of a doctorate.

This dissertation is also made possible by the thoughtful comments, invaluable suggestions, and critical references of my friends and colleagues in Berkeley. I thank Lois Koch, Jason Miller, Michael de Leon, Georgia Lindsay, Lusi Morhayim, Shawhin Roudbari, Ahmed El Antably, Anna Goodman, Eliana AbuHamdi, Sharone Tomer, Corey Schnobrich, Clare Robinson, Lee Kah Wee, and Nicholas Gagne who have provided continued support and guidance in a variety of ways. At UNC Charlotte, I thank Eric Sauda, my former advisor and research partner, who has believed in my achievements throughout my graduate career. Eric's passion for technological innovation and methodological creativity inspired a series of collaborative research projects and publications. Caroline Ziemkiewicz and Remco Chang, also research collaborators from Charlotte, taught me the importance of cross-disciplinary research in academia preparing me with the collaborative skills needed to complete my research at UC Berkeley.

I also wish to acknowledge the Department of Architecture and the Graduate Division at UC Berkeley which have contributed significant financial support to the project. The multiple grants and fellowships awarded to me have provided crucial support to allow this research to occur. In addition, the Graduate Division's Mentoring Fellowship provided a substantial amount of financial support for this research and an excellent mentorship opportunity with Sofia Airaghi, a rising UC Berkeley undergraduate student.

The invaluable encouragement from my family while completing my dissertation goes beyond the development of this project. I'm especially indebted to my sister, Jacqueline Wessel, for tirelessly copyediting the final draft and providing moral support at critical moments. I also appreciate the witty comics and laughter from my sister Casey Wessel who reminds me of the challenges and rewards tied to rising academics. Last, I want to thank my parents Charlotte and Warren Wessel. This dissertation was only possible because of their continued belief in me.

Chapter 1: Introduction

1.1 Kogi BBQ

It is November 2008. Mark Manguera, a 30 year-old restaurant entrepreneur, is eating late-night with his Korean American sister-in-law when it dawns on him that someone should make a taco using Korean barbecue ingredients. A few days later, in a cafe in Los Angeles's Koreatown, he suggests the idea to his friend Roy Choi, an unemployed, professionally-trained chef. After a sleepless night, Choi experiments with Mexican and Korean flavors to create a short rib taco made with warm corn tortillas, Korean barbecue beef (or Kogi), salsa roja, chopped cilantro, onion, lime, relish, and Napa cabbage romaine slaw and topped with a chili soy vinaigrette. Without enough money to open a storefront, Manguera and Choi decide to sell their two-dollar tacos out of a food truck. Manguera quickly brokers a deal with a friend who owns a commissary for a used catering truck and calls his sister-in-law, Alice Shin, a writer in New York, to start contacting food bloggers. Mark, his wife Caroline Shin, her brother Eric Shin, and Choi, then buy \$250 worth of food, train for a week, and begin serving on Sunset Boulevard the night before Thanksgiving (Hammer, no date). Together, they soon establish a route through South Los Angeles and Koreatown, selling tacos outside the 24-hour Hodori eatery on Olympic Boulevard, as well as on Crenshaw. Within a few months, lines of 300 to 500 people begin waiting at every stop (Caspian, 2014: 36).

We served “runaways, transients, hookers, drug addicts, people working out their demons in the evening, wheelies, and drunks coming out of night clubs,” says Choi (as quoted in Hammer). With no intention of becoming popular, the Korean taco truck's customer base grew rapidly through word-of-mouth and Twitter, launching the truck's reputation as a leader of culinary experimentation. Within three months of starting the business, Kogi BBQ began drawing crowds of up to 500 people and eventually grossed roughly \$2 million in its first year (McLaughlin, 2010). Per this enormous success, the team soon added more trucks named Roja, Verde, and Naranja, who serve different areas of Los Angeles county (Figure 1-1 & 1-2) and Rosita for special events. Today, chefs across the US know the fleet of Kogi BBQ food trucks as leaders in reinventing cuisine and the traditional American restaurant experience.

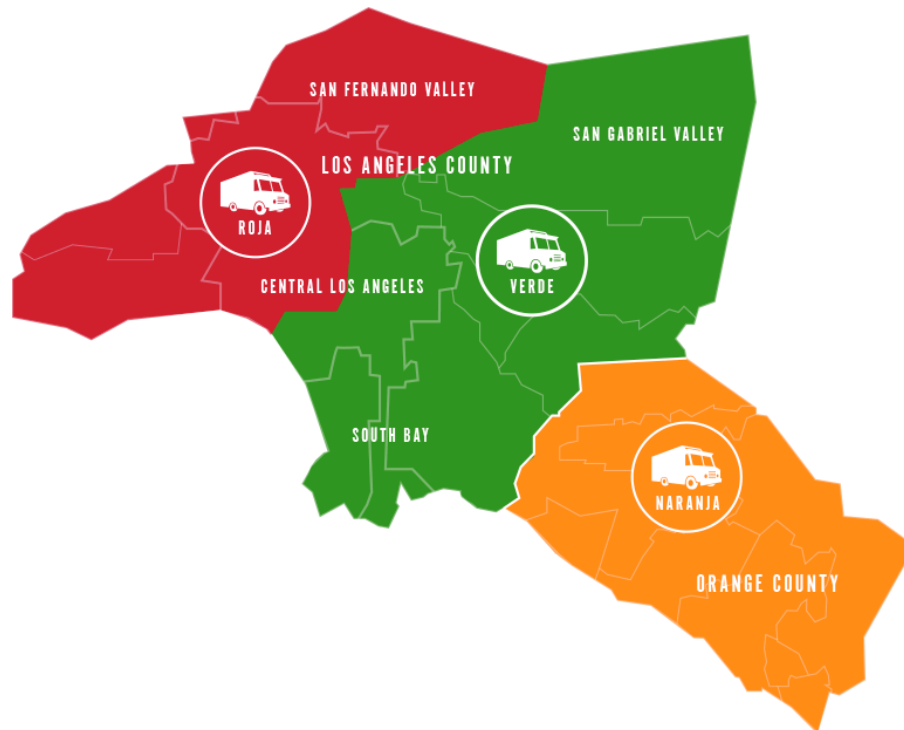


Figure 1-1. Map of Kogi BBQ trucks across the Los Angeles metropolitan area. Source: <http://kogibbq.com/>.



Figure 1-2. Kogi BBQ truck located at the HBO/Hulu campus, Santa Monica, CA, May 1, 2013. Source: Author.

Kogi BBQ food trucks were unique from prior forms of vending in a variety of ways. First, the cuisine was new, inventive, and never seen before. Traditionally, chefs replicated recipes that were passed down through the generations with little modification or learned conventional cooking methods at culinary institutions. Over the 20th century, cooking French, Mexican, Chinese, or Italian foods meant providing Americans with well-known and easily recognizable dishes reminiscent of distant cultures. In the case of Choi, his marriage of Mexican and Korean cultural flavors created a specific consumer connection that also reflects Los

Angeles's confluence of diverse cultures and cuisines. Second, Kogi's team quickly realized the power of social media and the blog-sphere to help spread the word about their food and the whereabouts of their mobile locations. Unlike traditional taco trucks that relied upon propinquity and routine stops, Kogi BBQ's online following meant that the trucks could move more freely about Los Angeles and with an assured customer base. Finally, while repurposing a catering truck as a food truck was not a new tactic used by vendors (loncheras, for example), the social classes that the vendors served began to change following the rise of Kogi BBQ's popularity. Traditionally, most taco truck vendors served at construction sites, factory workplaces, and Latino neighborhoods, whereas Kogi opted to explicitly seek out diverse social classes in a variety of Los Angeles neighborhoods. Today, the Kogi BBQ trucks serve in both affluent business areas as well as forgotten and marginal spaces of the city, a business practice made possible by the affordability of the menu. For these reasons, Kogi BBQ was unique from former vending models and was able to carve a path for a lucrative new industry.

Following the enormous success of Kogi BBQ, imitators popped up almost immediately, each one trying to recapture Choi's mix of gourmet training and street smarts (Caspian, 2014: 36). The rapid growth of these food vendors can be linked to a variety of converging factors. Specifically, the economic downturn of 2008 and the subsequent decrease in consumer spending (Brennan, 2014). Also, the increasing use and accessibility of social media platforms, smart phones, and global positioning applications allowed vendors new ways to market their businesses and announce their locations. Aspiring chefs and culinary students, who enjoyed experimenting with culturally diverse cuisines and who were equipped with the knowledge of the restaurant industry and such technologies, sought similar success to Roy Choi. Starting a mobile food business was more financially feasible and flexible for these young culinary entrepreneurs and established chefs who experienced difficulty maintaining their restaurants.¹ Additionally, vendors initially found operating in urban areas to be relatively easy given the lack of prior mobile vending precedents and loose municipal ordinances. These forces led to the national growth of the food truck industry whose revenue nearly doubled from 6 to 18 percent by the end of 2008 (Brennan, 2014). Although the exact number of mobile food vendors in the US is undocumented, it is estimated that the food truck industry is currently worth \$800 million and will increase to \$985 million by 2019 (Brennan, 2014).

Today, food vendors do not roam freely; they continuously negotiate evolving regulations. Some public adversaries argue that vendors congest streets, weaken business for brick-and-mortar establishments, contribute to crime, and use unsafe food practices. In many cities, the restaurant industry argues for increased propinquity as to thwart competition. Conversely, in cities like Portland, in which vendors are more often stationary, vendors are known to cultivate community in neighborhoods, provide access to food in areas with few options, promote entrepreneurship, and create jobs (Kapell et al., 2008). Thus this research aims to unpack the diversity of attitudes and positions surrounding food vending by analyzing the social and technological actors in different urban contexts.

Many different types of vendors exist; however, "new wave" vendors are defined by their high-quality and often high-priced food (\$10-\$15 per meal, for example) and stylishly branded and fully equipped catering trucks. Customers seeking new outdoor food experiences have prompted significant changes in the production of urban space and social life in cities (Figure 1-3). At the center of this phenomenon is the robust use of information technology that allows

¹ The average food truck business generally requires \$55,000-\$75,000, whereas a brick and mortar restaurant can cost in the range of \$250,000-\$500,000.

these vendors to exchange real-time information and mobilize their businesses to areas with a predictable crowd. Yet, other types of vendors such as taco trucks, hot dog vendors, and pushcart vendors, who may or may not be licensed, also inform this new vending scene and the construction of regulatory policy and therefore must be addressed in this discourse.



Figure 1-3. Modern food trucks. Left: San Francisco, April 18, 2014. Center: Charlotte, NC, May 29, 2013. Right: Los Angeles, CA, May 2, 2013. Source: Author.

1.2 Existing Limitations

The introduction of modern food trucks in 2008 began to unsettle existing rules that have governed the trade. Today, governments have struggled to keep pace, often conflicted under the pressure to support and restrict the trend. Largely still viewed as a marginal practice, that has less economic value than the established brick-and-mortar restaurant industry, vendors' rights are subject to the preferences and interests of larger economic sectors. Yet, little is still known about how to effectively and equitably regulate vendors within established, and often outdated, frameworks.

In the US, government officials have historically resisted the food vending practice. For example, in 1940 the US government eliminated “street peddler” from the census revealing that the profession occupied a marginal space in the economy (Morales and Kettles, 2009). Historically, the lack of attention stems from adverse views surrounding unsanitary practices, low-economic status, and illegality (Burnstein, 1996: 60; Bluestone, 1991: 80-81; Bromley: 2000, 6-10). Unfavorable views can also be linked to the mid-20th century modernist planning and design ideals that created orderly, auto-centered city streets and did away with activities perceived as inefficient and unproductive that impeded upon this view (Cross, 2005: 35). In 1972, the International Labor Organization (ILO) first reported that the informal sector consists of a range of wage-earners and self-employed persons conducting jobs characterized by ease of entry, reliance on indigenous resources, family ownership of enterprise, small scale operation, skills acquired outside the formal school system, and labor intensive and adapted technology (ILO, 1972). This recognition of the informal sector in policy enacted a dialogue on low-income economic activities, especially in advanced capitalist countries. Street vending also started to gain recognition in advanced societies with the successive waves of immigration, whether welcomed or resisted. The transformation of late 20th century capitalism and labor organization has been identified by geographer David Harvey who states, “The revival of interest in the role of small business (a highly dynamic sector since 1970), the rediscovery of sweatshops and of informal activities of all kinds, that the recognition that these are playing an important role in contemporary economic development even in the most advanced of industrialized countries, and the attempt to track the rapid geographical shifts in employment and economic fortunes . . .

seems to support this vision for of a major transformation in the way late twentieth-century capitalism is working” (1989: 190). Soon scholars began researching immigrant labor, employment growth, state regulation, labor subcontracting, and informal market dynamics (Castells Portes, 1989; Fernandez-Kelly and Garcia, 1989; Sassen, 1989; Stepick, 1989). Many started quantifying the economic impact of unregulated employment, yet few looked beyond the appearance of informal activities to focus on the social dynamics underlying the production of these conditions.

Much is still unknown about how vendors operate within regulatory environments. This occurrence has resulted in the incapacity of cities to support and manage their activities, often leaving vendors with little opportunities for upward mobility. Due to this lack of discourse, I aim to expand the current dialogue and increase awareness of their contributions to cities, both socially, politically, and economically.

With the introduction of new, vibrantly branded, and highly equipped food trucks in 2008, that continue to attract affluent populations today, street food vending is beginning to gain validity as a respectable and long-term occupation among the general public. This increased public acceptance on behalf of higher-income populations has prompted the food truck industry to grow rapidly in recent years. For instance, many cities host large food truck events once a month as part of downtown reactivation plans. Local organizations that focus on food accessibility find vendors resourceful in urban areas that lack food options. Rather than bringing lunch or eating at a quick-service restaurant, many office workers now choose to eat lunch from trucks on a weekly basis. While these trends promote an acceptance of street food vending as part of everyday American life, the US government still lacks the ability to measure their economic impact, leaving local municipalities, data firms, and industry leaders to tackle this effort. A recent market research report cites 4,042 mobile food trucks roam US streets employing 14,893 people (Alvarez, 2015), whereas other estimates are 15,000-20,000 mobile food trucks (Willett, 2015). Depending of the size of the metropolitan area, a city may have between 10 and 200 food trucks.

In 2002, the US Census documented 2,302 mobile food services in the US (2002 NAICS code 72233, US Census); however, it only identified commissaries and commissary kitchens excluding records of the total number of vendors.² This lack of documentation by the US government also reflects the lack of research addressing their operational strategies. Aside from industry reports and numerous news articles, scholarship on contemporary vending involves conflicts over vendor rights, regulatory pressures, cultural stigmas, and litigation (Hernandez-Lopez, 2012; Linnekin et al., 2011; Norman et al. 2011) primarily in the Sun Belt cities of the US. Other studies on Latino street vendors in Los Angeles and the Silicon Valley have given attention to their detailed practices (Crawford, 2014; Dohan, 2003; López-Garza, 2001; Muñoz, 2013; Rojas, 2014; Weber, 2001; Zloliniski, 2006). These efforts serve as positive scholarly contributions; however, the growing size of the industry in cities across the US and their social and ethnic diversity shows an urgent need for more research.

The prior neglect of street food vending in policy explains why many local governments have few strategies for how to accommodate or plan for their growth. Additionally, vendor mobility confronts many established planning ideologies and methods that address urban economic growth through fixed and predicable business locations, which allows governments to

² The 2002 US Census defines mobile food services as establishments “primarily engaged in preparing and serving meals and snacks for immediate consumption from motorized vehicles or nonmotorized carts. The establishment is the central location from which the caterer route is serviced, not each vehicle or cart.”

easily regulate and monitor their productivity within the formal market system. With little understanding of where vendors choose to locate and the mobility of their operations, vendors' behaviors are largely unknown.

Just as vendors' operations are unknown, so too are the spaces they inhabit. New and old food vendors frequently appear in underused and marginal spaces of cities such as parking lots, alleyways, and street curbs creating a highly visible form of social exchange. Vendors, who play multiple roles as guardian of the street or local neighbor increasing safety of the public realm, are often restricted from high opportunity urban centers and forced to seek marginal areas. These unfamiliar spaces also reveal the unbalanced priorities of cities that typically focus on automobile circulation, new development, and high building occupancy in downtown areas. To this end, these spaces become reactivated with social life sporadically, transforming underutilized land into spaces of high social activity and economic value, beneficial to activating and strengthening the public realm.

The overall neglect of food vendors in American discourse is problematic in a variety of ways, but more significantly, it hinders governments' abilities to understand how vendors operate and contribute to urban settings. While bottom-up food truck advocates continue to debate top-down institutions such as the restaurant industry, expanding the dialogue surrounding the vending practice can mitigate such tensions. Thus scholarship needs to delve below the surface to understand how vendors work in context.

1.3 Current Issues and Research Questions

In 2008, as the popularity of mobile food vending grew across the US, cities and counties soon realized that their outdated, or in some cases nonexistent, policies vaguely outlined where vendors were permitted to vend and how they should operate. Subsequently, protectionist views originating from brick-and-mortar restaurants quickly dominated regulatory frameworks imposing proximity bans and significantly distancing vendors from areas of opportunity. Additionally, many antiquated regulations conformed to the established model of ice cream trucks which limit food vendors from staying in places for an extended period of time. More recently, governments in Chicago, Boston, and Cranston, Rhode Island began monitoring food truck locations by requiring vendors to place a GPS locator in their vehicles. However, because GPS devices can be as much as 30 feet off (and the bans call for a distance of 200 feet from restaurants), Chicago now finds itself embroiled in lawsuits. Thus current policies tend to constrain vendor operations and limit their opportunities. These few cases also show that who can access space and under what conditions serve as central issues among food vendors. Inequalities over the right to use space or claim particular areas cause much debate. Thus a better balance is needed between the realities of how our cities are used and the established parameters by which they serve the public.

In opposition, food vending associations have multiplied across the US with at least 15 regional efforts (National Food Truck Association, 2015). These groups argue for more equitable regulatory frameworks, fight for vendor rights, and share best practices. The National Food and Entrepreneurship Conference in San Francisco and Portland's Roam Mobile Food Conference that occur annually have become a meeting place for such organizations to share knowledge and organize efforts. These associations assist vendors by helping them find locations to serve and fighting tickets and violations. Numerous regulatory battles illustrate the heated complexity of formalizing a new, highly mobile food industry, both spatially and in terms of public health.

While a comprehensive set of policies for the entire US is virtually impossible, nor of interest given the diversity of urban contexts, local governments are looking to other cities to find new ways to balance competing interests when establishing their new regulatory frameworks.

Managing the growth of the food vendors has always been a complex issue. For centuries, efforts to remove vendors from city streets have led to containing them in certain peripheral areas of cities or in formally regulated urban markets. As early as the late 19th century, government officials implemented growth-management strategies such as evenly distributing vendors to avoid concentration and congestion. Also, in the 1970s and 1980s immigration reform led to concerns surrounding the potential over-saturation of vendors in New York City prompting a 3,000-vendor permit cap. This growth cap has produced a black market of permits that triples the original cost of a permit and causes vendors to wait years in order to obtain such permits. To this end, there still is no adequate plan or spatial strategy to address the industry's growth.

The proper degree of municipal involvement needed to establish restrictions and enforce rules is also unknown. Portland is currently regarded as the best model for establishing institutional support and educational strategies, rather than direct enforcement. What factors create a balanced regulatory climate? To what degree should government regulate free enterprise? The extent of municipal intervention needs to be addressed to determine the best modes that foster a sustainable industry. With little understanding of vendor operations at the government level, politically driven decision-making results in regulations that constrain vendors' operations, produce conflict with municipalities, and limit vendors' abilities to maintain or grow a profitable business. Food vendors and city governments will not achieve resolutions by following the current trajectory. Thus further analysis of vendor operations is needed to improve existing vending conditions and allow for the healthy growth of small-scale businesses.

In addition to regulatory concerns, modern food trucks operate with a new set of conditions such as heightened mobility, spontaneous uses of space, and the use of technology for a variety of business needs. These unique characteristics are foreign and largely ignored as municipalities focus efforts and resources on the proper use of space. The central questions guiding this research include:

- How do mobile food vendors operate? Who are the social and technological actors in vending and what are their contributions?
- What are the social and political implications of mobile food vending? How do vendors navigate, challenge, and alter special interests and top-down planning practices? What factors motivate the state's decisions in regard to mobile food vending, and how can empirical knowledge of vendors' operations inform equitable regulatory frameworks?

1.4 Theoretical Framework

The purpose of this research is to investigate the current state of industry, rethink existing assumptions about food vending, and situate the practice in a theoretical discourse that can be used to explain and plan for mobile food vending growth in US cities. Two theoretical discourses frame this research. The first is derived by Marxist philosopher Henri Lefebvre, whose discussions of "the right to the city" and the "social production of social space" provide a way to understand food vending as a social production of encounter, exchange, and debate. The temporary occupation of highly regulated urban spaces in US cities inevitably leads to conflicts

of interest over the claiming of public space. Lefebvre's attention to the oppressive nature of capitalist society calling for the right to participation and appropriation illustrates the ways mobile vendors negotiate and participate in demands for public space and fairer regulations. This framework intends to situate space as a multifaceted social and political product.

The second framework used to investigate mobile food vending centers upon the work of actor-network theorist Bruno Latour. Actor-network theory (or ANT) is known for blurring the distinction between humans and machines, considering agency as relational and embedded, and for re-conceptualizing social systems as a multiplicity of assemblages. For urbanists, ANT provides an alternative ontology to understanding the ways of thinking about the linkage between technical and social worlds. As a radically new approach to understanding the dynamics of cities, it provides a way to closely examine associations between things that make up the social and built environment. In this research, ANT provides an analytical tool to rethink current urban models.

1.5 Research Approach and Design

To answer my research questions, I followed mixed methods approach that used both qualitative, human-centered investigations and quantitative, data-driven analysis. Within these frameworks, methods include in-depth interviews, participant observation, surveys, data analysis, information visualization, and virtual ethnography. First, the human-centered or ethnographic approach is concerned with receiving and interpreting actors experiences through direct immersion and participation in their social worlds. Originating in the field of anthropology, ethnographers build a description of customs and practices of individuals by gathering empirical data through direct observation. In this research, I began by examining the phenomenon of food vending as a quasi member of the food vending community by building relationships with food vendors and representatives of vending organizations who provided first-hand accounts of their daily practices. Ethnography allows for the development of theories that speak to the reality of on-the-ground occurrences, as opposed to deducing testable hypotheses from existing theories. Thus Glaser and Strauss's sociological grounded theory strategy proved essential to analyzing data (1967). Opposed to positivist conceptions that stress objectivity, generality, replication of research, and falsification, grounded theory analysis allows participation in the creation of theory and merging facts with values. This human-centered lens acknowledges human beings as active agents in their lives and in their worlds rather than passive recipients of large social forces.

A second form of ethnography, referred to as virtual ethnography (Hine, 2000) or online ethnography, familiar to the field of information science, allows researchers to both observe and participate in online communities. The significance of virtual ethnography, as it relates to my research, emerges from the active use of social media in the daily practices of mobile food vendors. In this research, the exchange of real-time information that occurs online to assist vendors' operations becomes equally as important as the physical social settings where food trucks locate. In my research, I have analyzed the food vending industry immersed as a participant in social media platforms such as Twitter, Facebook, and food truck mapping applications such as Roaming Hunger and TruxMap. My primary objective using virtual ethnography is to understand how online communication affects the organization and performance of social relationships in time and space, as opposed to understanding how a virtual experience might be different from "the real."

In addition to ethnography, I explored the online communication of vendors where I applied a variety of quantitative techniques to tweets with the goal of illustrating, through inventive forms of information visualization, the intersections of data and space. The value of this approach is that it illustrates virtual communication both in time and space and expands existing urban models of analysis.

1.6 Methodology

Using a mixed methods approach provides a way to sufficiently explain the contemporary and rapidly evolving mobile food vending industry. To begin my investigation, I reviewed popular media outlets such as online local newspapers, social media websites, and food vending blogs, which led me to identify the cities of Los Angeles, Portland, San Francisco, and Charlotte for analysis. Food vending in each of these cities varies in scale and economic significance; therefore, I analyzed each city individually, acquiring a complete picture of the on-the-ground vendor activity and settings by tracing the phenomenon through various actors, policies, and digital media. In the following city descriptions, I highlight when modern mobile food vending emerged, its pace of growth, and scale.

Los Angeles, California is known as the food truck capital of the nation, having the largest population of loncheras, modern trucks, and pushcart vendors. The city has a longstanding history of Latino vendors whose presence grew during periods of new immigration reform. The first known modern food truck, Kogi BBQ, emerged in Los Angeles on November 26, 2008. Similar food truck businesses grew rapidly and in 18 months, there were 60 known modern food trucks (Geller, 2014). Los Angeles County, including its 88 municipalities, reported having 9,500 licensed mobile food facilities in 2010 (Nagourney, 2010), which include modern food trucks and loncheras, but exclude pushcarts. This study focuses on the City of Los Angeles; however, tracing vending activity led me to conduct fieldwork in the neighboring cities of San Fernando, Culver City, and West Hollywood.

Portland, Oregon unlike Los Angeles, is known for its stationary food carts or makeshift trailers collectively located in parking lots and commonly referred to as food cart pods. Portland's food cart scene started in the late 1990s with two carts renting space in a downtown parking lot. Portland's zoning codes and bylaws do not apply to vendors if their vending units rest on wheels and are less than 16 feet in length. Per these conditions, vendors soon began populating parking spaces and generating high profits for the Goodman family who own the majority of parking lots in downtown. Portland's progressive culture, acceptance of micro-scale economic activity, relaxed regulations, and tourism industry has allowed the number of carts to increase at a steady pace each year, but also with high turnover. Today, Portland has approximately 500 food carts that have expanded to numerous lots in surrounding neighborhoods.

San Francisco, California witnessed an aggressive growth of food trucks in 2010 with the help of Off the Grid, a company that specializes in organizing food truck markets complete with seating, music, accessible restrooms, and trash disposal. Beginning at the historic military base known as Fort Mason, a nonregulated area of San Francisco, today Off the Grid has 35 weekly markets that accommodate up to 10,000 people. Company

owner Matt Cohen also played a key role in San Francisco's food truck movement working closely with city officials to refine regulations and balance the demands of the restaurant industry. Today, most mobile food vendors prefer the large crowds and amenities weekly markets have to offer. Similar to Portland's model, Carlos Muela created San Francisco's first permanent food truck park in a once struggling area of downtown in 2011. Much like Off the Grid's markets, vendors at the park prefer the consistent customer base and enjoy the higher profits of working collectively.

Charlotte, North Carolina has a smaller and younger mobile food vending culture as compared to the other cities. In 2011, Charlotte's Downtown Association and a vacant lot owner in the South End District started a weekly event known as Food Truck Friday. The first months were experimental and slow hosting just four trucks, but the event grew rapidly in the spring months of 2012. Today, the lot serves as the premier destination for up to ten food trucks drawing a crowd of more than 3,000 each Friday. Other popular locations for vendors include the numerous office parks on the periphery of the city and college campuses. Vendors have mentioned that the slower growth of food trucks in Charlotte is due to the strict regulations banning food trucks from downtown streets and the need to educate the community about the higher quality of food.

When choosing specific field sites within each city, I adopted a network approach (Burrell, 2009) where I traced vendor activities throughout the cities. In the 1990s, a number of researchers adopted an "ethnography in/of the world system" approach (Marcus, 1998) that provided a newer conception of the movement of objects, individuals, ideas, media, and fieldworkers. This concept of multi-sited ethnography allowed the researcher to *follow* a person or object applying emphasis to the movement of social practices and cultural processes that take place across great distances. This approach acknowledges the increasing heterogeneity of cultural practices and populations, "uncovering insights and objects of inquiry that were not visible in studies that assumed culture was spatially fixed" (Burrell, 2009: 183)

A network approach suggests a field site is in certain ways continually constructed throughout the process of data gathering. Fundamentally, a network approach allows the researcher to construct field sites from the observable connections performed by participants. As such, it is an approach "designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites" (Marcus, 1998: 90). Burrell outlines some proposed steps for field site construction: seek entry points rather than sites; consider multiple types of networks (e.g. people goods, digital objects); follow, but also interpret; attend to what is indexed in interviews; incorporate uninhabitable spaces; and know when and where to stop (2009: 190-194). By defining the field site as a network in accordance with these guidelines, the field site transitions from a bounded space that the researcher dwells within to something that more closely tracks the social phenomenon under study (Burrell, 2009: 195).

In my own fieldwork experience, online media became the entry point for discovering vendors. While research was conducted in each city over the span of two weeks, online media allowed me to study the industry over the course of three years. Prior to entering the field, field sites in each city were first identified by reviewing food vendor communication via Facebook, Twitter and vendor webpages. Conversations with customers and vendors at vending locations led me to discover additional vending locations, commissaries, and prep-kitchens in each city. In

Los Angeles, I studied eight vending locations and two regional commissaries. In Portland, I studied 12 food cart pods within the downtown and surrounding neighborhoods. In San Francisco, I studied 25 vending locations in a variety of neighborhoods. Finally, in Charlotte, I studied six vending locations and one commissary kitchen facility.

At each field site, I performed participant observations and semi-structured interviews with vendors, customers, lot owners, and facility owners. As a primary method of data collection, participant observation allows the observer to take part in the daily activities, rituals, interactions, and events of a group of people as one of the means of learning the explicit and tacit aspects of their life routine and their culture (Dewalt and Dewalt, 2011: 1). Participant observation requires the explicit recording and analysis of study subjects in their context (field notes) and encourages the formulation of new research questions grounded in on-the-scene observation. At each of the field sites visited in this research, I used notes, sketches, and photographs to record customer and vendor behaviors, interactions, and conversations as well as the spatial organization of food vending units within field sites and in relation to the surrounding built environment over time.

Interviews with vendors provided a wealth of information about their daily work habits and decisions in regard to their businesses as well as customer preferences and purposes. My aim was to develop a description of mobile food vendors in each city from their perspective. More specifically, semi-structured interviews allowed me to pause, probe, or prompt the informant based on their responses. Interviews consisted of open-ended questions derived from curiosities about the basic processes of vendor operations. This beginning point later developed into questions about employment, family and friend networks, and geographic migrations. Vendor interviews lasted from 30 minutes up to two hours and follow-up conversations were also conducted after reviewing the initial conversations to fine-tune ambiguities in vendor responses (see also Appendix D).

Customers at vending sites were also asked to complete a survey. Using a short list of questions, I asked customers about the distance they traveled, their motivations for eating from a vendor, and how often they eat from vendors. I surveyed approximately 75 customers throughout my fieldwork to grasp a better understanding of motivations that drive the thriving demand for food trucks (see also Appendix D).

1.7 Organization of Dissertation

Following this introduction, I have organized this dissertation into eight additional chapters. Chapter Two reviews the existing discourse and theoretical frameworks that relate to mobile food vending and set up the current debates that situate mobile food vending socially and politically. Theories from Henri Lefebvre and Michael de Certeau provide a framework to understand vendors' *rights* in the context of oppression. An overview of their theories is followed by a discussion on *Latino urbanism* and *tactical urbanism* in the US which highlight complex social justice narratives. The second half of Chapter Two seeks to outline alternative theories such as *actor-network theory* and *thing theory* that emphasize the importance of nonhuman actors as capable of shaping social life. In this section, writings from Bruno Latour and Bill Brown acknowledge the mutual construction of social and physical environments.

Chapter Three uses secondary literature to illustrate the economic and historical significance of street food vending in the US, primarily in the Sun Belt cities and New York City. After a summary of the food truck evolution, the chapter continues with street peddling in

New York City during the progressive era. This section describes the ways vendors negotiated spatial constraints and regulatory pressures to service neighborhoods facing congestion and food scarcity. It then recounts the impact of 20th century urban renewal on vending in New York City and San Antonio where Mexican and Latin American food flourished with the migration of immigrants across the US. Concurrently, advances in canning and propaganda catapulted Mexican cuisine into mainstream America. Tracing Hispanic foods across the US leads to Los Angeles in the 1960s where the impact of subsequent immigration reform and economic restructuring expanded Latino food vending across southern California.

Chapter Four is dedicated to the growth factors, operations, and regulations of modern food trucks. I use actor-network theory to describe mobile food vending as a complex assemblage of actors using mobility, technology, and space as analytic frames. Next, I review the state's reaction to mobile food vending and the top-down mechanisms used to monitor and plan vending practices. Significant cases including New York City's vending permit cap and Los Angeles's sidewalk ban reveal the detrimental impacts of state control. Finally, I review existing regulations in the US and categorize their spatial or behavioral strategies.

Chapter Five addresses the current state of mobile food vending in Los Angeles. Beginning at the largest vending commissary in the US, I trace the daily practices of both the long-established loncheras or route trucks and modern food trucks. Throughout this research process, different social and cultural geographies become apparent. Industrial landscapes and blue-collar workers define loncheras daily routes, whereas "new wave" vendors seek affluent population in commercial and office areas. Furthermore, I reveal the multiple and robust linkages among economic sectors such as the wholesale production, restaurant, automotive, legal, and technology-based industries that cater to each type of vendor. In the progressive, highly diverse, and seemingly disordered environment of Los Angeles, the political debates grow from various claims to space. A variety of court cases illustrate unjust claims to space, one driven by social and cultural stigmas and the other by economic competition and protection. For loncheras and "new wave" vendors, spatial rights and the use of space are contested in ways that reflect different social and economic settings.

In Chapter Six, I explore mobile food vendors in the San Francisco Bay Area. I begin by describing the nonprofit efforts of La Cocina, one of the first organizations to support low-income vendors in the Mission District. Then I discuss the Bay Area's first for-profit food vending organization, known as Off-the-Grid (OTG), which offers municipalities a variety of incentives for managing the quality of the vending industry. In this chapter, I examine the ways interests align between vending market organizers and city officials around narratives of community building and placemaking, while questioning vendor autonomy.

Chapter Seven provides an overview of food carts in Portland. I begin by identifying the unique characteristics of Portland's artisan economy and built environment. I reveal the different ways food cart pods have seamlessly become part of everyday life in downtown Portland and are used to revitalize neglected areas. I investigate the attitudes and decision-making among city planners when the popularity of food carts started to rise in the mid-2000s (well before the modern food trucks) as this history points to a sustainable food cart industry that employs as many as 500 vendors in a medium-to-low income economy. This chapter suggests that Portland's governing structure serves as the best existing precedent per its accessible and educational regulatory approach; however, it cannot be exactly replicated.

In Chapter Eight, I focus on the smaller, and more recent, vending community in Charlotte where the urban geography lends to distinct vendor practices centered upon festivals

and office parks. I begin at the Food Truck Friday event in Charlotte's South End District, which was the first well-known location to host food vendors in the city in 2011. Research on the daily practices of Charlotte's vendors reveals a close, self-organizing vending community. I also discuss the slow acceptance of street food and the challenges of educating the Charlotte population on the industry. I conclude by discussing Charlotte's vendor activism that seeks to educate planning officials and establish more fair policy.

To conclude, I summarize the significant findings of my research in regard to my research questions. I then reflect on the advantages and disadvantages of mobile food vending socially, economically, and politically. I also provide an assessment of mobile food vending for urban planners and offer strategies to create equitable regulatory frameworks. Finally, I reflect upon the theoretical frameworks used in this study as they point to a need for more nuanced investigations of particular situations and settings.

Chapter 2: Framing Mobile Food Vending

Mobile food vendors navigate a variety of economic and regulatory constraints that slow that growth of the industry. Subject to the objections of fixed establishments (so-called “brick and mortar” restaurants), contestation over space remains fundamental to vendor practices. Despite these setbacks, vendors become active participants in the public realm of cities by confronting political and spatial urban realities on a local level and engaging with multiple groups of residents and visitors. Both welcomed and resisted, vendors must seek out locations in cities that will generate profits without disruption. As a result of the complexity of these practices, the food truck industry can be situated within multiple theoretical and scholarly discourses. One applicable theoretical framework engages questions on *rights*. Frequently, vendors must demand rights from those who control top-down decision making. Other related topics that address claims to the city include *Latino urbanism* and *tactical urbanism*, which are useful to explain the ways bottom-up agency manifests among food vendors.

Other social theories posit agency as relational, heterogeneous, and produced from a variety of actors and objects. These include critical social theory and Science and Technology Studies (STS). From this perspective, mobile food vending is a flexible network of associations among a variety of actors that are rarely seen and largely unknown. For example, *actor-network theory* suggests that mobile food vending can be interpreted as a highly complex assemblage of material and immaterial subjects, objects, and events. The novelty of “new wave” vendors’ operations rests on physical mobility and access to urban space as well as online communication. In “new wave” food vending, the combination of factors offer new ways to conceptualize the production of spaces that are spontaneous, fluid, and socially active. For this work, clarifying the ways in which humans and nonhumans deploy agency by enrolling others into a situation is fundamental to understanding how the material environment shapes and is shaped by social human beings. Therefore, discourses including actor-networks, materiality, and thing theory also prove useful in explaining the production of mobile food vending. In this chapter, I briefly survey these approaches and outline the ways in which they have contributed to my study.

2.1 The Right to the City

Marxist philosopher Henri Lefebvre is well known for his views on capitalist urban development and transformation throughout the 20th century. His conceptual frameworks of “the right to the city” and “the social production of social space” provide a way to frame the complexities of mobile food vending. For instance, mobile food vending is both a social production of encounter and exchange as well as a contested activity. Cities tend to limit vendors’ freedoms in order to support unfettered automobile circulation and restaurant opposition. Moreover, vendors must continuously negotiate urban spaces that are controlled by a regulatory body that favors the productivity of private property. Among all forms of street food vending, “rights to the city” are a claim to the use of urban space.

Lefebvre criticized the Marxists’ emphasis on economic determinism and sought to explore the everyday realities of urban life. Thus, much of his work examines the contradictions between the institutional forces of capitalism and the demands of human life. The social unrest in Paris in 1968 also motivated him to focus on citizen choice and political identity which he considered essential to political action and social transformation (McLeod, 1997, 18). “The Right to the City,” originally published in *Le droit à la ville* in 1968 (and republished in English in *The Writing on Cities*, 1996), has since appeared in numerous works on social theory that attempt to decipher inequalities in the built environment (Mitchell, 2003; Soja, 1996, 2000). Calling for citizens to be active and engaged, his phrase “the right to the city” has been used to frame social justice debates surrounding issues of housing, homelessness, property, and public space. Lefebvre’s article “The Right to the City” expressed his deep concerns with the expansion of capitalism, and the decline of the *oeuvre*. *Oeuvre*, a term suggestive of a performance, refers to the “information, symbolism, the imagery and play” in daily life (Lefebvre, 1996:147). As such, “the right to the *oeuvre*, to participation and appropriation, are implied in the right to the city” (Lefebvre, 1996: 174). Lefebvre’s “The Right to the City” thus demands a renewed right to urban life where “the working class can become the agent, the social carrier or support of this realization” (Lefebvre, 1996: 158).

“The right to the city” for Lefebvre is “the right to freedom, to individualization in socialization, to habitat and to inhabit” (1996: 173). For this research, I am particularly interested in who can inhabit, use, or appropriate space and for what use. Moreover, rights are vital to the functioning and development of a just city where a variety of social groups and classes must coexist. Regulatory decisions on the proper and best use of space are typically left to government officials; however, private development interests and protectionist views and values often influence and fuel such decisions. Since their interests align, city governments usually favor stakeholders with large financial investments in the city. Marginal populations, such as newcomers, the homeless, and non-property owners are often at a disadvantage when exercising their rights in a community. For Lefebvre, the struggle for these rights produces a political form of urbanism.

Who can inhabit space is just as important as how space is enacted. Lefebvre’s concept of social space in the 1960s (popularized in the West in the 1990s) provides a useful starting point for understanding the production of urban spaces that have layered political, economic, material, and social meanings. In its basic form, Lefebvre’s concept of social space involves the body, daily rhythms, and surrounding space that are socially, politically, and economically constructed. Lefebvre’s style of dialectical discussion is meant to illustrate the continual movement between opposing perspectives or binary modes. He illustrates this movement through his use of a conceptual triad of *spatial practice* (perceived space), *representations of space* (conceived space),

and *representational spaces* (lived space). This demonstrates how space is produced through the contestation between dominant and everyday social groups (1991: 33, 38-39). He suggests spatial practice embodies a close relation with daily reality. In the daily routine, routes link the places set aside for work, private life, and leisure. Representations of space refer to conceptualized space that is perceived by planners and urbanists and the order and design they impose. In those words, they are treatments of space. Finally, representational spaces are spaces of inhabitants and users, which imagination seeks to change and appropriate. From the abstract flows of capitalism that oppress the different rhythms of space and time that are produced by the body, the human subject is central for Lefebvre. My approach follows his in focusing on social and democratic uses of urban space.

Similarly, French cultural theorist Michel de Certeau opposes oppression (“strategies”) with “tactical” approaches to social and civic life in his book *The Practices of Everyday Life* (1984). De Certeau’s work is particularly important for this project; in particular, his concepts of *strategic* and *tactical spatial practices*, echo Lefebvre’s view. First, a strategic spatial practice can be associated with locations of power and control (1984: 36). These practices are a “triumph of place over time” allowing “one to capitalize acquired advantages, to prepare for future expansion, and thus give one’s self a certain independence” (36). Second, a strategic spatial practice can be charged politically by the mastery of place through sight. Similar to Lefebvre’s representations of space, strategic spatial practices allow objects to be observed, measured, and controlled for their inclusion or exclusion from the total vision. Finally, power is a precondition of knowledge, which is used to transform places.

In contrast, a tactical spatial practice is “determined by the absence of power just as a strategy is organized by the postulation of power” (38). Tactical spatial practices are “procedures that gain validity in relation to the pertinence they lend to time” (38). They may refer “to the precise instant that an intervention transforms into a favorable situation, to the rapidity of movements that change the organization of space, to the relations among successive moments in an action, and to the possible intersections of durations and heterogeneous rhythms” (38). The crucial difference lies in their relationship to space. De Certeau suggests, “strategies pin their hopes on the resistance that the establishment of a place offers to the erosion of time; tactics are a clever utilization of time, of the opportunities it presents and also of the play it introduces into the foundations of power” (38-39). De Certeau’s analysis of spatial practices, reminiscent to that of Lefebvre, suggests that space is a social product. Most significantly, he emphasizes the everyday participants in the city who live, walk, adapt, alter, and appropriate it to make it their own.

These theories, although created in reaction to events that are now historical, still serve as useful explanations for today’s urban activity. Lefebvre’s attention to the oppressed nature of rights and his calling for the right to participation and appropriation illustrates the ways in which mobile vendors negotiate and participate in the fight over public space and fairer regulations. De Certeau’s tactical spatial practices prove particularly useful in describing how mobile food vendors create their own meanings and uses for spaces, individually or collectively. Serving to ground the following discussions in this document, Lefebvre and de Certeau situate urban space as a multifaceted social and political product. Unfortunately, these theorists did not explicitly recognize the socio-technological relationships that would later develop from technologies. Nor did they abandon singular narratives of centralized control and resistance. Although they may not explicitly cite Lefebvre or DeCerteau, several additional bodies of literature take these concepts in more empirical directions that can be easily connected to mobile food vending. These are

Latino urbanism, an ethnically-framed discourse rooted in issues of social and spatial inequality and *tactical urbanism*, a contemporary form of activism based in urban life.

2.1.1 Latino Urbanism

Much research on food vendors over the last century emerged from Southern California, a region where Latino immigration and vending are synonymous. The region has a lengthy history of Latino migration and, in 2013, the Latino presence reached 48.5% of the total population in Los Angeles County (US Census, 2013). For this reason, the region offers a rich landscape to study Latino places and practices. Although scholars have looked at Latinos in other American cities such as Charlotte and New Jersey (Gamez, 2012; Londono, 2012), Los Angeles has generated the largest body of literature on multiple dimensions of the Latino population in cities. Scholars have taken two separate approaches. On the one hand, structuralist scholars explain the geography, economy, and settlement patterns of Latinos as the result of labor markets and economic shifts. In contrast, scholars in the fields of anthropology and sociology focus on Latinos' daily routines and decision-making in relation to economic realities. Both paths of research have made substantial contributions to Latino studies; however, given the rise of the Latino population in second half of the 20th century and their significant impact on the urban landscape, there are still too few studies that understand this population.

Many planning scholars approach Latino barrios in Southern California with a contradictory attitude, simultaneously celebrating and ignoring these places. They are intrigued by the social order but dismayed by the adhoc and low-income environment. Mike Davis (2000) and Ricardo Romo (1983), documenting Latino settlement patterns in Los Angeles, argue that industrialization and a surplus of employment at the turn of the century attracted new residents (see also Section 3.5.2 for a history of Latino vendors in LA). Among the many Latino communities in Southern California, East Los Angeles is best known for its Latino population, rich cultural landscape, and long-standing residents.

The Latino urban landscape reveals both cultural and urban realities and socio-economic conditions. James Rojas, an urban planner and founder of Latino Urban Forum, an advocacy group dedicated to increasing awareness around planning and design issues facing low-income Latinos, is well known for his ethnographic research on the identity formation and social behaviors in Latino barrios of East Los Angeles (2006, 2010, 2013). He examines murals, street vendors, spaces of the home, props (i.e. store fronts, music, and gas stations), showing how the local vernacular and urban space are enacted by the residents' participation with and appropriation of the material landscape. He shows how Latinos focus on adapting the in-between spaces of houses and gas stations to produce vibrant places of social interaction and play. In these spaces, Latinos have "focused their inventive imaginations on the transformation of the spaces" (2006: 185). Rojas recognizes that the Latino landscape is not planned, but rather made through use, which provides residents with a sense of empowerment.

Urbanist Margaret Crawford has also studied the Latino vernacular landscape of East Los Angeles (1994). By analyzing fences, gardens, and "Mexicanized" craftsmen bungalows, she sees houses in Latino barrios, as "vehicle[s] for mobilizing social identity, making a publicly legible statement that provides residents with a new sense of agency" (1994: 13). Thus Latino spaces in East Los Angeles, such as the home, daily life, and urban residences become political channels and new venues for collective activity. Although they are organic and well functioning, they also express politics of struggle. In *Everyday Urbanism* (1999), Crawford, opposed singular definitions of public space, sees everyday spaces of cities as crucial to democracy. Latino

vendors, for Crawford, “disrupt the given categories of social life and urban space” (1999: 35). By bringing domestic life to the streets, Latino practices “invoke the intimacy of the interior” and offer a diversity of alternative meanings of democracy in cities.

Focusing on urban design and the public realm, Michael Rios interprets Latino urbanism as a place-making activity that places particular claims on space (2009, 2010, 2012). In Latino public urban spaces, such as Plaza del Colibris in San Francisco’s Mission District and Chicano Park in San Diego, culture can instigate a shift in the use and production of space by groups with little or no political power. Rios argues cultural and political identity formation and the territorial claiming of space become useful resources for community development and local urban policy and, thus a practical way to arrive at more democratic solutions.

Emphasizing the rich diversity within Latino landscapes, these scholars address the inventive ways Latinos tactically use and appropriate spaces to create economic opportunities that, in the process, also produce Latino social and cultural identities. This analysis easily lends itself to my study of vending practices. Other scholars, however, focus on a critical analysis of Latinos’ role in US labor markets. Examining employment among Latino populations in industrial garment manufacturing, domestic services, gardening, construction, and street vending, they explain the growth of these types of economic activities as either survival strategies in response to a lack of employment in the formal economy or the outcome of structural changes in a capitalist economy (Castells & Portes, 1989; Cross, 2000; Sassen-Koob, 1989). Such structuralist narratives explain the growth of the informal economy as an outcome of neoliberalism, situating informal employment as a reaction against the state’s regulation of the economy and the power of organized labor. By focusing on Latino labor practices that undermine the power of organized labor, they display little interest in the reasons that Latinos choose or are limited to specific low-wage types of employment. However, recent scholars have recognized this limitation and are beginning to research Latinos’ own perspectives on their economic choices such as street vending (López-Garza, 2001; Muñoz, 2013; Weber, 2001; Zolniski, 2006).

These scholars identify street vending as an important type of Latino urbanism, particularly in California. Anthropologist Christian Zolniski studies the reasons why Silicon Valley immigrants choose their jobs and how they explain their choices. This demonstrates that vending and janitorial jobs are not just carelessly improvised survival strategies undertaken by unskilled immigrants disconnected from Silicon Valley’s formal economy. Rather, he finds that many immigrants vend to supplement other wages they earn in low-skilled jobs in the formal sector. More importantly, vending represents an alternative to the low-wage, harsh jobs in the formal economy (2006: 75). This produces a limited amount upward mobility among vendors and janitors who find ways to flexibly combine both formal and informal jobs. Another key issue is that flexible work schedules among these types of jobs accommodate family and household demands. Zolniski and Lorena Muñoz (2008, 2013), emphasize the significance of personal and family circumstances, such as childcare, spouse schedules, and elderly care, that lead people to choose flexible forms of self-employment such as food vending. Muñoz, looking at Garment-Town and MacArthur Park in Los Angeles, argues that Latino vendors are entrepreneurially savvy in the ways they reconfigure public space into spaces of work, networking, and childcare.

Regulation is another key issue in understanding vending. Since many middle class residents and municipal officials often perceive Latinos as low skilled, and potentially illegal, they respond by trying to increase regulation and enforcement. These restrictions often limit vendors economic rights and freedoms. Legal scholars have established that many of the

mechanisms of enforcement and regulation that vendors must navigate are discriminatory. Law professor Ernesto Hernandez-Lopez researching a variety of legal cases concerning Latino vendors in Los Angeles discovered that new local ordinances regulating mobile food vendors do not comply with established state laws, such as the California Vehicle Code. Additionally, urban policy professor Mark Vallianatos and Los Angeles Deputy Council member Gregg Kettles have promoted legalizing street food in Los Angeles. This is a major step in supporting vending, since it has been banned from the city's sidewalks since the 1930s (Vallianatos, 2015, 2014; Kettles, 2014). They suggest that legalizing vending will promote the economic growth and upward mobility of vendors by removing overly burdensome enforcement that limits vendors' financial stability. Today, a majority of Los Angeles's 50,000 pushcart vendors (including merchandise vendors) continue to fight for legalization in order to avoid raids by health inspectors, resulting in high fines. As Latinos seek occupational freedom on public land, they have also petitioned and won many successful legal cases fighting discriminatory ordinances. These battles have also become case law for "new wave" mobile food vendors as well. The regulatory climate of any US city is complex. Regulations, typically organized as one-size-fits-all, have very different effects in different places. Rethinking the existing policies once written for historic circumstances is central to generating opportunities for vendors' upward mobility. Chapter Four will provide a thorough analysis of food vending regulations in the US.

I have selectively drawn on various discussions of Latino urbanism, particularly those examples of nuanced scholarship that acknowledge Latinos' daily lives and cultural practices, to provide the context for my discussions of Latino vendors. In addition, by providing numerous empirical case studies of vending activities, these scholars provide good models for discussing the formation of the material and cultural built environment, the motivations behind informal labor practices, and regulatory pressures on vendors. Their focus on social justice also makes important connections between democracy and economic opportunities.

2.1.2 Tactical Urbanism

I also draw on a second discourse based on Lefebvre's concept of "the right to the city." This approach is what I will call "tactical urbanism" (Lydon and Garcia, 2014), although similar practices have been labeled do-it-yourself urban design (Douglas, 2013), guerilla urbanism (Hou, 2010), spontaneous interventions (Venice Biennale, 2012), opportunistic urbanism (Ramirez-Lovering, 2008), spatial agency (Awan, Schneider, and Till, 2011), and temporary cities (Bishop and Williams, 2012; Oswalt, 2013). These approaches all recognize the potential of local design initiatives that transform urban life from the bottom up. Foregrounding what DeCerteau calls 'making-do,' they are part of a growing discourse on grassroots space appropriation. In the Lefebvian tradition, these theories highlight performative urban practices that are based on transforming urban space through collaborative activities and attainable design tactics that circumvent formal planning processes. Some examples of these practices include yarn and chair bombing, parking day, flash-mobs, guerilla bike lanes, community sharing locations, pop-up parks, and street festivals.

Three primary arguments have emerged from discussions of these types of urban interventions. One suggests these developing forms of human-centered urban design are reactions to formal, tightly controlled, and regulated urban planning. A second suggests this design approach acts in response to financial constraints, limited resources, and the lengthy process necessary for municipal urban design improvements and projects. Thus residents and interested professionals advocate for incremental approaches that allow for experimentation and

testing before long-term investments. A third argues that user-based movements accompany the rising affluence of some segments of the population in advanced economies, producing creative economies based upon historic traditions of craft, hand making, and tinkering. Such local ‘maker communities’ that advocate for reuse, collaborative work, and knowledge incubation are seen as reactions and alternatives to consumer lifestyles. Affluence encourages increasing numbers of autonomous, self-employed, and small-scale business enterprises whose owners enjoy flexibility and ownership. Taken together, these narratives highlight the economic and regulatory stresses placed on urban development and provide an explanation for spontaneous forms of contemporary urban life that can be constructed with low cost methods that make use of existing accessible objects and resources.

In 2013, the European Urban Catalyst group summed up patterns of unplanned interventions and urban development in both advanced and developing countries (Oswalt, 2013). They argue that user-based urbanism has lasting effects on a location well after the space has been temporarily occupied. For instance, temporary uses can change the image of a place and attract other uses to locate there. Temporary uses often become transformed into permanent structures through repetitive use. In addition, temporary uses can cause buildings that were previously slated for demolition to be preserved, renovated, and modernized (2013: 61). Their work suggests that temporary interventions challenge traditional planning tools that allocate single functional uses to fixed spatial locations such as zoning. Short-term uses transform the predictable environment into an unstable state, which complicates conventional planning’s existing toolboxes.

Social theorists such as Lefebvre (1974) and de Certeau (1984) shaped this discourse by defining space as a social construction whereby citizen agency can be exercised in a capitalistic society. In the context of these spontaneous practices, local actors exercise and produce “rights to the city.” In response to the “Spontaneous Interventions” exhibit in the US pavilion at the *13th International Venice Architecture Biennale* in the Fall 2012, Crawford states that interventions “empower artists, architects, cultural activists, and ordinary citizens to become key players by inventing new practices, strategies, and tactics to claim their rights to their city and freely project alternative possibilities for urban life” (2012). These creative and collaborative efforts emerge from the demands of a population that values new alternatives. Local actors, in these instances, are exercising what some scholars refer to as *spatial agency*, an alternative to the way professionals produce buildings and spaces where local agents act with and on the behalf of others (Awan, Schneider, & Till, 2011).

I support the position that user-based urbanism is a positive step towards more democratic forms of urban activity, but much of the current literature situates these practices as reactionary rather than active and ignore their potential to change the mindset of professional planning, encouraging planners to embrace experimentation in urban space. In addition, discussion of these practices needs to more thoroughly address how the local nature of these projects operates in relation to the cultural and social differences within communities. Tactical urbanism is a useful concept in understanding mobile food vending as both the result of prior restrictive modes of planning and as a flexible urban practice allowing vendors to appropriate underused spaces to operate their businesses. Food vending can be seen as a form of user-based urbanism created by entrepreneurs interested in autonomy in their careers, who choose to operate and participate in remaking urban space.

2.2 Urban Assemblages

A second framework that guides this research is rooted in the fields of anthropology, sociology and the History of Science and Technology, usually referred to as Science and Technology Studies (STS). Two generations of scholarship in this field are relevant to my project. In the early 1980s, the Social Construction of Technology (SCOT) and Large Technological Systems (LTS) frameworks emerged. The SCOT approach stresses the importance of the ‘social’ and argued that the content of science and technology is socially produced. SCOT theorists wanted to move away from what they saw as one-dimensional accounts of technological change based on the individual inventor (or “genius”), technological determinism, and making distinctions among the technical, social, economic, and political aspects of technological development (Bijker et al., 1987: 3). SCOT scholars called for a broader understanding of the technological frame to include the goals, problems, knowledge, and practices that become established around an artifact.

The SCOT model calls for a new vocabulary for describing the construction of various socio-technical systems. Each theorist has developed a modified language that describes the process of social construction. Key concepts of this approach include *relevant social groups* (people who share meaning about an artifact by using or purchasing the object), *interpretive flexibility* (artifacts acquiring different meanings for different social groups), and *closure* (social groups consolidate, accept, and promote a technology allowing it to become dominate). SCOT analysis begins with physical objects or artifacts, such as an automobile, bicycle, or door-closer and then researchers evaluate technology through activities or processes, such as steel making or molding. SCOT addresses the “know-how” that goes into designing a car or bicycle (Bijker et al., 1987:4). Each of these layers results in a wealth of detailed information that addresses *how* an assemblage is mutually constructed, while secondarily addressing *why* the phenomena exists. Studies are numerous and have included missiles (MacKenzie, 1987), bakelite plastic (Bijker, 1987), bicycles (Bijker, 1995), automobiles (Kline and Pinch, 1996), among others.

In the 1980s, STS scholar Langdon Winner added to the field by arguing that artifacts have politics in his book *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (1986). His work explicitly showed the ways in which artifacts are embedded in a particular social order where their design and arrangement can become a way to settle community affairs. Winner reviews the work of master builders like Robert Moses whose public works projects engaged in racial segregation through use of specific design parameters. For example, a bridge overpass was designed according to a height measurement that excluded the passage of tall buses that brought lower social classes to his parkways.

As a field, SCOT includes a variety of theoretical frameworks that describe the social and technological process of “becoming.” Each framework recognizes that technological determinism is insufficient with regards to describing technological change. Constructivists’ theory attempts to illustrate the intimate and active relationship between social life and machines by empirically detailing *how* they are mutually constructed through a variety of human and nonhuman actors. In these studies, man-made objects are used to provide clues to the impact of technologies on human life. For this reason, artifacts and their meanings demand a closer understanding.

The next generation of STS scholarship produced *actor-network theory*, a materialist concept introduced by Bruno Latour and others (Michel Callon, John Law) in 1999 and solidified in his book *Reassembling the Social: An Introduction to Actor-network Theory* (2005). Latour calls for new explanations of social systems that challenge traditional sociological

analysis and positivist forms of knowledge production. Actor-network theory (or ANT) blurs the distinction between humans and non-human actors such as machines, objects, and animals. Agency is considered relational and embedded in complex networks, rather than hierarchical. ANT's framework re-conceptualizes social systems as a multiplicity of assemblages. For urban studies, ANT provides an alternative ontology for understanding the ways of thinking about the linkage between material, technical and social worlds. As a radical approach to understanding the dynamics of social life, the concept challenges "the stable and bounded way urban studies have mostly conceived of the city" (Fariás & Bender, 2010: 2) and provides a way to closely examine associations among multiple actors that make up the social and built environment.

ANT theorists creatively developed a new set of concepts to avoid what they see as the limitations of modern, objectivist terminology. For ANT, the concept of social does not represent a domain of reality; rather it illustrates a "movement, displacement, transformation, translation, and enrollment" (Latour, 2005: 64). Therefore, the social is not a thing but a type of relation; or better, it is an association among things that are not by themselves social (Fariás & Bender, 2010: 3). The principle of generalized symmetry proposes a common conceptual repertoire to describe and analyze the relations between humans and non-humans (Fariás & Bender, 2010: 3). In other words, objects, tools, technologies, tests, institutions, and humans mutually constitute each other as actors with no methodologically significant distinction between them. To form networks, both humans and non-humans form associations. ANT is also built on a relational ontology that does not privilege any particular set of variables because every variable depends on others. Thereby, networks often referred to as *assemblages* describe the multiplicity of processes of "becoming."

ANT's approach to analyzing the construction of social systems offers a unique look at the constructs of time and space, seeing them as part of the network. Anthropologist and sociologist Ignacio Fariás and historian Thomas Bender clarify this distinction:

ANT provides a radical account of space and time as consequences, effects or, even dependent variables of the relations and associations making up actor-networks. From this perspective, space is not an underlying structure produced by capitalist relations or state strategies. Thinking of space and scale as a product which somehow become independent from the set of practices that produce it (what structuration ultimately means) would involve falling into the trap of fetishism, in the Marxian sense of taking for real and ontologically autonomous what is rather an attribute of particular actor-networks and urban sites. Space, scale, and time are rather multiply enacted and assembled at concrete local sites, where concrete actors shape time-space dynamics in various ways, producing thereby different geographies of associations (2010: 6).

Agency in ANT is deployed within assemblages as a relational process. In other words, actors are *actants* or things made to act. Moreover, actors are actual transformers in the construction of an assemblage, rather than just passing something along. Since a network is dependent on associations, instances of disassociation put the whole network at stake. In this moment, a network may become a bifurcation, an event, or a new translation. This conceptualization of reality confronts structuralism and neo-structuralism which depend on external agency to command and control events. Agency, like the constructs of time and space, is not an external force but rather an immanent effect of association. Latour explains the dynamics of agency stating, "Social action is not only taken over by aliens, it is also shifted or delegated to different types of actors which are able to transport the action further through other modes of action, other types of forces altogether" (2005: 70).

Opponents of ANT have made several objections to its premises. Some scholars criticize its perceived one directional inductive approach to the formation of assemblages. These views suggest there is no explanation that adequately accounts for the subtraction of objects, actors, and events from the assemblage. Others have recognized that ANT is culturally flat. Counter-arguments suggest practices and cultures are made in a field of material resources and that the existing context is rarely acknowledged in the construction of actors. They claim ANT theorists must pay more attention to subjective factors of cultures and practices such as the arrangements of actors that produce them (Sismondo, 2010: 89). Scholars also argue humans and non-humans are distinctly different in regard to the intentionality inherent in human actions. Latour acknowledges intentionality and intends to expand the discourse stating, “if action is limited to a priori to what intentional, it is hard to see how a hammer, a basket, a door-closer, a cat, a rug, a mug, a list, or a tag could act” (2005:71). In spite of these concerns, actor-network theory offers a useful way to understand social life that is connected through various relationships with human, nonhuman, material, and immaterial realms. Social realities are complex systems of action that produce contingent effects.

2.2.1 Artifacts and Things

Another approach conceptualizing the relationships between humans and inanimate objects are various theories dealing with “things.” Although many philosophers have thought about the nature of inanimate objects (Heidegger, 1971), researchers from different disciplines began studying the commodities of social life only recently. *The Social Life of Things* (Appadurai, 1986), *The Sex of Things* (De Grazia, 1996), and *Material Cultures: What Some Things Matter* (Miller, 1998), and *Things* (Brown, 2001) examine the way value is created in specific social formations and lodged in specific material forms. The research investigates the ways that people code, recode, and satisfy their material wants and needs (Brown, 2003: 4).

In 2001, social theorist Bill Brown introduced *thing theory* into the discourse of materiality (2001; 2003; 2004), discussing the dialectic between artifacts that are objects and artifacts that are things, he recounts on a variety of ways things are negotiated in the built environment. Brown distinguishes things as either baldly encountered or not quite apprehended. He begins by stating that objects are materialized when they are encountered by the subject. Things, in this scenario, are the “aftereffect of the mutual constitution of the subject and object” (2004: 5). Other the other hand, he notes things can be excessive objects, imagined beyond their mere materialization or utilization as objects. Here things amount to latency – “the not yet formed or the not yet formable” (2004: 5). Thus things can be physically encountered or imagined through thought. To demonstrate this, Brown inverts the work of Jean Baudrillard. Baudrillard states, “we have always lived off the splendor of the subject and the poverty of the object. It is the subject that makes history, it’s the subject that totalizes the world,” whereas the object “is shamed, obscene, passive” (2004: 8). For Brown, this demonstrates the entrenched habits of mind and practice that disregard the crucial roles that objects play in our lives. Thing theory is useful for a phenomenological understanding of the construction of artifacts and the roles of objects acquiring metaphysical presence as things in our daily life.

Materiality and thing theory contribute to a holistic picture of assemblages constructed by material objects and urban artifacts. These theories situate objects in a dialectic with the human subject to the extent that a mutual relationship of effects is produced. Accordingly, this discourse reveals the significance of the material world in constructing material agency.

2.2.2 Assemblages and Urban Studies

Unlike analysis centered on binary oppositions such as local and global, subject and object, and material and immaterial, STS scholars recognize a blurring or mutual construction of social worlds emphasizing the degree of connectivity present. For them, the task is to trace how an actor becomes strategic through the number of connections it commands and how it loses importance when connections are lost. Connectivity, as enacted, suggests assemblages are fluid, shifting, and multiple. This alternative perspective freed science from logical positivists, it also offers a new opportunity to study the social and technical currents that constitute the urban context (Farias and Bender, 2010).

The first robust application of ANT to cities appeared in *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition* (2001). Geographers Stephen Graham and Simon Marvin illustrate the process of assembling technical infrastructures (e.g. cable television, communication networks, highways, and housing). They argue that urban infrastructure networks have been opened to private competition producing a variety of consequences, namely physical and social segregation. In 2010, *Urban Assemblages: How Actor-Network Theory Changes Urban Studies*, edited by STS scholars, introduced a variety of empirical studies covering topics of the production and development of transportation infrastructure, urban music scenes in cities, urban tourism, and urban renewal (Farias and Berner, 2010). One notable study by STS scholar Andres Valderrama Pineda examined the design and implementation of Bogotá's Transmilenio, a rapid bus system designed in 1989 for mass transit, and carefully showed to what extent design decisions regarding particular elements of this system are entangled with the political reorganization of the city (Valderrama Pineda, 2010). By employing empirical analysis, Pineda uses ethnographic methods to study Transmilenio over a prolonged period of time. He specifically focused on the design of buses, the height of bus platforms, the location of stations, and the use of discriminated traffic lanes as features of a system as a whole. The production of these elements is then explained through various decision-making processes and by applying key concepts of ANT such as multiplicity, displacement, and translation. The study also illustrates how an object such as a transportation system is co-produced simultaneously through ongoing negotiations, enactments, and controversy around issues.

A second related study by sociologist and anthropologist Ignacio Farías shows how bus tours and their complex sociotechnical arrangement make tourist activity in an urban setting possible (2010). Farías begins with an empirical exploration of a video bus tour and a non-video bus tour in Berlin collecting data through participant observation of both the tourists and the bus operators. From his observations, he makes intelligible the development of a tourist sociotechnical frame through spatial, visual, narrative, and performative arrangements of elements on a bus tour and in the environment. Farías then provides a comparative analysis of the two tour bus types. He reveals that tourists on the non-video bus tour undergo a virtualized experience by engaging in interpersonal communication when forced to construct the history and meanings of locations on their own, rather than watch an explanatory video. Second, he also claims that tourist destinations create a virtual urban reality through sense-making (a process related to SCOT theories where a variety of people develop a shared meaning about an artifact) and communication about various urban sites (2010: 209, 223). He believes it is possible to think of ontology as virtual because the act of sense-making not only literally creates and renders the city into a tourist destination, but it also enables and holds together the multiple urban

assemblages brought into being in bus tours, hostels, and the infinite number of urban settings where tourism takes place.

While these studies offer some useful urban applications of ANT, they have primarily focused on urban infrastructure. Farías analysis of bus tours in Berlin is the most relevant case study for the topic of mobile food vending and will help guide the analysis in Chapter Four. Thus ANT, combined with other approaches that I have described, will furnish a key component of my dissertation.

2.3 Conclusion

In this chapter, I have identified the analytical tools to analyze mobile food vending. *The right to city* and *actor-network theory* have drawbacks; however, I find both of these frameworks useful to illustrate the realities of vendors' daily operations in cities. ANT provides a very useful framework to analyze *how* the built environment, technology, and humans shape and enable one another. At the same time, however, ANT does not allow an understanding of the vertical hierarchies that structure and restrict. In these cases, contestation models top-down and bottom-up approaches by Lefebvre and de Certeau. Furthermore, "the right to the city" discourse offers conceptual theories that explain the tensions and debates over who is able to participate in the public space of cities, whereas the ANT discourse offers an innovative approach that illustrates vendors' operations and pinpoints *how* debates are formed.

Chapter 3: Early Peddlers to Mainstream Vendors in the US, 1870 to 2008

3.1 Introduction

In virtually every city street across the globe, street vendors continue to sell unique foods and merchandise similar to the way their predecessors did centuries before. Street vendors commonly populate streets, squares, and sidewalks selling authentic foods known to their cultures. *Monie* or porridge in Sengal, *sate* or rows of meat and shrimp on skewers with peanut sauce in Indonesia, *samosas* or ground lamb encased in dough in Bangladesh, *foul* and *tamia* or flatbread sandwiches in Egypt (Tinker, 1997), and hot dogs in New York City are just a few examples. Most street foods have been prepared with ingredients familiar to their native lands and techniques traded through generations of family cooking. These culturally distinct foods have migrated around the world where they are simultaneously preserved and reinvented. Today, restaurants, the food truck industry, cooking shows, cookbooks, and magazines popularize the variety of cultural cuisines from around the world.

For centuries, street vending has taken place in developing countries and is cultural and socially embedded as a common economic practice. Over the last quarter century, scholars have begun to study the social and economic importance of these street vendors by recommending western standards and policies that address gender roles, food nutrition, and water sanitation methods in the countries of India, Thailand, and Nigeria (Tinker, 1997). Not only has this research addressed the importance of public health conditions, they have attracted the attention of governments who often overlook their role in the local economy. The history of street vending begins in cities across the world; however, their documentation in historical literature is limited.

In the US, the history of food vending shows a complex trajectory involving illegality and contests over the right to use space. Most government officials, store merchants, political figures, and portions of the general public believe that street vending should, by all logical criteria, eventually disappear. This prevailing view suggests that vendors create disorder in their environments, congest streets, and contribute very little to the organized and well-kept appearance of cities that planners desire. This argument became prevalent in the modernist era of urban redevelopment when urban planners and designers tried desperately to create visual and social order in urban spaces with grand visions, devoid of human scale and aesthetics. Moreover, attempts to regulate and plan cities based on circulation and separated land uses ignored the existing social fabric of city streets.

The negative views of street vendors intensified with the rise of the capitalist city and its western-style Fordist and Keynesian approaches to economic development. Rigid structures of mass consumerism by way of new department stores, big-box retail, and supermarkets focused on reducing costs and increasing stock on demand. These macro-scaled merchandise economies furthered the polarity of small and large businesses and created tensions between formal enterprises and street commerce. At the same time, increased distribution of cultural ingredients and foods expanded bringing new cuisines to household across America. Given these forces of urban renewal and Fordist mass production one would assume their extinction; yet, they continue to thrive in cities at constant and increasing rates supporting a variety of urban social classes and economic sectors.

The following chapter will illustrate the pervasive and culturally diverse practice of food vending within the US over the last century. While a majority of US cities have histories of vending, New York City, New Orleans, San Antonio, and Los Angeles cultivated the largest vending environments founded upon various immigrant cultures and cooking traditions. The chapter begins in New York City to uncover the emergence of street peddlers and their spatial tactics in navigating an rapidly industrializing and immigrant landscape during the Progressive Era. Simultaneously, the introduction of Latin American ingredients and cuisines established a distinctive type of food vending culture in the Sun Belt cities with Chili Queens and Tamale Kings. The second notable phase of food vending in the US involves mid-century immigration reform, urban renewal efforts, and economic labor restructuring. In the 1960s, Los Angeles quickly became an important context for food vending within the American landscape, specifically in regard to its close relationship with Latin American food and fertile growing landscape. Today, New York City and Los Angeles are ranked in the top two metropolitan economies in the US (US Conference of Mayors, 2013) and their ethnic transformations mirror a decisive national trend with important international linkages (Davis, 2000: 2). For this reason, New York City and Los Angeles both offer useful compliments and become the focal point of this discussion.

In general, how street food vending has evolved over the course of history is a rather understudied phenomenon. Given their lack of documentation by city governments and the US Census Bureau, it is difficult to determine the precise growth and decline of street vendors overtime in various contexts. For this reason, historical narratives from scholarly research and archival newspapers must be pieced together from a variety of sources. My discussion is founded upon the work of a variety of scholars who have devoted a significant amount of time and effort to locating and analyzing archival planning reports, photographs, and newspaper articles. While their work has contributed to establishing a much needed discourse on vending, I plan to synthesize these narratives while focusing on vendors' viewpoints and motivations.

3.2 Food Truck History

The chuck wagon was the first mobile cooking unit on wheels that was used to serve and store food for hungry cattlemen in the American countryside. At the end of the US civil war in the 1860's, a massive expansion of settlement moved westward across the North American continent, which created a large market for beef. Cattle drives, which moved herds of cattle to markets without railroads, meant crews of cowhands had to live in the countryside for months at a time. The need to feed and care for cattlemen resulted in the development of the chuck wagon, also called 'cookies' (Thompson, n.d.). Cooks of chuck wagons woke as early as 3:00am to stoke

fires and bake biscuits. The wagons themselves were designed specifically for cooking, with separate areas for pot storage, washing, and food preparation (Butler, 2014). The Studebaker Brothers Manufacturing Company, an Indiana-based company established in 1852 that produced many of America's wagons, carriages, and automobiles, created a model chuck wagon called the "Round-Up" in 1880 (Edison, n.d.) (Figure 3-1). The era of motorized transportation emerging at the turn of 19th century introduced a new higher powered model.

In the late 19th century, the Autocar Company (originally established as the Pittsburgh Motor Vehicle Company in 1897 and changed names to Autocar in 1899) began specializing in manufacturing commercial trucks. They developed a series of electric-powered ice cream wagons for the Breyer Ice Cream Company which started in 1908 in Philadelphia, PA. An advertisement in Philadelphia's *Evening Public Ledger* in 1915 quotes a mobile ice cream unit or chassis (i.e. frame of the automobile) at a cost of \$1,650 (Figure 3-1). The ice cream autocar provided seating for at least one driver and space to load a dozen ice cream barrels. Ice cream sales would continue to lead the development of heavy equipment trucks for decades to come.

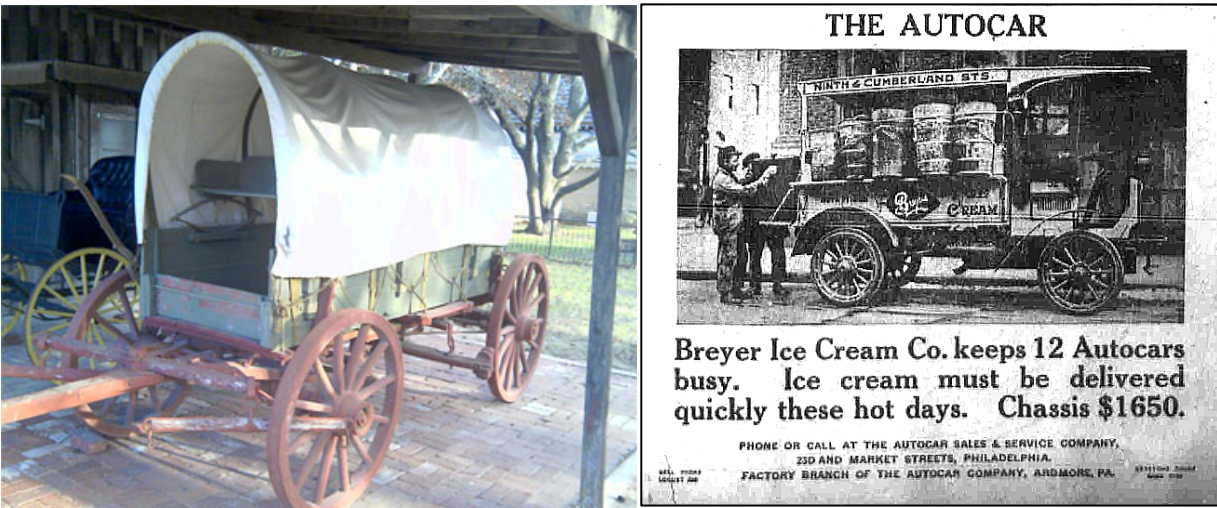


Figure 3-1. Left Image: Round-Up chuck wagon by the Studebaker Brothers Manufacturing Company, Stephenville Museum, Stephenville, Texas, no date. Source: Chamblee, Steven. Right Image: The Autocar advertisement, *Evening Public Ledger*, Philadelphia, PA, July 28, 1915. Source: Penn State University Libraries, University Park, PA.

With the invention of electric refrigeration in the 1920s, ice cream vendors rapidly expanded across the US. The well-known Good Humors ice cream trucks (Figure 3-2) and other similar companies operated with fully motorized vehicles outfitted with large electric refrigerators mounted onto the rear of the truck. Advances in electricity and refrigeration simultaneously expanded food distribution across many regions in the early 20th century; however, the production of truck manufacturing declined during the Great Depression of the 1930s. Ice cream trucks soon advanced into more lightweight commercial vehicles or vans and began roaming suburban neighborhoods often playing a prerecorded jingle to appeal to children (Figure 3-3).



Figure 3-2. Left: Peter’s Ice Cream van with people buying ice cream, Burnley Street, Richmond, approximately 1937-1938. Source: State Library of Victoria. Right: Good Humor Ice Cream Truck, Boston, MA, 1938. Source: Smithsonian Snapshot Series, Smithsonian’s National Museum of American History.



Figure 3-3. Left Image: Ice cream truck, Berkeley, CA, May 1, 2015. Source: Author. Right Image: Ice cream van, San Fernando, CA, May 3, 2013. Source: Author.

The 1950s and 1960s ushered a new wave of atomized food vending and food trucks. In 1956, General Motors advertised the use of their ball bearings in kitchen restaurant equipment with an illustration of a mobile Bake-O-Mat of the future (Figure 3-4). The illustration depicts the truck as a mobile automatic bread-dispensing machine that delivers to housewives in suburban neighborhoods. The automatic bread dispenser suggests General Motors ball bearings could produce mass quantities of bread with efficient speed and consistency. The speed of production is further enhanced with door-to-door service provided by the truck. While the truck did not materialize immediately, its design was eventually established and documented as an official US patent (Figure 3-5). Moreover, the automat cafeterias, which were popular among office workers in New York City in the early 20th century, likely provided inspiration for the Bake-o-Mat bread dispensing food truck.



Figure 3-4. New Departures Ball Bearings advertisement, General Motors. *Scientific American*, July 1956. Source: University of California, Berkeley Library.

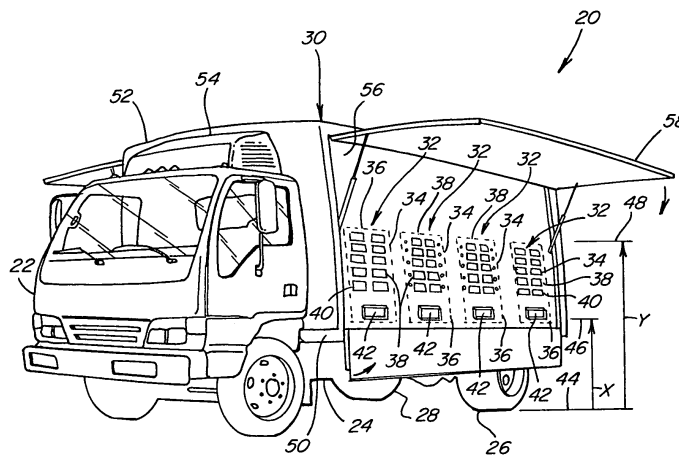


Figure 3-5. Mobile vending apparatus, 2008. Inventor Tony Guard. Source: US Patent and Trademark Office Database.

In the 1980s, pick-up trucks and catering trucks materialized as the most widely used mobile vending units (Figure 3-6). The addition of ovens and stoves on trucks meant vendors could serve hot meals on-the-go. In addition to appearing at carnivals and fairs, mobile catering

trucks were used by migrants serving laborers in industrial areas of cities. In Los Angeles, the construction and manufacturing industries became popular locations for vendors serving Mexican dishes to workers. The expansion of loncheras, or taco trucks, over the later half of the 20th century (see also Section 3.5.2), provided the foundation for the modern day food truck whose high-end cooking equipment and vibrant branding introduced another new type of mobile vending to affluent populations.

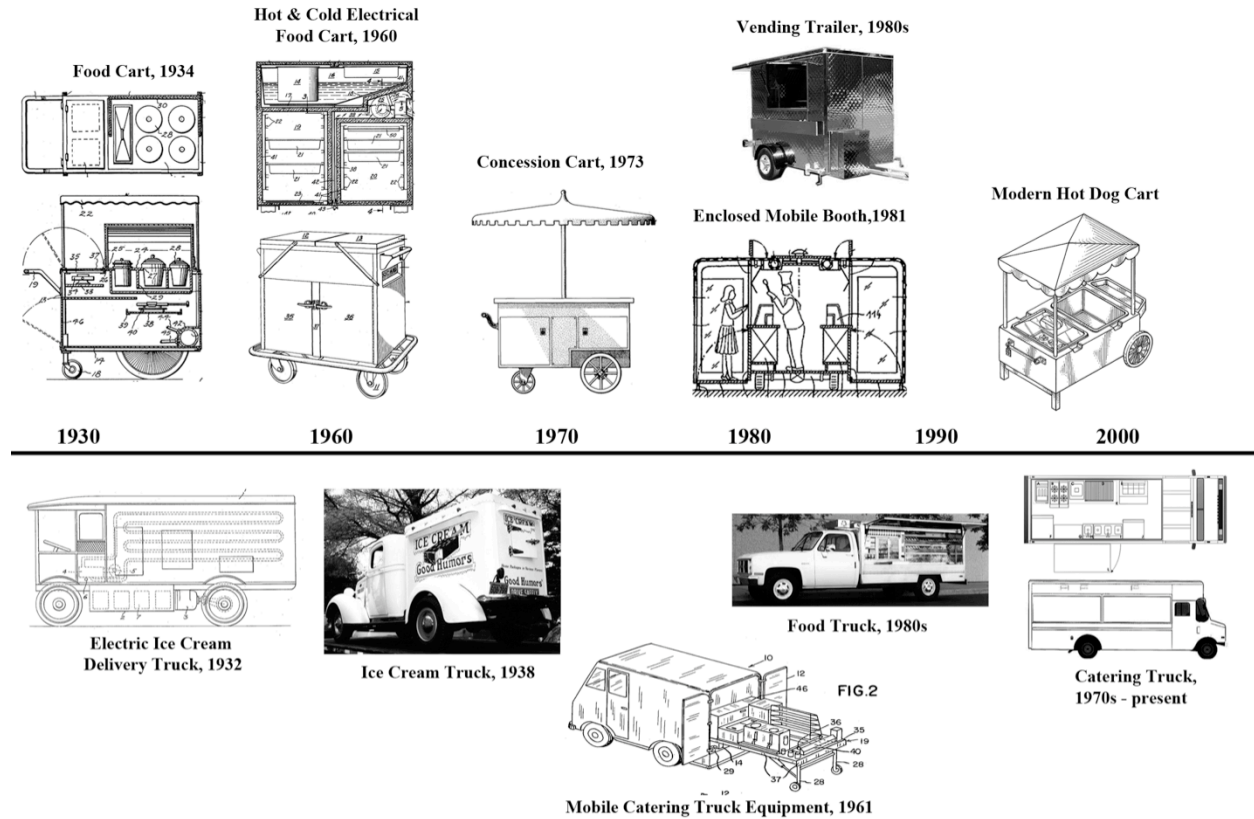


Figure 3-6. Timeline of food carts and food trucks over the 20th century. Sources: US Patent and Trademark Office Database; Smithsonian’s National Museum of American History; Timeline constructed by Author.

3.3 Early Peddlers in Immigrant America, 1870 - 1930

3.3.1 New York City Pushcart Peddlers

Pushcart peddlers, also called hawkers, hucksters, and shiners were common in the early 1800s and rose to prominence in the final quarter of the 19th century when they started gathering daily at specific locations to form street markets (Bluestone, 1991; Upton, 2008; Wright, 1927). City officials have combated pushcarts in New York City as far back as 1701 when street hawking was formally forbidden. Elimination was viewed as the only way to manage the peddlers’ seemingly chaotic and unacceptable behavior. In 1886, four peddlers planted pushcarts along Hester Street on the city’s Lower East Side. Considered the city’s first documented stationary pushcart market, although illegal, these vendors benefited from the high residential densities that allowed them to sell from single locations (Bluestone, 1991; Wasserman, 2009).

Peddling during the Progressive Era is a story of both survival and entrepreneurial ambition in a young, economically challenged city. After the Civil War, New York's population rose from 400,000 in 1840 to 2 million in 1880. Farmers close enough to the city, could not reach the demand of the population leaving many low-income families unable to compete for quality foods (Wasserman, 2009). A 1906 survey of New York's pushcart system recognized that any proposed regulation would have "serious consequences to the great mass of the poorer people of the city" (as quoted in Bluestone, 1991: 73). Pushcarts first populated the primarily immigrant Lower East Side, an area known for a starving population and tenement buildings packed with families and boarders that patronized the carts lining the streets (Burnstein, 1996, 52). Peddlers would haul their cart down to the fish and produce markets at the docks or to the wholesale markets, to buy a small quantity and then push their carts uptown (Wasserman, 2009, 156). A short list of items for sale at the pushcart markets included hot corn, fish, poultry, meat, pickles, bread, cake, candy, candles, wallpaper, oil cloth, furniture, stockings, glassware, crockery, clothing, shoes, and books (Burnstein, 1996: 54). In addition to serving food products and dry goods, roughly one third of the pushcart businesses sold inexpensive and slightly damaged nonfood merchandise through wholesale purchase of factory seconds. While wholesale markets became important economic hubs for peddlers seeking the cheapest items for sale, the pushcarts themselves generated micro-economies of production as well. Factories outside New York City manufactured the wheels, axels, and springs and blacksmiths in the city made the belt and trestle (Wasserman, 2009) (Figure 3-7). In 1880, pushcart rentals cost roughly ten cents per day, and by 1925, the rent had doubled.



Figure 3-7. Pushcart peddler in the Lower East Side, New York City, early 1900s. Source: The Marchand Archive, University of California, Davis.

Similar to today, pushcart vendors came from a variety of ethnic backgrounds, mostly European immigrants, bringing with them traditions well known in their cultures. According to

New York City's Department of Markets record, of the 31,000 peddlers in 1925, the vast majority, 72 percent, were Jewish immigrants selling a variety of food products and household goods. These Jewish street vendors were from Eastern Europe, especially Russia, where discriminatory laws prevented them from owning farmland and restricted them to a few crafts and to minor businesses such as peddling (Burnstein, 1996: 49). Twenty-two percent were Italian and the rest were German, Irish, Russian, Spanish and American born. Women, African Americans, and children were often among the poorest of urban dwellers at the time and survived by selling fruit, vegetables, candies, and hot corn on busy street corners (Wasserman, 2009: 155, 158). Several ethnic groups active in the trade concentrated in the Lower East Side where more than 50 percent of all pushcarts were located.

The polarity between the social class of the elite and the proletariat increased dramatically with the rise of industry and swift growth of the city population in the early 20th century. The Great Depression of the 1930s is the clearest example of peddling supporting entire household incomes. At the time, 47,000 families depended on earnings made from pushcarts, which generated \$40 million to \$50 million each year (Wasserman, 2009:158). The economic conditions of the time suggests food vendors were serving daily food shortages. Thus food vendors on street corners were not only necessary, but they became a visual manifestation of poor immigrant tenements in New York City. On the other hand, some vendors viewed owning a pushcart as a higher status occupation than a laborer working in sweatshops. Rather than performing repeated manual labor, they desired the independence, flexibility, and pride associated owning a pushcart business. Others viewed a pushcart as a transitional type of work and a first step on the ladder of entrepreneurial success (Burnstein, 1996: 51).

A number of spatial strategies were proposed to manage vendors. City officials proposed the concentration of peddlers in specific areas of the city to hide their visibility, reduce conflict with store owners, and control economic revenue. In contrast, some officials were less resistant and argued for a even dispersal of peddlers throughout the city to allow them to serve familiar neighborhoods and distribute their economic activity. Given the continual growth of food peddlers during the late 1800s and the "filth problem" in pushcart areas, in 1904 the Department of Street Cleaning Commission established an ordinance that limited vendors to remain in a single spot for thirty minutes or less, which grew notoriously difficult to enforce (Burnstein, 1996: 75). In 1906, the Push-Cart Commission, chaired by Lawrence Veiller under Mayor McClellan, reported that pushcarts added to the "picturesqueness of the city's street and impart[ed] that air of foreign life which is so interesting to the traveler, lending an element of gaiety and charm to the scene which is otherwise lacking" (as quoted in Bluestone, 1991, 82). In an effort to reduce the heavy concentrations of peddlers that stood at the center of reformers concerns, Veiller and McClellan pushed for an ordinance assigning four vendors to a block (83). Regrettably, their request failed and peddlers continued to concentrate in areas that were not carefully policed. In 1913, the City designated areas underneath the Manhattan, Williamsburg, and Queensboro bridges for pushcarts to segregate them from the city's streets where they were seen as obstructions. These competing views of concentration and dispersal would continue for years to come and are still debated today.

Of the groups who have historically opposed pushcarts, store merchants have represented the most oppositional faction of society. Rather than arguing over economic competition, in this period, store merchants centered their concerns on pushcart congestion on sidewalks, a visually unpleasant activity that blocks their storefronts. Department stores and delivery services argued that they needed clear street frontage for deliveries and short-term shopper parking. The rise of

retail establishments also depended upon the unfettered circulation of customers and goods for their high-volume, high-turnover business (Bluestone, 1991: 76). Store merchants also wanted to separate themselves from peddlers by providing clear fixed pricing that reduced haggling and social exchange, eventually making shopping a passive experience. Merchants also fought “pulling-in” or “schlepping” used to pursue shoppers or passerby (Wasserman, 2009, 160) by citing complaints about noise and singing to the police. Earl French, who in 1925 conducted one of the most comprehensive studies of New York City pushcart markets, quickly dispelled this argument. He found that pushcarts generally lined side streets or large thoroughfares and did not interfere with traffic to the degree often asserted by many reformers (77). Ironically, the removal of pushcarts from the streets in the 1920s reduced foot traffic and department store sales, to the extent that they requested a reduction in rent from the city.¹

3.3.2 Southern Chili Queens and Tamale Kings

Counter to the hawkers of the northeast, in the southern cities such as San Antonio, Mexican women nicknamed Chili Queen’s began drawing attention in the 1870s, forty years after the 1848 Mexican-American War that was still present in the minds of many residents (Figure 3-8). Journalist Arellano Gustavo suggests that Chili Queens’ also sold the “romance of a vanquished people, a slice of Old Mexico in a state that hadn’t fully joined the Republic” (2012a: 32). The Chili Queens illustrate the major role of women in the early forms of vending. Their highly skilled knowledge of cooking linked the private realm of the home to the public arena of vending. In 1893, they received recognition for their work while on display at the World’s Columbian Exposition in an exhibit called “The San Antonio Chili Stand” created by Texas official delegation. Soon chili con carne became widely popular across the nation as an easy, affordable meal for a starved nation.

Able to overcome displacement, at the turn of the 19th century in San Antonio Chili Queens were embraced as cultural artifacts to attract tourists nostalgic for a “bit of Old San Antone” (34). The influx of Anglo tourists and settlers provided a regular source of income for working-class vendors, who struggled for the next half-century to retain their civic rights to the plazas of San Antonio (Gabaccia and Pilcher, 2011). In 1889, the San Antonio mayor initiated a building boom in order to beautify the city, creating a new city hall in Military Plaza, and landscaping Alamo Plaza with trees and a gazebo, driving the vendors from their two most profitable venues (Gabaccia and Pilcher, 2011).

After World War II, the Chili Queens were eliminated when health regulators began to formalize vending practices requiring them to register their business with a seal of approval. Much of allure of the vendors lay in the their transgression of the boundaries of race and hygiene. One journalist wrote, “Ignorance in the details of their manufacture is necessary to the complete enjoyment of tamales” (as quoted in Gabaccia and Pilcher, 2011: 116). Given the conflicts between tourist eager for picturesque attractions and health officials concerned about racial contagion (Gabaccia and Pilcher, 2011), the original allure of the queens and the authenticity of their cooking practices soon diminished (Arellano, 2012a). As historians Donna Gabaccia and Jeffery Pilcher argue, “In the Southwest, ethnic food provided a primitive foil for Anglo health officials and food processors to establish a particular construction of industrial sanitation as a civilized norm. Even after the chili stands has disappeared, images of gastrointestinal danger and outright criminality remained latent, waiting to be applied to the

¹ For detailed statements from merchants see Wassermann, 2009.

subsequent generations of Latin American immigrants, including contemporary taco truck operators” (Gabaccia and Pilcher, 2011: 119).



Figure 3-8. Chili stands, Haymarket, San Antonio, TX, 1933. Source: San Antonio Light Photograph Collection, University of Texas, San Antonio Libraries Special Collections.

At the same time peddlers in the northeast and Chili Queens in the southwest supported dense urban populations, Tamale Kings emerged on street corners in the 1890s. Early newspapers reminded the public of the universal singsong called - “Hot-ta-ma-leeees! Hat ta-ma-leeees!” - that rang across the nation (as quoted in Arellano, 2012a: 38) (Figure 3-9). Tamale men first emerged with force in San Francisco, Los Angeles, San Antonio, New York City, and Chicago. In San Antonio Chili Queens also popularized the sale of tamales and the city went by the nickname Tamale Town or Tamaleville for decades after its initial fame (Arellano, 2012b). Los Angeles streets were a familiar setting for tamale wagons. In San Francisco, tamale men were a mix of ethnicities including Mexicans, Brazilians and even Arabs who would take to the street corners, alleys, bars, and businesses with their tamales in warm portable steam buckets.

During this trend, Robert H. Putnam created San Francisco’s first California Chicken Tamale Company in 1892 with the desire to send tamales nationwide. In Chicago, Putnam was hiring two to three men a week, ultimately amassing a force of over 500 workers on Chicago’s streets (Arellano, 2012b). Arellano highlights that Putnam’s employees wore “a white linen coat, overalls, and hat that brought, if not class, at least an assurance that these vendors cared about appearances and sanitation” (2012b). The California Midwinter International Exposition of 1894 also held the “Tamale Cottage” exhibit to highlight the nation’s industry and foster a continued demand. After the height of their success in 1894, tamale men began to disappear amidst other vendor and restaurant competition that saw the visual benefits of making their food in view of their customers and the rise of the canning industry. The *San Francisco Chronicle* cheered on the demise of the tamale men by trying to paint them as dirty and dangerous and soon Americans wanted tamales in a can, a guarantee that the product inside was hygienic (Arellano, 2012b).

Charles H. Workman, also cited as the “tamale king” in newspapers, opened W.G.M. Canning Company in 1900 in San Francisco, with the goal selling clams, tamales, and enchiladas

to households nationwide. Workman expanded his company quickly and tamale sales soared in 1912. Soon other companies entered the tamale canning industry driving up competition. Workman's canning industry success led to the demise of tamale men on city streets. Arellano highlights, "one report estimated that the sales of husk tamales had decreased from 40,000 per year to 4,000 within the span of a decade" (2012b). As sanitation regulations developed in response to the filth of the industrial city, unsanitary places of consumption on the streets were disregarded for the modern advances in the home kitchen.

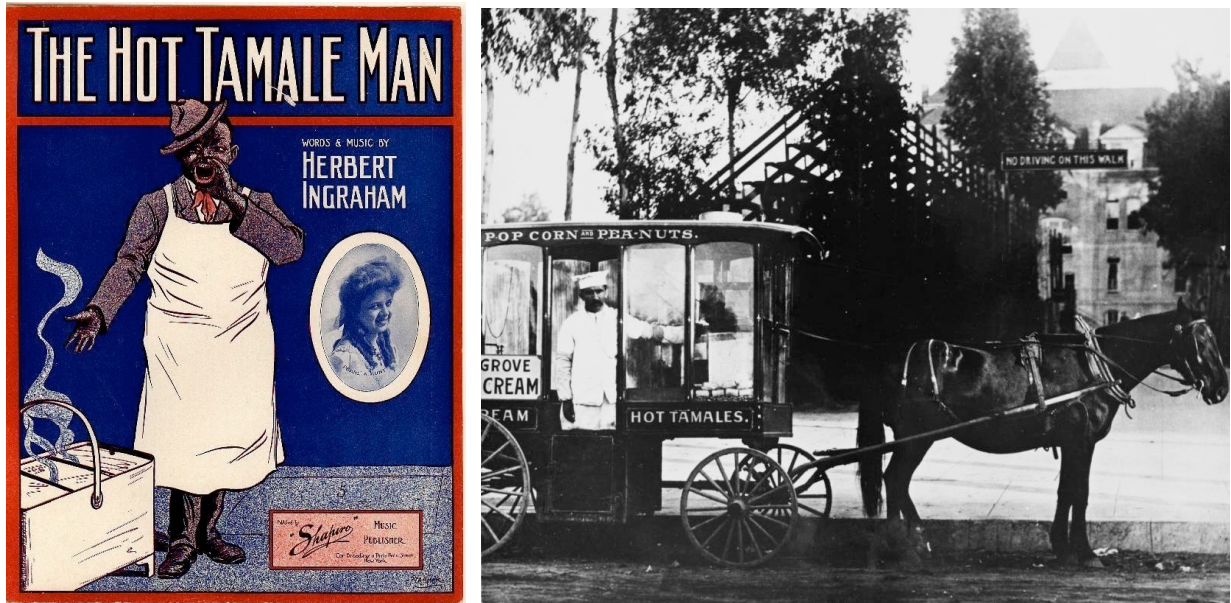


Figure 3-9. Left: *The Hot Tamale Man*, Historic American Sheet Music. Source: David M. Rubenstein Rare Book & Manuscript Library, Duke University Libraries. Right: Tom, the Hot Tamales Man, and his horse drawn refreshment wagon, USC, 1910. Source: University of Southern California History Collection. USC Libraries.

3.4 Urban Redevelopment and the Mass Production of Cultural Foods, 1930 - 1960

The Great Depression of the 1930s exacerbated economic conditions leaving little opportunity for employment. Given the severity of the economy, the number of peddlers grew exponentially in New York City as the unemployed struggled to support their starving families. In response to these events, Mayor Fiorello LaGuardia took up the issue of creating indoor public markets for pushcart vendors as an attempt to "professionalize" and contain their practices. Rules for indoor markets stated that no used second-hand merchandise could be sold, vendors must remain behind their counters when conducting transactions, and no shouting or hawking by vendors (Wasserman, 2009, 164). The indoor markets put the poorest peddlers out of work permanently. Fifteen thousand peddlers lined the streets of the city when LaGuardia came to power and by 1945, a little more than ten years later, only 1,200 remained. Furthermore, indoor markets never flourished because the stall rentals were too high and customers soon abandoned the market for the convenience of supermarkets (Wasserman, 2009, 167).

In Los Angeles in the 1930s, street vendors (including merchandise vendors) were outlawed by city officials on sidewalks. To this day, Los Angeles Municipal Code 42.00(b) upholds, "No person . . . Shall on any sidewalk . . . offer for sale . . . Any goods, wares or

merchandise which the public may purchase at any time.” Section 11.00(m) reinforces the ban stating “making vending wares on the sidewalks a misdemeanor punishable by a fine of up to one thousand dollars and/or by imprisonment in the county jail for up to six months.” Despite failed attempts to over-turn this ordinance over the last century, vendors have gained strong support from a variety of non-profits and have established the Street Vendor Campaign (Alpert Reyes, 2014). The effort has resulted in a reevaluation of the ordinance by the City of Los Angeles. A recent vendor raid by the County’s Department of Public Health at downtown MacArthur Park continues the debates over antiquated ordinances and vendors’ right to use public space (CBS Los Angeles, 2015).

Beginning in the 1940s, large sections of New York City were redeveloped to allow for the expansion of bridges, freeways, housing projects, and parks led by Robert Moses. He financed large-scale public works projects by creating public benefit corporations, who act like quasi private authorities exempt from many local and state regulations. While these redevelopment projects demanded ease and accessibility for the expanding distribution of goods. New high-rise affordable housing complexes built to clear slum areas impacted established urban neighborhoods, small business owners, and the social life of urban streets. Additionally, the influence of Jacob Riis’s striking photographic analysis in *How the other half lives* (1914) brought awareness to the severity of conditions in tenement housing adding urgency to the renewal efforts.

Concerns surrounding street vendors lowering real estate values through neighborhood deterioration, creating social disorder, and the spread of disease via unsanitary food handling practices on dirty city streets coincide with urban renewal efforts aimed at city beautification. Officials at the Department of Street Cleaning believed the carts constituted a “menace to health” in adding a considerable volume of garbage onto the streets. The filth of the streets served as an inappropriate model for newer immigrants, who would often throw household refuse out of apartment windows (Burnstein, 1996: 73). Although urban reformers wanted to achieve greater public health conditions, their lack of attention to the established communities resistant to redevelopment and the social and economic benefit of street vendors left communities vulnerable to change.

As urban renewal brought dramatic changes to the New York City landscape, much of the nation was developing a integrated distribution network for mass produced goods. Chili Queens and Tamale Kings, who shared their Mexican cooking traditions for the nearly sixty years preceding the end of World War II, would have less staying power against the force of mass production and canned products. Easy to make dishes with canned ingredients such as chile con carne, tamales, chile pepper, tacos, frijoles, and enchiladas infiltrated American streets and homes (Figure 3-10). Between 1920 and 1960, American society became organized around the process of consumption by the masses (Gottdiener, 2001: 52). Hand-cooked food production methods simply could not be preserved, keep pace, or reach the vast distances met by factory machines and commercial transportation. Chicago was at the epicenter of the canning industry during this time given its volume of stockyards and railroads. Here, chili con carne, a cheap mixture of meat, beans, and spice, was packaged as an easy meal for millions of Americans (Arellano, 2012: 35). The Fordist industries such as canning and prepackaged frozen meals were propelled by the growth of the middle class and home consumption activities, the uncontrolled economic collapse that occurred during the Great Depression, and the emergence of a mass advertising industry (Gottdiener, 2001: 53).



Figure 3-10. “Home Cooking in a Can,” 1950. Source: Outdoor Advertising Association of America, David M. Rubenstein Rare Books & Manuscript Library, Duke University Libraries.

The proliferation of Mexican cuisine was also propelled by the introduction of the automobile and the federal expansion of the interstate that drove American society in the mid-20th century. Roadside diners and fast food restaurants serving Mexican food began populating freeways throughout the country. The American culture of quick consumption became synonymous with quick and convenient manufactured food. Mexican food in the American diet was easily accessible from a variety of franchise fast food chains such as the ubiquitous Taco Bell and Del Taco founded in the 1960s as well as the more recent Moe’s Southwest Grill, Rubio’s, Chipotle, and Qdoba. In an effort to reduce cost with efficient operations, these corporate establishments use calculations of consumer behavior and quantitative research reports conducted by the National Restaurant Association and other industry reporting companies. George Ritzer reminds us that McDonalozation offers powerful advantages, where the replacement of human by nonhuman technologies is a major means through which predictability, efficiency, calculability, and control can be ensured both in production and in interactions with customers (Ritzer, 2011).

3.5 Immigration Reform, Political Agendas and Economic Restructuring, 1960 – 2008

3.5.1. New York City Politics

From the mid-20th century on, immigrant street peddlers would continue to informally populate urban centers. In the 1960s and 1970s, economic stagnation in New York City and increasing levels of immigration per the immigration reform of 1965 created both a new demand for street food and a supply of street vendors. There was no cap on vending licenses in New York City at the time; however, there were a number of streets designated as off limits to itinerant vendors. Vending was made more attractive in 1967 when Mayor John Lindsay

removed the ordinance requiring vendors to remain mobile, allowing them to set up on one corner for the entire day (Devlin, 2011: 6). In the 1970s, the central business district of Midtown Manhattan became the focus of government regulatory efforts to protect property owners from vendor activity. Complaining that “Africans” constitute a blight that diminishes storefront businesses as well as the good image of Fifth Avenue, the Fifth Avenue Merchants Association, headed by Donald Trump, asked Mayor Ed Koch to remove street vendors from the street (Loukaitou-Sideris & Ehrenfeucht, 2009). Koch responded by creating a new arm of the New York Police Department, the Street Vendor Task Force, which consisted of thirty-four officers who enforced vending ordinances by prosecuting, fining, and often arresting vendors.

In 1988, Mayor Koch implemented the now well-known 3,000-vendor permit cap that to this day, stifles the city’s vending potential and creates a black market of permits with thousands of vendors on a waiting list. Those fortunate enough to obtain a permit often illegally rent their carts out for \$12,000 to \$20,000 per year (Vallianatos, 2014). Figures of 10,000 vendors have been reported doing business on NYC sidewalks illegally. Throughout the 1980s, unlicensed vending became especially common in immigrant and low-income neighborhoods in the city’s outer boroughs and less central areas of Manhattan.

As history is destined to repeat itself, in the 1990s Mayor Rudolph Giuliani proposed banishing all peddlers from street corners and relocating them in open-air markets (Wasserman, 2009, 168). While unsuccessful, he also took the liberty of creating the Street Vendor Review Panel in an effort to determine which city streets should be closed to street vending. His motivation for this initiative was driven by conflicts and competition arguments that arose from the African vendor market and street artists. The committee successfully closed 130 streets in a few short years.

In 2001, the Street Vendor Project was established by local vendors. After much advocacy, New York City council member Philip Reed introduced a proposal in 2005 to restructure the city’s vending laws in ways that would prove favorable to vendors. The bill suggested increasing the number of licenses, reducing fines, and allowing six vendors per block on all streets. Unfortunately, the proposed bill faced strong opposition by business interests and has not been enacted into law (Loukaitou-Sideris & Ehrenfeucht, 2009).

In 2008, the definition of traditional street peddling in New York City expanded with the introduction of new wave mobile food trucks, as it did in many US cities. Rather than accommodating this new industry, the city government focused its efforts on addressing food deserts. Seed funding from a grant allowed the city to develop a program that would create 1,000 new permits for vendors who only sell fresh fruits and produce to low-income neighborhoods exclusively. Most of the 500 carts in operation today are being run by immigrants. Mary Mazzio, a filmmaker who documented the stories of several vendors and launched a political battle to start the Green Cart program in a film titled *The Apple Pushers*, noted that “seeing these first-time entrepreneurs slowly begin realizing a vision for a better life through the mechanism of a “push cart” struck her as a story that “crossed the generations” (as quoted in Burnstein, 2012). Another example of recent food vending support came from Mayor Bloomberg’s launch of an initiative in 2011 to reduce crime in city parks. He announced a competition seeking proposals from vendors operating pushcarts and mobile trucks that were of “premium quality in terms of both mobile food unit design and menu content, making significant improvement to the quality and ambience of the parks” (City of New York, 2011). The few winners awarded five-year term permits are prospering given the lack of vendor competition and high customer demand.

Overall, the history and practice of vending in New York City has been heavily influenced by commercial interests backed by political figures who view vendors as a lesser force in the economy. Protectionist views supported new laws and vending markets that were used as tools to drive them out of spaces where they were not wanted. Ordinances imposed rules and codes of orderly and civilized behavior on the streets. These views hindered the positive impact that vendors had in sustaining and supporting low-income areas and populations. New York is distinguished as a city of constant migrant flows. The migrants that serve the city streets, documented or not, offer a rich social and cultural diversity that is often overlooked.

3.5.2 Vending Landscape of Los Angeles

Los Angeles is considered the most well known city in the US for Latino operated taco trucks that, Arellano suggests, have followed the lead of the Tamale Men and Chili Queens (2012). Similar to the expansion of the immigrant population of New York City in the 1960s, Los Angeles witnessed increased growth in legal and undocumented Latinos who, for decades migrated between American border zones and Mexico. After the Immigration and Naturalization Act of 1965 that focused on family reunification, thousands of Latinos began arriving in Los Angeles and by the late 1970s, the group achieved a plurality in the city. By 1998, Latinos outnumbered Anglos in Los Angeles County by more than one million (Davis 2000: 2). Without the Latino population boom, Los Angeles and other major American cities would have dramatically shrunk in the face of accelerated white flight (Davis, 2000: 8).

Before 1970, Latinos in Los Angeles largely settled in areas of industrial manufacturing that were located east and southeast of downtown such as Boyle Heights and Garment Town. The spatial settlement pattern, often called barrios, prompted a unique development in the economic and geographic landscape of Los Angeles, distinct from the polycentric barrios of Chicago or the multicultural mosaic development of New York. As geographer Mike Davis finds, by 1990 the developing spatial pattern became a vast city-within-a-city in which there is a poor, new immigrant (Mexican and Central) core, and a more affluent, second to fifth generation Chicano suburban belt in the San Gabriel Valley (2000: 58). Davis also found that Latinos occupy most of Los Angeles and Orange County's traditional blue-collar housing tracts and suburbs adjacent to the three great corridors of industrial zoned land along Interstate 5, the 60 (Pomona) Freeway, and the Los Angeles River (Figure 3-11).



Figure 3-11. Customers at a taco catering truck in Los Angeles, CA 1987. Source: Los Angeles Times Photographic Archive, UCLA Library.

As with deindustrialization, the end of the Cold War, and the economic restructuring in the 1970s, Boyle Heights and many Latino communities had a resurgence of vending activity in to the 1980s (Vallianatos, 2014). Other factors for increased activity include the economic recession of 1982 in Mexico and elsewhere in Latin American as well as the passage of the 1986 Immigration Reform and Control Act which penalized employers for hiring undocumented workers (Bhimji, 2010: 465). Many Latinos also became predominate in low-tech manufacturing, home construction, and tourist-leisure services (Davis, 2000: 54).² It is also important to note that per historical trends, Latinos typically generate businesses that tend to be smaller in scale and production than large-scale capitalist industries. They also find employment in factories such as textiles and metal works that have little opportunity for upward mobility. As scholars have found in a comparative analysis of five metropolitan areas with foreign born populations - Los Angeles, San Francisco, Chicago, Miami and New York City - immigrants typically moved into employment niches that were either directly created by immigration itself (i.e. ethnic restaurants and small apparel factories) or abandoned by native workers in route to better jobs in the suburbs (as cited in Davis, 2000: 112-3). The cultural unity and blue-collar solidarity of Latino workers in Los Angeles and its morphology in expanding a nucleated city over the later half of the 20th century illustrates how cycles of vending occur in Los Angeles today.

² During the last quarter century, Latinos have replaced blue-collar Anglos in the quadrant of industrial suburbs southeast of Downtown. Mexican and Salvadorean immigrants likewise have superseded working-class African-Americans on the east side of Southcentral Los Angles. Central Avenue, the old main street of Black Los Angeles, is now 75 percent Latino (Davis, 2000: 54).

Ever since the banning of sidewalk vendors from city streets in the 1930s, Los Angeles's vendors have operated in spite of this contentious piece of legislation using "look-outs" to protect their businesses. The impossibility of overturning the provision is supported by a variety of reasons, including sanitation concerns with the rise of health policy, congested sidewalks and streets meant strictly for the automobile, politically charged complaints by restaurant owners, and racially motivated restrictive property covenants and regulations. Vallianatos highlights that "although attitudes are changing, sidewalk vending has been viewed as a foreign and chaotic activity, a Third World occupation, rather than as an opportunity to encourage business formation and provision of food in low-income areas" (Vallianatos, 2014: 212). Indeed, the story of vending in Los Angeles and many cities across the country is pressurized with negative stigmas of illegal immigrants and discrimination.

Planners' attempts to regulate and formalize the practice of vending emerges again in 1994 when the City of Los Angeles amended an ordinance to allow the establishment of up to eight "Special Sidewalk Vending Districts" meant as pilot areas (Vallianatos, 2014). The initiative failed due to a requirement that 20 percent of surrounding businesses had to sign the application in favor of the new district which proved to be a lengthy and cumbersome process. The vending district proposal also failed due to the assignment of vendors to specified, fixed locations that limited their flexibility. MacArthur Park was the only vending district ever established of the eight proposed and it failed due to restrictions placed on participating vendors and the competition from other illegal vendors operating nearby (as cited in Vallianatos, 2014).

In addition to sidewalk vending in Los Angeles, mobile food truck vendors negotiate the ambiguous terrain of the street. In 2008 and 2009, the County and City of Los Angeles used municipal parking ordinances, such as limiting the time a vendor could sell, to regulate taco truck operations in East Los Angeles and Boyle Heights, an initiative that led to heated court cases.³ It was determined that local parking regulations specific to mobile food vendors were inconsistent with the California Vehicle Code which only permits local regulations for concerns of public safety. While these cases were a great success for taco truck vendors, they also laid the groundwork for the "new wave" food trucks that have used them as primary case law in a variety of court cases across Los Angeles County (M. Geller, personal communication, May 1, 2013).

As of May 2012, Vallianatos (2014) calculates that there are approximately 18,000 vendors operating in Los Angeles County. 6,280 vendors are registered with valid health permits to sell food.⁴ Of these, a little over 2,000 are carts and the rest are trucks and trailers. This leaves about 12,000 mobile and sidewalk vendors without permits. Enforcement of illegal sidewalk vending falls on the Bureau of Street Services who has 25 inspectors that enforce over one hundred provisions of local and state law (as cited in Vallianatos, 2014).⁵ Data from the Investigation and Enforcement Division at the City of Los Angeles Bureau of Street Services in 2012 shows 284 vendor arrests between an eleven-month period in 2011 and 2012 (as cited in Vallianatos, 2014). This regulatory environment is often driven by politically invested protectionist views that stifle and diminish the vitality that vending can bring to communities.

³ *People v. Garcia and Gonzalez v. City of Los Angeles Dept. Transportation* are two court cases investigated by Hernandez-Lopez (2011).

⁴ According to the Bureau of Specialized Surveillance and Enforcement, Environmental Health Division, there were 1,159 carts with permits to sell prepackaged foods and beverages, 644 carts licensed to steam hot dogs, and 144 carts licensed to sell unpackaged food or beverages such as pretzels, churros, coffee, and snow cones (as cited in Vallianatos, 2014).

⁵ See Vallianatos for interview with Gary Harris with the Investigations and Enforcement Division in Los Angeles County, who explains motivations to make arrests.

Most startling, vendors constitute a vital component of many low-income communities. They represent a sector that is linked to the formal economy through its ability to drive competition among restaurants and sheer necessity as a source of food for many factory workers at the bottom of the Fordist pyramid. Moreover, low-wage workers inability and lack of interest in moving up the economic ladder stems from a variety of geographic, cultural, and educational barriers that plague immigrant populations today.

Despite the high level of vendor opposition in many US cities, Los Angeles remains unique due to its strong presence of advocacy groups that represent and make efforts towards protecting vendor interests. Loncheros formed *La Asociación de Loncheros L.A. Familia Unida de California* (Truck Vendors Association: The United Family of California) in 2008. Organized with 300 members, their mission is to support Latino vendors from unlawful regulations and enforcement. Representing the modern food truck vendors is the *Southern California Mobile Food Vendors Association* led by attorney Matt Geller. Also, non-profits such as *Leadership for Urban Renewal Network* (LURN), an organization that is leading the recent *Los Angeles Street Vendor Campaign*, are currently seeking to legalize sidewalk vendors. These groups negotiate the complicated terrain of vending regulations in Los Angeles and seek to establish fair business practices among vendors who receive little support compared to the restaurant industry.

The history of food vending in Los Angeles repeats struggles over social justice and class polarization, but it also celebrates a colorful and hard working culture. City planner James Rojas highlights the point that the cultural behavior of Latinos renders the city's current land-use practices out of time and out of place for protecting and promoting the well-being of the community (2006: 185), a narrative that was present nearly a century ago.

3.8 Conclusion

Food vending in the US shows a complex and contentious history. In particular, stories of vending containment and restraint contradict vendors' innate ability to serve as a key food source to urban populations with few food options. History also shows outsiders and many officials perceive vendor activity as ad-hoc, spontaneous, and uncontrolled. Quite the opposite, history also reveals vendors' operations are self-organizing and driven by the demands of a population over time. Thus where a vendor chooses to locate and how they perform their daily operations reflect certain cultural backgrounds and patterns of everyday life in communities. Moreover, the foods and the cooking traditions that vendors bring to the US are now an integral part of the American diet, whether at home or served on the street. As food vending continues to evolve, debates over space will undoubtedly continue as central issues, resembling similar conditions to historical events in time. The history of vending in the US shows that despite vendors' perpetual resistance from certain sectors of society, they can adapt to shifting social, economic, and regulatory environments in cities. The proliferation of vendors in recent years shows the industry can reinvent itself and will continue to be a thriving industry in urban areas for years to come.

Chapter 4: Modern Food Trucks: Growth Factors, Assemblages, and the Regulatory Landscape

In basically every US city today, there roams a food truck on a daily basis. Despite their lack of documentation, business reports show an estimate of 15,000 to 20,000 food trucks across the US with Orlando, Miami, and Washington DC having the highest number of trucks per resident (Willett, 2014).¹ “New wave” food trucks, often referred to as gourmet food trucks, gastrobuses, and lux-loncheras, materialized in 2008 at the onset of the last major economic recession. Similar to the 1930s depression crisis where the weakness of the modern economic system strengthened working-class pushcart commerce on streets (Bluestone, 1991: 89), mobile food truck commerce surged among the part-time and unemployed. News and industry reports place emphasis on the decline in consumer spending and the affordability of a food truck over restaurants (Alvarez, 2015). While this is true, analysts exclude a number of other social, political, and technological factors.

In addition to the lack of literature explaining factors of vending growth, the multi-faceted operations of vendors, which are equally important in explaining this phenomenon, are unknown. Following actor-network theory’s (ANT) interpretive framework of socio-technical assemblages, mobile food vending can be viewed as a integrated network of human and nonhuman actors (Latour, 2005). Principally, assemblages contain many actors that form particular associations, interconnections, and interrelations with other potential actors. Investigating mobile food vending as a socio-technical assemblage means understanding the multiple ways interconnections are formed and the ways agency is distributed. To this end, an assemblage emphasizes *how* a particular social practice negotiates the built environment. In this chapter, I analyze multiple facets of vending as an assemblage including: mobility (visual, experiential, and physical arrangements afforded by the food truck); technology (mutual construction between social, technological, and spatial urban realms); and space (moments and sites of activity vendors produce).

Illustrating different aspects of vendors’ daily operations from an urban studies perspective, foregrounds the robust relationship that vendors have with space. Yet space, in the American context, exists within a layered social and political history of regulations. Policies,

¹ A study determined the number of food trucks in each city using data total counts collected by Roaming Hunger, a food truck consultancy firm. Per 100,000 people, Orlando showed 37.7 food trucks, Miami 33.8, and Washington DC 26.6.

which tend to regulate space with a one-size-fits-all approach, ignore the circumstantial and particular ways space is used. The following chapter will examine the variety of factors that led to the growth of modern food trucks, explore mobile food vending as a socio-technical assemblage, and finally, demonstrate the motivations and layered history of vending regulations in the US. In this process, I seek to define new and unique conventions of contemporary food vending empirically.

4.1 Growth Factors

The recent growth of vending has prompted the attention of city officials and planning scholars to investigate the practice (Cameron, Hawkins, & Associates, 2011; Cunto, Mike et al., 2010; Ross et al., 2010; Kapell et al., 2010). Studies seek to understand demographics, economic impacts, and consumer preferences in a variety of cities; however, labor intensive surveying has limited sample sizes and results. An industry report published by a global marketing firm suggests the West and Mid-Atlantic are the most important regions for this industry, accounting for an estimated 25.2 percent and 23.3 percent of food trucks in 2014, respectively (Brenner, 2014). In September of 2012, the US Small Business Administration created a page with “Tips for Starting your Own Street Food Business,” and many local governments started to take food trucks more seriously by documenting their operations. The exact number of mobile food vendors in the US is undocumented; however, it is estimated that the food truck industry is worth \$800 million and estimated to increase to \$985 million by 2019 (Brennan, 2014).

The rapid growth of these food vendors can be linked to a variety of converging factors. The economic downturn of 2008 and the subsequent decrease in consumer spending and confidence shifted demand away from the broader food service sector and towards more affordable food options. From 2007 to 2008, estimates suggest the industry revenue growth nearly doubled from 6 percent to 18 percent while national consumer spending declined (Brennan, 2014). At the same time, the growing use and accessibility of social media platforms, smart phones, and global positioning applications have allowed vendors to use new ways of marketing their businesses and announcing their locations. The speed and efficiency of technologies eliminate labor-intensive methods such as promoting a business, scheduling tasks and locations, and conducting financial transactions.

Aspiring chefs and culinary students with knowledge of the restaurant industry have experimented with culturally diverse cuisines and sought a level of success similar to that of the popular Los Angeles-based Kogi food trucks who are known for serving Korean-Mexican tacos. In an effort to avoid direct food related competition, food truck operators aim for a clear market position by offering a unique and differentiated menu (Brenner, 2014). Starting a mobile food business proved more financially feasible and flexible for young culinary entrepreneurs and established chefs who had difficulty maintaining their restaurants.² Additionally, vendors discovered that operating in urban areas was relatively easy given the lack of mobile vending precedents and loose municipal ordinances in 2008. In other words, vendors out-paced city policy changes aimed at regulating growth.

With regards to recent customer demographics, figures show 43.4 percent of customers who spend the most time at food trucks on a monthly basis are ages 25 to 44, representing a class

² The average food truck business generally requires \$55,000-\$75,000, whereas a brick and mortar restaurant can cost in the range of \$250,000-\$500,000.

with steady or high income. In contrast, customers below the age of 25 (19.7 percent), between the ages of 45 and 54 (17.7 percent), and over the age of 55 (19.2 percent) each account for less than one-fifth of the consumer market for food trucks (Alvarez, 2015). While customers below the age of 25 represent a smaller percentage of the market due to their lower disposable income, they are much more active on social media websites, a vital component of the new wave trucks' success. According to research conducted by the Pew Research Center, the use of social networking sites is the highest among those aged 18 to 29 with site use declining among the older age groups. Customers age 55 and over, who may have the highest disposable incomes, are more likely to dine out at sit-down restaurants, which account for their lower turn out (as cited in Brennan, 2014). In addition, many of these customers expect and demand higher-quality food, a larger variety of styles and tastes, better presentation, and more healthy menu options. Today, customers are increasingly aware and educated about the food they eat given higher national obesity rates that are linked to unhealthy foods. This consumer awareness means that vendors must keep their menu items fresh while simultaneously providing up-to-date cuisines and ingredients that cater to a more health conscious population.

4.2 Mobility and Daily Work

From the vantage point of a researcher, the analysis of food vending begins with the most visible actor, the food vendor. When operating their food trucks, vendors perform multiple roles, such as head chef, business owner or manager, and guardian of the street. Their daily operations include a host of tasks, such as washing, fueling, stocking, and prepping a food truck for business, buying and cooking food, scheduling vending locations, managing employees, and organizing the finances of the business. Vendors must also stay up-to-date on health codes and municipal regulations and pay any fees and citations accordingly. Despite the overwhelming complexity of vendors' daily tasks, vendors receive satisfaction through their entrepreneurial independence.

Food vending trailers and carts that are attached to vehicles and consume multiple parking spaces are being replaced with modern trucks that move and park with relative ease. The trucks also contain all of the needed supportive infrastructure, such as condiment bars, television screens, trash receptacles, and menu boards which allow for quick set-up and take-down operations and the ability to shift locations quickly. The food truck itself is a highly complex material and technological object which houses the refrigeration, sanitation, cookware, and prep area (Figure 4-1). Traditionally only used in restaurant kitchens, industrial grade equipment now dictates the interior space of a food truck. Many food trucks today originally functioned as catering and construction trucks; therefore, many vendors hire an automotive contractor to build and design the truck according to state and county health code requirements. Food trucks are also in constant need of maintenance and repair due to their heavy daily use. Thus, automotive repairmen prove valuable for vendors who rely on a continuously operational truck. Thus food trucks are complex machines that consist of multiple component parts that must maintain operation. If the food truck fails to function properly, the vending business ceases to operate.

With regards to mobility, the food truck is essential for mobilizing around the city, changing locations if business is slow, and changing course if demand in a specific location arises. The mobility of the truck also creates a psychological and physical effect of independence for the vendor. Similarly, architectural theorist Reyner Banham discusses mobility in terms of the private freedom of the car and the public discipline of the freeway (1971: 216). As Banham questions the meaning of democratic urban transportation, he explains the natural order and flow

of the freeway, which is supported by drivers' trust and navigational know-how. He evaluates the experience of a driver on the freeway when choosing among driving lanes, glancing at other drivers, reading road signage, and listening to traffic updates. He refers to the freeway system as a human ecology or way of life that resembles a sought after place of both solitude and togetherness. In mobile food vending, mobility produces a unique visual and sensory environment for the driver who spends a majority of his day navigating the city. Additionally, the possibility of new locations grants the vendor flexibility in decision-making and allows for the vendor's ownership and control of where the business locates (Figure 4-1).



Figure 4-1. Left: Interior of food truck, Los Angeles, CA, May 5, 2013. Right: View from within the interior of a food truck, Los Angeles, CA, May 3, 2013. Source: Author.

Mobility in food vending can also be linked to the significance of the automobile in American culture. Generally speaking, mobility in the contemporary city is both concerning and celebrated. While mobility provides personal liberation, the American economy is hopelessly dependent on it. Cultural landscape scholar J.B. Jackson is well known for his studies on the mobility of US truckers' work practices in "Truck City" (Jackson, 1994, 1997; Wachs and Crawford, 1991). In Jackson's detailed descriptions of the car and truck in the daily lives of middle-class Americans, he traces the relationships between the gridded geography of the American landscape and the centrality of the automobile in daily work. He finds that blue collar Americans think of their automobile in economic terms. The automobile is either a work tool, an object essential to their livelihood, or a form of capital (1994: 167). Jackson's oral history of the commercial truck as a tool for carrying goods and services, particularly in relationship to factories, is a topic gaining much notoriety as environmental concerns drive regulations on the vast American trucking industry. Thus Jackson suggests mobility, as a characteristically American phenomenon, is deeply embedded in the urban economy and everyday life.

From the engine of the food truck to the spaces constructed for the personal automobile, food vendors fundamentally rely on the efficiencies of mobility to operate their businesses. In fact, the food vending industry has creatively reinvented the original commercial truck meant for carrying heavy loads of goods into a self-contained business on wheels that produces and delivers goods at the consumer's convenience. Food trucks highlight the deeply connected

relationship between humans and mobility as well as the importance of automobile infrastructure that supports a mobile society.

4.3 Communication Technologies and Spatial Encounters

When the material equipment within the truck fails or a vendor simply wishes to contact his customers, the vendor immediately deploys a digital message via social media or email to notify his loyal followers, a communication feature that defines the “new wave” vending population. Today, information technology is an essential and assumed part of vendors’ businesses that makes it possible to instantly update customers on planned or new locations and menu items. As opposed to traditional forms of free advertising for small businesses, such as door knocking and posting flyers in the community, social media allows information to travel faster and among a larger population through online social networks among friends, family, and coworkers.

Vendors and customers now use social media platforms (e.g., Twitter, Facebook), smart phone applications that offer real-time tracking of food trucks (e.g., TruxMap, Food Truck Fiesta, Foursquare, Road Stoves GPS, and Truck Spotting), scheduling platforms for vending locations (Lotmom), smart phone payment applications (e.g., Intuit’s GoPayment and Square), photography and video platforms (e.g., Instagram, Vine) as well as blog, business and food review websites (e.g., MobiMunch, Yelp, and Urbanspoon) to keep their vending community informed. These tools, which together create a media ecology, compliment the nimble business models of vendors who need to remain flexible and responsive to new locational opportunities and shifting consumer preferences (healthier food options, for example). These technologies are invisible parts of the network, requiring moderate user know-how. The efficiency and speed provided by these technologies translate to improved operations and higher sales’ figures. In mobile food vending, technology creates more nimble and flexible vendor operations and extends the reach of customers beyond physical proximity.

Understanding the relationship between mobile food vending and technology requires a deeper look at the relationship between technical and social realms. Actor-network theorists argue humans and inanimate objects should be considered symmetrically in which neither can be considered without the other. From this perspective, technology becomes an actor that informs and interacts and shapes social life. Many Science and Technology Studies scholars have explored the ways machine technologies and humans have mutually constructed one another over time. Studies are numerous and have included missiles (MacKenzie, 1987), bakelite plastic (Bijker, 1987), bicycles (Bijker, 1995), and automobiles (Kline and Pinch, 1996), among others. Constructivists’ theory attempts to illustrate the intimate and active relationship between social life and machines by empirically detailing how they are mutually constructed through a variety of human and nonhuman actors. In these studies, machine technologies are used to provide clues to the impact of technologies on human life. Viewed in this way, technology has significant social implications for our experiences and daily routines.

In mobile food vending, I would argue for a similar symbiotic relationship between humans (e.g. vendors and customers) and technology (e.g. food trucks and communication technology); however, space also becomes an essential actor in the network. This can be illustrated in three ways. First, food trucks are machine technologies constructed by multiple different social groups who have modified it for their needs over time. More specifically, farmers, truckers, and contractors have altered the design of the standard utility truck over the last century

for different purposes. The truck assumes agency offering its users the necessities of mobility and navigational control. Second, communication technology such as Twitter provides a platform for users to share information and experiences, shaping both human activity and urban space. For instance, within Twitter a community of followers develops, based on shared values and interests about a food vendor, and then mobilizes and encounters one another at the vending locations. Thus Twitter supports spatial encounter and is necessary when vendors' locations are unfamiliar or new. Moreover, during and after a visit to a food truck, patrons share photographs of the food and positive experiences through Twitter, generating further interest and assuring continual spatial encounter (Figure 4-2). Finally, space becomes a vital actor bringing together the assemblage and is also capable of shaping the social realm. For example, the circumstances of a location (i.e. accessibility, amount of store-front businesses, comfort associated with the environment) can greatly impact how people use the space or decide to return.

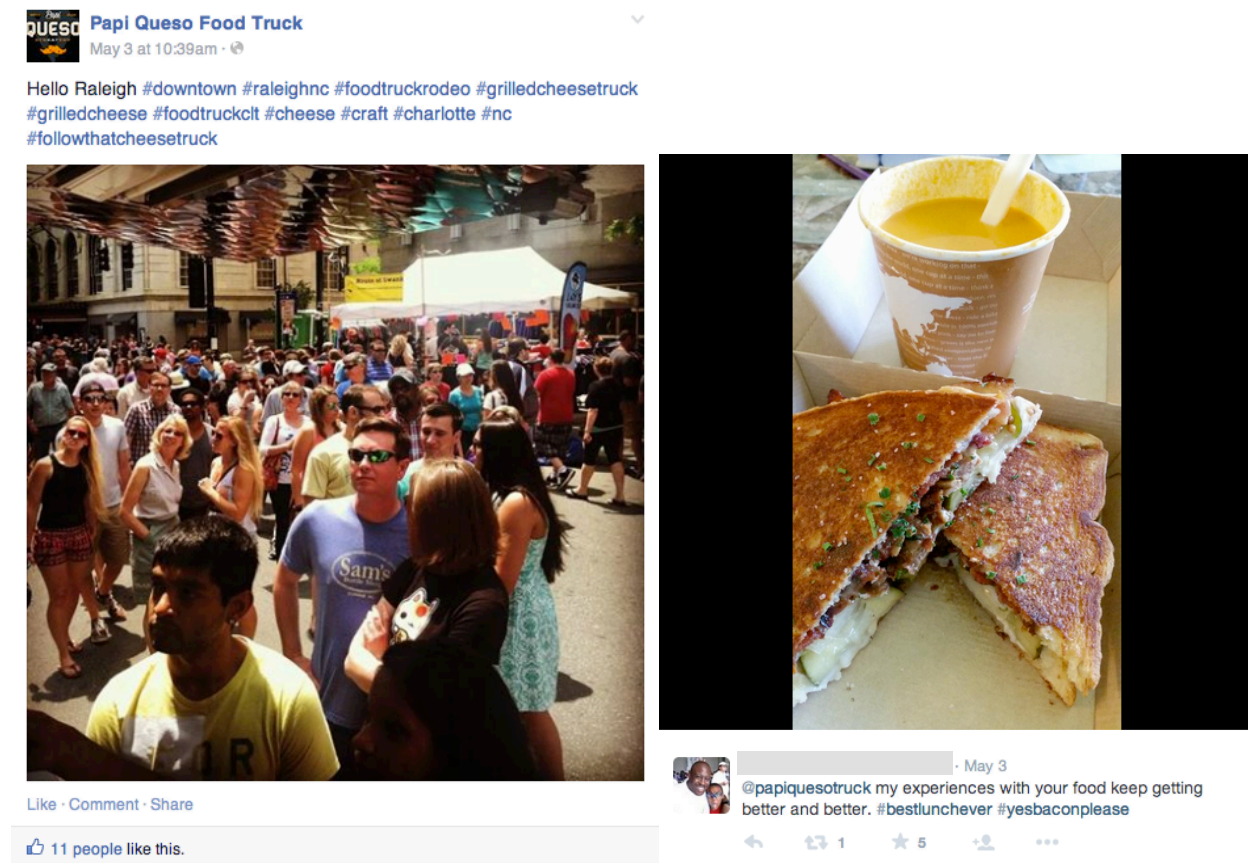


Figure 4-2. Left: A food vendor posting an image of the event in real-time, May 3, 2015. Source: Facebook.com. Right: A patron posting about his positive experience at a food truck, May 3, 2015. Source: Twitter.com.

4.4 Spaces of Vending and Tactical Arrangements

Established road networks and spaces in the urban landscape become vital supportive spaces in the daily operations of mobile food vendors who depend on them for a profitable business. Highways, parking lots, alleyways, commissaries, automotive repair shops, gas stations, and mechanic shops become fixed and dependable points among a vendor's route. From the

locations vendors serve, to the highways they navigate, space plays a key role in sustaining the mobile vending assemblage.

Key spaces in a vendor's daily operations include the commissary space (where the truck is stored, repaired, and stocked), the prepping space (either the food truck itself or a commercial kitchen space where food is stored, prepped, and cooked), highways and routes (used to navigate to other spaces), and the serving location (different spaces throughout the city where customers purchase food) (Figure 4-3). Not only are these spaces vital to the assemblage, but they are also each located in different areas of the city reinforcing the need for mobility. The arrangement of vendors' spaces throughout the city reflects different land uses and geographies. For instance, commissaries are typically located in industrial areas, whereas serving spaces may be commercial areas of heavy foot traffic. The sequence of their use must align with vendors' needs throughout the course of a day. If an issue occurs at one location, such as few sales, a contingent effect is produced and the vendors seek other locations.



Figure 4-3. Top Left: Commissary space, Los Angeles, CA, March 18, 2014. Top Right: Prepping space, Los Angeles, CA, May 4, 2013. Bottom Left: Mobility space, Los Angeles, CA, May 4, 2013. Bottom Right: Serving space, San Francisco, CA, June 21, 2013. Source: Author.

De Certeau's concepts of *strategic* and *tactical spatial practices* are also particularly relevant to understanding the ways food vendors negotiate urban space. Opposed to strategic practices that presume control over space, tactical spatial practices are urban activities that gain validity in relation to the pertinence they lend to time (de Certeau, 1984: 38). De Certeau states, "Tactics are a clever utilization of time, of the opportunities it presents and also of the play it introduces into the foundations of power" (38-39). Most significantly, he emphasizes that the participants in the city who live, walk, adapt, alter and appropriate space make it their own. Vendors' tactical agility to seek opportunities within the urban landscape and adapt to new changes makes them nimble, flexible, and self-organizing. Similarly, the daily operations of food vendors represent a tactical approach to "making-do," also referred to as bricolage.

By adapting to different spaces in the environment, vendors are often subject to regulatory controls or strategic spatial practices that observe, measure, and control vendors for their inclusion or exclusion from the total vision of urban space. In contrast, mobile food vending represents a bottom-up approach to urban life that sustains vendors' livelihoods and creates vibrant urban settings in both marginal and sought after spaces of cities.

4.5 "Strategic" Vending Regulations

Opposed to the tactical spatial practices of mobile food vendors, strategic spatial regulations dictate and restrict vendors' operations. Although regulations are not new, the complexity and the level of restriction has increased. The renewed attention to food vending among city officials is primarily due to the increased presence of "new wave" trucks that park at highly visible, dense pedestrian locations and draw large crowds. In contrast, earlier vendors sought areas of high foot traffic as well, but they did so using locations embedded within neighborhoods or places of work familiar to the operator. The competition among food establishments in a struggling economy also prompted additional concern among officials to readdress ambiguous and outdated regulations.

In some unique cases, such as that of Portland, city governments have taken a more tolerant approach to the growth of vending without altering existing regulations. In most cities, governments have focused on the spatial implications of food vendors' businesses and their impact on brick and mortar restaurants. Similar to past forms of vending, today's regulations are created and influenced by political motives, prejudices, and misconceptions about how vendors operate, who they serve, and what role they play in the urban economy. In the US, federal, state, county, and city administrations establish and enforce such regulations and standards. Each county governs regulations pertaining to public health and safety, including those that relate hygiene, proper food handling, employment, required permits, and annual health inspections. In contrast, city governments require operators to obtain a business license and street use permits that may differ depending on the vendor's use of public or private land. In addition to such permits, most city ordinances include spatial restrictions that exclude vendors from operating within a specified distance of restaurants, establishments serving similar foods, neighborhoods, office parks, and high traffic zones in downtown areas. While regulations have different degrees of complexity in various cities, they have become a serious issue among city officials, businesses, vendors, and residents.

Traditionally, two motivations drive the development of regulations: the pursuit of economic gain and the existence of social prejudices or dislike of behavior (Van Doren, 2005). Due to the fact that food vendors serve the general public, whether they conduct business in

public right-of-ways or on privately owned land, they draw debate from a variety of social groups who are economically and/or socially and culturally motivated. Proximity bans advocated by restaurant owners are the most visible example of special interests affecting the development of regulations. This group argues the presence of vendors creates direct competition; therefore, vendors should be distanced from storefronts in order to protect profits. These protectionist views often align with the interests of local politicians and council members who seek to protect or improve economic development in an area. Thus, these figures leverage their decision-making power to create or expand proximity bans. To further complicate the situation, a lack of common understanding exists as to what constitutes “competition” among various sectors of the food industry such as “like foods” for example. In addition to proximity bans, restrictions, such as containing vendors to districts, banning them from public property, imposing stop-and-wait restrictions, and requiring GPS enabled devices in vending units also serve as examples of economic interests seeking to gain from regulation.

Furthermore, regulations are the result of people using the political system to affirm their beliefs about what is right and what is wrong. During the mid 20th century, many business owners and politicians perceived food vendors as a nuisance that diminished the value of land, fostered crime, and cluttered public right-of-ways. Higher income populations ultimately shunned vendors who impeded on their property values. Unless a complaint was received from the public, local governments largely neglected the activity and viewed their presence as an informal practice with little contribution to the formal economy. Professor of Law Ernesto Hernandez-Lopez argues that cultural concerns for neighborhood identity can motivate food truck regulations and their litigation (2010). In 2008, for example, the surge of regulatory enforcement on vending activity in the East Los Angeles and Boyle Heights neighborhoods can be traced to new investor and business interests, such as corporate retailers and restaurants who sought to attract higher-income residents and new businesses. Ultimately, personal beliefs and misconceived notions surrounding vending activities influenced regulations.

4.5.1 History of Vending Regulations in the US

The lengthy history of regulations that limit and control food vending in the US reveals that most municipal ordinances were established to either formalize their practices or do away with them entirely. For example, John Cross (1991) describes the ways in which New York politicians contained peddlers and pushcart vendors to markets and made them wear white coats, display item prices, and talk to customers from behind tables. Also concerns over food sanitation in disease-ridden and congested cities during the early 20th century pushed city and county health departments to regulate the temperature of foods cooked from carts, further formalizing and discouraging the practice.

With the rise of a consumer society during the mid-20th century, city regulators and merchants largely excluded vendors from the street as these groups sought orderly urban spaces that were devoid of undesirable behaviors and capable of providing clear visibility for brick-and-mortar establishments. For instance, the popularity of the ice cream truck during the mid-20th century prompted many city officials to establish regulations that prohibited vendors from stopping and waiting for customers. In effect, vendors had to circle an area while continuously sounding a horn or bell to build a customer demand before stopping. In Washington D.C., where the regulation is still in effect, vendors use Twitter to broadcast a predetermined location so that customers can line up before the vendor arrives.

In the later half of the 20th century, many urban areas experienced large immigrant migrations, many of which turned to vending to build an economic livelihood. Due to this occurrence, strict regulations, such as proximity bans from restaurants and residential neighborhoods, vending districts, and requirements for obtaining health, building, zoning, and fire protection permits to verify legal operations soon emerged. For example, New York City officials established a vending cap that limited the amount of year-round permits to 3,000, with the exception of non-disabled veterans whose permits are unlimited under state law. During the summer months, an additional 1,000 temporary permits were made available. This single regulation forever changed the vending landscape in the city, creating a hopeless, 10 to 20 year-long waitlist and a black market where permits could be rented from retired permit holders for \$10,000 to \$20,000 a year. As many as 20 veteran permit holders, all located outside the Metropolitan Museum of Art, have recently frustrated museum officials who view their presence as a deterrent to the visitors they seek to attract. The vice president of public affairs stated, “What we have now is a blight on a magnificent new civic space, and a huge impediment, bordering on a safety hazard, for the thousands of people who visit the museum every day” (as quoted in Manly, 2014). To further complicate the situation, investigators found instances where the veteran permit holders were absent at their carts. Also some vendors did not have permits and instead hired veterans to hangout around the carts in case of impromptu enforcement. Thus the vending cap in New York City continues to stifle the vending economy, making entry into the industry nearly impossible.

In Los Angeles, sidewalk vending has been entirely banned since the 1930s, while vending from food trucks is allowed under state law (LAMC 42(b)). Violations of this ban are considered misdemeanors and individual violators face up to six months in jail and a \$1,000 fine (Vallianatos, 2014). Over time, this ban has led to numerous debates on racial and social injustices among Latino vending communities. In 1994, city officials amended the ban to allow up to eight “Special Sidewalk Vending Districts” (LAMC IV 42(m)) that were meant to serve as vending pilot areas (Vallianatos, 2014). Only one vending district was ever created due to the lengthy process of acquiring approval from surrounding landowners and the allocation of specific vending spaces that forced vendors to compete with other nearby illegal vendors. Today, 35 employees of the Bureau of Street Services enforce the vending regulations in Los Angeles. Scholar Mark Vallianatos identified 284 vendors who were arrested between July 2011 and May 2012 for selling counterfeit items, bootleg merchandise, and food on sidewalks. Today, while campaigns to overturn rules prohibiting vending continue, approximately 50,000 sidewalk vendors conduct business in Los Angeles. On December 2, 2014, 200 vendors, supported by the Los Angeles Street Vendor Campaign, gathered at the LA City Council chambers for a heated economic development hearing on how to legalize street vending. Most vendors, who seek to support families and avoid the cost of citations or confiscated carts, desire a legal way to operate their businesses. Various city agencies are currently reviewing the proposal in an effort to develop a comprehensive plan.

In addition to the historical legacy of strict regulation, cities today have turned to GPS technology to control their practices. The cities of Chicago, IL, Boston, MA, and Cranston, RI, all require food vendors to purchase and install GPS tracking devices in their trucks before they can vend. This requirement allows police enforcement to observe whether vendors are located in permitted areas when complaints are received and helps health inspectors access vendors for impromptu inspections. In Chicago, where vendors are already banned from serving within 200

feet of a restaurant (Figure 4-4), adding tracking devices deters many vendors from entering the market.

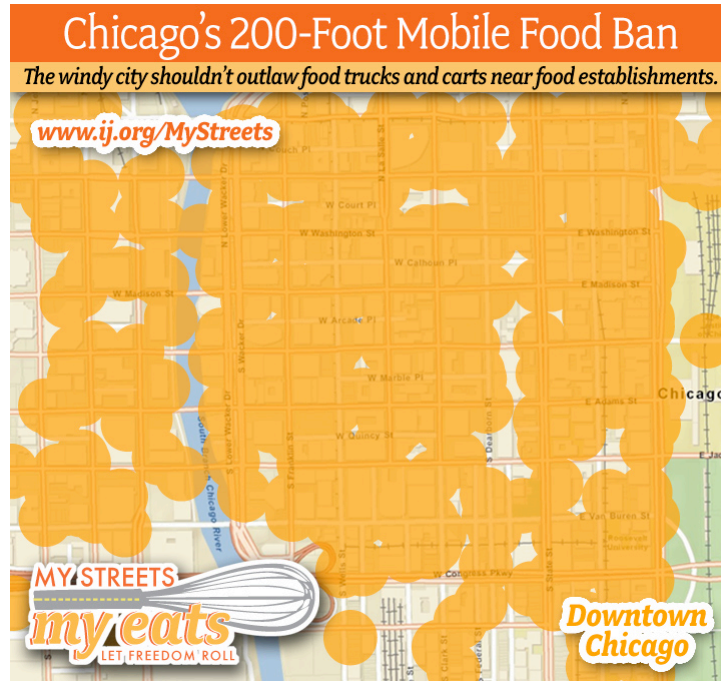


Figure 4-4. Map of areas forbidden to vendors in Chicago based on the 200-foot proximity ban. Source: Institute for Justice.

Aside from food handling licenses and regulations concerning the protection of public health in communities, city officials implement vending regulations to control or contain vendor behaviors, spatially and non-spatially. The level of complexity, type, and degree of regulation enforcement in the US depends on the local municipality. The strategies used to regulate food vendors are based on spatial exclusion, altering behaviors, and public health standards. The chart below identifies variety of common regulations throughout the US (Figure 4-5).

Regulatory Strategy	Means of Control
Spatial Exclusion	<ul style="list-style-type: none"> • Containing vending to particular districts • Proximity bans (e.g. restaurants, schools, “like-foods”) • Public property bans • Requiring compatibility with parking stalls
Regulating Behavior	<ul style="list-style-type: none"> • Requiring GPS devices inside vending units • Duration restrictions • Stop-and-wait restrictions • Spatial distancing between vendors • Requiring activity permits (e.g. special event permits) • Regulating activities (e.g. alcohol consumption)
Public Health and Safety	<ul style="list-style-type: none"> • Requiring letter grades • Requiring commissary use • Impromptu health inspections • Requiring public bathroom • Vending unit design standards

Figure 4-5. Regulation strategies that control the operations of food vendors. Source: Author.

4.6 Food Vending Organizations

Just as city officials began amending vending regulations in 2009, food vending associations rapidly began to multiply. The Southern California Food Vending Association (SCMFVA) is the most legally active group in the US having sued 13 municipalities for not abiding by the California State Vehicle Code, which states that vending regulations on public right-of-ways must address a public safety issue. In Monrovia, CA, for example, the city's ban on food trucks in the Old Town district was quickly reversed by a lawsuit. Councilman Adams said they were simply trying to level the playing field. "If you can drive during peak hours and take advantage of brisk business and then leave, you have an advantage over someone who stays there in good times and in bad" (Adams as quoted in Knoll, 2012). In this case, the mayor stated that city officials believed they had done nothing wrong but decided to settle to avoid going to trial. In Charlotte, a food vending association called the Charlotte Food Truck Federation was recently established in an effort to petition a 2014 proposal for stricter regulations. Fortunately, in January 2015, a less aggressive proposal satisfied vendors. As food truck associations began to grow across the nation in 2013, Matt Geller, president of SCMFVA, developed the National Food Truck Association to support existing food truck associations and help truck vendors start new associations. Today, the organization represents fifteen regional associations across the US (Figure 4-6).



Figure 4-6. Regional food truck associations across the US. Source: www.nationalfoodtrucks.org.

In recent decades, members of the Latino vending community have also sought legal support through various organizations in Los Angeles and New York City. The Street Vendor Project in New York City is well known for helping vendors exercise their rights regarding unfair citations. The UCLA School of Law's Criminal Defense Clinic allowed students to engage in criminal law practice by providing legal analysis for loncheras who believed the citations were given unfairly (Eagly, 2012). A recent study investigating food truck associations suggests that these organizations help reduce uncertainty and augment industry legitimacy by representing collective interests when challenged by regulators and restaurant associations. They also generate collective identity for new industries and help to resolve internal industry conflicts and procure club goods for their members (Esparza et al., 2013). In summary, food vending organizations

show the significance of collective support and litigation to dispute economic and social interests that attempt to shape strict regulations.

Overall, administrative actions and enforcement, public opinion, private actors, and market forces determine the outcome of regulations. In particular, tools, such as municipal codes, statutes, and legal codes have been devised to tame vendor behavior and control the growth of vending to varying degrees. As Dell Upton reminds us, in the first half of the 19th century, the meaning of public space in American cities was defined on two parallel fronts, “in legal and political battles over the use of public domain for private economic purposes, and in legal and cultural conflicts over the political and social uses of streets and urban open spaces” (Upton, 2008: 9).

4.7 Conclusion

The description of mobile food vending as an assemblage looks past the outer surface of the industry and makes visible the array of working parts. With the frames of mobility, technology, and space, multiple social and technological actors have formed and sustained the practice since 2008. Mobile food vending is held together not only by the social relations between people but relations between objects (i.e. vending cannot be maintained without the truck or communication technology). Aside from the social and technological relations, space brings together all the various material parts.

In the actor-network of mobile food vending, a process of *stabilization* occurs when a vendor reaches a sufficient and dependable customer base at a location. Also referred to as *closure*, according to ANT, stabilization in the assemblage occurs as social relationships agree on a dominant meaning of a new technology (e.g. a food truck). This stabilized state signifies consumers produce a shared meaning about a food truck and depend on it for regular meals. Stabilization is also important when looking at the long-term sustainability of mobile food vending as a whole. A decline in the total number of customers at a location may be a sign of decreasing demand or destabilization of the assemblage.

This empirical research shows networks manifest at multiple scales from a vendor’s daily operations using a food truck, to a city-wide scale where multiple vendors interact with the built environment constructing a thriving new industry around food in local urban settings. Additionally, opposed to vertical hierarchies of agency and power, ANT exposes the relational structures of agency in the construction of mobile food vending. It also shows mobile food vending is embedded and entangled with all kinds of personal, social, and cultural values, elements, and practices.

Finally, through this investigation space emerges as a complex social and political entity with a layered history of regulations. Yet the question whether to regulate vending is not a simple one. Regulations carry important political implications for vendors’ rights and freedoms. Rather than suggesting the complete deregulation of urban space, policy makers will need to identify the participating actors and recognize the variety of circumstances related to the particular situation. Thus the treatment of regulation in a more nuanced fashion is needed. Overall, progressive planning means finding solutions to situations where regulation prevents people from earning livelihoods.

Chapter 5: Parallel Assemblages: Loncheras and Gourmet Food Trucks in Los Angeles, California

Los Angeles is considered the food truck capital of the US with over 200 new wave food trucks, hundreds of taco trucks, and approximately 10,000 pushcart vendors (Rojas, 2014; Roaming Hunger). Throughout the 20th century, the city's developing auto-centric landscape, growing industrial and construction industries, and successive waves of immigration¹ have significantly driven the growth of the street food vending industry. After the introduction of pushcart vendors in the early 20th century, loncheras (also referred to as taco trucks that are typically operated by a person of Latino descent) became the first significant mobile vending population to define Los Angeles in the 1960s. Today, loncheras commonly locate in Boyle Heights, Garment Town, and East Los Angeles as well as at construction sites and factories (see also Section 3.5.2). Despite the apparent social and cultural differences between loncheras and “new wave” vendors in Los Angeles, the struggles they face when navigating the city stem from similar concerns over the right to use space. To unpack this issue, I begin at the food truck commissary located along the outskirts of Los Angeles. The commissary is part of every vendor's day and it is the only location where diverse vendors encounter similar realities of the food vending business.

5.1 24-Hour Commissaries

In Los Angeles, commissaries are the invisible heartbeat of the food vending industry that ensures food trucks and trailers stay in constant operation. The largest commissaries in Los Angeles host over 200 trucks including modern food trucks, loncheras or taco trucks, route-based lunch trucks, and catering trucks (Figure 5-1) and are typically located in industrial areas. California State Law, like many state laws across the US, requires vendors to store their food-vending unit at a certified commissary in order to maintain public health standards.² Vendors are

¹ The *1965 Immigration and Nationality Act* abolishes the national-origins quota system and replaces it with a system whereby immigrants are admitted based on their relationship to a US citizen or lawful permanent US citizen or US employer (Migration Policy Institute, 2013).

² *California Retail Food Code*, January 2015. Section 113751 states, "Commissary" means a food facility that services mobile food facilities, mobile support units, or vending machines where any of the following occur: (a) Food, containers, or supplies are stored. (b) Food is prepared or prepackaged for sale or service at other locations.

not required to use an additional commissary kitchen space to store and prepare food, although catering orders require a vendor to have extra space. Commissaries assist the government by centralizing vendors in one location to complete health inspections and permit checks more efficiently, a process that is required twice per year in Los Angeles. Food truck commissaries also provide a variety of essential services for vendors such as the sale of wholesale food and automotive maintenance. In addition to their constant activity, commissaries serve as a reliable place for vendors and a central hub for their daily operations.



Figure 5-1. Aerial view of a commissary in San Fernando Valley, date unknown. Source: <http://www.larazafoods.com/>.

Spanish, Armenian, Vietnamese, and American decedents comprise the majority of the commissary population, each bringing with them different cooking skills, customs, and dialects familiar to their home countries. Commissaries serve as the only location in a vendors' daily network where vendors encounter other vendors with different social and cultural backgrounds. Discreet cultural references mark the walls and signage throughout commissary spaces (Figure 5-2). Nestled in the industrial urban core or the industrial periphery, commissaries are the spaces of both blue-collar and immigrant labor. Despite the visible chaotic hustle and bustle of a commissary, the manual activities carried out by vendors are organized and operate on continuous cycles.

(c) Utensils are cleaned. (d) Liquid and solid wastes are disposed, or potable water is obtained. Section 114295 states, "Except as specified in subdivision, all mobile food facilities shall operate in conjunction with a commissary, mobile support unit, or other facility approved by the enforcement agency. This section does not apply to mobile food facilities that operate at community events as defined in Section 113755 and that remain in a fixed position during food preparation and its hours of operation, if potable water and liquid waste disposal facilities are available to mobile food facilities requiring potable water. (c) Mobile food facilities shall be stored at or within a commissary or other location approved by the enforcement agency in order to have protection from unsanitary conditions. (d) Mobile support units shall be operated from and stored at a designated commissary and shall be subject to permitting and plan review. *California Retail Food Code*, Chapter 10, January 2015.

Aside from operating 24-hours a day, the commissary has multiple peaks of activity. Some loncheras and route-based lunch trucks arrive at the commissary as early as 1:00am to begin the typical one to two-hour morning food preparation. This group serves a variety of manufacturing factories that expect and depend on a food truck's service during lunch periods and work breaks that begin as early as 4:00am. Another cycle of activity begins when "new wave" vendors arrive at 7:00am to prepare for the 11:00am office lunch crowds. A third group may also choose to serve at later hours at night arriving at the commissary in the afternoon. The constant and active use of the commissary requires that its services are accessible and dependable any time of the day.

Commissaries also provide a variety of services for the convenience of the vendor including food truck rentals. Vital services include wholesale grocery (Figure 5-2), dish washing, and an on-site mechanic who is relied upon to repair frequent truck breakdowns. The "main house" may include the administrative offices, a cashier, and a warehouse that sells groceries (e.g. chorizo, chicken, beef, pork, cabbage, avocados, peppers, mangos, and melons), essential cooking utensils, and truck equipment (e.g. faucets, piping, and water hoses). The cashier collects rent payments, provides vendors cash, and manages the truck lease agreements. Services such as truck washing, ice prepping, trash, compost, and grey water disposal can be purchased from an on-site commissary employee for \$10 a week. Although gas pumps are typically not provided at commissaries, many do offer self-service propane refills that cost approximately \$80 a week. While not all vendors purchase their food from a commissary, a vendor not requiring special ingredients will spend approximately \$100 to \$150 a day on food from the commissary.



Figure 5-2. Commissary grocery and supply warehouse. Signs include food specials and rental truck schedule, May 2, 2013. Source: Author.



Figure 5-3. Truck preparation at commissary, May 4, 2013. Source: Author.

Owners of commissaries come from a variety of backgrounds and range from food truck entrepreneurs to those educated in law school. Some owners have inherited the family business and witnessed their businesses grow overtime. Commissary owners typically acquire food trucks over time and begin to take on the role of a broker, renting trucks to hopeful entrepreneurs and those who rely on street vending for supplemental income. Food trucks linked to a specific lunch route may be rented at different prices depending on the number of stops in a route and the expectation of the number of customers at each stop.

Commissaries in Los Angeles, like many other cities, are vital to the daily life of a vendor and the industry as a whole. Centralizing services accommodates the government's needs by streamlining inspections and permitting vendors. On the other hand, vendors benefit from a community of knowledgeable vendors. The constant daily operations of a large-scale commissary are typically invisible to the food truck customer who enjoys the end product far from the commissary. Observations of commissaries in Los Angeles reveal that two predominate types of vendors define the mobile food vending landscape: "new wave" food trucks and loncheras and/or route trucks. Departing from the commissary, these two groups navigate different geographies and encounter different forms of acceptance and resistance.

5.2 Route Trucks and Industrial Districts

In Los Angeles, loncheras are well known in the Latino barrios and industrial districts as these areas have depended on their morning meals for decades. Some loncheras prefer to locate for longer periods of time in fewer locations while others choose to stay frequently mobile. Vending spaces for loncheras include factories, construction sites, schools, transit stations, and churches (Figure 5-4 & 5-5). Loncheras establish their locations through informal agreements with property owners or by purchasing a vending route from a commissary broker. The following vendor profile illustrates the diverse cultural backgrounds and daily routines of such vendors.³



Figure 5-4. A route truck food vendor in San Fernando Valley, CA serving lunch to factory employees, May 3, 2013 Source: Author.

³ To maintain anonymity, substitute names were assigned to vendors.



Figure 5-5. A route truck food vendor in San Fernando Valley, CA serving lunch to factory employees, May 3, 2013 Source: Author.

Miguel, a 22-year taco truck veteran of the San Fernando Valley, leaves the commissary at 6:00am to start his daily route. Along with his cook Maria, Miguel has carefully developed and repeated his route for the past five years, stopping at sofa factories, metal workshops, and shipping warehouses. Miguel, born in Armenia, moved to Los Angeles in 1989 with his immediate family through extended family recommendations. Miguel's decision to come to the US, similar to many American immigrants, is tied to family members that have crossed translational borders in search of employment opportunities. When Miguel and his family arrived in the San Fernando Valley, it was an older, Anglo Los Angeles suburb. Today, the Latino population in the area out numbers all other ethnicities. While living in this neighborhood, Miguel quickly realized the importance of speaking Spanish in order to interact with his growing Latino customers. Miguel already spoke four languages when he arrived, Russian his native, Turkish his country's opposition, and a bit of Hebrew, which helped him grasp the English and Spanish languages quickly and with no formal training.

During the 1990s, factory parking lots and loading docks served as the locations that defined his daily mental map and generated the highest profits of his career. His strong compassion for his business and the area he serves is evident through the camaraderie he repeatedly shares with his customers that he knows by name. Although he has deep concerns for money due to sluggish business, he allows his customers to pay him later, keeping tabs as high as 60 dollars. He explains that the workers are like family to him and he does not let anyone miss a meal and he trusts that they will eventually pay him. Miguel's best days are bi-weekly paydays when customers have money to pay off their tabs. Socially, Miguel's Armenian background matters very little to the predominately Latino factory workers who enjoy his jokes and banter. While Miguel converses with his patrons selling prepackaged danishes and drinks outside the truck, Maria works inside preparing traditional Spanish food, such as chili relleno, carne asada, burritos, and tortas.

Miguel and Maria navigate the landscape in predictable patterns that are consistent with laborers' work breaks and lunch hours. Miguel introduces each arrival with a triple honk and workers come ready to purchase burritos and Gatorade. Despite the enjoyment he finds in his work, Miguel encounters many hardships. He notes that a lack

of business in the past few years is an effect of job layoffs and workers with less money to spare. He also manages theft from his truck on a reoccurring basis. Given his lengthy experience vending, he knows not to carry large amounts of cash and if he is 'picked' by thieves, he does not resist and gives them his money. Despite these challenges and that he has made higher sales in the past, Miguel is content with his career that has supported his family of four.

Miguel's story serves as one example of the diverse cultural backgrounds associated with migrant vendors in the US and their ability to adapt to new cultural settings. His transnational history of migration and adaptation to new languages has granted him success in running his own business in a foreign country with a complex regulatory environment. His conscious move to hire a Latino woman, well skilled in traditional Mexican cooking, also helps him navigate the San Fernando Valley with ease. Together, Miguel's excellent business skills and Maria's knowledge of cooking Latin American food create a successful pairing and food truck operation.

Miguel's business is just one of thousands of vending businesses serving culturally distinct food in the southwestern region of the US. Yet, these vendors do not operate without resistance. Illegal vending and unsanitary food handling practices contribute to negative stigmas of these vendors and are reinforced by ethnic unfamiliarity, linguistic barriers, and presence on the street. These views tend to drive efforts to regulate street vendors, disempowering those with small businesses that do not conform to policies or visions of empowered officials. Concerns that they attract crime and drug activity and create business competition are theories that drive attempts to remove loncheras from areas of commerce and neighborhoods (Eagley, 2012). In one particular case, the Los Angeles council implemented an ordinance in 2006 (but not heavily enforced until 2008) that made it illegal for a "catering truck" to remain parked at any residential location, within a half mile radius, for a period exceeding 30 minutes (L.A. Mun. Code Section 80.73 (b)2f). To further these constraints, in 2008 another ordinance limited "peddlers" in "commercial vehicles" from parking or operating in residential and non-residential areas for 30 and 60 minutes, respectively (Hernandez-Lopez, 2012). While the exact motivations are unclear, professor of law Ernesto Hernandez-Lopez highlights a parallel urban redevelopment scheme proposed to extend the light-rail Gold Line, which increased land speculation for new business establishments who want vendors removed (Becerra, 2008).

In 2008, a long-time Latino vendor found herself facing up to six months in jail after a vendor crackdown. She took the issue to court and the charges were dismissed based on the rationale that the county had overstepped its authority when creating a parking restriction that did not promote public safety (Eagley, 2012). The case also proved that the California Vehicle Code (Section 22455) only permits municipalities to make modifications to existing ordinances for the purpose of public safety. *People v. Margarita Garcia* became useful case law for subsequent contests over expensive citations including *Gonzalez v. City of Los Angeles Department of Transportation*, and even cases in Texas such as *Castaneda v. City of El Paso*. These court cases reveal the many challenges facing loncheras, but also suggest efforts to fight over burdensome regulation can have substantial effects. Loncheras' claims to use public space manifest in opposition to conservative views that promote their removal. The opposition against vendors is rooted in many diverse prejudices that continue to evolve with time. Research on Latino vendors in San Francisco found that vendors had control over their businesses, ways to compensate for difficult times, knowledge of regulations, educated backgrounds in the food service industry, clear and informed decision making processes, and a vision for how to advance their business in

the future (Wessel and Airaghi, 2015; see also Appendix A). Moreover, most vendors overcome obstacles when negotiating the constraints of time, space, and regulatory bodies.

Opposed to the fleeting route vendors, a variety of trends among loncheras reveal their successes in establishing permanence or rootedness in communities. Loncheras act as social anchors and neighborhood guardians through repeated presence in a location and locating on private property to establish permanency in a neighborhood. Family and friends serve as vital actors in lonchera vending businesses. Gender and age reinforce specific skills and roles of family operations (e.g. youth promote the business through technology while parents tend to money matters). Moreover, vendors' ambitions to eventually own a restaurant show their desire for a formal fixed business suggesting loncheras seek to achieve upward mobility.

5.3 Gourmet Food Trucks and the Miracle Mile

“New wave” food vendors are unique from loncheras in a variety of ways, but the most apparent differences lie in the social and cultural groups they serve. While loncheras are highly integrated within Latino and immigrant neighborhoods and industrial districts, contemporary vendors serve predominately White and African American customers located in areas of commerce or employment offices. Their location decisions include many factors, but the high price point of their foods (\$10-\$15 per meal, for example), driven by increasing food and fuel prices, means they need to target moderate to high-income customers. Similarly, modern food trucks are commonly operated by an affluent social class of educated chefs who followed Kogi BBQ's lead and appropriated the taco truck model to start or expand a culinary business. Geographically, the Latino and white middle-class populations are segregated throughout Los Angeles. Loncheras and sidewalk vendors are well known in the Boyle Heights, Garment Town, and East Los Angeles neighborhoods. In contrast, “new wave” vendors flood popular boulevards in the area known as the Miracle Mile as well as various beach communities during lunch and dinnertime hours (Figure 5-6 & 5-7).

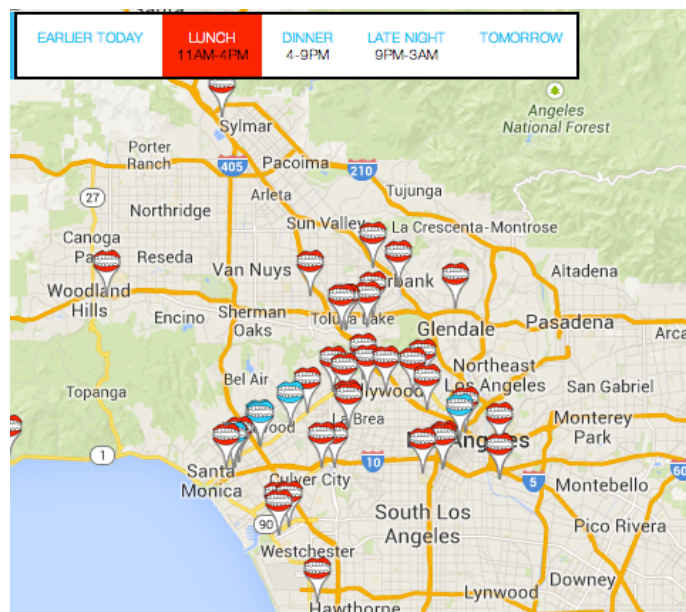


Figure 5-6. Map of contemporary vendors along the Miracle Mile in Los Angeles at 12:30pm on March 12, 2014. Source: roaminghunger.com.



Figure 5-7. Modern food trucks. Left: Wilshire Boulevard, Los Angeles, CA, May 1, 2013. Right: Venice Beach Eats, Los Angeles, CA, May 2, 2013. Source: Author.

The popularity of new wave food vendors grew rapidly in 2009 with a variety of trucks offering diverse cuisines. Some of the more popular trucks in Los Angeles include Green Truck On-the-Go (falafel and fish tacos), Coolhaus (architecturally inspired ice-cream sandwiches), Grill ‘Em All (gourmet burgers), Nom Nom Truck (Vietnamese sandwiches), and numerous fusion taco replicas of the famous Kogi BBQ truck (Calbi BBQ, Bool BBQ, and Don Chow Tacos). The variety of foods served suggests customers demand new food options and the culinary scene is responding with experimental and unique food combinations. Despite the vast array of cultural foods and brands, “new wave” food trucks all offer convenient to-go-style meals for an affluent class of working professionals and technologically savvy foodies.

The recent growth of these vendors in locations of Los Angeles once devoid of street vending has caused numerous contests between mobile vendors and established restaurant owners who are financially pressured following the 2008 economic decline. One controversial case occurred during the summer of 2010 when a collection of Los Angeles museums on the Miracle Mile argued vendors were encroaching on their restaurant businesses. As food trucks began to emerge in the metered spaces along Wilshire Blvd, nearby Museum Square office building restaurants and the Los Angeles County Art Museum restaurant owners became agitated. One restaurant owner stated, “The economy has been so bad that I had to cut employees, and then these trucks show up and I had to cut more. We all average \$15,000 to \$18,000 in rent, and have to pay employee taxes and alcohol licenses” (Ceja quoted in Behrens, 2010). After a few weeks of food trucks serving museum visitors and area office workers, junk cars emerged in parking spaces to intentionally consume potential food truck spaces.

Councilman Tom LaBonge, who represented District 4, claimed the trucks were monopolizing public parking spaces. Referencing Portland as a positive city model, LaBonge proposed two alternatives to the city council: restrict trucks from commercial zones or create specially designated zones for trucks. LaBonge stated, “These trucks park for multiple hours in a commercially zoned area, contrary to the intent of those metered spaces. Parking meters were designed to encourage turnover of vehicles in high demand areas. Parking meters also fight traffic congestion and pollution when their rates match parking demand. These businesses sometimes operate without city permits and absorb parking ticket fines as a cost of doing business” (as quoted in Behrens, 2010 June). With a strong belief that parking spaces were created for parking, not commerce, he later expanded his argument to include concerns of public safety by suggesting that the trucks blocked the visibility of drivers. Although LaBonge never

mentioned nearby restaurant positions, his changing story and aggressive approach line suggest he had an ulterior motive.

Food truck vendors felt LaBonge’s proposals were short sighted and did not uphold the California Vehicle Code (CVC 22455) which states that local agencies may only “adopt additional requirements [to the current code] for public safety [reasons] regulating the time and place of vending from vehicles upon any street.” In fact, this same code was upheld in the 2009 court case *People v. Margarita Garcia*. A local food truck advocate, educated with a law degree, turned to Twitter to spread the news of the debate on a late Friday afternoon in 2010 asking the food truck community to contact LaBonge with any concerns about the proposal. A Facebook page titled “Los Angelinos Against LaBonge,” which described him as a “friend of celebrity, foe of the small businessman,” collected many “likes” (Behrens, 2012). By Monday morning, LaBonge’s phone and inbox were flooded. This backlash postponed the measure for two years allowing the trucks to continue business if they could locate an empty parking space.

In December 2012, Los Angeles City Council members, who were most concerned about matters of public safety, voted and approved two restrictions: first, food trucks larger than 22 feet long and 7 feet high are prohibited from parking spaces with oversized vehicle restrictions along Wilshire between Fairfax and La Brea Avenues (i.e. 15 blocks) from 9:00am to 4:00pm and second, oversized vehicle parking is prohibited from the bisecting streets entirely (Figure 5-8). These restrictions reduced the number of potential parking spaces for vendors from 40 to 20. Food truck advocates have claimed lack of visibility has not been proven and find the new regulations to be a way to balance competing interests, without having to take sides. The vendors feel the real losers are the consumers who now have more limited lunchtime options.

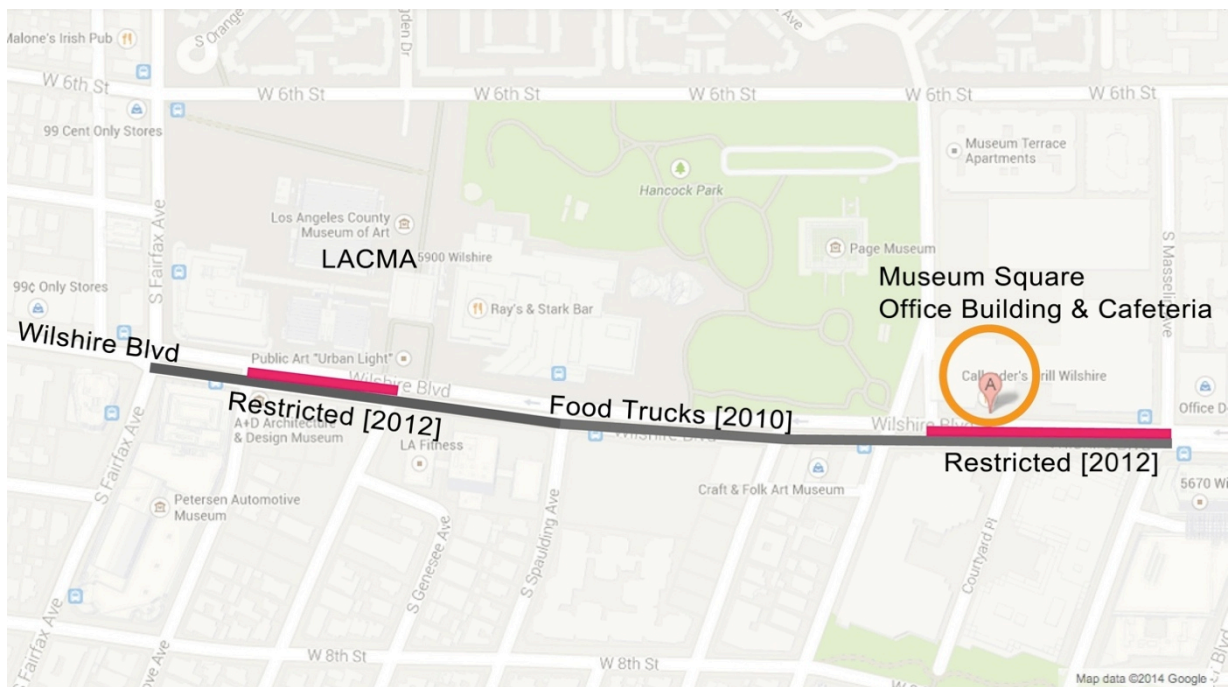


Figure 5-8. Map of vending locations before and after the 2012 amendment. Source: Author.

5.4 Vendor Freedoms and Restaurant Protectionism

Despite the fact that loncheras and new wave food trucks are constantly embroiled in debates over who is able to use public space and for what use, their motivations diverge regarding this issue. Loncheras are subject to a variety of prejudices that relate to unsanitary practices, low-economic status, and illegality (Bromley, 2000). While “new wave” vendors are less subject to illegal stigmas, they are more prone to the forces of restaurant protectionism in areas of cities with high land values. For “new wave” vendors, claims of “unfair competition” from restaurants are of foremost concern.

Despite the changing landscape, restaurant resistance, negative stigmas, and regulatory constraints, Latino vendors will continue to thrive as long as they are bound to their strong family and community networks that support their businesses. The shifting social demographics and rising cost of land in Los Angeles, as well as in many other US cities, present new challenges. Increased enforcement, limited availability of private property, and the loss of friends and family due to relocation represent some of the potential issues. Yet, this group of vendors shows resilience and perseverance when fighting strict regulations and hefty fines. Given loncheras encountered the pressures associated with regulatory constraints before the rise of modern food trucks, their efforts have established legal cases that support future vendors who consistently battle opposition from restaurants.

Protectionist views from restaurants result in regulations that spatially exclude vendors from areas of the city. While many view proximity bans as the easiest and most effective way to calm restaurant complaints, these spatial restrictions greatly limit vendors’ freedoms. In many cases, local governments use spatial exclusion as a mechanism of control that discourages existing vendors’ efforts and would-be entrepreneurs from starting or growing a business. With fewer locations available to vend, vendors are forced into areas with less opportunity for profit. Spatial exclusion also reinforces the political power of restaurants, designating restaurant owners as authoritative actors with decision-making power at a similar level to city officials.

Debates over unfair competition continue in many cities across the nation today. The restaurants’ argument focuses on the premise that food trucks sell inexpensive food in the vicinity of existing restaurants, thereby unfairly luring customers from brick-and-mortar establishments that incur higher overhead costs. While in certain instances this may be partially true, a variety of court cases suggest there is no evidence to support this position. For instance, the Institute for Justice (IJ), a libertarian public interest law firm that launched a “National Street Food Initiative” to shield entrepreneurs from protectionist positions in 2010, filed a highly publicized lawsuit against the City of El Paso, TX. IJ asked the El Paso court system to invalidate an ordinance that made it illegal to operate a food truck within 1,000 feet of any restaurant, convenience store, or grocery. The ordinance had also prohibited vendors from stopping and waiting for customers. After the lawsuit was filed, the ordinance was changed in just three months (Miller, 2011). Another more historic case dates back to 1978 when the City of Los Angeles passed an ordinance banning the sale of “victuals” on public streets within 100 feet of an entrance to a brick-and-mortar establishment. In trial court, it was ruled that the regulation “discriminated economically against catering truck operations” and amounted to nothing more than an unconstitutional “naked restraint of trade” (Eagly, 2012). Similar unfair competition debates have failed throughout Los Angeles given that the vehicle code only upholds changes based on public safety concerns.

In the context of economic markets, many view competition as a positive way to generate economic activity and revenue. Per the emergence of “new wave” food trucks, restaurants are

finding new ways to reinvent and boost their businesses. For instance, the owners of Lemon Rue restaurant on the Hulu/HBO campus in Santa Monica realized they could not remove the eight food trucks parking along the perimeter of the campus and decided to lower their prices and change their menu with a different offering each day. Their new business model responded to customer demand for to-go style foods. From the perspective of mobile food vendors, vendors who see room to expand their businesses to meet consistent customer demand embrace free market competition. They view restaurants as an entirely different market that offers tables, restrooms, and shelter from unfavorable weather. Many vendors make an effort to avoid areas with an established restaurant scene that are reasonably priced and offer outdoor seating. In the end, consumers drive the market and today they want more options and more access to foods that are inexpensive. “The person who is going to go to the food truck isn’t choosing it over a restaurant, they’re making an active choice to go. When people detect something is losing authenticity, that’s when a backlash occurs,” says a San Francisco vending advocate (as quoted in Richmond, 2011).

To conclude, mobile food vending in Los Angeles is a culturally and socially diverse practice. Today, loncheras and new wave vendors populate the landscape and serve different demographic populations in areas where their foods and price points match the demand. The commissary acts as a node that combines the diversity of the industry and supports both the government’s and vendors’ needs. Departing the commissary, vendors build a network of urban spaces that they continuously construct through repeated presence. Without a more complete understanding of vendors’ activities and cultural backgrounds, policy and investment measures will continue to contradict or neglect vendor operations and needs. Rather than establishing policy that attempts to limit or ban vending activity, city officials need to consider the equitable treatment of food vendors and avoid blanket policies that neglect their diverse circumstances. Ultimately, government efforts to increase economic opportunities for loncheras and “new wave” vendors will destabilize negative stigmas about the practice and will start to improve upward mobility. In a competitive land market, debates over legitimate uses of space and the presence of appropriate social groups will continue to emerge. In mobile food vending, contests over the right to use space occur regardless of the vending population. Yet, motivations behind different debates over the use of space are socially and culturally embedded in the settings that they serve.

Chapter 6: Organized Vending as Civic Placemaking: San Francisco Bay Area

The San Francisco Bay Area is one of the most highly sought after places to live in the US, boasting one of the most expensive housing markets. Aside from shipping, light manufacturing, and tourism, the economy caters to the growing number of technology firms who bring significant capital to the table (Arieff, 2013). Technology firms in the downtown and the chartered transportation routes that lead to Silicon Valley have altered the demographics and cost of housing in a variety of low-income and industrial areas. Urbanist Allison Arieff illustrates the ways in which technology firms raise property values in downtown buildings or city blocks, making it impossible for smaller stores to afford to stay in business. In addition to the gradual privatization of public space, these firms provide indoor cafeterias that serve a majority of their employees, detracting from the potential of mid-day street activity. Concerns of gentrification, brought about by the influx of young high-income professionals, are spreading throughout neighborhoods as the cost of living increases (Romney, 2014; SF Chronicle). Over the last decade, longtime renters have faced eviction per the Ellis Act, and the Latino population has declined by 20 percent in the Mission District as well. The shifting economic and social context is both alarming and welcomed. For mobile food vendors and owners of storefront businesses in downtown San Francisco, the stakes are high. Alleyways, parking spaces, and parking lots are rising in value. The capital investment in these marginal spaces contributes to an overall effect of urban rejuvenation in San Francisco.

In addition to rising cost of land, new wave vendors benefit from operating collectively in food truck markets. In the Bay Area, “new wave” mobile food vendors identify with Off the Grid (OTG), a company that organizes food truck markets throughout the city. Other small companies in the region include Moveable Feast in San Jose and Food Truck Mafia in the East Bay. Unlike the ordinary food markets established in the early 19th century, such as Chicago’s Maxwell Street Market or New York’s Chelsea Market, Off the Grid’s markets primarily cater to food vendors of high caliber. In general, high-grade ingredients and independent profitability differentiate these vendors. Moreover, Off the Grid’s unique relationship with Bay Area city officials proves essential to the growth of the industry. As such, aligning visions that promote community and placemaking serve as the foundation for successful agreements. Placemaking narratives that incorporate food truck vendors foster legitimacy for the industry and settle unwanted opposition. San Francisco’s market-based vending model is simultaneously opportunistic for vendors and

rationalized by state interests. As clustering drives vendors' profits and supports a flourishing food truck industry, the absence of long-term planning hinders the industry's economy stability. Furthermore, new technology-based industries, that leverage food vending businesses, emerge expanding the economic impact of the food vendors in the Bay Area.

6.1 La Cocina Vendor Incubation

San Francisco's recent food vending history begins with La Cocina in 2005. As the Bay Area's first nonprofit street vending incubation program, La Cocina's mission is to "cultivate low-income entrepreneurs and grow their businesses by providing affordable commercial kitchen space, industry specific technical assistance, and access to market and capital opportunities" (La Cocina 2012: 7). Particularly focused on women from immigrant communities and communities of color, La Cocina seeks to improve economic opportunity and upward mobility for low-income vendors by providing kitchen rental space and business coaching. In 2012, La Cocina supported 39 businesses that generated 3.35 million dollars in revenue and created 110 jobs (2012: 7). La Cocina's efforts are noticed through their vendor success stories (Figure 6-1), many of which tell the tale of vendors who enter the program with low skill levels in regard to running a business. In addition to vendor incubation, La Cocina has hosted a street food vending festival and industry conference for the past three years. Approximately 80,000 people attended the last street food festival, which generated revenue for the program and attracted attention for their emerging entrepreneurs. The professional street food conference began as the first national conference in 2011 and the event provides industry leaders and future vendors with a platform for engaging and learning best practices from one another.

Despite the many benefits of La Cocina's program, spots are limited and other vendors in the Mission District have commented that entry into the program is too selective and out of reach. Vendors who are not able to enter the incubation program often turn to other avenues such as the Mission Economic Development Agency (MEDA) for loans and business coaching. In the mid-2000s, La Cocina's staff quickly fostered a community of food vending advocates seeking to understand the process of starting a vending business. Among them was the future owner of San Francisco's Off the Grid (OTG) food vending business, which would become the Bay Area's largest and most recognized event organizer for "new wave" food trucks.



Figure 6-1. La Cocina food vendor at the Mission Community Market, July 3, 2014. Source: Author.

6.2 Off the Grid Food Truck Markets

Off the Grid's food truck markets intentionally seek to mimic the model of Asian night markets in Morocco and Singapore that include a variety of diverse cultural foods and a vibrant and active ambiance. In addition to the daily food vending markets that OTG operates throughout San Francisco, each Friday, OTG features a large event hosting hundreds of patrons in the parking lot of a decommissioned military base known as Fort Mason (Figure 6-2). At the Fort Mason food truck market, upwards of 30 trucks and newly incorporated tent vendors spatially organize in a large circle providing only two entry points. A predominately affluent population of all ages fills every seat and bench in the center. Off the Grid arranges vendors by popularity and type of food such that the long and short lines are evenly distributed. There is a tent for a band, a hidden seating area where fancier food and drink are served at high cost, a central tent for purchasing alcoholic beverages, digital kiosks to help customers navigate the space, and an area for children's games (Figure 6-3). The food trucks are each branded with bright colors, graphic designs, and recognizable labels to easily determine the type of cuisine from afar. The carnival atmosphere is vibrant, loud, and crowded, resulting in long lines. The event attracts hundreds of people and hired, dedicated staff members reinvent the atmosphere with new activities and amenities to maintain interest each week. The spatial organization of the vendors not only contains attendees, but it also segregates the area into intimate spaces. These smaller, courted off spaces host vendors with higher cost foods and mixed cocktails to appeal to the interests of different social classes. Off the Grid's food market designs strategically organize social activity and continuously invent new activities to amplify the food truck experience, provide comfort for patrons, and assure a returning demand. As a company, OTG cleverly brands itself as being "off-the-grid," a theme that suggests they are operating outside the formal rules of land use. Since 2010, they have expanded their model of organized food vending to over 35 weekly markets in the Bay Area.

The expansion of OTG markets to multiple municipalities suggests their model is welcomed. While a variety of political and economic factors contribute to OTG's expansion of markets, fundamentally the vending model succeeds per the benefits vendors gain when operating collectively. In addition to creating an instant destination with desired pedestrian activity, collective vending events provide shared amenities such as bathroom facilities, trash removal, and the occasional sharing of supplies. Underused parking lots are ideal sites that provide space for the market's portable event infrastructure. Off the Grid food markets are strategically located in parking lots, alleyways, and urban parks throughout the Bay Area. Each selected location meets the demands of high building occupancy, low automotive traffic, high pedestrian traffic, and quarter mile walking distances. Moreover, new market locations may be tested for short periods of time before permanent agreements are finalized. The prevalence of OTG markets across the Bay Area situates their organization as a primary actor supporting the sustainability of San Francisco's food vending scene.



Figure 6-2. Fort Mason Off the Grid event, May 23, 2014. Source: Author.



Figure 6-3. Fort Mason Off the Grid event, May 23, 2014. Source: Author.

6.3 Civic Improvements and Festival Market Places

San Francisco is a unique context to explore the ways in which Off the Grid supported and drove the development of food vending market places. Due to the growth of new wave food vendors in 2009, the city implemented a variety of proximity bans such as 300-foot distance requirements between vendors, 300-foot proximity bans from restaurants unless approved, and 1,500-foot proximity bans from middle and high schools on public right-of-ways. Furthermore, the cost of street permits reached \$10,000 per year and the distribution of such permits was limited to one permit per family. From the onset, the potential for vending growth looked bleak forcing vendors to make strong relationships to navigate regulations and locate unproblematic places to serve. During this time, Matt Cohen, a young teacher and a hotel employee, considered starting a mobile ramen business with a friend. Through the process of acquiring proper permitting, he was baffled by the lack of information and personnel at the city who understood the regulations. Eventually, he built relationships among San Francisco's small food vending network such as the director of La Cocina and the handful of food truck vendors who existed at the time.

In early 2010, Cohen discovered that Fort Mason, a former abandon army post on federal land in north San Francisco, was not subject to the city's complex regulations. In June, he organized the first Off the Grid event with ten food trucks. Unexpectedly, 500 people came to the first event and the next week there were 1,000 attendees. Shortly after, the San Francisco's Parks and Recreation Department took notice and began working with Cohen to secure more spaces in city-owned parks, a move that did not go unnoticed by restaurants.

Off the Grid provides a variety of benefits to its vendors such as location scouting and business advice relating to social media usage and truck aesthetics. Off the Grid provides vendors a way to bypass, or at least expedite, the city's permitting structure. A Department of Public Works permit is pre-approved for vendors, given that they operate in OTG markets, and health and fire licenses are expedited. A vendor emerging in the market stated, "City hall knows all these Off the Grid guys. It took four days to get my permits" (vendor as quoted by Hirsch, 2011). A former San Francisco city supervisor who worked with Cohen on mobile food legislation said, "You can try to make it on your own. But why would you want to?" (Dufty as quoted in Hirsch, 2011). Off the Grid is a for-profit company that charges \$50 per event and 10-12% of each vendor's earnings per event. Other services such as the SF Cart Project, an educational branch, provides information sessions on starting a new mobile food business at a cost of \$150 per hour. Cohen stated, "our pricing structure passes along value to the customer in terms of food quality and to the vendor in terms of a sustainable reliable business" (Cohen, 2013, personal communication).

The company also utilizes a selective entry process. First, the vendor must have had no issues with food sanitation and if they do, their relationship is terminated. Second, OTG checks the quality and type of the food. They seek quality ingredients and food that are artisan and interesting. The third pass is the truck's appropriateness for a market space. For example, Cohen mentioned, "It wouldn't be appropriate to place corporate trucks that we work with, whether it is San Francisco Soup Company or the Melt, at our Fort Mason center space, which is all about the creative, inventive, and grassroots kind of feel" (Cohen, personal communication, 2013). OTG takes a unique approach as compared to other food truck organizations in that its mission is based on the production of unique public urban places established by hosting trucks. "What we do is place-making. Some of the things that we are going to be doing in the future are less based on a food truck and more based around the entity of novel uses of public space," says Cohen (personal communication, 2013). Unlike other organizations that focus on advocacy, OTG pays particular attention to matters of urban design such as the hiring of an urban designer who examines site visibility, nearby parking, high traffic counts, and ability to handle high demand. OTG also has a thorough strategy for placing vendors at one of their 35 markets (Figure 6-4). Different price points, use of ingredients, and types of food (e.g. farm-to-table, organic, locally grown, traditional American, fusion) each factor into locating a market where the vendor can make profit.



Figure 6-4. Left: McCoppin Off the Grid market, June 22, 2013. Right: South Berkeley Off the Grid market, June 13, 2013. Source: Author.

The scale and demand for OTG events in San Francisco has solidified the group’s position as the leading food vending organization. In 2013, OTG grew from a 12-person staff to a 37-person team. Some skeptics have questioned whether the growth of OTG, combined with the vast amount of mobile food businesses, has become so large that joining the organization is the only means of business survival for some vendors. Others have questioned whether the company has contributed to a standard way of doing business across the city, making it difficult for independent vendors to seek substantial profit.

By October of 2011, the Department of Public Works had received 160 applications for permits and upon review, only 36 were approved. With a permitting process that took up to 12 months with no guarantee of success, the city and Cohen began discussing new ways to streamline the process. Scott Weiner, who serves on the Board of Supervisors Land Use and Economic Development Committee, began an effort to adjust existing regulations. After a two-year effort, on June 11, 2013 the Board of Supervisors passed a set of regulations that resulted from a compromise between food vendors, represented by Matt Cohen, and restaurant owners, who felt the city was giving away public land to food trucks and creating direct competition. The new regulations “will create a more predictable permitting process based on fairer standards and open up more areas where the food trucks can operate while making it more difficult to do business in the already crowded areas of Union Square and downtown,” said Wiener (as quoted in Sabatini, 2013). Although the new regulations did not impact the existing permit holders, newly permitted vendors faced the restriction of only being able to operate three days per week at one location, although they are allowed to apply for more than one location. The new regulations also eliminated the ambiguous “like-foods” clause, established a permanent “no-truck zone” 75 feet around a brick-and-mortar restaurant, and significantly reduced the 1,500-foot proximity ban around schools to 500 feet around middle schools and 750 feet around high schools. Another motivation for these regulations was to create a more streamlined permitting process, which is graphically illustrated on the city’s website (Figure 6-5). To this end, the regulations effectively eliminated the possibility of obtaining a new permit for downtown San Francisco, unless grandfathered in, and conversely opened the opportunity to vend in locations across San Francisco more broadly. The consensus among the city officials and OTG is that the new regulations are better than what was formerly established in terms of obtaining a permit. On the other hand, vendors have mentioned the new rules will make it virtually impossible to find a location in the highest opportunity areas.

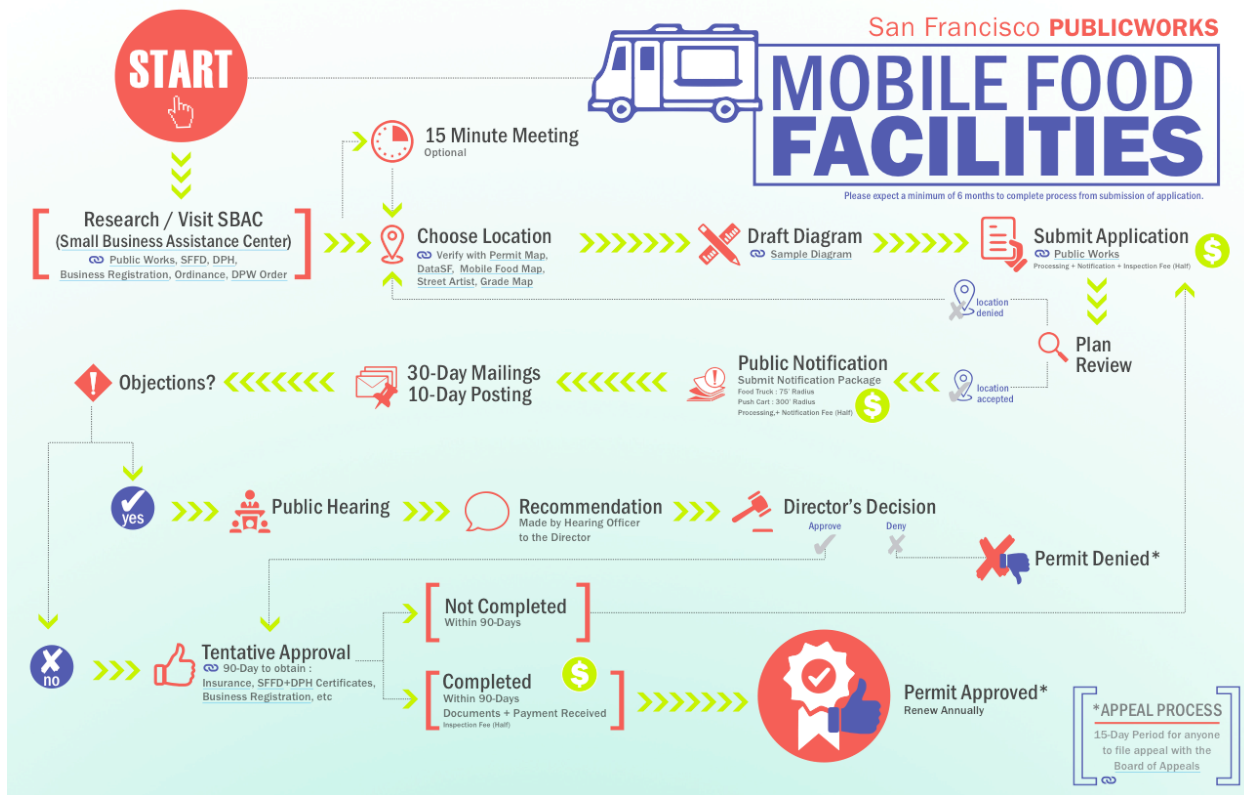


Figure 6-5. Mobile food vending permit process simplified. Source: <http://sfdpw.org/>.

The recent change to San Francisco’s regulations denotes a significant collaborative effort that is uncommon in many municipalities. Cohen’s role in investigating unknown and ambiguous regulations from the beginning and building a small network of vending relationships established him as the go-to-guy for regulation knowledge. With a keen eye for urban place-making and savvy business skills for developing a for-profit company during a period of high demand for food truck entry, Cohen quickly became an all-knowing leader of food vending in the Bay Area. Some have mentioned, “Matt has reshaped the way food trucks operate in the city. I don’t want to say it’s power, but that’s what it is” (Kimball as quoted in Hirsch, 2011). Undoubtedly, Cohen developed a strong relationship with city personnel who likely turned to him for advice. Opposed to recommending drastic changes to the regulatory code, Cohen’s piecemeal approach to bettering the regulatory process has gained trust and respectability among government officials who are assured OTG will meet the health and safety standards the city desires. OTG events include a variety of controlled standards such as recycling, efficient setup and removal, and monitored alcohol consumption, which align with municipal interests. This private, public relationship is a unique symbiosis. Recent debates address the future of privatization of public land and the ways urban life will change when companies have the public interest at hand. In this scenario, public and private interests align creating a co-dependent relationship that determines the growth of vending activity in San Francisco.

6.4 Managing Vendor Growth and Expanding Markets

The food vending regulations established in 2011 in San Francisco reinforce the growth of food truck markets and weaken the ability of individual vendors to locate sites in opportunistic

areas. Vending markets now resemble the state interventionist methods established throughout the 20th century. Many well-known markets, such as Chicago's Maxwell Market and New York City's Chelsea Market, emerged from debates over how to control vending. For instance, in 1912 the Chicago City Council took interest in developing Maxwell Street Market over concerns that vendors interfered with 'ordinary' business and traffic. Just as important, the food market "makes inspection and enforcement of ordinances related to cleanliness and health more practicable" (as cited in Morales, 2000). Furthermore, historian Anfonso Morales argues that Maxwell Market was a policy tool constructed as a response to unemployment in the city, an issue Chicago had typically ignored (2000: 80). Geographer Ray Bromley summarizes that the governments' impulse to contain vending activity is driven by fears of congestion, efforts to monitor sanitation, business competition, and crime (200: 6-10).

Successful international models also influenced cities to turn to markets to foster economic activity. Barcelona's Mercat de La Boqueria, Mexico City's Mercado de la Merced, and Singapore's Kreta Ayer Wet Market serve as precedents for American cities seeking ways to formalize vending activity. Food truck markets or festival market places, which are located in every major city in the US, provide vendors with opportunity to predict profits and share services and customers. In cities where vendor markets are more prevalent over independent vending spaces, vending businesses may become less self-sustaining. In this scenario, the demand to enter food truck markets increases among vendor entrepreneurs while the opportunities to vend diminish elsewhere. At the same time, food truck markets are a way for governments to centralize services, monitor vending growth and public safety, and control undesired behaviors. Municipal and private sector support for food markets in San Francisco simultaneously advances vending growth and constrains opportunity to vend elsewhere.

Although food truck markets may stifle the growth of independent vending, many new industries benefit from food trucks. Today, Mobi Munch and Roaming Hunger are two of the most popular food truck companies that offer new vendors a streamlined process for renting or owning a food truck, helping with menu creation and branding, and accessing profitable locations. Mobi Munch, a business that offers turnkey food truck rentals nationwide, was created in 2009 in Los Angeles by a restaurateur experienced in franchising restaurants across the country. Likewise, Roaming Hunger's model, a startup developed by a business graduate, also streamlines the start-up process. Despite the financial support and streamlined programs these companies offer to vendors, they remain focused on creating ways to make the industry scalable overall. Opposed to starting a food vending business with a more localized approach, these companies offer standardized packages that include a complete market analysis of profitable locations.

In recent years, San Francisco's technology industry has also supported new, vendor-related industries by aggressively developing more efficient services. For example, EAT Club Corporate Catering Services offers foods from a variety of restaurants in a single food truck. Employees place their order in the morning based on the daily menu and a food truck delivers the meals for the restaurants. An employee is required to pick up the order from the food truck on the street. This business model bypasses food vendors entirely, servicing restaurants under the guise of a food truck.

Similarly, the recent development of web-based firms such as ZeroCater and Cater2.me act as a mediator between downtown office workers who order lunch in groups and vendors' ethnic foods in the Mission District. Initially hesitant to take part in ZeroCater's services due to the 20 percent share of profits collected per order, Bernardo, a Latino vendor in the Mission

District, eventually agreed to join the company after increasing the price point of his food to compensate for the added fees. Today, catering orders through ZeroCater's website provide nearly half of Bernardo's profits and serve as an ensured revenue stream. In this instance, online catering services connect Bernardo's business with distant office workers in the Financial District and provide him with access to a new lunchtime clientele. At the same time, ZeroCater achieves significant profits through a percentage of low-priced foods. These creative partnerships provide new economic links for separated economic sectors. Purchasing orders through ZeroCater increases street vendors' visibility to office workers, allows vendors to scale their business to maximize profits, and sustains vendors during periods of slow business. Technology firms show the productive ways to grow and expand vendors' clientele by bridging disparate populations and increasing access to customers.

Likewise, food truck businesses themselves are similar to lean startup companies. Vendors' operational frameworks focus on flexibility with regards to daily scheduling and the ability to quickly mobilize. At the same time, the business is scalable. In Los Angeles, a variety of vending businesses have expanded to multiple trucks. Business owners may even choose a different branding strategy for each truck, allowing for product experimentation. Food truck businesses also grow into restaurant ventures. Kogi BBQ catapulted Chef Roy Choi's career prompting him to open a collection of restaurants in LA over the past few years; his most recent venture includes Pot and Commissary restaurants in the historic Line Hotel. KoJa Kitchen on Telegraph Avenue in Berkeley is a product of one of the Bay Area's original new wave trucks as well. An appearance on the Food Network's *Guy Fieri Top Stops* generated additional revenues for KoJa Kitchen. Moreover, Curry Up Now, another original SF food truck, now boasts four new restaurants in the Bay Area. While the list of vendors who expanded their businesses is endless, many do not make the leap and use vending for supplemental income.

To conclude, the Bay Area's competitive food vending industry illustrates the changing pressures of the economy. As land continues to increase in value, vendors will continue to face constraints. The growth of the industry heavily relies upon the production of food truck markets and events that municipalities, vending companies, and vendors prefer. As the industry continues to evolve, new markets that profit from food vending will continue to develop. The alignment of public and private interests surrounding community-building and placemaking guide new vending activity and public acceptance. From the city's perspective, food truck events are self-sufficient and affordable forms of placemaking and efforts across the country resemble this attitude (i.e. City of Seattle, 2013; San Jose, and Charlotte). The event organizers who streamline permitting for vendors reduce city efforts and resources needed to track down individually roaming vendors. Overall, the Bay Area's vending landscape, which is driven by food truck markets, supports the industry's growth, while simultaneously hindering the economic independence of small-scale vending businesses.

Chapter 7: Food Vending Paradise: Portland, Oregon

Portland is currently a national and global leader of the food vending industry with approximately 500 food carts in service. The food cart industry in Portland is lucrative with some of its best vendors moving into restaurants or establishing national food brands. While food carts gradually emerged as early as the 1980's, their presence grew 30 percent from 2008 to 2009 (Rogers & Roy, 2010: 69). Portland's food carts hardly resemble the new wave food trucks that account for less than 5% of the vendors. The units are typically constructed from refurbished trailers and designed with eclectic styles, built-on awnings, and front porches.

Portland's unique economic climate influences the success of food vendors. Formerly structured on the timber and fishing industry, Portland's fledging artisan economy is visible in every neighborhood from microbreweries to boutiques and from bike repair shops to food incubation facilities. Portland planner Charles Heying describes the economy as small-scale with low barriers to entry and individual worker autonomy (2010). In this artisan economy, entrepreneurs are unique in their ability to flexibly gather resources through personal networks, trade groups, and web resources. Local, self-reliant enterprise is also tied to the moral beliefs of a community, such as reinvestment in social and ecological infrastructures, buying locally, the belief in less is more, and maintaining democratically circulating wealth (2010). Furthermore, Portland has the highest percentage of mom-and-pop businesses of any major city in the country (Rogers & Roy, 2010: 8). Portland food vending advocate Brett Burmeister mentioned, "There is no way you could have Portland's model in Chicago or New York, the cost of the value of land is too high. But, it really does work in second-tier cities like Denver, Jacksonville, Austin, and Minneapolis" (personal communication, April 4, 2013). Portland's food carts with their often homemade, one-of-a-kind cart designs and dishes are a natural outgrowth of the artisan economy.

The Urban Vitality Group, a team of Portland State University students and City of Portland planners who conducted a study called *Food Cartology*, found that 51 percent of the 54 vendors surveyed were born outside of the US. Moreover, the team found over half of the vendors surveyed outside of the central business district were Hispanic, whereas a greater mix of ethnicities (Hispanic, Caucasian, and Asian) existed within the central business district (Urban Vitality Group, 2008). Therefore, vendors are disproportionately immigrant and non-white when compared with the overall demographics of the city which is 76 percent white (Newman and Burnett, 2013; US Census Bureau, 2010).

Although several food carts are highly profitable in Portland, most are not. Brett Burmeister, organizer of Food Carts Portland, says, “A good vendor is going to do \$800 in a day. In San Francisco, \$2000. We’re in Portland, some of these guys are happy with \$250. It’s a different model” (personal communication, April 4, 2013). Likewise, *Food Cartology* estimates annual food cart revenues range from \$10,000 to \$50,000. The prevalence of nearly 500 food carts in Portland reveal the significance of small-scale enterprise in Portland’s economy that includes only two fortune 500 companies (e.g. Nike and Precision Castparts) and one major technology firm (e.g. Intel). Despite Portland’s unique characteristics, cities across the nation are now replicating Portland’s pod model and redesigning urban spaces with permanent food vending parking stalls in mind (e.g. San Francisco’s Street Food Park, Rem Koolhaas’s West Louisville FoodPort).

7.1 The Bricolage of Food Carts and Pods

Portland’s first modern food cart arrived in 1965 when Maury Dragoon began selling kosher hot dogs from a Hebrew National cart across from City Hall. When Dragoon offered the Mayor and his staff free samples, he laid the political foundation for food vendor success today (Rodgers & Roy, 2010: 48). In 1984, food carts eventually became legitimized as a public space benefit in downtown’s Pioneer Courthouse Square, which was built to include food carts as a planned feature (2010: 48). Per the 1976 ordinance that legalized food carts in commercially zoned areas, food carts gradually began populating sidewalks and a few parking lot spaces in downtown areas where they are permitted to operate.

The primary reason food carts are stationary in Portland can be traced back to a vehicle code regulation established in the 1970s that categorized vending units as motor vehicles as long as they have wheels and were less than 16 feet in length.¹ Moreover, the vehicle code exempts food carts from the building code that would pose a host of other code challenges (e.g. plumbing requirements, proper fire separation between carts and buildings). Food cart vendors must secure city approval for cart designs, seating, hours of operation, graphics, and signage. The Multnomah County Health Department does not require food vendors to use a commissary to store their vending unit, which allows the carts to stay overnight on private property. Commissary services such as grey water dumping, trash and recycling disposal, and electricity are either built into the site for vendors or organized by independent operators who provide for entire groups of vendors on a routine basis.

Unlike mobile food trucks in other cities, stationary food carts account for 95% of the vending units in Portland and include a variety of different models such as a custom-built food cart, travel trailer, or cargo trailer (Figure 7-1). Vending carts may be rented or purchased through Craigslist or one of the two food cart manufacturers in the area for a cost ranging between \$1,000 to \$32,000 after upgrades (Flores as quoted in Burningham, 2009). Parking spaces that house the carts can typically be rented from \$500 to \$700 a month. With rent much lower in comparison to other cities, vendors find business costs much more manageable than opening a brick-and-mortar restaurant.

¹ Food carts over 16 feet must conform with Building Code regulations.



Figure 7-1. Three types of Portland food carts: (left) a cargo trailer located at 9th and Alder Streets, September 13, 2013; (center) a customer built food cart located at Rose City Food Park, May 7, 2013; (right) a travel trailer located at Cartlandia food pod, April 6, 2013. Source: Author.

Food carts are stationary in Portland, thus eliminating the need for social media or GPS mapping of cart locations. Most vendors use Facebook for their main business homepage and tweet less frequently than food trucks such as Koy Fusion, Portland’s first and one of only a few roaming food trucks. Additionally, there are numerous reports of vendors who have gone out of business without updating their media profiles, reflecting the lack of technology use among vendors. Overall, a vendor’s online presence is less significant than collectively locating in a pod where they share the benefits of each other’s foot traffic.

Food carts themselves are a bricolage of homemade signage, murals, and objects that define the vendor with cultural and iconographic individuality. Similarly, food cart menus include a variety of uniquely branded dishes to build a demand among customers. The visual quality of the food cart ranges from dumpy and dated to modern and vibrant. The food carts illustrate a unique appropriation and activation of sidewalk space unlike other cities. For instance, the exterior design of a cart may be extended onto the sidewalk or an existing infrastructure site to include patio and/or bar stool seating, front porches, carpets, and planters as long as additions are fixed to the vending unit per coding requirements (Figure 7-2). Although exterior upgrades to a food cart occasionally violate rules for public right-of-ways, few enforcement measures are taken unless complaints are filed. Seating is crucial to the food eating experience and the lack of available seats in the downtown area means customers often take their food to go or eat in their parked cars. While many downtown areas do not provide amenities, neighborhood food cart “pods” have created elaborate children play areas, tents, and stages for bands to play.



Figure 7-2. A food cart occupies a corner location at 9th and Alder Streets. Planters, a seating area, an ATM, and signage encroach onto the sidewalk and an existing parking lot gate is used to court off a seating area, September 13, 2013. Source: Author.

Food cart “pods” are unique to Portland’s food vending landscape and first emerged in downtown parking lots. The Goodman family owns the majority of downtown parking lots and their involvement in the industry has been instrumental in allowing the food carts scene to flourish. Despite the fact that the City of Portland is eager to develop the land, the Goodman’s have withheld development due to the lack of market pressure. Moreover, parking stalls for vendors bring in consistent revenue, with rent costing \$500 to \$600 a month for vendors as opposed to \$150 to \$200 a month to park an automobile (Browne et al., 2014: 252). Unlike other vending lots where the trucks are organized in an inward-facing fashion, Portland’s downtown food cart pods allow vendors to park along the perimeter and activate the sidewalk. The original pods at 10th and Alder and 5th and Stark Streets primarily serve lunch crowds and operate at the most sought after locations by vendors (Figure 7-3). The high density of jobs in the downtown area combined with walkable 200-foot block lengths encourage customer activity year round, aside from the winter months that are slower for business. Portland food advocate Brett Burmiester explains, “Food carts create a community space. When you put 10 to 15 carts on a lot, it’s a small business ecosystem. The food carts deserve a lot of credit for bringing people downtown” (as quoted in Culverwell, 2013). Urban scholars have pointed out that Portland contains elements of urban form that in some cases are not easily repeatable elsewhere such as a compact downtown area with tiny city blocks, a nearly 50:50 ratio of buildings to open space, wide sidewalks and narrow streets, and plentiful small public spaces containing public seating and shelter from the elements (Newman and Burnett, 2013; Rodgers and Roy, 2010: 7). In downtown, Portland food pods create “human-scaled spaces conducive to eating, interacting, and engaging in public life” (2013: 246). Pods serving evening crowds began to emerge east of the

Willamette River following the lead of Cartopia, the first neighborhood cart pod that hosts four food carts (Figure 7-4).



Figure 7-3. Food cart pod at 5th and Stark, April 3, 2013. Source: Author.



Figure 7-4. Cartopia cart pod at SE Hawthorne and SE 12th Ave., April 4, 2013. Source: Author.

Roger Goldingay, a well-known food cart pod developer and real estate rehabilitator, made an impact in 2009 with the Mississippi Marketplace food cart pod he created from a popular pairing, food and beer. Having lived in the Mississippi Avenue area, Goldingay was familiar with the area's high crime levels, drug presence, and prostitution and wanted to see change. Goldingay spent \$900,000 renovating a historic 100 year-old building that had once been a pharmacy and a church into a German beer pub and redeveloping a vacant lot with electricity and water hookups for ten food carts (Figure 7-5). The concept was to build a gathering space that would benefit the community and anchor the future renovation of the Historic Mississippi Ave area (Goldingay, 2015). Customers' ability to purchase food from a cart outside and eat it inside the bar (which serves its own low price food), as long as they purchase a drink, is a simple tactic that has proved essential to the site's success in a city that gets an average of 42 inches of rainfall per year. Open year-round, Mississippi Marketplace vendors struggle to remain profitable in the winter months but overall the pub helps draw customers. Many of the vendors at Mississippi Marketplace receive financial support from Albina Opportunities Corporation, a nonprofit organization that caters specifically to Portland's underserved small businesses and distressed neighborhoods (Rodgers and Roy, 2010: 101). Former Portland planner Alma Flores says the area has "completely gentrified, a 360. The Chinese restaurant across the street says the crime is gone" (personal communication, April 3, 2013). Flores believes vendors effectively increase the amount of surveillance in the area by providing more eyes-on-the-street, a planning concept popularized by urbanist Jane Jacobs (1961).



Figure 7-5. Mississippi Marketplace food cart pod in Portland, OR. Source: <http://www.missmarketplace.com>.

Other property owners following the lead of Roger Goldingay’s successful Mississippi Marketplace pod saw an opportunity to generate profit and began creating pods with seating, awnings, games, ATMs, and bulletin boards. A new market for developing pods quickly grew throughout a variety of neighborhoods east of downtown (Figure 7-6). Each pod adopts its own unique approach for providing covered seating, children playgrounds, and restrooms. Some pods are complete renovations such as Rose City Garden while others are created out spaces between buildings such as Alberta 15 (Figure 7-7).

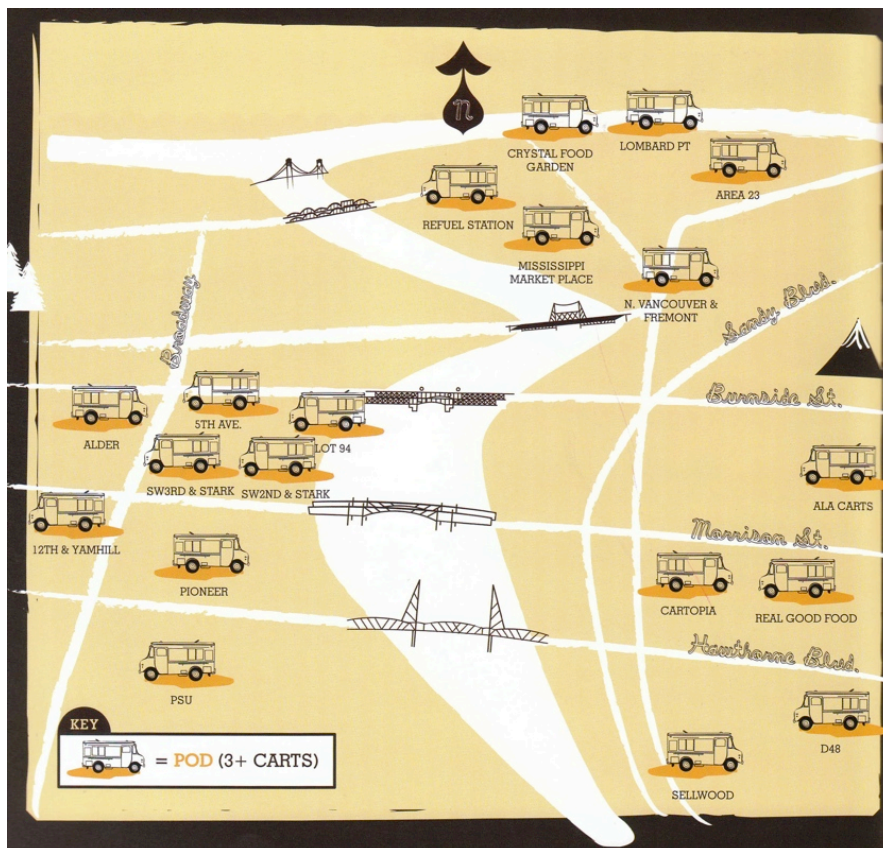


Figure 7-6. Map of food cart pods in 2010. Source: Jen Cogliantry, *Cartopia: Portland’s Food Cart Revolution*, Portland, OR: Consolidated Press.



Figure 7-7. Left: Rose City Garden Food Park, September 14, 2013. Right: Alberta 15 Co-op Food Pod, April 7, 2013. Source: Author.

In 2011, Roger Goldingay developed Portland’s largest food cart pod called Cartlandia, which cost over 1.5 million dollars to build (Law, 2013). The fenced in site hosts space for 20 food carts, a covered beer garden, a big screen television, a ‘barking’ lot for dogs, indoor restrooms, on-site parking, and bike racks. With a vision to revitalize the area, Goldingay’s proposal for Cartlandia was welcomed by the neighborhood association that was originally skeptical of the pod’s success given the area’s neglect, abundance of used car lots, homelessness, and drug crimes. Cartlandia is situated on a one-acre former used car lot along the Springwater Corridor regional bike path (Figure 7-8) and is a ten-minute walk from a new TriMet light rail stop. The engineering of the lot includes permanent underground electricity, gas, water, sewer, and a grease entrapment as well as new high-powered lights above ground to bolster security. Furthermore, Goldingay made an agreement with the Portland Parks and Recreation to mow the chest-high grass crowding the bike path and in exchange, Goldingay agreed to take over landscaping and maintenance of a 500-foot section of the trail (Law, 2013). In May of 2011, Cartlandia opened with just six carts largely due to the pod’s 12-mile distance from the city center. Today, Cartlandia is near vendor capacity. Goldingay has been touted as a “one-man urban renewal agency” (Law, 2013) for his food cart pod developments that have been applauded by Portland’s food enthusiasts.

Vendors who seek similar rights to brick-and-mortar restaurants have long desired the ability to sell alcohol to customers. In 2012, the Oregon Liquor Control Commission (OLCC) approved Carlandia food carts for liquor licenses, a move that upset city officials. The OLCC’s decision to grant Cartlandia food vendors liquor licenses was based on legal advice from the Oregon Department of Justice who said food carts should be treated like restaurants. The City of Portland sued the OLCC over concerns that they lacked clear rules to ensure public safety (Slovic, 2012). An excerpt from the lawsuit states, “such [alcohol] sales may result in increased crime, traffic accidents, fatalities, public nuisances, or other harms to the public safety” (as quoted in Solvic, 2012). Furthermore, a City Commissioner said, “We asked them [the OLCC] to wait until a public process could be conducted and they have not done that. They seem to not care about the problems we’re having in neighborhoods and seem to be looking directly at revenue from alcohol sales” (Sit, 2012). An OLCC spokeswoman said, “The free-for-all Portland officials fear is unlikely. All applications are treated on a case by case basis, just like those for the 2,800 Portland restaurants and stores with licenses” (as quoted in Solvic, 2012). Today, carts are eligible for licenses as long as they stay in one spot and owners demonstrate they can control

the area where alcohol is consumed. Still others fear the presence of alcohol in food cart pods may jeopardize the laissez-faire attitude towards minor infractions of licensing restrictions, which is an important factor in the success of Portland's street food industry (Newman and Burnett, 2013: 245).

Similar to vending trends in most US cities, pod vendors in Portland, whether downtown or embedded in neighborhoods, have flourished on private property and avoided public right-of-ways (e.g. public streets, sidewalks, and public squares). Vendors also benefit from operating in a shared environment where they encounter shared foot traffic and services.



Figure 7-8. Cartlandia food cart pod in Portland, OR, April 6, 2013. Source: Author.

7.2 Local Leadership and Global Tourism

The ubiquitous presence of food carts in Portland has established the city as a national and global vending leader of many municipalities. Unlike cities such as Los Angeles that have vending organizations that represent the city's food vending industry and provide a central place of information and legal protection for vendors, Portland has no such organized group, nor has there been a significant need for one. In 2011, a couple of friends interested in online blogging and public relations created Food Cart Portland, a blog website that provides resources for customers to find food carts. The popularity of the blog also launched its developers, Lizzy Caston and Brett Burmiester, into food cart spokesmen for Portland. Caston and Burmiester now conduct food cart tours, consultancy advice, event planning, national conferences, public appearances on radio broadcasts, planning meetings, and interviews on the Food Network. The blog has become so well known that vendors often see an increase in sales only hours after a new blog posting appears showcasing their cart. Unlike the Southern California Mobile Food Vending Association, their approach as food cart spokesmen is less focused on advocacy or regulatory debates given there is no demand for such an organized group. Caston and Burmeister make it a point to focus on the latest food cart news and provide a go-to information source for the community.

Eat Mobile, the increasingly popular annual food cart festival located under the Morrison Bridge, was born out of an editorial meeting at the local *Willamette Week* newspaper in 2008 (Figure 7-9). The first event was held in a warehouse with eight carts represented on foldout tables, and 300 people attended the festival. The event grows yearly just as Portland's food cart scene, and over 45 vendors participated in 2012. Proceeds from the event benefit Portland's MercyCorps Northwest's local economic development program and vendors are awarded the

coveted Carty Award. Like other food cart events across the US, Eat Mobile fosters continued local and regional demand for food carts.



Figure 7-9. Eat Mobile annual food cart festival under the Morrison Bridge. Source: Oregon Public Broadcasting, <http://www.opb.org/artsandlife/article/eat-mobile-celebration-portlands-food-cart-culture/>.

In addition to the popularity of the Food Carts Portland blog, some of Portland's vendors have also become food cart icons representing the possibilities of bottom up expansion. For instance, Nong Poonsukwattana, who is originally from Thailand, came to the US in 2003 and started a food cart business in April 2009 called Nong's Khao Man Gai (Figure 7-10). As an immigrant, Nong's largest barrier was learning English, which she picked up from working as a waitress in a restaurant (McKeever, 2013). With a dream of owning a business, she started her food cart operation with a refurbished kettle corn cart and a single dish of steamed chicken and rice for \$7. After seven months of researching the best type of chicken to purchase and making mediocre profits, Nong's business rapidly took off. The local newspaper ran a story on Nong that made her run out of food before noon the same day. In an interview with the food blog Eater, Nong says, "I had no idea the power of the media...I didn't know how it works" (McKeever, 2013). After a year and a half of intense working and strategizing on how to produce more product, Nong became eager to take her food national and decided her special sauce would allow her to expand her business. To pay for a sauce making facility, she opened two more food carts downtown. Nong now sells her sauce nationwide and hopes to soon expand her \$7 chicken and rice dish to New York, Austin, and Hawaii. Recent appearances on the Food Network and the Cooking Channel have assured Nong's continued success. Despite Nong's assimilation into the national food industry, she, like many others, has endured challenges since she first purchased her \$1,200 cart. Similar to the meager beginnings and instant success of chef Roy Choi in Los Angeles, Nong's work ethic comes from a place of deep connection to her childhood struggle and learning by doing (McKeever, 2013). Nong's story shows that although instant success comes from a combination of variable factors, bottom up efforts and entrepreneurial aspirations can lead to success on national and global scales.



Figure 7-10. Nong's Khao Man Gai food cart on the cover of *Travel Portland*, 2015. Source: *Travel Portland Magazine*.

7.3 Municipal Cooperation

As Portland food vendors rose to global recognition in 2010, many municipalities wanted to understand which best practices could be replicated in their own locales. To this end, in 2010, the Urban Vitality Group conducted the most comprehensive study of Portland's food carts to date including 54 vendors and 120 customers in four neighborhoods. Findings from their study prove food carts are positive contributors to the Portland economy per their ability to supply jobs and produce social ties within a community. Shockingly, they found 42 percent of the customer pool surveyed eats from food carts one to two times a week and the majority noted affordability as a reason (Urban Vitality Group, 2010). The public report established a precedent for other communities to learn about the impacts of small food vending businesses.

Despite positive findings, food cart vendors in Portland, like many other cities, encounter resistance from brick-and-mortar restaurants, but generally, the pressure does not result in significant policy changes. Restaurants with concerns over loss of business per the presence of vendors are typically newer establishments or corporate enterprises. Locally owned restaurants who have witnessed the growth of food carts over the past three decades are less concerned with competition and appreciate the extra foot traffic around their establishments. Despite complaints, restaurant resistance has not affected the growth or popularity of food cart businesses.

Aside from simplifying the permitting process in 2003, city regulations have hardly adjusted over time. Thus the regulations that manage food cart vendors today developed in

response to a perceived need for health and safety monitoring (Newman and Burnett, 2013: 237). For instance, the Multnomah County Environment and Health Department has supported vendors by providing clear steps for obtaining proper health permits, speaking publicly about how to become licensed, and increasing their department staff. In contrast, the City of Portland is most concerned with the potentially developable land. They believe food carts impede on their long-term plans to transform the surface parking lots into attractive mixed-use developments.

During the period of food cart growth in 2009, some vendors began building porches, platforms, overhangs, and seating areas to make their carts more appealing to customers. The Bureau of Development Services that enforces the Zoning and Building Codes argued the additions could be dangerous and cause injuries. After a crack down on a lot across from the city's Bureau of Development Services offices, it was decided that additions were acceptable only if they were primarily attached to the vending unit and not the ground. Aside from this instance, there have been relatively few active enforcement measures. Policing of food carts for improper use of parking stalls is largely a complaint-driven practice (Newman and Burnett, 2013: 239).

Unlike other cities, Portland was fortunate to have an economic development planner invested in small-scale enterprise. Alma Flores, who worked as a long-range planner at the City of Portland for six years and served as a key member of the Urban Vitality Group, became heavily invested in ways to support local food vendor growth when she was assigned to manage Portland's commercial corridor revitalization projects. One of her objectives was to get at the root of why people wanted to start a food cart to begin with and she found the reasons to be entrepreneurial independence, work flexibility, and the potential for growing into their own restaurants (personal communication, April 3, 2013). Flores also saw a discrepancy between the objectives of long-range and short-range planners in the City of Portland. She felt short-range planners who enforce vendors should first consider whether vendors are aware of the codes and rules. Her advice was to inform the vendors of the rules they did not know and give them a time frame to achieve compliance before enforcing rules before enforcing. While planners largely focused on the prospects of new development in vacant downtown lots, her efforts helped keep their desires at bay. Thus Alma's self-driven interests in food vendors as viable economic actors helped establish a compassion for and an awareness of food vendors among multiple municipal departments.

7.4 Flexible Vending Market

While Portland's model of food vending works for Portland and likely cannot be entirely translated to other cities, it does reveal some lessons in fostering sustainable economic activity in a relaxed regulatory climate. First, Portland's food cart pods exemplify the economic potential of interim uses of underutilized land that generate revenue for lot owners and social activity in the public realm. In some Portland neighborhoods, food cart pods have transformed neglected crime ridden areas into vibrant areas with steady street life. The classic urban design principle of eyes-on-the-street continues to prove essential to strengthening feelings of security and comfort in neighborhoods. Second, economic development planner Alma Flores was instrumental in understanding the potential of vendors in local economic development. This type of advocacy from within the planning department was able to mitigate regulatory resistance. Finally, Portland residents value small business incubation that can support local economies. The artisan economy of Portland, which values local production and high quality products, produces a business culture

that appreciates locality and entrepreneurial growth. New businesses that provide reusable container companies and cart branding and design have emerged as well. Burmeister says, “Portland grabs on to new food and drink trends quickly and embraces them fully. We’ve done it with beer, artisan coffee, and farmers markets” (as quoted in Burningham, 2009). In short, the food cart industry in Portland continually produces new jobs, generates economic revenue for underutilized land, and creates new forms of public life.

However, food cart pods are vulnerable to land development pressures. As the value of land in Portland increases, vendors grow concerned over relocating. In June 2014, some food pod property owners announced that they were closing their lots to allow for new housing developments. In the meantime, vendors have managed to survive by relocating to other lots (e.g. the new Rose City Garden or Cartlandia pods) through their personal networks and lot owner negotiations. Despite the growing concern over pod redevelopment pressures, the growth of new pods suggests Portland has a sustainable food cart industry.

Overall, Portland does not suffer from anticompetitive restrictions that stifle entrepreneurship, as many other cities do. Their food cart economy is able to flourish with a relaxed and supportive regulatory climate. More importantly, key figures such as food cart spokesmen, successful vendors, developer Roger Goldingay, the Urban Vitality Group, and planner Alma Flores have each supported the industry through different professional and social networks. Withstanding land development pressures, Portland’s food cart vendors have had a lasting effect on Portland’s social and economic landscape. Portland’s food vending market illustrates the ways in which small-scale economic development can transform a city’s local economy.

Chapter 8: New Vending Landscapes and Local Activism: Charlotte, North Carolina

Several years after Kogi BBQ began serving the streets of West Hollywood in 2009, food truck vendors emerged in Charlotte, North Carolina. In 2011, a small network of vendors gradually established a following in Charlotte after many months of uncertainty. One year later, the food truck industry gained momentum and expanded with weekly events drawing hundreds of people.

With financial services, motor sports, and energy as leading industries of the Charlotte economy, the city is characterized by steady employment growth with a 40 % increase since the 2000 US Census (Purvis and Off, 2014). Charlotte is also home to a younger population that lives in the trendy downtown neighborhood of North Davidson, an area that has a variety of affordable rental properties (average \$835 a month, for example) and a vibrant nightlife. Yet, Charlotte lacks ethnic diversity with a 50% White, 35% Black or African American, and 13% Hispanic or Latino population (US Census, 2010). Given Charlotte's landscape is primarily car-centric, concentrated shopping and restaurant areas, such as SouthPark Mall, North Lake Mall, and Concord Mills shopping outlets, also characterize the city. Despite the recent LYNX light rail development in 2010 that has created some walkable centers, the overall lack of walkable environments has produced a fragmented landscape with concentrated centers of commerce.

The slow growth of modern food trucks in Charlotte can be attributed to a variety of political and cultural factors. The most challenging barrier for vendors in Charlotte has been the strict regulations imposed in 2008 that limit the ability of vendors to locate on public streets in the downtown business district and neighborhoods. For Charlotte's Democratic National Convention in 2012, vendors were excluded from public property entirely and vending on private property required a special event permit (Figure 8-1). These types of restrictions forced vendors to actively seek out business partnerships with office parks, breweries, and campuses on the periphery of the central business district (Figure 8-2). Furthermore, unlike other cities, Charlotte vendors worked hard to educate the general public about the inventive and high-quality foods trucks can offer. Prior to 2011, a few pushcart vendors operated on downtown sidewalks and loncheras, who served laborers during the evening hours, were usually tucked away in the industrial landscape along South Boulevard and Central Avenue. At the time, Charlotte's primarily White population typically disregarded this small vending population. In 2012, "new wave" vending began to gain traction as weekly food truck events established a visibility to a

wide audience. Today, 125 mobile food units (trucks and trailers) and 56 single operator pushcarts have registered health permits in Charlotte-Mecklenburg County (Mecklenburg, 2014). Approximately 40 of these vendors are “new wave” mobile vendors (FoodTruckIn, 2014), and 20 operate on any given day.

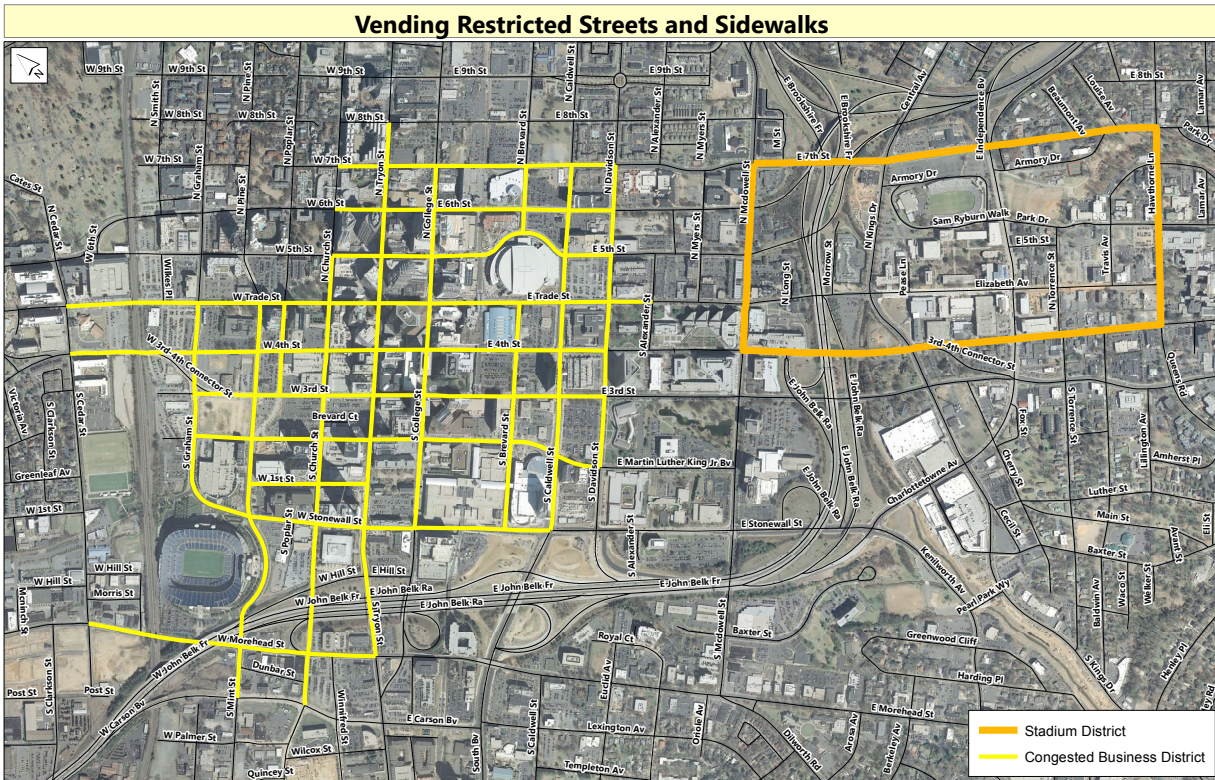


Figure 8-1. Restricted streets and sidewalks during the 2012 Democratic National Convention. Source: <http://charmec.org>.



Figure 8-2. Left: Food vendor at office park location, May 28, 2013. Right: Food vendor at brewery location, May 29, 2013. Source: Author.

8.1 Food Truck Friday

When Kelli Crisan arrived in Charlotte in August of 2010, she was eager to start her own food business. She noticed the increasing popularity of the food truck industry around the country and questioned why Charlotte, a city with a famous culinary school, was without food trucks.¹ In May 2011, Kelli started her Roaming Fork business in a refurbished vending trailer and began seeking locations on vacant lots and office parks. After building a relationship with the owner of a vacant lot that hosted a weekend tailgate flea market in the South End District, she began setting up her operation every first Friday night for three months (personal communication, May 29, 2013). Meanwhile, Charlotte Center City Partners, a nonprofit organization, similar to that of a downtown association, hosted the Chowdown Uptown food events. Ted Boyd, a member of Center City Partners and the manager of the South End District's neighborhood and economic development saw an opportunity to develop a similar event for food trucks in the South End District. He organized a Chowdown South End food truck event on October 27, 2010 with six trucks outside the Atherton Mill grocery market. The presence of 500 attendees at the event confirmed the need for another, which took place again the following month.

Following the success of the Chowdown South End food truck event, Ted Boyd developed a relationship with the owner of an acre of land at Park Avenue and Camden Road where Kelli parked, and he soon began hosting food trucks more frequently as an extension of an art crawl. Charlotte Center City Partners offered marketing and equipment for the vendors each Friday and the group became a key leader in building food truck awareness with city officials. A rising food truck vendor, the lot owner, and Ted Boyd partnered to organize "Food Truck Friday" and in the spring months of 2012, the event grew rapidly (Figure 8-3). Ted Boyd believes the branding of the event as Food Truck Friday, without references to its exact location, made it more recognizable to a regional audience creating "exposure beyond if it were a local hashtag" (personal communication, May 29, 2013).

The lot used for the event is situated in a reviving industrial district and ideally located ten minutes from a Lynx light rail stop. A nearby small grocery market proves essentials for restroom and alcohol purchases that are brought on-site. Today, the lot hosts 20 vendors every Friday night from 5:00pm to 9:00pm and acts as a destination space rather than a response to the rhythms of daily life with each vendor serving between 300-400 tickets in four hours (Portillo, 2014). The event also contributes to the surrounding businesses via a spillover effect. The general manager of Phat Burrito, an adjacent brick and mortar restaurant, said the weekly gathering doubles their sales. "It draws maybe 2,500 to 3,000 people on a nice night, and when the food trucks sell out of food, there are as couple hundred people that come over to the restaurant" (as quoted in Portillo, 2014).

Loncheras do not attend the food truck events and reasons for this include their inability to operate at high volumes, their lack of upkeep of their trucks, and their lack of motivation to attend such events. Vendors have mentioned that loncheras are not aggressive enough and rarely approach event organizers. "New wave" vendors have also mentioned that upgrading their trucks to make them more attractive would greatly improve their customer base to include more affluent populations. Updates, such as new paint and creative truck designs, may also change negative stigmas about the trucks' cleanliness.

¹ Kelli notes that Harvest Moon Grill was the only food trailer that she knew of at the time.

Aside from the Food Truck Friday event, food trucks cater food for business offices and private events. Similar to vendors in other cities, catering typically comprises a third to half of a food truck vendor's business. Unique to Charlotte are multiple office parks that dot the periphery of the city that are accompanied by shopping centers. Vendors rely on these office park locations for heavy, routine lunchtime sales.



Figure 8-3. Appropriation of a vacant lot in the South End District of Charlotte, NC. May 13, 2013 & June 6, 2013. Source: Author.

8.2 Vendor Community and Local Networks

Despite the varying business approaches among vendors (e.g. product quality versus profit, for example), Charlotte's food vendors operate as a community that supports one another in a variety of ways. For instance, a single vendor organizes the schedule for the Food Truck Friday events, rather than the lot owner. This occurrence could potentially create feelings of resentment with regard to vendor selection given the event wait-list; however, it reveals the vendors are self-organizing and must communicate with each other to establish a turn in the lot rotation.

Charlotte's Johnson and Whales University campus, a private school conveniently located in the downtown area and known for its culinary arts and hospitality programs, has prompted the expansion of vendors. The 2,500-student campus offers courses in food service entrepreneurship and prepares many graduates with the skills needed to start a food truck company. For instance, a Johnson and Whales University culinary graduate started the popular food truck business Roots-Local.Good.Food that only sources local ingredients. After growing passionate about food sustainability and the poor quality of food served in Charlotte restaurants, he began meeting local farmers around the area in order to establish a network of local suppliers. Likewise, one of the two Urban Legend food trucks is operated by a woman who graduated with her Bachelor's in Food and Beverage Management from Johnson and Whales. Kelli Crisan, the owner of Roaming Fork, has also hired culinary students to cook on her food truck.

In addition to the University's role in supporting a network of vendors, Charlotte's commissary kitchens prove to be a successful environment that fosters community and support. All Charlotte vendors use a separate kitchen space to prepare and store large catering orders for private events. The commissary kitchen operates as a home base where vendors share and schedule kitchen space and cooking equipment (Figure 8-4). Unlike California's commissaries

that do not have kitchens, in Mecklenburg County vendors can park their vending unit overnight in the same location that they prepare and cook their food. In 2013, an established real estate developer in Charlotte sought to distribute his family's pimento cheese recipe in regional food markets and he soon constructed a food vendor commissary kitchen out of an empty 5,000 square-foot office park building. The commissary kitchen includes a wet kitchen, bakery, packaging area, walk-in fridge and freezer, and dry storage area. The highest construction costs included upgrading the site with improved water and sewage capabilities and expensive kitchen equipment (personal communication, May 29, 2013). Today, the commissary offers educational classes where vendors can support their businesses through networking and sharing best practices (Figure 8-4). With good knowledge of the market demand for large-scale shared kitchens, the developer hopes to eventually open new commissary kitchens in Raleigh, Greensboro, Winston-Salem, Wilmington, Mooresville, and Columbia.



Figure 8-4. Carolina Kitchen commissary kitchen, May 28 & June 2, 2013. Source: Author.

8.3 Middle Class Consumer Education

“New wave” vendors in Charlotte have taken a unique role in educating Charlotte residents and companies about the benefits of food vending. For instance, Crisan mentioned, “Opposed to roach coaches that sold the prepackaged stuff, I had to educate them on how gourmet food trucks actually serve quality food” (personal communication, June 17, 2013). In many instances, vendors’ operational strategies reflect the ways in which vendors shape their business around their expected audience (changing menu items, for example).

Today, vendors use a variety of online tools to educate their customers. Also, vendors are aware that different age groups learn about the food trucks using different mediums. Crisan explains, “young college kids love Instagram, they love photography that speaks. My generation, people in their late thirties and forties, use Twitter and Facebook. People in their fifties are using just Facebook and anyone older than fifty uses just websites who type in the name of my business online” (personal communication, June 17, 2013). Crisan, like many well-connected vendors, uses integrative platforms like HootSuite that allow automatic postings on multiple social media platforms with a single command. She finds this information technology essential given her busy schedule as a small business owner. Crisan also uses food magazines as another publicity avenue in order to reach out to populations that do not use information technology. Crisan’s Roaming Fork business was featured in the summer 2012 issue of *Ballantyne Magazine*

and the online *Charlotte Magazine* in April 2013. Crisan also has numerous food and business awards that promote her visibility on media platforms such as Elevate Magazine, CharlotteAbout.com, CBS Radio, and QC Exclusive. Unlike the Papi Queso food truck that opened a year later in 2013 and whose following grew rapidly in the beginning, Crisan experienced slower growth as she sought to first educate Charlotte customers about the benefits of food trucks.

In addition to educating consumers, vendors have also actively educated corporations and office park owners. In the beginning of her business, Crisan traveled to the top five business parks to determine how many people occupy the buildings in different corporate campuses as well as the proximity of the office buildings to restaurants and convenient stores in each area. After creating a portfolio that emphasized the quality of food she served out, she approached property managers to educate them on the benefits of having a food truck on site. Property owners accepted her business proposal and gave her a regular weekly spot in Morrocroft financial business center (Figure 8-5) home to Regions bank and Morgan Stanely. Today, office workers consistently depend on Crisan's truck for their lunchtime meals. Crisan, who formerly worked in real estate and the new homes construction industry, sees great potential for food trucks improving cities. She envisions franchising her business in other cities and simultaneously educating cities on the benefits and best practices of food trucks.



Figure 8-5. Food truck at Morrocroft office park, May 30, 2013. Source: Author.

While vendors lead efforts to educate customers, they also tailor their business practices to accommodate customers who are unfamiliar with different cultural foods. The majority of Charlotte vendors serve foods that resemble reinventions of American style cuisine (e.g. grilled cheese, pizza, ice cream, and fusion tacos) rather than the variety of Peruvian, Ethiopian, and Korean foods you see in other cities. Some vendors even cater to the customer palettes and

spending power indicative of certain locations. For example, the Herban Legend food truck serves a variety of curries and lamb dishes outside Bank of America, a company that employs a large Indian population. When serving on the University of North Carolina, Charlotte campus, vendors will cater to students and serve small and more affordable dishes such as \$3.00 tacos.

Furthermore, Charlotte’s food vending scene illustrates how food truck gatherings are central to educating and expanding the awareness of the quality foods that come from vendors. Boyd says, “vending wouldn’t be as successful here if they weren’t in groups because it brings people together who want to have social interaction around some sort of sensory experience” (personal communication, May 29, 2013). Furthermore, Boyd explains, “you want to continue to make it interesting because if its the same truck, it will get stale and especially at the point where we are now with people waiting in lines to get food, you know they will be more inclined to try something new” (personal communication, May 29, 2013). Similar to Off the Grid food truck events in San Francisco, new foods and amusements are needed to generate an excitable food truck event outing. Continuing in the tradition of motorcar and monster truck events, rallies are often used to promote food truck events in Charlotte. Events also include games and activities for adults (Figure 8-6).

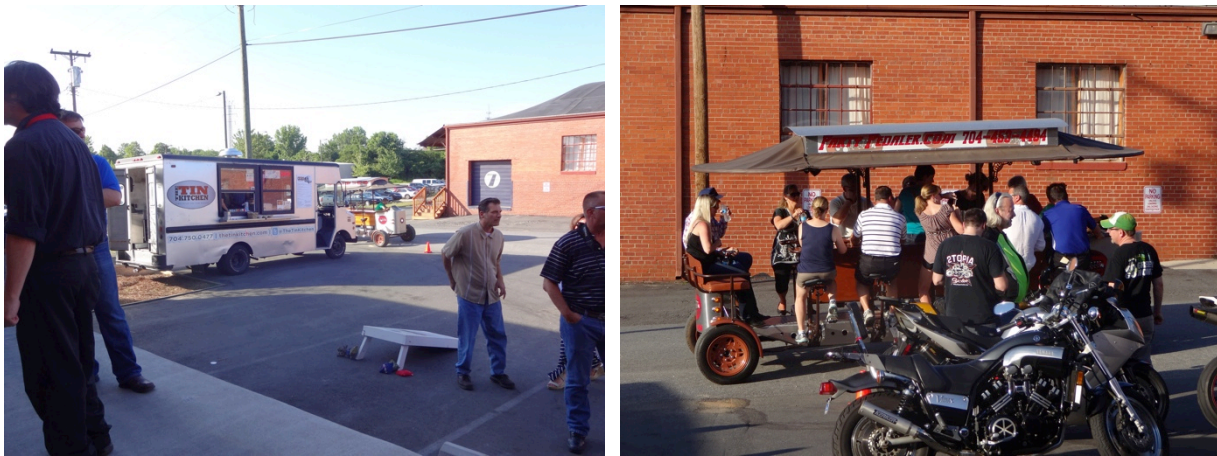


Figure 8-6. Attractions pair with food trucks and NoDa Brewery, May 28, 2013. Source: Author.

8.4 Regulatory Controls and Vendor Activism

As the “new wave” vending industry continues to grow, city and state planners have grown increasingly concerned about where and when a vendor is allowed to park and how they should conduct their business in certain spaces. In many cities, such as Los Angeles, Philadelphia, Charlotte, and Washington D.C., among others, vendors have formed food truck advocacy organizations to establish their rights per changing ordinances. Critical theorist Nancy Fraser called these groups that create and circulate oppositional interests and needs “subaltern publics” (Fraser, 1992). Vendors are well aware of the exclusionary mechanisms put into policies that limit their operations and have decided that working together can mitigate over burdensome regulations. For example, the City of Charlotte grew concerned about the related crime, noise along the primary boulevards, and traffic congestion and sought to revamp its food vending ordinances by enacting strict controls on public right of ways in 2008. Among the many regulations implemented, the most impactful limit the number of days a vendor can serve at a single location to 90 per year, limit the hours of operation from 8:00am to 9:00pm, require 400

feet of separation from another vendor and residential zoned districts, and restrict vending entirely to streets outside the central business district. At the time, loncheras, who were the dominant vending population, felt that the new regulations directly attacked their established 50-vendor community. Following the policy change, concerns soon emerged over potential social injustices in a regulatory system that governs a city where the three largest populations consist of White (50%), African American (35%), and Hispanic or Latino (13.1%) residents. A Latino activist stated to Charlotte's local news station, "We are talking about an economic class that happens to be Hispanic" (wsoctv.com, 2008). On the other hand, residents argued the regulations are meant to eliminate noise, trash, and loitering. In an attempt to change what felt like a discriminatory act, the loncheras launched the "Carne Asada Is Not A Crime" campaign and petitioned to amend the ordinance. Unfortunately, their efforts were too late for the passing of the regulations.

In the US, the Latino population's long history of immigration has embedded specific associations of illegality that has prompted many political debates over their presence in local economies and communities. The locations that they occupy also carry these anti-immigrant sentiments that lead other racial groups and urban officials to completely ignore or scrutinize their presence. In American society, the debate over inclusion and exclusion of citizenship manifests spatially for these vendors who are subject to harassment and socio-economic prejudices. Lonchera victories in multiple Los Angeles court cases (e.g., *People v. Garcia*, 2008; *Gonzalez v. City of Los Angeles Dept. of Transportation*, 2009) confirm that local regulation and policing cannot focus on matters such as restaurant competition or a neighborhood's "quality of life" (Hernandez-Lopez, 2010, 17). Rather, matters of public safety, a term that can be loosely interpreted, should be of primary concern to regulators. Unlike contemporary vendors, the struggles and discrimination that loncheras have encountered materialize in the spaces they occupy. Today in Charlotte, the number of loncheras has significantly decreased while the number of gourmet food trucks has risen. The expansion of modern food trucks proved successful due to their carefully made business plans and aggressive tactics when seeking new locations to arrange property agreements.

An analysis completed by Julie Rose of a local radio station (WAFE/WFHE 90.7) found racial biases in the methods of the city's enforcement of Charlotte's vendors. While much of Charlotte's vending enforcement is complaint driven, all 16 violations since the emergence of "new wave" vendors have been cited to loncheras. A lonchera stated, "They are making it hard for us. This is our job. It's not fair" (as quoted in Rose, 2012). The code enforcement explains, "We would inspect any location that comes to our attention or is brought to our attention. There is no delineation with regard to what type of truck" (as quoted in Rose, 2012). Debates over race and ethnicity are central in Charlotte. Conflicting perspectives suggest many residents dislike the appearance of loncheras and would prefer to see them removed.

In April 2014, Charlotte's Planning Department proposed another lengthy set of regulations that restricted vendors from accepting requests from businesses that are not in officially zoned office parks, established a 100-foot no parking buffer from restaurants, and prohibited the vendors from gathering more than once a week in a specific location. "I don't think they are intentionally trying to harm food trucks...but, I do think they don't understand what we do," said a "new wave" vendor (Portillo, 2014: 1). In response to these new regulations, vendors launched Charlottefoodtruck.org and formed the Charlotte Food Truck Federation to support their cause and businesses. The organization also petitioned the regulations and attended citizen advisory meetings. These grassroots advocacy efforts materialized in the City of

Charlotte's Citizen Advisory Group where vendors helped to establish a new set of ordinances that reduce the 400-foot proximity ban from residential areas to 100 feet and 50 feet from brick and mortar food establishments, allow vendors to serve past 9:00pm, and eliminate the 400-foot separation between trucks to allow for multiples on a single acre lot. Despite these improvements, vendors were extremely disappointed with having to pay fees to the city for private events. As a profit generator for the City of Charlotte, vendors find the permits cause excessive paperwork and costs that are passed on to their customers. Furthermore, some vendors feel that because Charlotte's rules and regulations are so strict, difficult to work around, and expensive that new vendors entering the market, who may not know the rules, could ruin the current food vending scene that many of the original vendors worked so hard to build.

Charlotte's regulatory tensions represent debates occurring across the country. Planners seeking to control and secure urban landscapes impose regulations as a reaction to complaints about noise, trash, crime, and business competition. In doing so, regulators confine vendors to specific areas of a city that do little to serve communities or areas in desperate need of food options. Richard Sennett acknowledges public space as always being a hybrid of politics and commerce in the modern city (1992: 21-22). Similarly, vending spaces are built on exclusion and politics. Indeed, vendors and policy makers will continue to debate the proper and best use of public space. As the industry continues to grow, Charlotte's vendors, along with vendors in many other cities, will face new regulatory hurdles.

Chapter 9: Conclusion: Mobile Food Vending, Space and the City

Mobile food vending is a complex topic that reveals multiple urban issues. This study illuminates the limitations of using a single explanatory framework and the necessity for multiple frameworks at different levels of abstraction. Two sets of questions guided this research. The first set seeks to identify *how* mobile food vendors operate to understand the opportunities and constraints within the industry, whereas the second address the social and political implications of vending. Both lenses challenge conventional ways of knowing urban space and offer alternative urban models for analysis.

9.1 Findings

Initial findings regarding vendor operations show that a range of diverse skill sets influence how vendors operate their business. Many vendors worked in the restaurant industry for years before operating a food truck while others made career changes and have little business or culinary experience. In both new and traditional forms of vending, local networks of friends and family support vendor operations. Benefits of owning a food truck include entrepreneurial freedom, a sense of proprietorship, flexible work schedules, and the ability to relocate if sales are slow. Despite vendor autonomy in their work, challenges that arise during their daily operations include slow sales, labor-intensive truck preparation, locating an appropriate serving location, and the subsequent conflicts that can occur over the use of space. Many vendors choose to start a food truck because it has lower risks and fewer barriers to entry than starting a restaurant business. Virtually all food vendors enter the business to fulfill their entrepreneurial aspirations and seek to expand their business.

Another finding suggests food truck markets and events have become an attractive way of doing business for vendors. Such events simultaneously support public and private sector interests. While food truck markets may expand opportunities for vendors, they also produce at least one-third of a food truck's business. The relationships that formed between food truck vendors and food truck event companies during the launch of the industry in San Francisco in 2009 created a supportive and heavily relied upon infrastructure for food vendors. Furthermore, markets are created through public and private interests that align over community building and placemaking narratives. Despite the positive visions of public and private interests, they tend to neglect future plans for the sustainability of the food truck industry.

Applying the analytical tools of actor-network theory revealed a variety of findings in regard to vendor operations. For instance, ANT illustrates the ways food trucks and communication technologies become powerful actors. Within the socio-technical assemblage of vending, mobility provides vendors the flexibility to move about cities and the freedom to relocate when needed. Thus vendors can now target areas of high customer demand more easily. The multiple locations vendors encounter on-the-fly are supported through information technology that provides vendors with a way to pre-notify customers of their new locations. This mutual reinforcement between vendor mobilization and communication technology provides a way of promoting a business and assuring that each location generates a sufficient customer base. Additionally, savvy vendors even capitalize on their unpredictability of location. Chef Roy Choi and his fleet of food trucks, for example, have been known to announce locations only a few hours before serving, which builds anticipation and intrigue among customers who seek a specific vendor's cuisine.

A robust network of online communication is constructed around topics of food vending through social media platforms, blog websites, and food review websites. Patrons, vendors, and food bloggers become linked through dialogues and interactions that begin online. As vendors gain popularity through 'likes' and positive reviews, small social networks grow. In physical space, vendor interaction and chance encounters among patrons foster a physical community with similar interests of exploring new foods. Although past dystopian views of technology suggest the loss of a particular social dimension or the significance of place, information technology, in this case, supports the growth of new social encounters and forms of public life. Communication technology also allows for the discovery of unknown places and creates new opportunities for social life to flourish.

Another finding shows mobile food vendors unique position in the public realm of the street makes them vulnerable to contestation. Complaints of unfair competition dominate discussions leading vendors to challenge ambiguous policies and top-down planning by forming support networks. In Los Angeles and Charlotte, these grassroots efforts among vendors eventually evolve into established organizations that provide legal advice and representation for those who feel victimized by overly burdensome laws and citations. By challenging preconceived notions about food vending businesses in court, vendors become empowered actors capable of shaping regulation.

Contestation over space results in the exclusion of food trucks from certain areas of the city and agreements that do not fully satisfy what both parties desire. The reevaluation of many local vending ordinances result in both constraint and acceptance. News media repeatedly report on cities loosening vending regulations and recognizing their economic benefits (Garrison, 2015; Hilario, 2015; Harrison, 2015), whereas other city's continue to restrain their practices (Leone, 2015; McKay, 2015; Stewart, 2015). While there are positive trends, lengthy permitting processes, unclear and ambiguous vending ordinances, and the inability of local governments to settle negative disputes surrounding vending show that high-level administration aims for broad planning and policy-making and understands little regarding how the policies materialize in the everyday environment. Council members, for example, rarely see the congruencies that emerge when regulations are enforced. Regulations written solely in English and with complex legal jargon are common barriers vendors face making it difficult to follow rules properly. In many cities, enforcement of the law is the administration's first response to addressing complaints, rather than seeking more educational and proactive alternatives.

9.2 Pluses and Minuses

There are many reasons to support mobile food vending in cities; however, the drawbacks hinder the industry from reaching its full potential. Planners and government are beginning to recognize the social and economic benefits of mobile food vendors as their effects become more established. Recent trends in city planning across the country include mobile vendors in their reactivation programs.

Despite the resistance from brick-and-mortar business owners, mobile food vendors contribute to the economic development of local settings in many ways. This research, as well as other studies, shows that rather than detracting business from an area, vendors are known to foster commerce in communities. More specifically, rather than pulling labor away from places and economic activities in need of growth, vendors jumpstart commerce through pedestrian activity and spill over effects. Vendors also contribute to city and county public works, parks and recreation, local economic development, and public health budgets through business taxes and permit fees. Cities with affordable fees can encourage easier entry into the market. Both customers and vendors spend locally, sustaining local commerce and investment. Moreover, the food truck model extends to other forms of mobile commerce, such as mobile retail, food delivery, libraries, and pet stores. Many new businesses prefer to test their brands with food trucks given the rising cost of property values and the hefty financial risks involved in starting a storefront business. Moreover, mobile food vendors contribute to the growing need of food access in undeserved areas of cities. In many areas, food trucks provide healthier foods than nearby stores. Finally, food trucks are supported by a cultural movement of educated health conscious customers that support a greater awareness of healthy food in the American diet. While it is unclear how much of an existing local economy is needed to sustain vending activity, mobile food vendors are proven to generate economic activity in both celebrated, opportunistic areas and those that are neglected.

Food vendors also transform the public realm and social life of cities across the US in significant ways. Lefebvre's notion of the *oeuvre*, or the urban milieu that is participatory in nature, suggests urban citizens have a right to appropriate and modify their environment, even in oppressive economic conditions. The *oeuvre* is applicable to contemporary vendors who temporarily participate in and enact urban settings. By participating in the city, food trucks bring new cultural foods and social activity. An extreme example is the Granada Hills Grubfest located north of downtown Los Angeles. The event hosts 43 food trucks every Friday evening. With no formal organization by the city, vendors line a neglected main street drawing hundreds of pedestrians for a vibrant multi-cultural food experience. The presence of vendors in urban settings can also increase feelings of safety and security per the presence of people. Jane Jacob's eyes-on-the-street maintains the same significance today as it did in the 1960s. Further enhancing social life, food vendors promote walkability and contribute to current urban design efforts that seek new ways to create more equitable street designs that favor all modes of transit (the Complete Streets movement, for example). The social benefits of food vendors participating the public realm far out-weigh the disadvantages.

Public and private partnerships in many cities create complex, co-dependent relationships between vendors, government, and private companies. The subliminal ways that city governments support organized vending events, such as deregulating parks for events, promoting community, and turning to company organizers for advice, suggest that government assumes partial responsibility for the livelihood of the food truck industry. The increasing acceptance on behalf of government officials also suggests they view food vending as a public good. Yet, there

is currently little effort underway to establish a long-term plan that sustains the industry. If a food truck organizing company fails, no one is responsible for the collapse of the industry. Moreover, the use of community building and placemaking as narratives to promote the industry on the behalf of public and private sectors neglects the nuances of the diverse communities in metropolitan areas. In other words, the specific circumstances and contexts of neighborhoods that may welcome or disapprove of vending activity need more careful attention.

Information technology also produces negative effects such as reinforcing social divisions among those who have and do not have access. The digital divide (Norris, 2001), which refers to inequalities afforded by the access, use, or knowledge of information technology, creates disparities between the haves and have nots. In food vending, new wave vendors repeatedly serve a particular affluent social class who is highly fluent in the use of technology. This excludes those who cannot afford technologies and adults who have never used them. Many vendors, who are not fluent with technology, hire specialized employees for marketing or assign social media tasks to their teenage family members.

Accusations of unfair competition from restaurants also continue to hinder the development of food vending. Arguments against food trucks are being refuted by food truck advocates such as the Institute for Justice in Washington D.C. who won a landmark case in El Paso, Texas and are now suing the City of Chicago. These efforts are significant and will likely expand across the nation as governments become more aware that the food sector can accommodate multiple industry markets. Despite these drawbacks, city planners are more often than not valuing food vendors as an asset to city development.

9.3 A Planner's Toolkit

Mobile food vendors' lack of permanency, self-sufficiency, and the ability to attract people makes them highly attractive outlets for activating public urban spaces. Prior to the tactical urbanism movement of the recent decade, few urban designers closely addressed or regarded temporary activities as major catalysts for urban redevelopment. However, today they are starting to value the ways in which vendors contribute to the public realm of cities and challenge conventional planning models.

In the future, government officials should enact a variety of strategies to ensure the longevity of the mobile food vending industry. First, city governments must increase efforts to assist small business owners. Recognizing small business as a significant economic and social contributor in cities supports middle to low-income populations and maintains equitable levels of control at the local level. While centralizing and containing vendors in areas provides more opportunity to control their activity and streamline vendor permitting, the model is less sustainable in the long term as it concentrates and limits vendors' spatial opportunities. Dispersing vendors throughout cities is not as advantageous in terms of vendor or industry profits; however, it does foster independence and locally-based agreements that sustain local community development.

Second, governments should focus on educating vendors before taking enforcement measures. Hosting community workshops and presentations on the proper ways to handle food, maintain a truck in public space, and trouble-shoot are a few possible educational objectives that will help vendors understand established rules. Ordinances, codes, and instructional pamphlets should be distributed in Spanish, Vietnamese, and Mandarin Chinese to reduce language barriers and vendor misunderstandings.

Third, city governments should work towards better integration and interaction between high-level administration in charge of deciding food vending regulations and the enforcement personnel who monitor vendors on the ground. Police and public health inspectors are taxed with interpreting a variety of detailed or ambiguous codes that result in invalid ticketing and unneeded costly fines. In addition to enforcement, city personnel who approve and permit vendors are typically under staffed in relation to the growth of the industry.

Finally, data can inform a host of more efficient ways to plan and analyze cities. Contemporary vendors using of Twitter provide an abundance of data that can be analyzed to better understand patterns and flows of vending activity. For instance, spatial analysis of real-time tweets (see also Appendix B) can reveal the dynamics of mobile vendors in relation to incomes, ethnicities, and social classes throughout a city. Transportation planners could analyze vending locations in relation to real-time traffic flows in order to better predict traffic congestion. In addition to Twitter, data produced and collected by companies such as Roaming Hunger and Off the Grid can provide real-time GPS data. Thus information technologies provide an abundance of data that can improve the transparency of mobile activities.

9.4 Theoretical Reflections

This research draws from two theoretical frameworks in order to analyze and define modern food vending. With a particular lens for the social, material, and digital relationships in the built environment, these theories build towards a new understanding of mobile food vending. First, actor-network theory (ANT) provides a lens to explore the operations of contemporary vendors as an integrated social, spatial, and material network. Opposed to conventional understandings of space that are spatially ordered, socially controlled, and physically predictable, ANT provides a way to understand networked relationships between humans and space. In this case, space shapes activities and vice versa. This challenges both conventional notions of space and the vertical structures of agency. ANT illustrates social phenomena as fully relational process whereby power becomes an immanent effect of association, rather than hierarchal (see also Chapter 2.2).

The second theoretical framework is concerned with mobile food vendors' struggles over rights to operate their vending business (see also Chapter 2.1) and draws from Lefebvre's notion of the "right to the city" (1996). The exercising and claiming of rights develop over issues concerning vendors' entrepreneurial freedoms, economic and social acceptance, and both perceived and real illegality. In other words, vendors' rights to use public spaces must overcome a host of political and economic challenges (see also Chapter 5, Los Angeles). In these political spaces, state agencies are the decision makers whose voices have the final say in matters of regulation and deregulation. Institutional actors also have close relationships with larger sectors of society that can guarantee consistent contributions towards prosperous economic development. In opposition to oppressive regulations and dominate modes of planning, food vending organizations establish agency by confronting the government or the restaurant industry in court. In many cases, vending organizations create more equitable long-term impacts for future vending generations. Opposed to the ideal of a democracy where rights are equal and shared, the "right to the city" framework illuminates structures of power that are embedded in the processes and procedures of decision making.

These two theoretical frameworks can be synthesized to offer a new way for urban designers to conceptualize who defines and participates in the public realm. Socially, food

vendors offer a visible form of democratic activity where encounters with strangers and neighbors may foster a safe and well-functioning social atmosphere. As actors in the public realm of cities, food vendors exercise their rights to use public space in opposition to state interests. Debates among vendors, city officials, and business owners emerge from protectionist fears of property investment and ownership. Outcomes typically restrain vendors' operations and entrepreneurial freedoms.

Both theoretical frameworks have advantages and disadvantages; however, they offer useful concepts and analytical tools to understand the multiple layers of mobile food vending. They also show that in different places mobile food vending has a very different effect. In Los Angeles both loncheras and new wave food trucks chart parallel paths and encounter resistance in ways that respond to different social and cultural environments. In the San Francisco Bay Area, the modern food trucks rest on private and public sector interests that align to create a robust industry of food truck markets at the expense of food vendors' autonomy. Portland's artisan economy exemplifies a rare food cart democracy characterized by bureaucratic ease and impassioned local actors. Finally, Charlotte's more recent vendor growth relies on strong vendor activism and the sharing of local knowledge to alter unjust regulations. These diverse findings suggest food vending is highly dependent on local circumstances that are social, political, economic, and regulatory. Through this analysis, I hope to expand conventional understandings of mobile food vending to promote continued investment in the public realm of cities.

Works Cited

- Aibar, E., & Bijker, W. (1997). Constructing a city: The Cerda plan for the extension of Barcelona. *Science, Technology, & Human Values*, 22(1), 3-30.
- AlSayyad, N. (2001). Global Norms and Urban Forms in the Age of Tourism: Manufacturing Heritage, consuming Tradition. In N. AlSayyad (Ed.), *Consuming traditions, manufacturing heritage: Global norms and urban forms in the age of tourism* (pp. 1-33). New York, NY: Routledge.
- AlSayyad, N. (2004). Urban informality as a 'new' way of life. In A. Roy & N. AlSayyad (Eds.), *Urban informality: Transnational perspectives from the Middle East, Latin America, and South Asia* (pp. 7-31). Lanham, MD: Lexington Books.
- AlSayyad, N., & Guvenc, M. (2013). Virtual uprisings: On the interaction of new social media, traditional media coverage, and urban space during the 'Arab spring.' *Urban Studies*. Epub ahead of print 10 October. doi: 10.1177/0042098013505881
- Alvarez, A. (2015). IBISWorld industry report 0D4322-food trucks. *IBISWorld*. Retrieved from <http://www.ibisworld.com/industry/food-trucks.html>
- Appadurai, A. (1986). *The social life of things: Commodities in cultural perspective*. Cambridge, UK: Cambridge University Press.
- Arellano, G. (2012a). *Taco USA: How Mexican food conquered America*. New York, NY: Scribner.
- Arellano, G. (2012b). When we were red hot: S.F.'S tamale industry once ruled America. *SF Weekly*. Retrieved from <http://www.sfweekly.com/sanfrancisco/when-we-were-red-hot-sfs-tamale-industry-once-ruled-america/Content?oid=2184706&showFullText=true>

- Arieff, A. (2013, December 13). What tech hasn't learned from urban planning. *New York Times*. Retrieved from <http://www.nytimes.com/2013/12/14/opinion/what-tech-hasnt-learned-from-urban-planning.html>
- Avila, E. (2004). *Popular culture in the age of white flight: Fear and fantasy in suburban Los Angeles*. Berkeley, CA: University of California Press.
- Avila, E. (2014). *The folklore of the freeway: Race and revolt in the modernist city*. Minneapolis, MN: University of Minnesota Press.
- Awan, N., Schneider, T., & Till, J. (2011). *Spatial agency: Other ways of doing architecture*. New York: Routledge.
- Axelrod, J. (2009). *Inventing utopia: Dreams and visions of the modern metropolis in jazz age Los Angeles*. Berkeley, CA: University of California Press.
- Banham, R. (1971). *Los Angeles: The architecture of four ecologies*. New York, NY: Harper and Row.
- Becerra, H. (2008, November 30). The fast track to change: The gold line's extension to the eastside is seen as a mixed blessing by some residents. *Los Angeles Times*. Retrieved from <http://articles.latimes.com/2008/nov/30/local/me-goldline30>
- Behrens, Z. (2010, June 11). Food fight: Tom LaBonge backlash begin after introducing food truck motions. *LAist*. Retrieved from http://laist.com/2010/06/11/food_fight_city_councilmember_wants.php
- Behrens, Z. (2010, July 8). Is Museum Square trying to block food trucks from parking on 5700 Wilshire? 'No comment,' says management. *LAist*. Retrieved from http://laist.com/2010/07/08/5700_wilshire_food_truck_war.php#photo-6
- Berger, M. L. (1991). The car's impact on the American family. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 57-74). Ann Arbor: University of Michigan Press.
- Bhat, R. V., & Waghray, K. (2000). Street foods in Latin America. In: A. P. Simopoulos & R. V. Bhat (Eds.), *Street foods* (pp. 123-137). New York, NY: Karger.
- Bhimji, F. (2010). Struggles, urban citizenship, and belonging: The experience of undocumented street vendors and food truck owners in Los Angeles. *Urban Anthropology and Studies of Cultural Systems and World Economic Development*, 39(4), 455-492.
- Bijker, W. E. (1987a). The social construction of the bakelite: Toward a theory of invention. In W. E. Bijker, T.P. Huges, & T.J. Pinch (Eds.), *The social construction of technological systems: New directions in the sociology and history of technology* (pp. 159-187). Cambridge, MA: MIT Press.

- Bijker, W. E., Hughes, T. P., & Pinch, T. J. (1987b). *The social construction of technological systems: New directions in the sociology and history of technology*. Cambridge, MA: MIT Press.
- Bijker, W. E. (1995). *Of bicycles, bakelites, and bulbs: Towards a theory of socio-technical change*. Cambridge, MA: MIT Press.
- Bishop, P., & Williams, L. (2012). *The temporary city*. London: Routledge.
- Bluestone, D. (1991). The pushcart evil: Peddlers, merchants, and New York City's streets, 1890-1940. *Journal of Urban History*, 18(1), 68-92.
- Bornstein, D. (2012, April 18). Conquering food deserts with green carts. *The New York Times*. Retrieved from http://opinionator.blogs.nytimes.com/2012/04/18/conquering-food-deserts-with-green-carts/?_php=true&_type=blogs&_r=0
- Bottles, S. L. (1991). Mass politics and the adoption of the automobile in Los Angeles. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 194-203). Ann Arbor: University of Michigan Press.
- Brennan, A. (2014). *ISISWorld industry report 0D4322-food trucks*. *ISISWorld.com*. Retrieved from <http://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4322>
- Bromley, R. (2000). Street vending and public policy: A global review. *International Journal of Sociology and Social Policy*, 20(1), 1-29.
- Brown, B. (2001, Autumn). Thing theory. *Critical Inquiry*, 28.
- Brown, B. (2003). *A sense of things*. Chicago, IL: University of Chicago Press.
- Brown, B. (2004). Thing theory. In B. Brown (Ed.), *Things*. Chicago, IL: University of Chicago Press.
- Brown, B. (2010). Materiality. In W.J.T. Mitchell & M. Hanson (Eds.), *Critical terms for media studies* (pp. 49-63). Chicago, IL: University of Chicago Press.
- Browne, G., Dominie, W., & Mayerson, K. (2014). Keep your wheels on: Mediating informality in the food cart industry. In V. Mukhija & A. Loukaitou-Sideris (Eds.), *The informal American city: Beyond taco trucks and day labor* (pp. 243-260). Cambridge, MA: MIT Press.
- Burmeister, B. (2014). Food carts Portland. [Web log post]. Retrieved from <http://www.foodcartsportland.com/>

- Burningham, L. (2009, December 17). Portland food carts push through recession. *Oregon Business Journal*. Retrieved from <http://www.oregonbusiness.com/articles/78-january-2010/2775-cash-and-carry>
- Burnstein, D. (1996) The vegetable man cometh: Political and moral choices in pushcart policy in progressive era. *New York History*, 77(1), 47-84.
- Burrell, J. (2009). The filed site as a network: A strategy for locating ethnographic research. *Field Methods*, 21(2), 181-199.
- Butler, S. (2014, August 8). From chuck wagon to pushcarts: The history of the food truck. *History Network*. Retrieved from <http://www.history.com/news/hungry-history/from-chuck-wagons-to-pushcarts-the-history-of-the-food-truck>
- Calabrese F., Colonna M., Lovisolo P., Parata, D., & Ratti, C. (2010). Real-time urban monitoring using cell phones: A case study in Rome. *IEEE Transactions in Intelligent Transportation Systems*. Epub ahead of print 4 October. doi: 10.1109/TITS.2010.2074196
- Caldwell, A. (2012). Will tweet for food: Microblogging food trucks—online, offline, and in line. In P. Williams-Forsson & C. Counihan (Eds.), *Taking food public: Redefining foodways in a changing world* (pp. 306-321). London, UK: Routledge.
- Cameron, Hawkins, & Associates. (2011). *Review of Toronto a la cart pilot project*. Toronto, Ontario: City of Toronto. Retrieved from <http://www.toronto.ca/legdocs/mmis/2011/ex/bgrd/backgroundfile-37419.pdf>
- Campbell, A. T., Eisenman, S. B., Lane, N. D., Miluzzo, E., Peterson, R., Lu, H., & Zheng, X. (2008). The rise of people-centric sensing. *IEEE Internet Computing*, 12(4), 12–21.
- Castells, M. (1996). *The information age: Economy, society and culture: Vol. 1: The rise of the network society*. Oxford, UK: Blackwell.
- Castells, M. (2000). *The information age: Economy, society, and culture: Vol. 1: The rise of the network society* (2nd ed.). Oxford, UK: Blackwell.
- Castells, M. (2009). *Communication power*. Oxford, UK: Oxford University Press.
- Castells, M. (2012). *Networks of outrage and hope: Social movements in the internet age*. Cambridge, UK: Polity Press.
- Castells, M., & Portes, A. (1989). World underneath: The origins, dynamics, and effects of the informal economy. In A. Portes, M. Castells, & L. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries* (pp.11-37). Baltimore, MD: Johns Hopkins University Press.

- Caspian, J. (2014, December 7). Roy Choi's master plan. *The California Sunday Magazine*, 28-39.
- CBS Los Angeles. (2015, March 16). Street vendor crackdown in L.A.'s MacArthur Park [Television Broadcast]. *CBS Los Angeles*. Retrieved from <http://losangeles.cbslocal.com/2015/03/16/video-shows-food-vendor-crackdown-in-l-a-s-macarthur-park/>
- CBS Los Angeles. (2013, October 16). Food truck that feeds homeless found be forced to move from streets of Hollywood. *CBS Los Angeles* [Television Broadcast]. Retrieved from <http://losangeles.cbslocal.com/2013/10/16/food-truck-that-feeds-homeless-could-be-forced-to-move-from-streets-of-hollywood/>
- Cervero, R. (1998). *The transit metropolis: A global inquiry*. Washington, D.C.: Island Press.
- Chamblee, S. (n. d.). Native plant road trips to Stephenville. *Neil Sperry's gardens: The definitive world of Texas horticulture* [Web log post]. Retrieved from <http://neilsperry.com/2009/12/native-plant-road-trip-to-stephenville/>
- Chastain, A. (2010). Food carts as retail real estate. *Quarterly & Urban Development Journal*, 2nd Quarter, 61-70.
- Choi, R. (2013, August). *A gateway to feed hunger: The promise of street food*. Presentation at the MAD3 Symposium. Copenhagen, Denmark.
- Choi, R., Nguyen, T., & Phan, N. (2013). *L.A. son, Roy Choi: My life, my city, my food*. New York, NY: Harper Collins.
- City of New York Department of Parks and Recreation. (2011). *Request for proposals: For the sale of specialty food from mobile food units at various locations citywide*. New York, NY: City of New York.
- City of San Francisco. (2012). *San Francisco neighborhoods socio-economic profiles: American community survey 2006-2010*. San Francisco Planning Department. San Francisco, CA
- City of Seattle. (2013). SDOT street use vending permits: Food vending site designation. Department of Transportation, City of Seattle. Retrieved from http://www.seattle.gov/transportation/stuse_vend.htm
- Coates, T. N., & Wang, O. (2010, August 11). Ode to the taco truck. *The Atlantic*. Retrieved from <http://www.theatlantic.com/national/archive/2010/08/ode-to-the-taco-truck/61292/>
- Crawford, M. (1991). The fifth ecology: Fantasy, the automobile, and Los Angeles. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 222-233). Ann Arbor, MI: University of Michigan Press.

- Crawford, M. (1994). Mi casa es su casa. *Assemblage*, 24, 12-19.
- Crawford, M. (1999). Blurring the boundaries: Public space and private life. In J. Chase, M. Crawford, & J. Kaliski (Eds.), *Everyday Urbanism* (pp. 22-35). New York, NY: Monacelli Press.
- Crawford, M. (2012, August). Urban interventions and the right to the city. *Architect*. Retrieved from http://www.architectmagazine.com/design/urban-interventions-and-the-right-to-the-city_o
- Crawford, M. (2014). The garage sale as informal economy and transformative urbanism. In V. Mukhija & A. Loukaitou-Sideris (Eds.), *The informal American city: Beyond taco trucks and day labor* (pp. 21-37). Cambridge, MA: MIT Press.
- Cross, J. C. (1991). The pushcart evil: Peddlers, merchants, and New York City's streets, 1890-1940. *Journal of Urban History*, 18(1): 68-92.
- Cross, J. C. (1998). *Informal politics: Street vendors and the state in Mexico City*. Stanford, CA: Stanford University Press.
- Cross, J. C. (2000). Street vendors, modernity, and postmodernity: Conflict and compromise in the global economy. *International Journal of Sociology and Social Policy*, 20(1/2), 30-52.
- Cross, J. C., & Morales, A. (2007). Introduction: Locating street markers in the modern/postmodern world. In J. Cross & A. Morales (Eds.), *Street entrepreneurs: People, place and politics in local and global perspective* (pp. 1-14). Abingdon, OX: Routledge.
- Cuff, D., Hansen, M., & Kang, J. (2008). Urban sensing: Out of the woods. *Communication of the ACM*, 51(3), 24-33.
- Culverwell, W. (2013, December 16). Retail revival: Food carts add to downtown's vibrancy. *Portland Business Journal*. Retrieved from <http://www.bizjournals.com/portland/blog/real-estate-daily/2013/12/retail-revival-food-carts-add-to.html?page=all>
- Cutno, M., Adriaenssens, Z., & Douangchai, V. L. (2010). *Atlanta street food feasibility study*. Atlanta, GA: Central Atlanta Progress. Retrieved from <http://www.scribd.com/doc/37485115/Atlanta-Street-Food-Feasibility-Study>
- Dalwadi, S. (2010). Integrating street vendors in city planning: The case of Vadodara. In S. Bhowmik (Ed.), *Street vendors in the global urban economy* (pp. 87-119). Tolstoy Marg, New Delhi: Routledge.
- Davis, M. (2000). *Magical urbanism: Latinos reinvent the U.S. city*. London, UK: Verso.

- De Certeau, M. (1984). *The practice of everyday life*. Berkeley, CA: University of California Press. (Originally published in French as *L'invention du quotidien. Vol. 1, Arts de faire'* 1980)
- De Grazia, V. (Ed.). (1996). *The sex of things: Gender and consumption in historical perspective*. Berkeley, CA: University of California Press.
- Deleuze, G., & Guattari, F. (1980). *A thousand plateaus: Capitalism and schizophrenia*. Paris, France: Minuit.
- De Soto, H. (1989). *The other path: The economic answer to terrorism*. New York: Harper & Row Publishers.
- Devlin, R. T. (2010). *Informal urbanism: Legal ambiguity, uncertainty, and the management of street food vending in New York City* (Doctoral dissertation). University of California, Berkeley. Available from ProQuest Dissertations and Theses database. (AAT 3413349)
- Dewalt, K. M., & Dewalt, B. R. (2011). *Participant observation: A guide for fieldworkers*. Plymouth, UK: Rowman and Littlefield.
- Dohan, D. (2003). *The price of poverty: Money, work, and culture in the Mexican American barrio*. Berkeley, CA: University of California Press.
- Douglas, G. (2014, March). Do-it-yourself urban design: The social practice of informal 'Improvement' through unauthorized alteration. *City and Community*, 13(1) 1-19. doi: 10.1111/cico.12029
- Dourish, P. (2001). *Where the action is: Foundations of embodied interaction*. Cambridge, MA: MIT Press.
- Dourish, P. (2006). Re-spacing place: 'Place' and 'space' ten years on. *Proceedings of CSCW'06: Computer supported collaborative work* (pp. 299-308). Alberta, Canada: ACM.
- Eagley, I. V. (2012). Criminal clinics in the pursuit of immigrant rights: Lessons from the loncheras. *UC Irvine Law Review*, 2(91), 91-124.
- Edison, R. (n. d.). Chuck wagon history and cooking [Web log post]. Retrieved from <http://americanchuckwagoncooking.blogspot.com/p/chuckwagon-historythere-is-majestic.html>
- Eisenman, S. B., & Campbell, A. T. (2006, November). SkiScape sensing. In *Proceedings of the 4th international conference on embedded network sensor systems* (pp. 401-402), Boulder, CO. New York, NY: ACM.

- Esparza, N., Walker, E. T., & Rossman, G. (2014). Trade associations and the legitimization of entrepreneurial movements: Collective action in the emerging gourmet food truck industry. *Nonprofit and Voluntary Sector Quarterly*, 43(2), 143-162.
- Farías, I. (2010). The reality of tourism: Framed activity and virtual ontology. In F. Ignacio & T. Bender (Eds.), *Urban assemblages: How actor-network theory changes urban studies* (pp. 209-228). London: Routledge.
- Farías, I., & Bender, T. (Eds.). (2010). *Urban assemblages: How actor-network theory changes urban studies*. London: Routledge.
- Farrelly, E. (2008). *Blubberland: The dangers of happiness*. Cambridge, MA: MIT Press.
- Fogelson, R. (1967). *Fragmented metropolis: Los Angeles, 1850-1930*. Cambridge, MA: Harvard University Press.
- FoodTrucksIn (2014). Charlotte, North Carolina truck listing. Retrieved from <http://www.food-trucksin.com/truck-search>
- Foster, M. S. (1991). The role of the automobile in shaping a unique city: Another look. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 186-193). Ann Arbor: University of Michigan Press.
- Franck, K. A. (2005). The City as dining room, market, and farm. *Architectural Design*, 75, 5-10.
- Fraser, N. (1992). Rethinking the public sphere: A contribution to the critique of actually existing democracy. In C. Calhoun (Ed.), *Habermas and the public sphere* (pp. 109-142). Cambridge, MA: MIT Press.
- Gabaccia, D., & Pilcher, J. (2011). 'Chili queens' and checkered tablecloths: Public dining cultures of Italians in New York City and Mexicans in San Antonio, Texas, 1870s-1940s. *Radical History Review*, 110, 109-126.
- Gamez, J. (2012). A pair of queens: La Reina de Los Angeles, the queen city of Charlotte, and the new (Latin) American south. In D.R. Diaz & R. D. Torres (Eds.), *Latino Urbanism: The politics of planning, policy, and redevelopment* (pp. 111-134). New York, NY: New York University Press.
- García-Rincón, M. F. (2007). Redefining rules: A market for public space in Caracas, Venezuela. In J. Cross & A. Morales (Eds.), *Street entrepreneurs: People, place, and politics in local and global perspective* (pp. 36-57). Abingdon, OX: Routledge.
- Garrison, E. (2015, March 10). City of Sacramento moves to loosen rules on food trucks. *The Sacramento Bee*. Retrieved from <http://www.sacbee.com/news/local/article13335635.html>

- Gaspar, J., & Glaser, E. (1998). Information technology and the future of cities. *Journal of Urban Economics*, 43, 136–156.
- Gebhard, D. (1991). The suburban house and the automobile. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 106-123). Ann Arbor: University of Michigan Press.
- Geertz, C. (1963). *Peddlers and princes: Social development and economic change in two Indonesian towns*. Chicago, IL: The University of Chicago Press.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.
- Gold, J. (2012, March). How America became a food truck nation. *Smithsonian Magazine*. Retrieved from <http://www.smithsonianmag.com/travel/how-america-became-a-food-truck-nation-99979799/?no-ist>
- Goldingay, R. (2015). Mississippi marketplace: Our history. Retrieved from <http://www.missmarketplace.com/our-history/>
- Goldwatch, J. (Director), & Google (Producer). (2014, March). *Google glass explorer story: Roy Choi* [Commercial video]. Retrieved from <https://www.youtube.com/watch?v=H05At3ohbRE>
- Gordon, R. (2012, February 29). Food truck bill seeks to combat childhood obesity. *San Francisco Gate*. Retrieved from <http://www.sfgate.com/bayarea/article/Food-truck-bill-seeks-to-combat-childhood-obesity-3369050.php>
- Gottdiener, M. (2001). *The theming of America: American dreams, media fantasies, and themed environments* (2nd ed.). Boulder, CO: Westview Press.
- Grafoli, J., & Said, C. (2014). *A changing Mission: To whom does San Francisco's oldest neighborhood belong* [Web news documentary]? *San Francisco Chronicle*. Retrieved from <http://www.sfchronicle.com/the-mission/>
- Graham, S. (1998). The end of geography or the explosion of place? Conceptualizing space, place, and information technology. *Progress in Human Geography* 22(2): 165–185.
- Graham, S., & Marvin, S. (2001). *Splintering urbanism: Networked infrastructures, technological mobilities, and the urban condition*. London, UK: Routledge.
- Groth, P. (1998). Introduction: J.B. Jackson and geography. *Geographical Review*, 88(4), iii-vi.
- Hajela, D. (2014, July 29). NYC uses food trucks to bring summer meals to kids. *Star Tribune*.
- Hammer, E. (n.d.). Phantom of the streets: Roy Choi reveals how a simple taco truck breaks down barriers. *Plate*. Retrieved from <http://www.marketingandtechnology.com>

- Harelik, T. (2013). *Trailer food diaries cookbook: Portland edition: Vol. 1*. Charleston, SC: American Palate.
- Harlow, S. (2011). Social media and social movements: Facebook and an online Guatemalan justice movement that moved offline. *New Media & Society*, 14(2), 224–243.
- Harrison, S. (2015, January 12). Charlotte looks to loosen food-truck rules. *Charlotte Observer*. Retrieved from <http://www.charlotteobserver.com/news/local/article9257759.html>
- Hart, K. (1973). Informal income opportunities and urban employment in Ghana. *The Journal of Modern African Studies*, 11(1), 61-89.
- Hayden, D. (2004). *Rebuilding suburbia: Green fields and urban growth, 1820-2000*. New York, NY: Vintage Books.
- Heidegger, M. (1971). *Poetry, language, and thought*. New York, NY: HarperCollins.
- Hernandez, R. (2011, June 23). Latinos make gains everywhere except the mission. *MissionLocal*. Retrieved from <http://missionlocal.org/2011/06/latinos-make-gains-everywhere-except-in-the-mission/>
- Hernandez-Lopez, E. (2012). LA's taco truck war: How law cooks food culture contests, *Inter-American Law Review*, 43(1), 233-268.
- Hess, A. (1991). Styling the strip: Car and roadside design in the 1950s. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 167-179). Ann Arbor: University of Michigan Press.
- Heying, C. (2010). *Brew to bikes: Portland's artisan economy*. Portland, OR: Ooligan Press, Portland State University.
- Hilario, F. (2015, April 28). In a win for food trucks, City Council passes bill to make business easier. *Philadelphia Business Journal*. Retrieved from <http://www.bizjournals.com/philadelphia/news/2015/04/28/in-a-win-for-food-trucks-city-council-passes-bill.html>
- Hine, C. (2000). *Virtual ethnography*. London, UK: Sage.
- Hirsch, J. (2011, October 1). How off the grid came to define a local food truck experience. *The Bay Citizen*. Retrieved from <https://www.baycitizen.org/news/food/how-grid-came-define-local-food-truck/>
- Holt, S. (2012, June 13). Food trucks move beyond hipster fad to help the hungry. *TakePart*. Retrieved from <http://www.takepart.com/article/2012/06/12/wheels-heal>

- Hou, J. (Ed). (2010). *Insurgent public space: Guerilla urbanism and the remaking of contemporary cities*. New York, NY: Routledge.
- Hughes, T. P. (1987). The evolution of large technological systems. In W. Bijker, T.P. Huges, & T.J. Pinch, *The social construction of technological systems: New directions in the sociology and history of technology* (pp. 51-82). Cambridge, MA: MIT Press.
- Huges, T. P., & Mayntz, R. (Eds.). (1988). *The development of large technical systems*. Frankfurt am Main: Campus Verlag.
- IBISWorld. (2014). Street vendors in the US: Market research report. NAICS 72233.
- International Labour Office. (1972). *Employment, incomes, and equality: A strategy for increasing productive employment in Kenya*. Geneva: Switzerland.
- Intuit. (2012, December). *Food trucks motor into the mainstream*. *Intuit.com*. Retrieved from <http://network.intuit.com/wp-content/uploads/2012/12/Intuit-Food-Trucks-Report.pdf>
- Jackson, J. B. (1994). *A sense of place, a sense of time*. New Haven, CT: Yale University Press.
- Jackson, J. B. (1997). *Landscape in sight: Looking at America*. New Haven, CT: Yale University Press.
- Jacobs, J. (1961). *The death and life of great American cities*. New York, NY: Random House.
- Joerges, B. (1988). Large technical systems: Concepts and issues. In T.P. Hughes & R. Mayntz (Eds.), *The development of large technical systems* (pp. 10-36). Frankfurt am Main: Campus Verlag.
- Jones, S. (1998). *Cybersociety 2.0: Revisiting computer-mediated communication and community*. Thousand Oaks, CA: SAGE.
- Kapell, H., Katon, P., Koski, A., Li, J., Price, C., & Thalhammer, K. (2010). *Food cartology: Rethinking urban spaces and people places*. Portland, OR: City of Portland. Retrieved from <https://www.portlandoregon.gov/bps/article/200738>
- Kauffman, J. (2012, February 20). New food truck bill could kill S.F.'S street food scene. *San Francisco Weekly*. Retrieved from <http://www.sfweekly.com/foodie/2012/02/20/new-food-truck-bill-could-kill-sfs-street-food-scene>
- Kettles, G. (2014). Crystals, mud, and space: Street vending informality. In V. Mukhija & A. Loukaitou-Sideris (Eds.), *The informal American city: Beyond taco trucks and day labor* (pp. 227-242). Cambridge, MA: MIT Press.

- Kettles, G. W. (2007). Legal responses to sidewalk vending: The case of Los Angeles, California. In J. Cross & A. Morales (Eds.), *Street entrepreneurs: People, place and politics in local and global perspective* (pp. 58-78). Abingdon, OX: Routledge.
- Knoll, C. (2012, September 6). Monrovia will let food trucks roll back into Old Town. *Los Angeles Times*. Retrieved from <http://articles.latimes.com/2012/sep/09/local/la-me-monrovia-food-trucks-20120910>
- La Cocina. (2012). La Cocina annual report. Retrieved from <http://www.lacocinasf.org/wp-content/uploads/2013/04/2012LCAnnualReport-FINAL-web-low-res.pdf>
- Latour, B. (1999). On recalling ANT. In J. Law & J. Hassard (Eds.), *Actor-network then and after* (pp. 15-25). Oxford, UK: Backwell.
- Latour, B. (2004). Why has critique run out of steam? From matters of fact to matters of concern. *Critical Inquiry*, 30(2), 225-248.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. New York, NY: Oxford University Press.
- Latour, B., & Johnson, J. (1988, June). Mixing humans and nonhumans together: The sociology of door-closer. *Social Problems*, 35(3). (Special Issue: *The Sociology of Science and Technology*)
- Latour, B., & Yaneva, A. (2008). Give me a gun and I will make all buildings move: An ANT's view of architecture. In R. Geiser (Ed.), *Explorations on architecture: Teaching, design, research* (pp. 80-89). Basel, Switzerland: Birkhauser.
- Law, S. (2013, February 7). Cartlandia wins over hearts of 82nd Avenue community. *Portland Tribune*. Retrieved from <http://portlandtribune.com/pt/9-news/127775-cartlandia-wins-over-hearts-of-82nd-avenue-community->
- Lefebvre, H. (1985). *Henri Lefebvre: Key writings on cities* (S. Elden, E. Lebas, & F. Kofman, Eds.). New York, NY: Continuum.
- Lefebvre, H. (1987). *The everyday and everydayness* (C. Levich, Trans.). *Yale French Studies*, 73, 7-11. (Original work published as *Quotidien et Quotidienneté*)
- Lefebvre, H. (1991a). *The production of space* (D. Nicholson-Smith, Trans.). Oxford, UK: Blackwell. (Original work published *La production de l'espace* 1974)
- Lefebvre, H. (1991b). *Critique of everyday life: Volume I* (J. Moore, Trans.). London: Verso. (Original work published 1947)
- Lefebvre, H. (1996). *Writings on cities* (E. Kofman & E. Lebas, Eds. & Trans.). Oxford, UK: Blackwell.

- Lefebvre, H. (2003). *The urban revolution* (pp.1-22), (R. Bononno, Trans.). London, UK: University of Minnesota Press. (Original work published 1970)
- Lenore, L. N., & Burnett, K. (2013). Street food and vibrant urban spaces: Lessons from Portland, Oregon. *Local Environment*, 18(2), 233-248.
- Leone, H. (2015, February 20). Brewery brings food-cart debate to downtown Oregon City, where zoning bans mobile food vendors. *The Oregonian*. Retrieved from http://www.oregonlive.com/oregon-city/index.ssf/2015/02/brewerys_battle_brings_food-ca.html
- Linnekin, B. J., Dermer, J., & Geller, M. (2011). New food truck advocacy: Social media, mobile food vending associations, truck lots, and litigation in California and beyond. *Nexus Journal of Law and Policy*, 17(35), 35-58.
- Londono, J. (2012). Aesthetic belonging: The latinization and renewal of Union City, New Jersey. In D.R. Diaz & R. D. Torres (Eds.). *Latino urbanism: The politics of planning, policy, and redevelopment* (pp. 47-64). New York, NY: New York University Press.
- López-García, M., & Diaz, D. R. (2001). *Asian and Latino immigrants in a restructuring economy: The metamorphosis of southern California*. Stanford, CA: Stanford University Press.
- López-Garza, Ma. (2001). A study of the informal economy and Latina/o immigrants in greater Los Angeles. In M. López-Garza & D.R. Diaz (Eds.), *Asian and Latino immigrants in a restructuring economy: The metamorphosis of Southern California* (pp. 141-168). Stanford, CA: Stanford University Press.
- Loukaitou-Sideris, A., & Ehrenfeucht, R. (2009). *Sidewalks: Conflict and negotiation over public space*. Cambridge, MA: MIT Press.
- Lydon, M., & Garcia, A. (2014). *Tactical urbanism*. Washington D.C.: Island Press.
- Litsher, M. (2013, September 19). California becomes the first state to regulate ride-sharing. *Los Angeles Times*. Retrieved from <http://articles.latimes.com/2013/sep/19/business/la-fi-mo-state-regulators-ok-ridesharing-20130919>
- MacKenzie, D. (1987). Missile accuracy: A case study in the social process of technological change. In W. Bijker, T.P. Huges, & T.J. Pinch (Eds.), *The social construction of technological systems: New directions in the sociology and history of technology* (pp. 195-222). Cambridge, MA: MIT Press.
- Manly, L. (2014, November 5). Putting the cart before the art. *New York Times*. Retrieved from <http://www.nytimes.com/2014/11/06/arts/design/putting-the-cart-before-the-art-.html>

- Marcus, G. E. (1998). Ethnography in/of the world system: The emergence of multi-sited ethnography. In G. E. Marcus (Ed.), *Ethnography through thick and thin* (pp. 79-104). Princeton, NJ: Princeton University Press.
- Massey, J., & Snyder, B. (2012). Occupying wall street: Places and space of political action. *Places Design Observer*. Retrieved from <http://places.designobserver.com/feature/occupy-wall-street-places-and-spaces-of-political-action/35938/>
- Maynard, M. (2012, June 12). Why it's so hard to be a food truck in New Orleans. *The Atlantic*. Retrieved from <http://www.citylab.com/design/2012/06/why-its-so-hard-be-food-truck-new-orleans/2250/>
- Mazzio, M. (Director). (2012). *The apple pushers* [Film]. Retrieved from <http://www.applepushers.com/>
- McKay, D. (2015, January 8). Proposal would restrict parking for food trucks. *Albuquerque Journal*. Retrieved from <http://www.abqjournal.com/523113/news/unfair-competition-abq-debates-food-truck-restrictions.html>
- McKeever, A. (2013, September 9). Nong Poonsukwattana on building a Khao Man Gai empire in Portland and beyond. *Eater*. Retrieved from <http://www.eater.com/2013/9/9/6374639/nong-poonsukwattana-on-building-a-khao-man-gai-empire-in-portland-and>
- McLeod, M. (1997). Henri Lefebvre's critique of everyday life: An introduction. In S. Harris & B. Berke (Eds.), *Architecture of the everyday*. New York, NY: Princeton Architectural Press.
- McLaughlin, K. (2010, January 15). The king of streets moves indoors. *The Wall Street Journal*. Retrieved from wallstreetjournal.com
- McLuhan, M. (1964). *Understanding media*. New York, NY: McGraw Hill.
- Mecklenburg County Health Department. (2013). Register health permits. Retrieved from <http://mecklenburg.digitalhealthdepartment.com>
- Migration Policy Institute. (2013, March). Major U.S. immigration laws, 1790-present. Washington, D.C.: Migration Policy Institute. Retrieved from <http://www.migrationpolicy.org/research/timeline-1790>
- Miller, Daniel (Ed.). (1998). *Material cultures: Why some things matter*. Chicago, IL: University of Chicago Press.
- Miller, M. (2011, June). Victory for El Paso street vendors. *Institute for Justice*. Retrieved from <http://www.ij.org/victory-for-el-paso-street-vendors-3>

- Miller, N. (1999). Street survival: The plight of the Los Angeles street vendors. In J. Chase, M. Crawford, & J. Kaliski (Eds.), *Everyday urbanism* (pp. 136-151). New York, NY: Monacelli Press.
- Mitchell, W. (1996). *City of bits: Space, place, and the infobahn*. Cambridge, MA: MIT Press.
- Mondelez International Inc. (Producer). (2014, April). *Oreo snack hacks: Midnight hack by Roy Choi* [Web commercial video]. Retrieved from <https://www.youtube.com/watch?v=QWuqcRe0t98>
- Morales, A. (2000). Peddling policy: Street vending in historical and contemporary context. *International Journal of Sociology and Social Policy*, 20 (¾), 76-98.
- Morales, A., & Kettle, G. (2009). Zoning for public markets and street vendors. *Zoning Practice, APA*, 25(2): 1-7.
- Mukhija, V., & Loukaitou-Sideris, A. (2014). Introduction. In V. Mukhija & A. Loukaitou-Sideris (Eds.), *The informal American city: Beyond taco trucks and day labor* (pp. 1-17). Cambridge, MA: MIT Press.
- Muñoz, L. (2013). From street child care to drive-throughs: Latinas reconfigure and negotiate street vending spaces. In N. Flores-González, A. Romina Guevarra, M. Toro-Morn, & G. Chang (Eds.), *Immigrant women workers in the neoliberal age* (pp. 133-143). Urbana, IL: University of Illinois Press.
- Muñoz, L. (2008). Tameles. . . elote. . . champurrado: The production of Latinos vending landscapes in Los Angeles. (Doctoral dissertation). University of Southern California.
- Nagourney, A. (2010, October 11). Inspectors in rearview as food trucks rule the road. *New York Times*. Retrieved from http://www.nytimes.com/2010/10/12/us/12trucks.html?pagewanted=all&_r=0
- National Food Truck Association. (2014). Regional food truck association. Retrieved from http://www.nationalfoodtrucks.org/regional_food_truck_associations
- National Public Radio. (Producer). (2013, November 5). LA food truck king tells his story, one recipe at a time. [Audio podcast]. *The salt podcast*. Retrieved from www.npr.org
- Nazario, P. (2012, May 10). The original food trucks. *LA Weekly*. Retrieved from <http://www.laweekly.com/restaurants/the-original-food-trucks-2174867>
- Neff, G., Fiore-Silcast, B., & Dossick, C. (2009, August). Model failure: Assemblages, performances, and uneasy collaborations in commercial construction. Paper presented at American Sociological Meetings, San Francisco, CA.
- Negroponte, N. (1995). *Being digital*. London, UK: Hodder and Stoughton.

- Norman, E., Frommer, R., Gall, B., & Knepper, L. (2011). Street of dreams: How cities can create economic opportunity by knocking down protectionist barriers to street vending. *Institute for Justice*. Arlington: Institute for Justice.
- Oswalt, P., Overmeyer, K., & Misselwitz, P. (2013). *Urban catalyst: The power of temporary use*. Berlin, Germany: DOM Publishers.
- Pascal, A. (1987). The vanishing city. *Urban Studies*, 24, 597-603.
- Pilcher, J. M. (2008). Who chased out the 'chili queens?' Gender, race, and urban form in San Antonio, Texas, 1880-1943. *Food and foodways*, 16, 173-200.
- Pinch, T., & Bijker, W. (1984). The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other. *Social Studies of Science*, 14(3), 399-441.
- Portillo, C. (2014, April 21). Charlotte food truck vendors criticize proposed regulations. *Charlotte Observer*. Retrieved from <http://www.charlotteobserver.com/news/business/small-business/article9114821.html>
- Purvis, K., & Off, G. (2014, December 5). Charlotte joins nation's fastest-growing big cities. *The Charlotte Observer*. Retrieved from <http://www.charlotteobserver.com/news/local/article9241220.html>
- Ramirez-Lovering, D. (Ed). (2008). *Opportunistic urbanism*. Melbourne, AU: RMIT Publishing.
- Resch, B., Britter, R., & Rotti, C. (2012). Live urbanism: Towards senseable cities and beyond. In S. T. Rassa & P. M. Pardalos (Eds.), *Sustainable environmental design in architecture* (pp. 175-184). New York, NY: Springer.
- Reyes, E. A. (2014, December 2). L.A officials take a step towards legalizing street vending. *Los Angeles Times*. Retrieved from <http://www.latimes.com/local/cityhall/la-me-street-vending-20141203-story.html>
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Boston, MA: Addison Wesley.
- Richmond, A. (2011, January 31). Have we reached gridlock? Matt Cohen on food trucks in 2011. *7X7SF*. Retrieved from <http://www.7x7.com/eat-drink/have-we-reached-gridlock-matt-cohen-food-trucks-2011>
- Riis, J. (1914). *How the other half lives*. New York, NY: Charles Scribner's Sons.
- Rios, M. (2009). Public space praxis: Cultural capacity and political efficacy in Latina/o placemaking. *Berkeley Planning Journal*, 22: 92-112.

- Rios, M. (2010). Claiming Latino space: Cultural insurgency in the public realm. In J. Hou (Ed.), *Insurgent public space: Guerilla urbanism and the remaking of contemporary cities* (pp. 99-110). New York, NY: Routledge.
- Rios, M., Vazquez, L., & Miranda, L. (2012). Introduction: Place as space, action, and identity. In M. Rios, L. Vazquez, & L. Miranda (Eds.), *Dilogos: Placemaking in Latino communities*. New York, NY: Routledge.
- Ritzer, G. (2011). *The McDonaldization of society* (6th ed.). Thousand Oaks, CA: Pine Forge Press.
- Roaming Hunger. (2015). Los Angeles food trucks. [Web food truck portal]. Retrieved from <http://roaminghunger.com/la>
- Rodgers, K., & Roy, K. (2010). *Cartopia: Portland's food cart revolution*. Portland, OR: Consolidated Press.
- Roever, S. (2010). Street trade in Latin America: Demographic trends, legal issues, and vending organizations in six cities. In S. Bhowmik (Ed.), *Street vendors in the global urban economy* (pp. 208-240). Tolstoy Marg, New Delhi: Routledge.
- Rojas, J. (2003). The enacted environment: Examining the streets and yards of East Los Angeles. In C. Wilson and P. Groth (Eds.), *Everyday America: Cultural landscape studies after J.B. Jackson* (pp. 275-292). Berkeley, CA: University of California Press.
- Rojas, J. (2006). The cultural landscape of a Latino community. In R. Schein (Ed.), *Landscape and race in the United States* (pp. 177-186). New York, NY: Routledge.
- Rojas, J. (2010). Latino urbanism in Los Angeles: A model for urban improvisation and reinvention. In J. Hou (Ed.), *Insurgent public space: Guerilla urbanism and the remaking of contemporary cities* (pp. 36-44). New York, NY: Routledge.
- Rojas, J. (2013). The enacted environment of East Los Angeles. In G. Cranz & E. Pavlides (Eds.), *Environmental design research: The body, the city, and the buildings in between* (pp. 355-365). San Diego, CA: Cognella.
- Rojas, L. (2014, December 18). Will the new year bring legalization to LA street vendors? City leaders say a new plan might work [Web news report]. Retrieved from <http://www.scp.org/blogs/multiamerican/2014/12/18/17690/will-the-new-year-bring-legalization-to-la-street/>
- Romney, L. (2011, September 1). Upscale culture and gang violence share a small space. *Los Angeles Times*. Retrieved from <http://articles.latimes.com/2011/sep/21/local/la-me-district-slayings-20110921>.
- Romo, R. (1983). *East Los Angeles: History of a barrio*. Austin, TX: University of Texas Press.

- Rose, J. (2012, August 6). Food truck boom or bust? Depends on what you serve. Retrieved from <http://wfae.org/post/food-truck-boom-or-bust-depends-what-you-serve>
- Ross, M. P., & LaMattina, S. (2010). *Report on foodtrucks*. Boston, MA: City of Boston. Retrieved from https://www.cityofboston.gov/cityclerk/hearing/upload_pdfs/docket_pdfs/160411282010.pdf
- Sabatini, J. (2013, June 19). San Francisco passes new rules for food trucks. *San Francisco Examiner*. Retrieved from <http://www.sfexaminer.com/sanfrancisco/san-francisco-passes-new-rules-for-food-trucks/Content?oid=2470033>
- Sakaki, T., Okazaki, M., & Matsuo, Y. (2010, April). Earthquake shakes Twitter users: Real-time event detection by social sensors. In *Proceedings of international World Wide Web* (pp. 851-860). New York, NY: ACM.
- San Francisco Anti-Displacement Coalition (2015, April 24). *San Francisco's Eviction Crisis*. Retrieved from <http://www.antievictionmappingproject.net/EvictionSurge.pdf>
- San Francisco Planning Department. (2014, September 2). *San Francisco neighborhood profiles: American community survey 2006-2010*. Retrieved from <http://www.sf-planning.org/modules/showdocument.aspx?documentid=8779>
- Sankin, A. (2012, February 28). California food truck ban cooks up growing opposition. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/2012/02/28/california-food-truck-ban-growing-opposition_n_1307510.html
- Sassen, S. (2012). *Cities in a world economy* (4th ed.). Thousand Oaks, CA: SAGE.
- Sassen, S. (2001). *The global city: New York, London, Tokyo*. Princeton, NJ: Princeton University Press.
- Sassen-Koob, S. (1989). New York City's informal economy. In A. Portes, M. Castells, & L. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries* (pp. 60-77). Baltimore, MD: Johns Hopkins University Press.
- Saxenian, A. L. (1994). *Regional advantage: Culture and competition in Silicon Valley and Route 128*. Cambridge, MA: Harvard University Press.
- Scattergood, A. (2012, May 16). Q & A with Roy Choi. *LA Weekly*. Retrieved from <http://www.laweekly.com>
- Searcey, D. (2015, January 9). Job growth fails to help paychecks of workers. *New York Times*. Retrieved from <http://www.nytimes.com/2015/01/10/business/economy/jobs-unemployment-figures-december.html>

- Sibilla, N. (2014, June 27). 9 things you didn't know about food trucks. *BuzzFeed*. Retrieved from <http://www.buzzfeed.com/nicks29/9-facts-you-didnt-know-about-food-trucks-4y3w>
- Sibilla, Nick. (n.d.). Austin food carts provide economic opportunity for homeless people. *Institute for Justice*. Retrieved from <http://ij.org>
- Sit, J. (2012, March 16). OLCC approves Portland food cart liquor permit. *KWG.com*. Retrieved from <http://www.kgw.com/story/news/2014/07/23/12207320/>
- Skinner, C. (2010). Street trading trends in Africa: A critical review. In S. Bhowmik (Ed.), *Street vendors in the global urban economy* (pp. 184-207). Tolstoy Marg, New Delhi: Routledge.
- Soja, E. (1996). *Thirdspace: Journeys to Los Angeles and other real and imagined places*. Malden, MA: Blackwell.
- Soja, E. (2000). *Postmetropolis: Critical studeies of cities and regions*. Oxford, UK: Blackwell.
- Solvic, B. (2012, February 8). Portland officials fret about food carts with liquor licenses under new statewide guidelines. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2012/02/portland_officials_frets_about.html
- Solvic, B. (2012, May 14). Portland sues Oregon liquor control commission over food carts with booze: Portland City Hall roundup. *The Oregonian*. Retrieved from http://blog.oregonlive.com/portlandcityhall/2012/05/portland_sues_oregon_liquor_co.html
- Southern California Mobile Food Vendors Association. (2014, November 18). How did food trucks become so popular? [Web blog post]. Retrieved from <http://socalmfva.com/socalmfva/how-did-food-trucks-become-so-popular/>
- Southworth, M. (2005). Designing the walkable city. *Journal of Urban Planning and Development*, 246 – 257.
- Sismondo, S. (2010). *An introduction to science and technology studies* (2nd ed.). Malden, MA: John Wiley & Sons.
- Spradley, J. (1980). *Participant observation*. New York, NY: Holt, Reinhart and Winston.
- Staudt, K. *Free trade? Informal economies at the U.S-Mexico border*. Philadelphia: Temple University Press, 1998.

- Stewart, J. (2015, January 20). Property owner pulls food truck park plans. *Rome-New Tribune*. Retrieved from http://www.northwestgeorgianews.com/rome/business/property-owner-pulls-food-truck-park-plans/article_eb56f804-a846-11e4-82a4-cb55e3d75b28.html
- Summers, S., & Tomas Jr., F. (2013). *Latinos at the Golden Gate: Creating community & identity in San Francisco*. Chapel Hill, NC: The University of North Carolina Press.
- Tinker, I. (1997). *Street foods: Urban food and employment in developing countries*. Oxford, UK: Oxford University Press.
- Thompson, B. (n. d.). The chuck wagon. American Chuck Wagon Association. Retrieved from <http://www.americanchuckwagon.org/chuck-wagon-history.html>
- Townsend, A. (2013). *Smart cities: Big data, civic hackers, and the quest for a new utopia*. New York, NY: W.W. Norton & Company.
- Upton, D. (2008). *Another city: Urban life and urban spaces in the new American republic*. New Haven, CT: Yale University Press.
- Upton, Dell. (1985). The power of things: Recent studies in the American vernacular architecture. In T.J. Schlereth (Ed.), *Material culture: A research guide*. Lawrence, KS: University Press of Kansas.
- Urban Vitality Group. (2010). *Food cartology: Rethinking urban space as people places*. Urban Vitality Group. Retrieved from <https://www.portlandoregon.gov/bps/article/200738>
- US Census Bureau. (2010). Portland, Oregon state and county quickfacts. Retrieved from <http://quickfacts.census.gov/qfd/states/41/4159000.html>
- US Census Bureau. (2012). Portland, Oregon state and county quickfacts. Retrieved from <http://quickfacts.census.gov/qfd/states/41/4159000.html>
- US Conference of Mayors. (2013, November). *US metro economies*. Lexington, MA: IHS Global Insight, Inc. Retrieved from <http://www.usmayors.org/metroeconomies/2013/201311-report.pdf>
- US Department of Labor, Bureau of Labor Statistics. (2014). *Mobile food services NAICS 72233*. Retrieved from <http://www.census.gov/mrts/www/naicsdef.html>
- Pineda, A. F. V. (2010). How do we co-produce urban transport systems and the city? The case of transmilenio and Bogotá. In I. Fariás & T. Bender (Eds.), *Urban assemblages: How actor-network theory changes urban studies* (pp. 123-138). London: Routledge.
- Vallianatos, M. (2015). Compl(eat)ing the streets: Legalizing sidewalk food vending in Los Angeles. In S. Zavestoski & J. Agyeman (Eds.), *Incomplete streets: Processes, practices, and possibilities* (pp. 205-224). New York, NY: Routledge.

- Vallianatos, M. (2014). A more delicious city: How to legalize street food. In V. Mukhija & A. Loukaitou-Sideris (Eds.), *The informal American city: Beyond taco trucks and day labor* (pp. 209-226). Cambridge, MA: MIT Press.
- Van Doren, P. (2005). The political economy of urban design standards. In E. Ben-Joseph & T.S. Szold (Eds.), *Regulating place: Standards and the shaping of urban America* (pp. 45-66). New York, NY: Routledge.
- Venice B. (2012). *Spontaneous interventions: Design actions for the common good*. 13th Annual International Architecture Exhibition.
- Venturi, R., Scott-Brown, D., & Izenour, S. (1972). *Learning from Las Vegas: The forgotten symbloism of architectural form*. Cambridge, MA: MIT Press.
- Vieweg, S., Hughes, A. L., Starbird, K., & Palen, L. (2010, April). Microblogging during two natural hazard events: What Twitter may contribute to situational awareness. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 1079-1088). New York, NY: ACM.
- Wachs, M., & Crawford, M. (1991). *The car and the city: The automobile, the built environment, and daily urban life*. Ann Arbor, MI: University of Michigan.
- Warner, S. B. (1991). The car, the city, and daily work. In M. Wachs & M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 9-15). Ann Arbor: University of Michigan Press.
- Wasserman, S. (2009). Hawkers and gawkers: Peddling and markets in New York City. In A. Hauck-Lawson & J. Deutsch (Eds.), *Gastropolis: Food and New York City* (pp. 153-173). New York, NY: Columbia University Press.
- Webber, M. (1991). The joys of automobility. In M. Wachs and M. Crawford (Eds.), *The car and the city: The automobile, the built environment, and daily urban life* (pp. 274-284). Ann Arbor, MI: University of Michigan Press.
- Webber, M. (1964). The urban place and the nonplace urban realm. In M. Webber (Ed.), *Explorations into urban structure* (pp. 79-153). Philadelphia, PA: University of Pennsylvania Press.
- Weber, C. M. (2001). Latino street vendors in Los Angeles: Heterogeneous alliances, community-based activism, and the state. In M. López-Garza, & D.R. Diaz (Eds.), *Asian and Latino immigrants in a restructuring economy: The metamorphosis of Southern California* (pp. 217-240). Stanford, CA: Stanford University Press.
- Wessel, G. (2012). From place to nonplace: A case study of social media and contemporary food trucks. *Journal of Urban Design*, 17(4): 511-531.

- Wessel, G. & Airaghi, S. (2015). Negotiating informality: Operational strategies of Latino vendors in San Francisco's Mission District [Web publication]. *Participatory Urbanisms*, University of California Berkeley.
- Willett, Megan. (2014, May 16). Step aside, New York, Orlando is America's food truck capital. *Business Insider*. Retrieved from <http://www.businessinsider.com/best-cities-for-food-trucks-in-america-2014-5>.
- Winner, L. (1986). *The whale and the reactor: A search for limits in an age of high technology*. Chicago, IL: University of Chicago Press.
- Wright, R. (1927). *Hawkers and walkers in early America: Strolling, peddlers, preachers, lawyers, doctors, players and others, from the beginning of the civil war*. Philadelphia, PA: J.B. Lippincott Company.
- Yaneva, A. (2005a). A building is a multiverse. In B. Latour & P. Weibel (Eds.), *Making things public: Atmospheres of Democracy* (pp. 530-535). Cambridge, MA: MIT Press.
- Yaneva, A. (2005b). Scaling up and down: Extraction trails in architectural design. *Social Studies of Science*, 35(6), 867.
- Yaneva, A. (2008). How buildings 'surprise': The renovation of the Alte Aula in Vienn. *Science Studies*, 21,8-29.
- Yaneva, A. (2012). *Mapping controversies in architecture*. Surrey, UK: Ashgate.
- Zolniski, C. (2006). *Janitors, street vendors, and activists: The lives of Mexican immigrants in Silicon Valley*. Berkeley, CA: University of California Press.

Appendix A: Latino Food Vendors in the Mission District¹

Introduction

In the US, the practice of street food vending has historically been perceived as an unorganized and marginal activity conducted by minority populations. Urban historians have traced adverse views from a variety of prejudices that relate to unsanitary practices, low-economic status, and illegality (Burnstein, 1996: 60; Bluestone, 1991: 80-81; Bromley, 2000: 6-10). Unfavorable views can also be linked to the mid-20th century modernist planning and design ideals that created orderly, auto-centered city streets and did away with activities perceived as inefficient and unproductive that impeded upon this view (Cross, 2000: 35). In 1963, anthropologist Clifford Geertz studied street markets and bazars in Indonesia claiming that they hampered the development of a western-style, firm-centered economy (1963). Opposed to efficiency and organization, he suggested street vending relied on practices rooted in local customs and social exchange. Growing anxieties over the sanitation of food handling throughout the 19th and 20th centuries also contributed to a widely held view that food prepared on the street was unhygienic and unhealthy (Burnstein, 1996: 60). Given these judgments, little research addresses the potential benefits street vendors bring to communities and the constraints that vendors face when operating a productive business.

While there is scholarship that investigates vending in developing countries,² few have attempted to explore the ways in which vendors support the low-income American economy. The lack of attention is linked to vendors' low levels of economic productivity, ethnic unfamiliarity, and perceived illegality of undocumented work practices. Only recently have the US government and restaurant industry started to document the number of food vendors in cities. Today, food vending is gaining validity as a respectable and stable occupation among affluent population with the recent growth of new, vibrantly branded, and highly equipped food trucks. Public acceptance on behalf of middle-income populations combined with a declining US economy has prompted this diverse and increasingly trendy food industry to grow rapidly in recent years (Alvarez, 2015). Local organizations that focus on food accessibility are also beginning to find vendors resourceful in areas that lack food options (Hajela, 2010). While these trends promote broader acceptance of street food vending, little is known about the impacts on the established population of Latino vendors or why government officials and city residents still recognize them as illegal, low-income, and unsanitary (Hernández-López, 2011: 233).

Formal and informal sectors of the economy are most often posited in binary terms, with informality placed in a subordinate position to those activities conventionally accepted as legal. However, visual, social, and legal variances occur between these general categories creating a spectrum of possibilities. For example, formal sectors such as restaurants may hire

¹ Interviews and data collected for this article were conducted by the author and undergraduate geography student Sofia Airaghi in UC Berkeley's SMART mentoring program in the summer of 2014. Sofia held interviews with vendors in Spanish, translated interviews into English, and contributed writing fieldwork and history sections. This work is published in *Participatory Urbanisms*, UC Berkeley's Global Urban Humanities Initiative online publication in the spring of 2015.

² Research on food vending in developing countries shows frequent patterns of migration, rising economic and social inequalities, and local political factors influence the growth and decline of vendors. Some sources include, Irene Tinker, *Street Foods: Urban Food and Employment in Developing Countries* (New York: Oxford, 1996); John Cross and Alfonso Morales, eds. *Street Entrepreneurs: People, Place, and Politics in A Local and Global Perspective* (London: Routledge, 2007).

undocumented workers to lower production costs or neglect to file taxes, whereas informal sectors, such as street food vending, have established vendor associations in an effort to navigate the regulatory climate of municipalities. These devious business practices and self-organized collaborative efforts blur clear definitions of informal and formal sectors. Furthermore, the wide variety of food vending types, such as paleta and tamale pushcart vendors, taco truck vendors, and gourmet food truck vendors, also convolutes any clear definition of informality. A range of different vendors may be identified depending on social and cultural backgrounds, cultural foods, food prices, and types of vending units. Considering the pushcart vendors who legally operate with permits and the gourmet vendors who fail to document workers because of high insurance costs, formal and informal categories do not apply. Yet these nuances are ignored in city-wide policies that seek to manage vending growth.

Mapping the Discourse of Informality

Informality has traditionally been discussed and analyzed in developing countries where declining economic productivity, reduced investments, and limited technological progress perpetuate the growth of unregulated activities and limit the growth of the formal sector (de Soto, 1989: 173). In the US, however, planners and policy makers have assumed that informal activities are either limited in scope, and therefore safe to ignore, or criminal in nature, and thus need to be opposed (Vinit Mukhija and Loukaitou-Sideris, 2014: 3). Informal economy discourse in the American context is largely based in studies of low-wage employment among ethnic groups and immigrant neighborhoods, particularly the Latino barrios of southwestern states (Dohan, 1998). Amongst this demographic, official citizenship is low and the means of acquiring documentation is challenging, which leads many to find work outside of the documented employment sector. Street vendors, garment workers, construction workers, gardeners, janitors, window washers, nannies, and day laborers are some of the many forms of low-wage employment addressed as informal. Despite the insufficient analysis of these occupations, the topic is gaining attention from economists who see the growth of low-wage jobs coupled with stagnant hourly wages within a recovering economy (Searcey, 2015).

Researching in Ghana in the 1970s, British anthropologist Keith Hart became well known for referring to small-scale enterprises as the “informal sector.” Discontent with the ambiguity among western terms such as *low-productivity urban sector*, *underemployed and unemployed*, and *traditional sector*, Hart claimed there were “axes of differentiation [within small scale distribution types of employment], such as the nature of the trading medium (market stalls, roadside booths, hawking) and, more importantly, the commodity being traded” (Hart, 1973: 71). Hart argued the distinction between informal and formal sectors rests on self-employment versus wage-earning jobs that are recruited on a permanent and regular basis. He further categorized informal income opportunities as legitimate and illegitimate, distinguishing activities such as hustling, gambling, smuggling, and petty theft. Moreover, Hart acknowledged the position of the International Labor Organization (ILO), which reported in 1972 that the informal sector consists of a range of self-employed persons conducting jobs characterized by ease of entry, reliance on indigenous resources, family ownership of enterprise, small scale operation, and skills acquired outside the formal school system (International Labour Office, 1972: 6).

A substantial amount of scholarship focuses on the organizing logic between informal and formal economies suggesting that the informal economy in many countries is related to the rise and uneven nature of global capitalist development (AlSayyad, 2004: 15; Castells and

Portes, 1989: 32; Sassen-Koob, 1989: 61). During the period of economic restructuring in the 1970s informal activities expanded due to the impact of international competition, which led to diffusion of low labor costs across countries and workers reacting against the state's regulation of the economy (e.g. taxes and social legislation) (Castells and Portes, 1989: 28). Manuel Castells and Alejandro Portes note, "informalization is not a social process developing outside the purview of the state; it is instead the expression of a new form of control characterized by disenfranchisement of a large sector of the working class . . . the loss of formal control over these activities is compensated by the short-term potential for legitimation and renewed economic growth that they offer" (Castells and Portes, 1989: 27). Thus the relationship between governments and informal activities becomes most apparent during periods of economic recession and high unemployment.

Tracing Vending Activity in the Mission District

In the summer of 2014, over a ten-week period, we investigated the presence and stories of Latino vendors in San Francisco's Mission District. Given the lack of information regarding vendors' operations and economic challenges, our study uses ethnographic and grounded theory methods to understand street vendors' family and social obligations, daily work habits, and work-related decision making. Before entering the field, the geographic limits of the study were defined as the Mission District (District 9), an area in San Francisco with a dense Latino population.³ The rich history of Latino food vendors in the region and other California cities reinforced the decision to focus this demographic. First, the density of Latino vendors in the neighborhood was mapped by walking throughout the neighborhood at various times of the day, surveying the environment, and keeping in mind the locations of transit stations, parks, and elementary schools that generate activity with vendors (Figure A-1). Vendors were chosen at random and observed to understand their flow of business. If the vendor was available to talk, they were first engaged in casual conversation. Vendors were informed that we were researchers investigating their work as a vendor, and that their identity would not be revealed.⁴ We attempted to affect the setting as little as possible by remaining self-aware of our own presence in the space when patrons were present. Often, vendors were willing to answer questions while taking care of business simultaneously. Towards the end of the conversation, we confirmed the vendor's willingness to have follow-up conversations in the future.

³ In Mission District, 41 percent of the population is of Latino ethnicity and 37 percent of residents speak only Spanish at home, San Francisco Planning Department, "San Francisco Neighborhood Profiles," American Community Survey 2006-2010, <http://www.sf-planning.org/modules/showdocument.aspx?documentid=8779>.

⁴ Vendors were assigned substitute names during data collection to maintain anonymity.

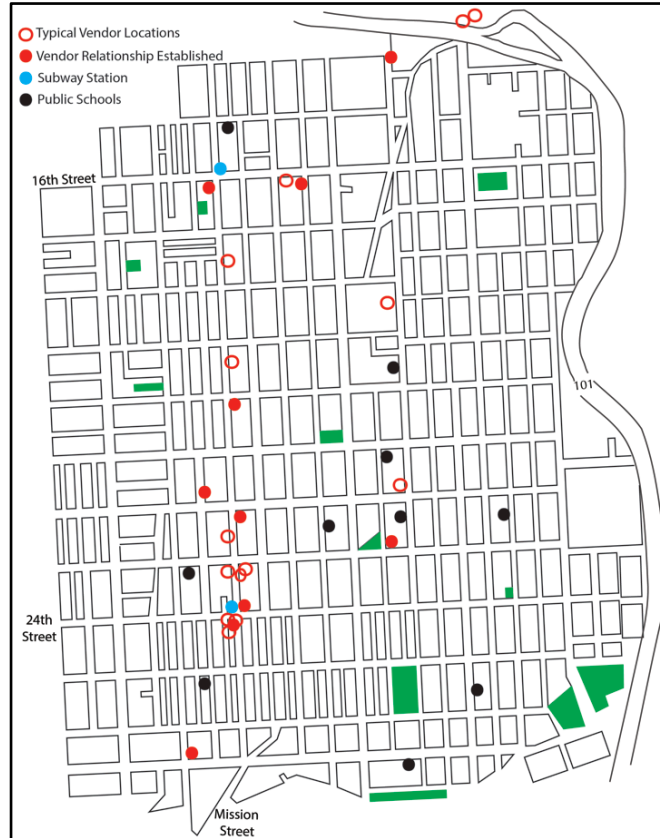


Figure A-1. Mission District vendor map. Source: Authors.

Eight vendors were interviewed of the seventeen total vendors identified throughout the ten-week period: three food truck vendors, two vendors with trailers, two pushcart vendors, and one vendor with a portable table.⁵ We interviewed this select eight based on their willingness to share knowledge, yet their spatial distribution in the Mission District and their variety of vending types (e.g. mobile trucks, stationary trailers, and pushcarts) provided a representative sample of the vending landscape. We talked with six men and two women, one vendor in his 20s, two vendors in their 30s, three in their 40s, and two in their 50s, all Latino from Mexico or Central America. Of the eight vendors we spoke with, all but one were owners of their establishments, some had been in the US for decades while others were more recent immigrants, and they each had experience working in the restaurant industry. Despite the fact that the majority of vendors identified were male, we were able to speak with two female vendors, one in her early-30s who sold tacos at a weekly market, and the other woman in her mid-40s who sold hotdogs from a pushcart. Pushcart vendors were hesitant to share their stories on a couple of occasions and while the precise reasons are unknown, we conclude that these vendors may be concerned with protecting their business against police or health code enforcement or news media, occurrences that further contribute to perceptions of vending as illegal. Interviews were conducted in Spanish, lasted from thirty minutes to two hours and consisted of open-ended questions about the basic processes of vendor operations, employment history, family and friend networks, and

⁵ After interviewing eight vendors, we transcribed conversations from Spanish to English, reviewed data for follow-up questions, and began initial coding. Follow-up interviews were conducted with five vendors. After multiple trips to the field, we determined eight vendors, including follow-up interviews, would provide detailed knowledge of vendor operations.

geographic migrations. Follow up conversations were conducted after reviewing the initial conversations to clarify ambiguities in vendor responses. Additionally, vendors' locations were observed and documented using field notes, sketches, and photographs.

The Physical and Cultural Landscape of Vending

Beginning as a religious Spanish settlement, the Mission District was named after the oldest building in San Francisco, the Mission San Francisco de Asís, which was constructed in 1776. In the early 20th century, the neighborhood expanded with Irish immigrants who were later displaced with the rapid arrival of Latino immigrants in the postwar period. From the 1940s to the 1960s, Mexican, Central American, and Puerto Rican immigrants seeking work replaced waves of European immigrants that moved to suburban areas (SF Chronicle, 2015). By the 1970s, San Francisco's Latino population had reached over 70,000 (Summers Sandoval, 2013: 122). Today, these transnational connections from San Francisco to various parts of Latin America are well formed and constantly adapting. More recently, local residents are concerned that gentrifying forces, brought about by the influx of young high-income professionals, are pricing out much of the existing population, as housing and rental costs increase (SF Chronicle, 2015; Romney, 2011). City-wide eviction notices increased 57 percent in the past five years (SF Anti-Displacement Coalition, 2015) and in the Mission District the Latino population has declined by 22 percent since 2000 (Hernandez, 2015).

Despite these socio-economic changes, the Mission District is still the heart of Latino culture in San Francisco with a 41 percent Latino population compared to 14 percent in San Francisco as a whole. Visually, there are many aspects that culturally link this neighborhood to homelands in Central and South America. Colorful murals, commercial signage in Spanish, and several bilingual schools and community centers are a few examples of Latino expression. The Mission District has become famous for its bountiful tradition of vivid murals and street art, especially Balmy Alley, which is lined with artwork that depict different aspects of history, social movements, spiritual and religious figures (Figure A-2). As Summers Sandoval states, "once in the city Latinas and Latinos engaged a multifaceted process of "homemaking," re-creating the tastes, sounds, and sights of the familiar" (Summers Sandoval, 2013: 116). These material elements of the landscape create links to other countries and are a vibrant hybrid of cultural references, expanding notions of home, citizenship and belonging.



Figure A-2. Balmy Alley, Mission District, San Francisco, Nov 11, 2014 Source: Author.

Food vendors primarily congregate on Mission Street between 24th Street and 16th Street (Figure A-1). This area has high car and pedestrian traffic and is also a main passageway for buses and the underground train system. The Mission District houses seven public elementary schools and the children and parents, especially those who walk or take public transportation to get to school, are a significant customer base for the vendors. During summer breaks, vendors see less business and therefore have a less routine vending route. In addition, Mission Street is a main commercial thoroughfare with high numbers of Latino markets, clothing stores, electronic repair shops, pawn shops, thrift stores, liquor stores, bodegas, banks, bars, restaurants, cafes, and clubs that together form a hub of Latino culture in San Francisco and several vendors choose their location based on this reality. Vendors strategically locate their operations in the Mission corridor to reach their Latino customer base and to use their location to assure the perception and presentation of their cultural authenticity.

Although many food vendors in the Mission District do not receive a great deal of coverage on social media or in the blogosphere, many are able to achieve a high level of physical visibility. Vendors maximize this visibility by displaying large bilingual signage, raising colorful flags, and placing memorable visual and cultural imagery on their trucks or trailers (Figure A-3). Additionally, their visibility on the street forms a cultural connection for the community through the representation of their business.



Figure A-3. Street vendor on Mission Street, July 3, 2014. Source: Author.

Of the eight vendors we spoke with, we choose three vendors to pursue further conversations with based on the variety of their business experience and willingness to participate in follow up conversations. Each vendor migrated to the US, established a business, and acquired vending licenses at different points in time. Bernardo, originally from Mexico City, has lived in the US for over 20 years and worked in the restaurant and automotive industries until opening his own taco business out of vending trailer two years ago with the help of his wife and

brother-in-law. Another vendor, Javier, also came to the US 20 years ago, but from El Salvador, and worked in restaurants until he started his bacon wrapped hot dog business three years ago with just \$150 dollars that he had borrowed from his mother. Unlike Bernardo and Javier, Cesar has been between Honduras and California for the past four years and worked for the Red Cross in Honduras before working in a food truck selling burritos and hamburgers. Each of the vendors' businesses have approved health permits from the county and parking permits either with the Public Works Department at the City of San Francisco or property owners. After analyzing the stories of these three vendors, it is apparent that those who have lived in San Francisco for longer periods of time are more established not only through owning a business, but also with their family situations.

These established vendors have an integrated relationship with the street and play an important role in the daily happenings of the neighborhood. Vendors who have lived in San Francisco for several years become an integral part of the community. Bernardo mentioned, "My life is already made here and this country has granted me good opportunities. It gave me my legalization, my papers, I have opened my path here."⁶ In addition to establishing ties with the community, food vending locations simultaneously become a site for social interaction and unity within the urban landscape serving as a gathering place for family, friends, and neighborhood acquaintances. For instance, other food vendors and friends working at nearby restaurants and stores frequently visit one of the hot dog vendors we interviewed. At any given moment, the three stools situated in front of the vendor's trailer may be filled with patrons chatting about soccer, news, or recent crimes in the area. The vendors also spend a significant amount of time with their own families in public space as many elders and children come along to help. Additionally, the vendors' repeated presence on the street creates a dual role of food distributor and guardian of the community. By having this active and noticeable presence 8 to 12 hours a day that creates repeated engagement and interaction in the street, the vendors establish themselves as anchors in the community.

Vendor Spatial Organization and Adaptation

Vendors pursue different spatial strategies depending on their unit type, their location options or lack thereof, and their customer base. Pushcarts, which have considerably lower startup costs and are often a point of entry into running a vending business, are the most spatially flexible. Although pushcart vendors are typically do not have permits to vend in the Mission District, the regulatory authorities and police often overlook these mobile units as long as they do not pose a threat to security or block sidewalks. Javier, who owns a trailer unit, expressed his grievances that he preferred not to vend at the Pride Parade because not only were the permit fees too high to ensure making a profit, but police unfairly enforced his trailer while ignoring pushcarts who are able to move at a moments notice. In these situations, pushcart vendors have more points of access to customers; however, their businesses are typically less sustainable. Furthermore, pushcart vendors generally tend to stay in the same location in an unofficial claiming of territory to maintain continuity with customers. While some vendors strategically locate farther away from competing vendors who are selling the same product, other vendors who have established relationships may vend together with separate carts (Figure A-4).

⁶ Original statement in Spanish: "Ya mi vida esta hecha aquí y me a brindado buenas oportunidades este país. Me dio mi legalización aquí, mis papeles, me he abierto camino yo aquí."

In the case of Bernardo, he originally wanted to locate his trailer on the main thoroughfare of Mission Street but because of high permit fees for city streets, he ended up privately renting a neglected portion of a car wash lot a couple of blocks away. Bernardo's distance from the main thoroughfare means he had to invent creative ways of advertising his business. He stated, "In the beginning everybody, only the family knew that I cooked, that my tacos were good, but from there I would stand outside at the door and I would tell people to stop and try. They would come to eat, and the word would spread."⁷ Although he is slightly farther away from the concentration of pedestrian traffic and other businesses he is able to avoid interaction with the City of San Francisco for spatial permitting, utilize outdoor seating, and host a jazz band on the weekends (Figure A-4). Over time he has been able to create a more welcoming environment by negotiating an enclosed seating area with the lot owner over concerns of children wandering too close to the street.



Figure A-4. Left: Street vendors selling fruit and flowers on the plaza of a subway station, July 10, 2014. Right: Street vendor located on the edge of a car wash lot, July 10, 2014. Source: Author.

Cesar, an employee on a taco truck owned by a restaurant family, recounts the history of the establishment and says that the truck has been parking in its exact location since 1996. The owners originally chose the location for its proximity to the neighborhood health clinic which functions as a central point in the community. The truck has always parked on the side of the street closest to the clinic with its serving window directly facing the parking lot and the pedestrian flows from the subway station towards the residential area of the Mission. On one occasion, the truck parked on the opposite side of the street and business suffered roughly a 50 percent decline. Not only is location important but equally so is orientation within the space, as other points of reference and overall visibility in the urban environment can help increase patronage.

When vendors choose their location, it is a conscious decision that is informed by social networks and the urban landscape of schools, commercial areas, and transit points (Figure A-1). Yet vendors who are told to move locations due to new public right-of-way regulations or are given a limited number of parking options by the City of San Francisco are very aware of their constraints and in response, they develop other methods to compensate and compete.

⁷ Original statement in Spanish: "Al principio todos, solo la familia sabia que cocinaba, que mis tacos estaban buenos pero de allí yo me ponía allí afuera en la puerta y yo le decía a la gente que pasaran a probar. Venían a comer y ya se corría la voz."

Economic Strategizing Among Latino Vendors

The physical and economic conditions of the Mission District ultimately test the entrepreneurial skills of Latino vendors. While some may be forced to close their vending operations due to lack of profit, others prevail by establishing self-sustaining businesses. Contrary to popular belief that street vendors exercise less than established business skills and choose vending as a last resort occupation, our conversations reveal that vendors actively pursue their livelihood with vending. Vendors must also negotiate a variety of parameters established by the limits of space, time, and regulatory bodies in their daily operations. Over time, these challenges strengthen their entrepreneurial skills and street knowledge allowing them to make strategic business decisions that increase their opportunities for upward job mobility such as scaling to their vending business or owning a brick-and-mortar restaurant.

Daily Operations and Constraints

Each vendor in the Mission District operates within specific spatial parameters imposed by the sidewalk, the public street, or private property. Sidewalk vendors must navigate a narrow width of pavement predominately allocated to the continuous movement of pedestrians. Staking an unobtrusive location on the edge of the sidewalk means that they must work from small scale vending units that are mobile, both limiting the variety of food they are able to prepare and requiring physical strength. Conversely, public parking spaces along streets allow for more full-scale vending trucks and trailers, but require an expensive initial fee of \$764 and \$135 annually thereafter. These vendors use personal automobiles to occupy the metered parking space overnight. Privately owned properties carry the fewest regulations in commercially zoned areas and are the preferred choice if located along a thoroughfare. Short-term lease agreements negotiated between the vendor and the property owner typically allow for greater flexibility in terms of space for seating or storage. However, these vendors are often concerned about displacement with the onset of new development. In addition, each space has its own physical assets and obstacles. Noise, direct sunlight, car pollution, graffiti, lack of pedestrian traffic, and wide streets impact a vending business; yet, nearby destinations such as Best Buy, Costco, or a hospital can provide consistent pedestrian traffic.

Navigating spatial parameters requires vendors to have working knowledge of land use and vending regulations in the City and County of San Francisco. Many vendors expressed the lengthy and expensive process of obtaining a vending permit for a location. Others expressed the need to properly handle and prepare food on a continuous basis in case a health inspector visits unannounced. Javier immediately pointed out his County Health Department certificate that officially approves his operations. With great pride in the cleanliness of his trailer, he also compared his business to fellow unpermitted vendors who he felt were doing a disservice to their customers. He went as far as to describe the improper handling of hotdogs from a fellow vendor who picked up large quantities in Los Angeles and drove them unrefrigerated to San Francisco. From Javier's point of view, the police should be more supportive of his work and focus their efforts on food handling practices among unlicensed vendors. Unlicensed vendors are also aware of regulations and are able to leverage their mobility when being approached by police. As such, vendors will congregate and look out for one another (Figure A-4). According to city policy, all vendors, licensed or unlicensed, should be aware of how to properly operate their business.

Just as permits can be a challenge to obtain and maintain, all vendors stressed that a lack of sufficient finances made it difficult to start or expand their business. Borrowing money from

family and friends, rather than taking out loans, is preferred among the vendors. The small amount of food that the unit can hold and the relatively low price points, at \$2.00 for a taco and \$3.50 for a bacon wrapped hot dog, often translates to small profits and slow growth. Per our conversations, some vendors described the exact cost of ingredients, the best stores to locate the most affordable food, and clever ways to minimize waste. Each vendor recalled a difficult time of slow business and agreed that financial planning can determine a business's success. Low profit margins also present a barrier to advancing to a current vending unit, operating multiple units, or even opening a brick and mortar location. Owners shared a vision for advancement where they could employ others, work less, generate more income, and continue to grow as an established business owner.

Connected Economies

Tracing the path of a vendor's daily operations reveals a variety of linked economic activities. Multiple times a week, vendors purchase goods from wholesale markets such as Restaurant Depot or Costco. These wholesale companies provide a variety of ingredients and offer supplies that span the needs of an entire business from perishable foods to propane refills. Their role in the everyday life of vendors is essential as the food vendor operators depend on their low costs and regular stock of supplies and ingredients. With regards to the vending unit itself, owners house them in storage facilities, commissaries, and unused parking lots. Furthermore, automobile manufacturing and repair businesses are essential for designing trailers and trucks to fit the proper kitchen equipment to code requirements and fixing worn engines.

The restaurant industry is another economic actor that generates competition and serves as an incubator for future business owners. Per our field conversations, vendors in general believe that restaurants pose little threat to their operations unless they serve comparable food products. Conversely, restaurants are more likely to express discontent towards vendors for fear that they could take their business. While no direct instances of restaurant conflict arose in conversation, some city officials are known for siding with the protectionist views of restaurant associations (Norman et al., 2011: 20). Viewed differently, this tension could lead to healthy and creative economic growth through marketing and food experimentation.

The recent development of web-based firms such as ZeroCater and Cater2.me act as a mediator between downtown office workers who order lunch in groups and vendors' ethnic foods in the Mission District. Initially hesitant to take part in ZeroCater's services due to the 20 percent share of profits collected per order, Bernardo eventually agreed to join the company after increasing the price point of his food to compensate for the added fees. Today, catering orders through ZeroCater's website provide nearly half of Bernardo's profits and serve as an ensured revenue stream leaving him less worried about business stability. Bernardo mentioned, "Now business is very strong [from ZeroCater]. I don't have to worry about whether or not I had sales today [at the trailer], because I know that I have this income [from catering] as well."⁸ In this instance, online catering services connect Bernardo's business with distant office workers in the Financial District and provide him with access to a new lunchtime clientele. Catering orders through ZeroCater make street vendors visible to office workers, allow vendors to scale their business to maximize profits, and sustain vendors during periods of slow business. At the same time, ZeroCater achieves significant profits through a percentage of low-priced foods.

⁸ Original statement in Spanish: "Entonces ahorita esta muy fuerte, ahora si que no me preocupo si hay venta o no hay, porque yo se que tengo esta entrada también."

During fieldwork, new wave food trucks that serve gourmet meals emerged as an operationally separate set of vendors based on the close proximity of the South of Market (SOMA) Street Food Park to the Mission District. The park, which opened in 2011, is well known among the area's burgeoning technology firm office workers seeking outdoor food options. The expensive rental space in the park and competitive menu prices were the primary reasons the Latino vendors preferred to remain at their current locations. Despite these distinctions, we observed business professionals frequenting the Latino vendors. Our observations lead us to conclude that Latino vendors, who serve low to high-income customers in a good location, may have an advantage in attracting more customers over new wave food trucks that primarily cater to medium to high-income individuals.

Conclusion: Informality, Place, and Agency

Informality as a way of describing street vending activity reinforces ideas of inadequacy as compared to the formal employment sectors. In the food vending industry, informality may refer to unlicensed vendors, undocumented immigrants, unsanitary food handling practices, and low-income employment that are each reinforced by ethnic unfamiliarity, linguistic barriers, and presence on the street. These views drive efforts to regulate street vendors, disempowering those with small businesses that do not conform to policies or visions of empowered officials. Through our observations and conversations with vendors in the Mission District, we find that these perspectives neglect vendors' efforts to sustain families and build community. We found that vendors had control over their businesses, ways to compensate for difficult times, knowledge of regulations, educated backgrounds in the food service industry, clear and informed decision making processes, and a vision for how to advance their business in the future. Most vendors showed us how they overcome obstacles when negotiating the constraints of time, space, and regulatory bodies. These vendors also activate and participate in urban space by creating a social atmosphere, acting as neighborhood guardians. Their repeated presence creates a familiar setting for the community and represents a strong cultural sector of society.

Our research led us to discover the inventive ways in which vendors develop a robust network with old and new industries to support their daily operations. Technology firms show the productive ways to grow and expand vendor's profits by bridging disparate populations and increasing access to customers. Notably, our research shows little relationship between the new wave food truck industry and Latino vendors in the Mission. Their lack of interaction suggests that the new wave industry targets a customer population with moderate to high income and that their location choices in urban space reflect this demographic. Furthermore, we observed a variety of trends among vendors that destabilize categories of formal and informal activities, such as building social ties within a community through repeated presence in a location, locating on private property to establish permanency in a neighborhood, and negotiating over temporary leases on private property to obtain permanent structures. Moreover, vendors' ambitions to eventually own a restaurant show their desire for a formal fixed business.

The shifting social demographics and rising cost of land in the Mission District present new challenges. Increased enforcement, limited available private property, and the loss of networks of friends and family who may need to relocate, are some of the potential issues. In a competitive land market, debates emerge over legitimate uses and appropriate social groups. Converging opinions between vendors and nearby property owners also leads to active contests and litigation over the right to use space. Regardless of these setbacks, this research shows

vendors are highly adaptable with established skills sets and operational strategies for upward mobility.

Without a more complete understanding of vendors' activities, policy and investment measures will continue to contradict or neglect vendor operations and needs. City officials would be well advised to consider equitable treatment of food vendors and avoid blanket policies that neglect their diverse circumstances, including use of the limiting categories of formal and informal economic activities.

Appendix B: Tweet Communication in Mobile Food Vending¹

Introduction

The proliferation of Twitter-based mobile food vendors in cities across the United States has created opportunities for social gatherings to occur spontaneously and in unpredictable locations. Structured upon both physical mobility and continuous online communication, this recent phenomenon poses interesting questions about urban space and information technology. How does information technology inform social practices in urban space and what new spatial and temporal relationships develop as a result? How can we develop an accurate description of emerging activities in cities that combines real-time data with more qualitative forms of urban analysis?

The objective of this research is to interpret emerging relationships among online communication and urban settings. Tweets, posted on the social media website Twitter, provide a lens to better understand the multiple roles and functions of real-time information as it informs urban settings. This qualitative and quantitative analysis closely documents the daily operations, tweet content, and spatial locations of six vendors in Charlotte, North Carolina over an extended period of time. The analysis shows how online communication creates new spatial and temporal relationships in cities and provides new opportunity for innovative analyses.

An existing assumption of this work is that contemporary urban form must account for the transformation and dislocation caused by the rapid proliferation of portable, omnipresent information technology. Unique relationships between data, space, and time emerge while using methods of topic modeling and frequency analysis of tweet content, onsite documentation, participant observation, and interviewing. To analyze this condition, contemporary food vending gatherings are identified as *events* that have both a temporal and a spatial component. The analysis reveals the ways *events* are supported by online communication, located with little relationship to traditional urban form, and can be further organized and studied using emerging techniques in visual analytics.

The field of urban design focuses on the spatial growth of the city and the design of public spaces using qualitative readings of the urban context. These methods lack a way to analyze temporary and spontaneous social settings that are supported by the rapid nature of online communication. Furthermore, urban activities that are both digital and spatial can alter daily patterns of use in cities and prompt planners and urban officials to accommodate and respond to new design settings. Thus there is a pertinent need to develop an integrated approach for analysis and planning that critically examines online communication in relation to spatial settings in order to challenge established methods and suggest alternative frameworks.

¹ This study was a collaboration between Caroline Ziemkiewicz, computer scientist at Aptima, Inc., and Eric Sauda, Professor and Director of the Digital Arts Center at UNC Charlotte, and myself. The overall study design and the design illustrations was a collaborative effort. Ziemkiewicz generated the graphic illustrations using R statistical computing and graphic software and explained the procedure in the document. Ginette was the primary author, writing the introduction, body, findings, and conclusion. Sauda contributed to the conclusion of the document and provided feedback during the writing process. This work was published January 2015 in *New Media & Society*, 1-21 DOI: 10.1177/1461444814567987.

Methods of Communication in Food Vending

Traditional advertising techniques such as distributing flyers and word-of-mouth communication, were once the primary methods that vendors used to promote their businesses. Food vendors can choose to operate in the same locations either daily or weekly so that they become predictable and reliable to patrons. With continued promotion and repetition of location, many vendors can run a thriving and successful business. Alternatively, other vendors have found that the efficiency and usability of information technology promotes, connects, and expands their operations across cities and regions. Vendors, customers, and supporting organizations can use social media platforms (e.g., Twitter, Facebook), smart phone applications that offer real-time tracking of food trucks (e.g., TruxMap, Food Truck Fiesta, Foursquare, Road Stoves GPS and Truck Spotting), smart phone payment applications (e.g., Intuit's GoPayment and Square), photography and video platforms (e.g., Instagram, Vine) as well as blog, business and food review websites (e.g., MobiMunch, Yelp and Urbanspoon). These tools, which together create a media ecology, compliment the nimble business models of vendors who need to remain flexible and responsive to shifting consumer preferences.

Upon its launch in 2006, Twitter quickly became the most popular social media tool for food vendors. Structured on a micro-blogging framework that allows the sending of 140-character messages or 'tweets,' Twitter has achieved exponential growth in recent years. With just 20 users at the time of inception, Twitter has grown its user base to roughly 650 million active participants. Today, small businesses use Twitter as a free mass-marketing tool to communicate their latest or future locations in a city, daily or hourly menu items, whether or not they are sold out of a particular good, or if they are out of service. Food truck operators also use Twitter strategically to choose vending locations throughout the day and to understand the locations of their fellow vendors to meet up or avoid overlap. Just as important, customers find this real-time information helpful when locating their favorite trucks and menu items. It is no surprise that Twitter provides a virtual infrastructure for communication in an industry reliant on mobility. The effects of real-time information have assured vendors a constant and sufficient customer base in a variety locations.

Existing Discourses on Technology and City Development

Communication technology has been a significant force in the development of cities and American culture since the introduction of the telegraph and television. The profound work of media theorist Marshall McLuhan in the 1960s suggests modern technologies such as electricity, television, and print culture were an aggressive transformer of culture. He predicted society would move towards a new collective consciousness becoming a *global village* created by a intensified connectivity. MchLuhan is also well known for coining the phrase "the medium is the message" to explain who content carried over a medium and the medium itself can affect the mental mindset and social processes of a society. Similar to McLuhan's predictions, in 1964 Melvin Webber established the view that electronic communication produces aspatial interactions, acknowledging the emergence of new social relations dependent on public communication that transcends place. While at the time revolutionary, Webber saw telephones, radio, and television as indicators of cultural development to be used as devices for evaluating the effectiveness of urban spatial structure. As opposed to manipulating urban spatial arrangements of cities and city space, he called to focus on social processes as webs of interaction (1964: 80) that are less dependent on traditional, place-based conceptions of urban

environments. His theory is applicable to both the introduction of the telephone and the proliferation of digital communication. As the internet began expanding to home environments in the late 1980s, theorists questioned the relevancy of space, suggesting that reduced face-to-face contact, home employment, and infrequent automobile travel diminishes the economic value of place (Negroponte, 1995; Pascal, 1987). These technological determinist views cast technology as “an essential and independent agent of change that is separated from the social world” (Graham, 1998: 168). Other early theorist views considered technology in a social context suggesting the opposite, that it breeds intensification of urban activity through both electronic and transportation networks (Gaspar and Glaser, 1998; Graham and Marvin, 2001).

Another discourse aims to explain the co-evolution of city development and information technology in a neoliberal economic system, which focuses on cities as global finance centers and communication hubs that are electronically linked, yet face spatial polarization through uneven development (Castells, 2000; Sassen, 2001). Similarly, scholars analyzing regional contexts argue that information technology creates new specialized populations and social structures within a city, whether through local competitive advantage (Saxenian, 1996) or electronic communication channels (Webber, 1964).

Recently, information technology and urban space focuses on international and national social justice movements, operating both online and offline. This research explores the dialogues generated from political unrest and the ways information technology mobilizes people in space (AlSayyad and Guvenc, 2013; Castells, 2012; Harlow, 2011; Massey and Snyder, 2012). Investigations of the Occupy Movement and the Egyptian Uprising reveal the rapid spread of trending information, both locally and regionally, between activists. In this context of social change, the role of online communication manifests itself in urban space through expression and dissent.

In the 1990s, growing discussions on social networks and online communities explored the roles of social identity, participatory democracy, countercultures, and online privacy (Jones, 1998; Rheingold, 1993). Research focused on understanding the ways in which people interact online and create individual and collective identities. More recently, online communities have created a direct relationship with physical communities. Today, websites such as Nextdoor.com, i-Neighbors.org, frontporchforum.com, and Patch.com facilitate communication networks focused on local settings. The unique quality of these platforms is not in their ability to connect users in a global or national framework, but rather their use of the neighborhood unit as an organizing mechanism, which reflects the enduring significance of place in building online relationships.

Using a similar concept of producing more efficient serves, the micro-blogging website Twitter is used to provide situational awareness of natural events taking place in the environment. Through content analysis techniques, tweet messages have been used to detect natural hazards such as earthquakes (Sakaki et al., 2010), fires, and floods (Vieweg et al., 2010). These studies help advance situational awareness of natural events taking place in the environment. For example, Sakaki et al. locates and verifies earthquakes occurring in Japan through tweets and instantly emails Twitter members the information. Aside from these useful risk management tools that address the intersection of communication and space in real-time, Twitter also deploys information on a potentially global scale. Castells refers to free and downloadable open source programs as platforms for mass self-communication. Unique to online communication and unlike television which provides for a single audience, mass self-communication suggests the tweet or

interactive blogging is self-generated in content, self-directed in emission, and self-selected in reception by many who communicate with many (Castells, 2009: 70).

In the following decade, *urban sensing* emerged following the proliferation of smart phone technology (Campbell et al., 2008; Cuff et al., 2008). Geographic information system (GIS) platforms or visual analytic programs can easily collect and analyze geocoded data on a variety of urban processes such as traffic flows, air pollution (Resch et al., 2012), population densities (Calabrese et al., 2010), and weather conditions (Eisenman and Campbell, 2006) from microchip sensors. Urban sensing helps illustrate and estimate urban practices, allowing data to become a form of public infrastructure that supports decision-making among citizens and city officials.

On September 19, 2013, the State of California approved the first set of rules regulating ride-sharing services or transportation network companies (TNC) (Lifsher, 2013). Soon after, companies such as Uber, Lyft, Sidecar, and InstantCab introduced fast and efficient transportation services to a social demographic characterized by smartphone ownership and a healthy income. The concept was innovative, using geolocational data from cell phones to connect customers with available independent private drivers roaming the area or making a nearby drop-off. State legislators saw the benefits of improved transportation options to once neglected areas of cities. They also saw the potential for ride sharing to decrease traffic congestion. Through faster and more efficient services that smart phone technologies support, ride-share companies redefined existing economies such as the taxi industry.

These approaches illustrate the variety of ways in which space is enacted by technology. Information technologies provide new ways for social groups to connect in physical or virtual space, but more importantly, participate with space. Technology becomes an essential part of a mobile food vending assemblage. Opposed to prior vending practices, information technology is now vital to the growth of vendors' businesses and their accessibility to customers.

A Study of Tweet Communication through Time and Space

Unlike west coast US cities that have hundreds of vendors, Charlotte's slower growth of new wave food vending can be attributed to strict spatial regulations that exclude vendors from street parking in the downtown business district as well as the need to educate customers about new food experiences and truck sanitation. Given the size of the new wave vending community it is easy to identify the most popular trucks that commonly repeat events. In 2013, 125 mobile food units and 56 single operator pushcarts have registered health permits in Charlotte-Mecklenburg County (Mecklenburg County Health Department, 2013), of which approximately 40 are new wave mobile vendors (FoodTrucksIn, 2014) and 20 operate on any given day.

Mixed-Method Approach

This study uses a variety of methods to examine the mobile food vendors' online communication and their shifting operational settings, such as topic modeling and frequency analysis of tweet content, ethnographic interviews and participant observation of vendor operations, and spatial mapping of vendors' movements and temporal sequencing throughout the city. Six mobile food vendors, of the 20 regularly active in Charlotte in the spring of 2013, were chosen based on the number of "followers" (>1000) tallied on each vendor's Twitter account and their repeated presence at Charlotte's popular "Food Truck Friday." One-thousand publicly available tweets were collected from each vendor on 15 November 2012, which included the

vendor's account name, the date and time of each tweet, the number of retweets, and the tweet content. Raw tweet data was collected through an Application Programming Interface (API). The tweets spanned periods of 4 to 9 months depending on the vendor's tweeting frequency. Each vendor was interviewed twice on topics including length of time in the business, operating methods, approach to using Twitter, scheduling procedures for events and locations, and menu items related to location or time. Each vendor was visited at least three times to record the arrangement of the truck and movement of customers through diagrams, photographs, and time-lapse video.

Communicating Space: Tweet Cluster Analysis

The analysis began by examining the content of each vendor's 1000 tweets using a simple automatic topic analysis. This effort provides a set of topics that naturally emerge from grouping verbally similar tweets together. Text analysis of tweets is difficult using traditional automated topic analysis due to the short length of documents, heavy use of slang and abbreviations, and noise from URLs, attached images, and automated tweets from applications. More sophisticated methods such as latent semantic analysis (LSA) did not produce better results with our data, likely because the short length of the documents violates the assumptions of these methods. Therefore, a simple topic analysis method based on *k-means clustering* was used.

The tweet data was simplified by extracting the most frequent 1000 keywords minus a standard list of *stop words*, or words to ignore (e.g. overly common words such as *the, an, of*), augmented with tweet-specific stop words including *RT, #*, and URL components such as *http* and *t.co* (the standard beginning of a URL automatically shortened by Twitter). These 1000 keywords become dimensions in a transformed dataset. Instead of being a string of words, each tweet is a vector of zeros (does not contain the keyword) and ones (contains the keyword). This is known as a "bag of words" technique since the order of words is ignored. This results in a dataset in which each tweet is a point in a high-dimensional space.

Next, *k-means* clustering was applied to the data set using the Euclidean distance between the vectors that represent the tweets. *k-means* clustering takes a number of clusters as an argument and classifies data items according to the tightest clusters when the space is separated into that number of groups. The analysis produced values of *k* ranging from 4 to 10 clusters that were examined by hand. Based on the qualitative results of interviews, the topics produced by the eight-cluster analysis were judged to be the most meaningful. While this is a subjective judgment, there was a great deal of consistency between the analyses, so this choice does not significantly affect the results.

The eight clusters in the final analysis are summarized in the following table (Figure B-1). The top 10 features for each cluster are listed, along with the number of tweets in the dataset, which are classified as part of the cluster. The largest cluster, which we labeled "Miscellaneous," is not a clearly defined topic and contains a number of generic terms found in other clusters. This was a common feature to all of the topic analyses and is likely related to the fact that many tweets are difficult to classify due to their noisiness and the small number of words in the classification. Semantically separable clusters emerged due to the fact that the tweets are more restricted in content than most collections of tweet data, since they come from Twitter accounts with the common goal of marketing a food truck. Even so, there are large numbers of tweets in the dataset that fall outside this common semantic space, including mentions of and retweets from accounts not associated with food trucks. The

Miscellaneous cluster is largely an artifact of this off-topic tweeting and, as a result, is more affected by the difficulty of meaningfully classifying very short documents based on a bag-of-words approach.

	Miscellaneous	Schedule	Food Truck Trend	Gratitude	Food Truck Friday	Locations	Truck Mentions	Menu Items
Top features	thanks @wingzzatruck great cupcakes today just see @thetinkitchen tonight us	lunch come see today us st trade 30 tomorrow schedule	food truck trucks great @thetinkitchen come @herban_legend #clt beer charlotte	thank great sold see us awesome day rock guys support	truck food friday rally @southendclt camden park southend tonight see	pecan 1111 ave plaza midwood dinner fork roaming tonight 8-May	@thetinkitchen @herban_legend @napolitanosmkt @sticksandcones @autoburger @southerncake #foodtruckfriday @cltfoodtrucks @papiquesotruck @turkeyand	sweet potato hash special w/ today tacos taco bacon chorizo
Tweets	5201	999	413	300	266	189	111	26

Figure B-1. Eight topic clusters derived from k-means clustering analysis. Source: Sauda, Wessel, Ziemkweicz.

The other seven clusters reveal more meaningful patterns that relate to the trends in interviews and the onsite analysis. The “Food Truck Trend” cluster, which contains a mix of hashtags, mentions, and words relating to the phrase “Charlotte food trucks,” is related to trending topics about food trucks that emerge around popular events. The “Truck Mentions” cluster, which includes vendor usernames preceded by the @ symbol and is used to mention or reply to another Twitter account holder, suggests an active and ongoing dialogue occurs between vendors and their customers. The “Food Truck Friday” cluster contains a series of terms such as rally, Friday, and Southend that relate to topics about the most popular event in the city. The clusters “Schedule” and “Location” include terms about time and location-based information, which reveal the robust link between data and urban space.

After eliminating the “Miscellaneous” cluster, the remaining seven clusters were used as a framework to compare the total tweets and retweets (i.e. tweet content posted by another user) for each vendor. Figure B-2 shows the “Schedule” cluster was tweeted and retweeted most frequently across all the clusters highlighting the importance of advanced planning by vendors. Also, the clusters “Food Truck Trend” and “Food Truck Friday,” that include popular general terms about food vending, are consistently retweeted across all vendors. This reveals tweets travel between Twitter accounts frequently, building a dense network of information exchange. Furthermore, tweets that include terms about “Gratitude” generated very high retweeting for the vendors @WingzzaTruck and @roamingforkNC, showing positive dialogue and relationships can extend past the point of sale. Similarly, the owner of @roamingforkNC mentioned, “Rather than focusing on money, I think first about quality and customer service. My customers need to know that they are appreciated and I am thankful for the opportunity to get out there and give them what they expect” (Cirsan, 2013, personal communication). Last, the “Truck Mentions” cluster shows a consistent amount of retweeting suggesting a strong back and forth communication exists between vendors and their customers which may look like, “First @WingzzaTruck stop of the year! They are always so nice and the food is delish!”



Figure B-2. Total tweets and retweets organized by vendor and cluster topic. Source: Sauda, Wessel, Ziemkweicz.

Event Construction through Tweets

If a physical time-based event is linked to online communication, the tweets should reveal time and location-based information. We began by organizing vendors' tweets into event related (spatial) and nonevent related and identified the frequency of locations in the event-related tweets. In order to determine the tweeting frequency for each vendor, a 2-month timeline (September–October 2012) was constructed showing the days in which events occur, the numbers of event-related tweets, and the number of nonevent-related tweets (Figure B-3). The total count of events, event-related tweets, and nonevent-related tweets are identified for each vendors' timeline. In general, the total number of tweets for any one event ranged from one to nine, the time frame ranged from three weeks before and including the event, and event-related tweets most frequently occur on the day of an event or within one week prior to an event.

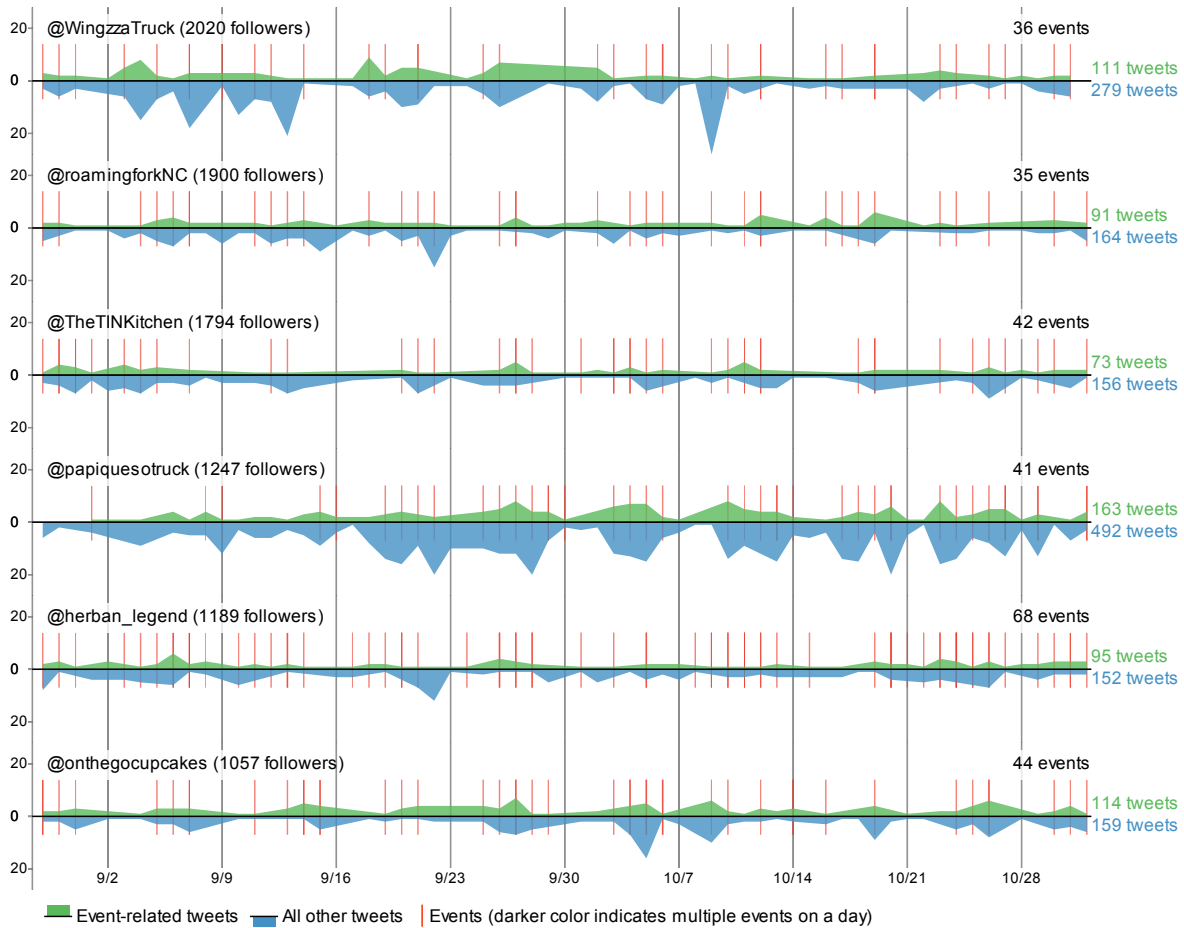


Figure B-3. A two-month timeline of each vendor: the day an event occurs (red lines), the frequency of multiple events occurring on a single day (dark red lines), event-related tweets (green), and other tweets (blue). Source: Sauda, Wessel, Ziemkweicz.

First, the timelines reveal multiple events occur on a single day more frequently during the work week. This challenges the presumption that vending is a leisurely weekend destination. Employees now find food trucks to be a common food choice during lunch hours. Subsequently, the owners of @herban_legend, @TheTINKitchen, and @roamingforkNC mentioned they serve lunch three days a week at remote business park locations or college campuses.

Second, the nonevent-related tweeting reveals vendors often communicate about a variety of aspects, such as types of food, customer feedback, truck operating issues, and their personal life. A tweet by @roamingforkNC states, “In Costa Rica ... Rejuvenating ... Relaxing ... What’s happening where you are?” The vendor @WingzzaTruck tweeted, “Hey #TeamWingzza if you could add one item to our menu what would it be? Working on some things for you! #CLTFood.” This tweeting proves to be a consistent type of communication throughout the entire two-month mapping for all vendors, suggesting it is essential to continue dialogue and engage customers in ways that are personal and positive.

Third, some vendors when compared show an inverse relationship between the number of event-related tweets and the number of events. For @herban_legend, who has a total of 68 events and 95 event-related tweets, and @papiquesotruck, who has 41 events and 163 event-related tweets, the amount of tweets bears no relationship to an increase of events. Interestingly, this

may be related to @papiquesotruck's later opening in 2012 and need to attract more followers. The vendor @papiquesotruck mentioned, "My website doesn't drive my business, social media does. I can tell that my customers use Twitter a lot because we will post a secret menu occasionally and within minutes we'll have people standing in line" (Stockholm, 2013, personal communication).

Using the vendors' event-related tweets, we identified how many times a location was mentioned and tagged it as either "one-time" or "repeated." Most locations were named multiple times for a given vendor (e.g. Food Truck Friday), while others were only mentioned once (e.g. Democratic National Convention). We then tallied the number of each type of event and aggregated them to determine how many days in advance vendors tweeted (Figure B-4). We found that one-time events are tweeted about more often and earlier in advance (2.61 times on average; 1.84 days in advance) than repeated events (1.84 times on average; 0.86 days in advance), although they take place less often. This suggests there is high value in online communication when familiarizing customers with new locations. The mobile nature of their practice can serve as a disadvantage compared to restaurants who have predictable and fixed locations. The vendor @papiquesotruck is well aware of this challenge stating, "I like building long-term partnerships with businesses so that my customers know where to find me on a regular basis" (Stockholm, May 29, 2013, personal communication).

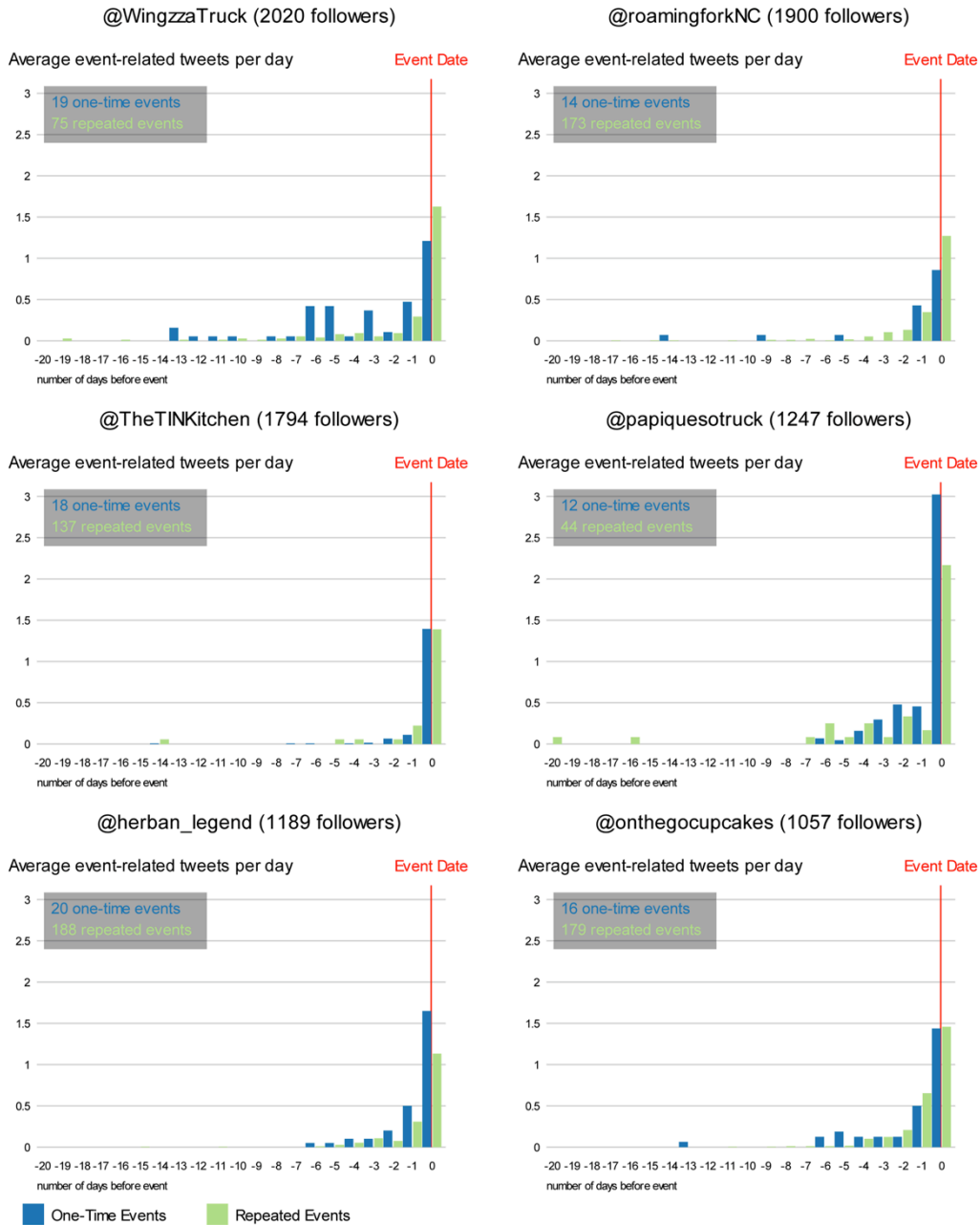


Figure B-4. Average number of one-time event locations and repeated event locations per vendor. Source: Sauda, Wessel, Ziemkweicz.

Next, we investigated a single vendor, @herban_legend, to better understand event-related tweeting in relation to events. We generated a spark line for each of the 209 total events that shows corresponding tweets identified with each event (Figure B-5). The largest amount of tweets related to a specific event is nine, and a pattern of tweeting emerges well in advance of the day of the event and often multiple times. This asynchronous relationship between the event and online communication is represented in the following: 33% of all events have a single tweet at least 1 day before the event, 61% of events with two or more total tweets have at least one tweet before the day of the event, and 92% of events with three or more total tweets have at least

one tweet before the day of the event. These numbers reveal vendors’ routine practice of planning and announcing events ahead of time. Unlike prior forms of vending, new wave vendors are able to construct an event and ensure a predictable customer base well before it physically occurs.

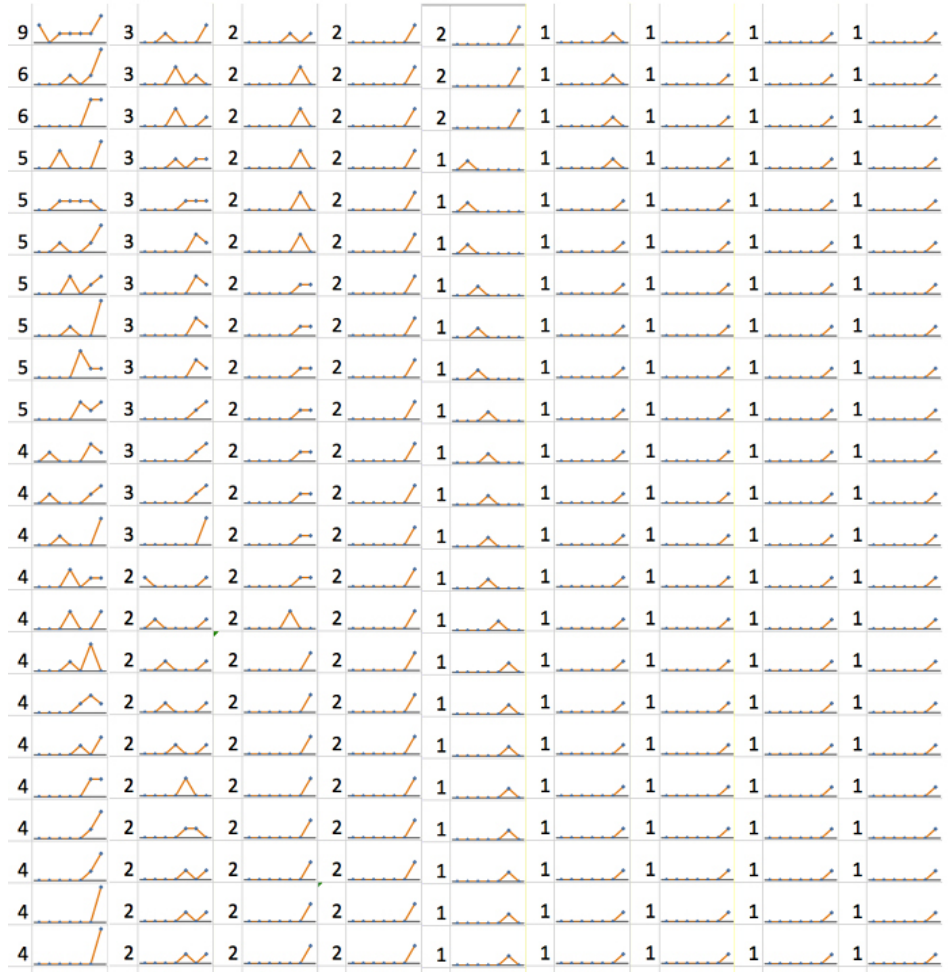


Figure B-5. Mapping of each event across time for vendor. Nine is the most tweets per event and one is the least. @herban_legend. Source: Sauda, Wessel, Ziemkweicz.

Vendor time-space sequencing

Working toward a visual analytic interface that illustrates the intersection of space, time, and data, we illustrate the vendors’ choice of location and movement over time (Figure B-6), first over the course of a year for relative frequency of locations, and second, over the course of one week to illustrate their movement between locations. Vendor websites and tweets over 12 months provided location information.

In the first map, locations visited three or more times by vendors within the 12-month period are geographically marked using a circle. The diameter of the circle corresponds to the number of times that location repeats among all vendors. If a location is visited eight times, the diameter of the circle is eight pixels. If more than one vendor visits a location, the circle is divided corresponding to the percentage of times that each vendor frequents that particular location. The second map relates to

the spatial movements of the vendors. Considering that the data shows vendor activity often reoccurs in a weekly pattern, we chose a random week and plotted arrows to connect the locations in the order visited. This process is then repeated for each vendor.

In addition to visualizing the frequency of space and the flows of movement between locations as part of an analytic program, the vendor locations reflect many of Charlotte’s geographic and economic conditions: a compact downtown core, a decentralized landscape linked by an extensive roadway system, business park developments located on the southern periphery, the university as a node of activity north, and major thoroughfares and areas of commerce throughout. Furthermore, this organization reveals an uneven spatial and temporal distribution. Much like the telephone permitted the decentralization of communication, online communication in this setting supports the mobile expansion of the food vending economy. Mobility allows vendors to travel to meet customer demand. While some may view this as a competitive advantage, vendors face the difficulty of making their business known in unfamiliar locations. Mapping the fluid nature of urban processes is a continual challenge for planners who seek to understand urban use patterns. In these maps, we hope to represent actual behaviors occurring in time and space.

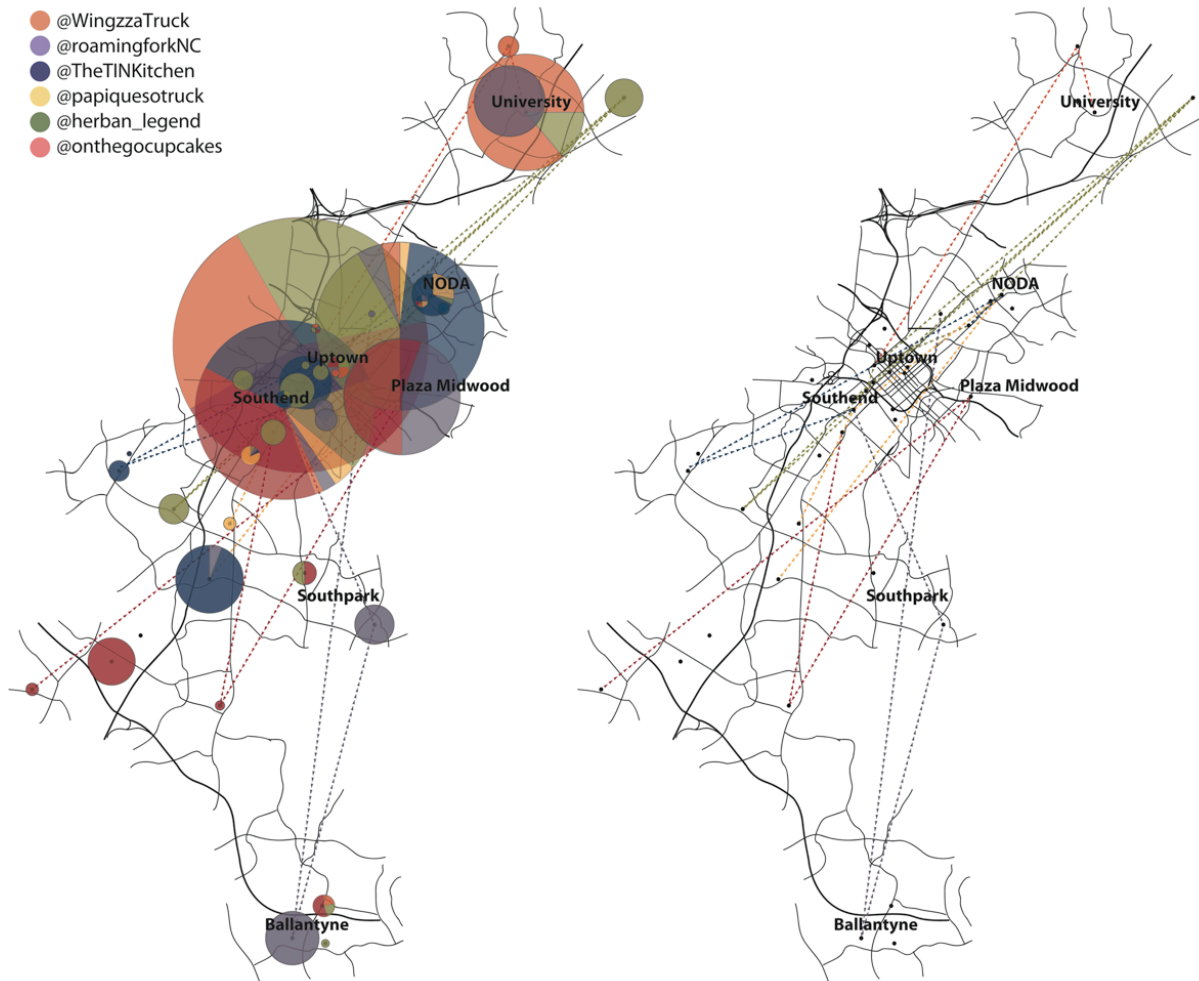


Figure B-6. Mapping of vendors’ location frequency for one year and movement for one week.
Source: Sauda, Wessel, Ziemkweicz.

Event spaces

Based on the highest frequency of events, we chose four spaces to compare with traditional gathering places and formerly established Latino vending locations. Using standard urban design techniques, we studied both the immediate site of the trucks (e.g. customers, site amenities, and any other co-located trucks) and their position within a larger urban context (e.g. nearby land and building uses) (Figure B-7).

The first space is a privately owned vacant dirt parcel situated on the periphery of Charlotte's central business district, also known as Historic South End. With the help of Charlotte's Downtown Association, the site became home to "Food Truck Friday" in October 2011. Aside from its slow start, it is now a widely popular activity on Friday evenings in the city. The downtown association mentioned a number of factors were used in determining this location: visibility from pedestrian paths, scale of the space so that it could accommodate food trucks while also intimate enough for patrons, close proximity to public restrooms, available parking, and few nearby food establishments. This site's context resembles a traditional gathering space with its abundance of open space and close proximity to retail and public transit. Yet, the site is left unused otherwise, lacks shade devices or trees, lacks permanent infrastructure, and has relatively low pedestrian activity other than Friday.

The second location caters to lunchtime patrons multiple days of the week on an active vehicular thoroughfare adjacent to a culinary university and a residential condominium. Key factors in the success of this location are truck visibility to vehicular traffic, accessibility by foot to residential and educational buildings, and nearby infrastructure for seating and shade. However, the space does not serve as a designated gathering space, rather the presence of the food truck parked on a busy street activates nearby spaces.

The third space is a large parking lot located in an office park south of the central business district. Patrons working in nearby offices take food to their cars to eat alone, sometimes in pairs, while others take food to their office building. Given the short lunch hour and the lack of seating options, this location has large influxes of people and then lulls of emptiness leaving patrons little opportunity to socialize. A vendor mentioned that her more dedicated customers order in advance, allowing them to avoid lines. The design elements of this space have no bearing on the vending experience or traditional gathering spaces.

The last location is nestled behind a local brewery in the Historic Arts District northeast of downtown. The paved parking lot accommodates a single truck nightly that is organized by the brewery owner. Given the remote location of the brewery, a majority of customers drive; however, customers tend to occupy the site for long periods of time. The site does offer seating for patrons indoors and outside, but lacks open space, shade, street visibility, and pedestrian and public transit access.

Findings show that vending locations are not initially conceived with regard to accommodating people formally or informally. Situated on predominately privately owned and underutilized land, these spaces are instantly transformed with vibrant mobile restaurants, makeshift seating, and social activity. Unlike the established Latino vending locations that respond to a laborer's workday serving at industrial work places, commercial strip malls, and convenient stores, new wave trucks cater to White and African American populations in office parks and large vacant lots to accommodate their pre-notified customers. Furthermore, the resemblance between new wave vending locations and traditional parks and plazas varies among sites. Overall, traditional urban design methods cannot fully explain the development of vending

locations and information technology affords a virtual dialogue where demand for vendors is generated and organized in advance.

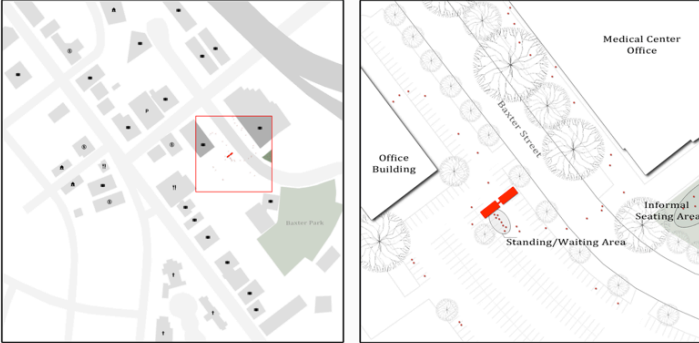
Historic South End, 102 South Camden Street



Gateway Village, 980 West Trade Street



Baxter Office Park, 928 Baxter Street



NoDa Historic Arts District, 2229 North Davidson Street



Figure B-7. Four locations analyzed for their characteristics of traditional gathering spaces. Source: Sauda, Wessel, Ziemkweicz.

Conclusion

Posed with the question of how information technology would affect the use and even the relevance of the city, this research examines contemporary mobile food vending as a new form of urban spatial occupation linked to online communication. The investigation of this phenomenon revealed the underlying temporal relationships afforded by online communication. This creates a demand for new food experiences in unfamiliar urban spaces by extending the reach of an audience beyond the physical propinquity of a food vendor. As suggested through this analysis, this urban condition requires new strategies that combine real-time information with more traditional forms of analysis.

Presumably, mobile food vendors might find places in the city that closely follow and reinforce the planned spatial pattern. If this were true, existing urban design methods would be sufficient to explain and plan for their growth. On the other hand, the combination of online communication and food vendors could lead to extreme forms of diffusion. The locational decisions of a truck might reflect the aggregated demand derived from information technology, shifting locations in real-time to meet the greatest number of customers. The truck could move many times over the course of a day, a “just-in-time” restaurant. In this scenario, urban design is irrelevant; the trucks would move frequently and without regard to the nature of the space they occupy.

This study shows how data, space, and time are a tightly woven network that functions before each food truck event. Specifically, spatial information is announced several times in advance of the scheduled date, creating an audience for a particular location at a particular time. This allows the event to reach more than a spatially adjacent audience, as opposed to prior modes that relied on repeated presence, word-of-mouth communication, and even music played through loudspeakers. In addition, the local spatial arrangement of the trucks was highly variable. Sometimes, the trucks reinforce a more or less predictable arrangement of urban form (e.g. Food Truck Friday), but often, the spatial arrangement responded only to the location of potential customers, especially in peripheral urban spaces (e.g. office parks and university campuses).

Thus, neither data nor urban space considered separately could adequately explain vendors’ behavior. Existing descriptions of space using canonical methods of urban design could not describe the locations of the trucks with any degree of certainty, while at the same time, investigations of the data network using either topic modeling or temporal information was only meaningful with some knowledge of the spatial locations.

At the most primary level, the unit of analysis will become the *event*, something that combines location, time, and data. The identification of *events* will help to guide decisions relating to emergent forms of commercial, social, and civic functions (e.g. mobile health clinics, libraries, and retail businesses). This effect will be particularly pronounced with new businesses and social gatherings.

As a result, locations for public activities of all kinds will be less based on planned urban space than on propinquity. Being on “Main Street” will matter less than it used to, but being nearby will still be important. An audience will be able to find any event, but a specific location will be important for gathering a critical mass. Previously marginal urban spaces will become more important and valuable.

Finally, by using mixed methods, this research proposes a hybrid form of urban analysis that is informed both by a qualitative recognition of human urban places and a quantitative understanding of large flows of data. A visual analytic interface, suggested by the direction of this research, can offer an understanding of the underlying processes that create urban places.

The defining quality of this interface will be its discursive nature, allowing users to test alternative interpretations while viewing multiple forms for information.

The emphasis on the spatial over the temporal in urban analyses has become a serious drawback, making the understanding of new forms of urban activity difficult to see or to analyze. Considering only the informational network would be equally one sided. This analysis represents some first tentative steps toward an integration of qualitative and data-driven analyses. As data become more readily available, urban analysts will need to reevaluate traditional methods in order to interpret and plan for urban activities supported by online communication.

Appendix C: Research Limitations

Research Limitations

Generally speaking, I encountered few limitations in this research. In 2009, the rapid emergence of mobile food vendors heightened news media and municipal concerns regarding the best way to handle the expanding industry. Thus city officials, vendors, advocates, antagonists, and food truck organizers welcomed my curiosities. Participants in this research were often curious themselves about the fate of their business due to competitive urban settings. The acceptance of my inquiries among the vending communities studied affirms that vendors are important social actors who interact and build social bonds with the general public. Observing the ways vendors foster social activity shows how essential vendors are in creating a diverse public realm.

Although I was initially embraced as a curious participant in the mobile food vending community, I encountered minor limitations during my ethnographic fieldwork and data analysis. In addition to commissary visits, fieldwork observations occurred at a variety of food vending locations, each visit lasting two to three hours. Vendors' continuous movements throughout the city challenged me to actively seek new fieldwork sites and learn vendors' behaviors and routines in each city. Some cities, such as Charlotte, had stronger vending activity during the workweek lunch hours as opposed to weekend evenings. Conversely, Los Angeles had activity at both times, but the activity was more sporadic. The limited timeframes with which to work also led to site visits characterized by constant and intense periods of photography, note taking, and conversing with vendors and customers. Each setting provided a new set of circumstances that included different spatial contexts, types of patrons, and vendor arrangements that required fluid and constant note taking. My lack of familiarity with the geography of Portland and Los Angeles required a significant amount of online research before entering the field so that my time in these cities could be most efficiently used.

Some vendors' dialects and poor English speaking skills proved challenging when translating vendor conversations after interviews. In situations where Spanish was the native language, I brought a translator to mediate conversations. Furthermore, hearing vendors' responses sometimes proved difficult given the height differential between the street and the vendor inside the elevated vending unit, but often the vendor would exit the vending unit or invite me inside to talk more easily face-to-face. Street noise and car traffic also produced external noise that made holding conversations challenging. Overall, these limitations were considered minor and did not hinder my ability to gather a complete picture of vending.

During my fieldwork observations at vending sites, I attempted to take on a passive role and affect the setting as little as possible. Occasionally, I participated by purchasing food and chatting with customers. In situations where I actively participated, I was aware of gaining intimacy at the cost of objectivity, observer bias, or intrusiveness, and I determined that these losses did not significantly impact my analysis. The notebook I carried drew a few curiosities from business owners and customers in settings with little patronage. Queries about my presence resulted in brief conversations that provided rich information and stories. While on-site, I timed the best opportunities to approach vendors. Food trucks with one or two staff members meant vendors were continuously busy managing the operations of their business. Lengthy discussions with vendors were usually scheduled for the following morning when the vendors were able to

talk while prepping for the day. Overall, concealing my identity as a researcher was less important than establishing relationships with the vending community.

Last, the messiness and complexity of real-time data required a significant amount of time to clean and analyze the information, which challenged my research timeline (Appendix B). Tweets captured from Twitter included metadata that required coding and organizing in order to analyze correlations and patterns. This process was conducted both manually and by using statistical programs that each required extensive pre-planning and know-how. Thus data analysis in this research spanned two years and required the assistance of a skilled statistical analyst.

Appendix D: Interview Guides and a Patron Survey

Interview Guide: Food Vendors

Starting a Food Vending Business

- Could you describe a typical day of work? Could you kind of take me through your day and tell me what it is like?
- Tell me the story about how you ended up as a food vendor starting from when you first began thinking about it. What influenced this decision, people? Information sources? And what was the reaction from your family and friends to this decision?
- What were you doing before you started a mobile food business. What were your reasons for starting it? Did you already know people in the mobile food business?
- Describe your first few weeks and months in the business. What were your expectations about your business before you started vending? How did your experience in the business differ from your expectations?
- What are/some of the hardest things about starting out in the business? Could you give me an example of a hard time?
- How has your life changed now that you have been operating your business for a while? Can you tell me about the relationship(s) you have had with your customers, landlord(s) of your locations, your fellow food vendors, and nearby store-front business owners.
- What year did you begin operating this truck?
- How many locations do you typically travel to in a day?
- Tell me about your plans for the future of your business?

Operating the Mobile Food Truck

- Tell be about how you found the locations where you serve and why you chose to park there.
- Are there certain criteria about these locations that are important to you? What location do you like the most? And which the least? Why?
- Do you do anything to attract more customers? What changes would you like to make to attract more customers?
- How would you measure the success of your business?
- Tell me about where you prep and buy your food.
- Have you had experiences with inspectors, can you recall any of them? Can you tell me about the experiences you've had with city officials?
- Does the weather impact your business? Do you do anything to counteract this?

Technology

- Do you use online technology for your business? Which types? For what reasons do you use them? Which do you use most often?
- Do you think a majority of your customers use online media to get info about your cart? Half? Less than half?
- Which platform do you think your customers use most?

- How has the use of this tech helped your business? Can you give an example.
- If there was ever a time when you did not use technology for your business, tell me about any change you noticed in your business when you started using it.
- Do you find technology to influence your ability to serve multiple locations?
- Do you have any advice for other vendors starting out using Twitter or Facebook?

Interview Guide: City planning officials, Vending organizers and spokesmen, Representatives of start-up kitchen facilities

Introductory/ Personal Experience

- Could you tell me about how you became interested in XXX and how you eventually received your position at XXX?
- Could you briefly describe a typical day for you? Or what your job entails?
- When did you first experience food vending in your career?
- As someone who worked for XXX, could you tell me about your role and responsibilities you had in relation to food vending?
- Looking back on your work in XXX, could you describe any particular events or situations that you dealt with or were involved in, in relation to food vending. What was the role or position of the person involved?
- During these events, did you encounter any problems? And what did you do?
- Could you explain your role specifically and how you responded to the event/situation?
- On a more personal note, could you tell me about your thoughts and feelings about these events as they occurred?

Vendor Operations

- As a XXX, did you have any experience with online media (e.g. email, websites, social media) for communication or other purposes in relation to topics of food vending?
- Could you tell me about the online platforms you use and the reasons for using them?
- In terms of the cultural landscape of vendors in XXX, could you comment on the ethnicities among vendors?
- Did you notice any cultural differences through your interactions with them?
- Are you familiar with or can you comment on the emergence of food truck in XXX. Why were these sites in particular developed? Did you play a role in their development? Are there certain criteria about these locations that made them appealing? What is important about these locations from a XXX perspective? Not important?
- From your perspective, what location do you like the most? And which the least?

Social Relationships

- Can you tell me about the relationship(s) you have had with vendors. Positive or negative experiences?
- Can you tell me about the relationship(s) you have witnessed between vendors and property owners, store-front business owners, and the city.
- Have you witnessed any situations of resistance from any of these parties? Or particularly friendly interactions?

Closing

- How, if at all, have your thoughts and feelings changed about food vendors since when you started working with them?
- Could you describe the most important lessons you learned about food vending through experiencing the rise of vending in XXX?

- Throughout your career of vending in XXX, who has been the most helpful to you during this time? And how were they helpful?
- After your experiences with food vendors, what advice would you give someone who has just encountered food vending in a planning position?
- Do you have plans to become involved in food vending in the future?
- Is there anything you would like to ask me?

Patron Survey

I am a PhD student at UC Berkeley studying the social & economic relationships among food trucks/carts in the city and I would like your input based on your experience as a patron. Your answers will be kept anonymous. Thank you.

- 1) Did you come here today with the intent to eat from a specific vendor(s)?
Yes No Which one(s)? _____
- 2) If you did come here for a certain vendor(s), how did you learn the vendor(s) was here today?
From a friend/coworker, Flyer posted in the area, Online, if yes, what type of media?
Other: _____ N/A
- 3) If you did come here for a certain vendor(s), how did you initially learn about this vendor(s)?
From a friend/coworker, Flyer posted in the area, Online, if yes, what type of media?
Other: _____ N/A
- 4) If you did not come for a certain vendor(s), how did you learn about this location?
From a friend/coworker, Flyer posted in the area, Online, if yes, what type of media?
Other: _____ N/A
- 5) How often do you patronize food trucks?
More than once a week, Once a week, Less than once a week
- 6) Are you from this area or are you visiting from another city?
From here Visiting from _____
- 7) In general, how often do you use online sources to find information about food truck(s)?
More than once a week, Once a week, Less than once a week
- 8) If you use online sources, what type of information is important to you?
Truck location, Menu items, Food specials, Prices of menu items, Hours of operation
Other: _____ N/A
- 9) Regardless of food vending, are you typically an active online user?
Everyday, Online more than 5 days a week, Online 1 to 2 times a week, Never online
- 10) How do you feel about the physical qualities of the food truck(s) at this location?
Very Appealing, Moderately Appealing, Neutral, Somewhat Unappealing, Very Unappealing
Truck signs
Awnings
Exterior of truck(s)
View into kitchens
- 11) How important to you are the following characteristics of this location?
Very Important, Moderately Important, Neutral Not Very Important, Not at all
Trees
Parking availability
Seating/Tables
Covered seating
Street character/image
Landmark structures
Landmark spaces

Adjacent uses
Presence of other people
Safety
Direct sunlight
Breeze or wind
Proximity to public transit
Other: _____

12) What motivates you to patronize food trucks?
Strongly, Moderately, Neutral, Slightly, Not at all
Tasty food
Affordable food
Service of vendor
Close to home/work/school
Convenience of social media
Enjoyable outdoor atmosphere
No other food option nearby
Other: _____

13) How often do you get your food to-go? Every time, Almost every time, Occasionally, Never

14) I have conversations with other customers at food trucks.
Strongly agree, Agree, Neutral, Disagree, Strongly disagree

15) Other than ordering food, I have a friendly relationship with one or more vendors.
Strongly agree, Agree, Neutral, Disagree, Strongly disagree

16) How did you travel here today? Walk, Bike, Drive, Public Transit

17) Approx travel time? _____ minutes

18) What is your highest level of education? High School, Associates, Bachelor's, Graduate

19) What is your occupation? _____

20) Age: _____

21) Gender: Male Female

22) Ethnicity: Hispanic, Caucasian, Asian, Eastern European, African American
Other: _____