COUNTERACTING FOOD DESERTS. THE POTENTIAL FOR MOBILE FOOD VENDING IN REGENERATING CONTEMPORARY CITIES

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ABSTRACT

Even if healthy food is back on the agenda of a growing number of cities, for far too many people, and especially for those living in low-income neighbourhoods, the access to healthy options is simply out of reach. Many of these communities are oversaturated with fast-food chains and other sources of inexpensive and processed food, facing the highest risks of obesity, diabetes, and other preventable health challenges. Unsustainable urban development, market failures and urban planning have mainly led to food deserts, areas without proper access to fresh, healthy and affordable food. These underserved urban spaces have recently received a great deal of attention, seen as the product of poor proximity, means of transportation and shopping options in low-income neighbourhoods.

As cities seek to grow a more sustainable, equitable and liveable environment, ensuring that healthy food is accessible to all is crucial. Alternative projects, initiatives and policies have been developed, bringing mobile food options to these unsuccessful parts of cities. Street vending, as an interim use, is a mean to promote a livelier and healthier city, a potential tool that may generate positive community changes, if the agenda used to promote it specifically address existing inequalities.

This paper argues for the use of mobile food vending as an innovative tool to counteract food deserts and to activate the public space of previously dramatic urban areas, improving health and urban outcomes in places that need them most. It focuses on specific north-America street food strategies: New York City, Philadelphia, Seattle and Toronto have devised similar street food strategies with the aim to increase access to healthy food for the most vulnerable people.

Keywords: activation, food deserts, mobile food vending, public space, revitalization, street food.

1 WHY HEALTHY FOOD MATTERS

Food – its production, transportation, process, access, regulation, consume; its contribution to the local economy and jobs, and what it does to the health of people and the planet – is a major issue for cities and regions. Adding food to the core elements of the planning and design processes improves the liveability of our cities and will deliver a more sustainable city in the next future.

The identification that food needs to be on the agenda while planning and designing cities is gathering momentum all over the world: planners are involved in processes that improve public health, sustainability, land use, transportation, environmental management, and economic development. Since planning takes into account the programs and functions of a city, planners and decision makers are affecting the community food system. Using the words of Dannenberg, health is determined by planning at least as much as it is by medical care [1], so it is crucial for planners to be wary of communities' health concerns, food systems, and food security to minimize food desert issues.

From the past to the present day, food has been central to the health and wellbeing of cities. Over the course of the last century, global changes placed pressure on cities and their food systems, resulting in pollution, interruptions in food supply, diet-related preventable diseases, rising food costs, and losses of rural areas. Nowadays, there is a growing recognition that local and sustainable food fuels healthy and vibrant communities, making an important part of the local economy, and acting as a powerful catalyst for fostering inclusive neighbour-hoods. For all these reasons and repercussions, food is reappearing on the agenda of a growing number of municipal governments.

The importance of working on a coordinated food strategy is in response to the recognition of what food brings to the city and to vulnerabilities and challenges. Food is an issue that galvanizes communities and catalyses action like few other topics can: it greens the environment; it promotes biodiversity; it contributes to the local economy and provides opportunities for education, social inclusion and interaction.

Many of the researches and scholars that define food deserts do not take into account food distribution organizations other than grocery stores, and thus do not allow for a complete look at how these other organizations play a role in and can affect the future of underserved urban spaces. One of these innovative types of organizations is mobile food vending – vendors are able to move their central location or distribution network more freely because they are not tied to sedentary brick and mortar buildings. For these reasons, it may be beneficial to understand more about its role in food deserts, both in the offer of healthy food and in its potential to enliven the urban landscape and enrich the quality of public life.

This paper highlights existing examples of healthy vending initiatives to describe how mobile food vending can be used to increase access to nutritious food for vulnerable populations. Although urban scholars gave attention to the topic in the past, contemporary mobile food vending has received little attention in the literature. This paper tries to highlight the features of mobile food vending that makes it an intriguing venue for food access and urban revitalization.

2 FOOD ESTABLISHMENTS AND THE ROLE OF PUBLIC SPACE

Urban design and planning literature in the last few decades has suggested that streets are the main public space in cities. Streets represent the outdoors and people depend on them for their daily activities, movements, and social interaction [2–8]. Previous studies have shown that the main characteristics of cities are the liveliness and diversity, the mixing of various functions, activities and ambience, of the public space. Increasingly, scholars have suggested thinking of the role of and the need for meaningful public space, able to support and enhance public life and social interaction [2, 4, 9–12].

Today, there is a growing belief among practitioners that urban design must incorporate both form and function to become a field that engages the human experience of the built environment [13]. Many cities have adopted a hybrid approach that incorporates a balance of people and place into their plans and policies. The rise of Everyday Urbanism and Tactical Urbanism has exemplified the current movement of citizen-driven incremental civic improvements [14, 15]. In Tactical Urbanism, local authorities and urban residents use temporary solutions to bridge the gap between existing development and an envisioned future. These tactics are particularly common in areas with strong citizen involvement, and projects have been important for building community, both socially and physically [14].

Food has long been tied to social, cultural, psychological wellbeing and comfort. Seen as an activity that stimulates social involvement and delight, food is a generator and provider of human interaction [16]. Its vital role in everyday life and the potential to bring people together

make food, and the act of selling and consuming, an important opportunity to connect social comfort to the built environment [17].

The use of food to build urban activity, conviviality and a sense of community in public space emerges from the researches of Whyte and Oldenburg. Whyte was a strong proponent of vendors in the public realm, because "food attracts people, who attract more people", and vendors are "caterers of the city's outdoor life" [18]. Oldenburg defines *third places* all the informal public gathering places where people can active and passive socialize with friends, neighbours and strangers. These places have some common aspects – proximity, easy access, food and drinks – and are an essential counterpart to our private sphere [9, 16].

Food establishments are apt to be generators of activity because they provide what Gehl calls "opportunities for staying", invitations for people to comfortably linger in the public realm [19]. Few other types of activities can offer such extended and casual experiences in the public space in the way that selling and eating food are able to [16].

By encouraging opportunities for staying, neighbourhoods and cities can enliven streets while bringing in economic potential. The idea of food as a catalyst of experience places selling and consuming into the social realm and "in many cities, new food-consumption venues are the forerunners of urban regeneration" [17]. Food becomes an opportunity for re-establishing retail businesses, missing services, and a sense of community back into a neighbourhood, since the use of the sidewalk and the activity that spill out from food establishments help to enliven the public realm. The measure of a space is not a matter of quantity, but quality: total pedestrian counts can only show traffic, but total pedestrian time spent within the space indicates the quality of space provided. This change in speed is critical to the public realm as it helps to generate more activity and create an atmosphere of conviviality and liveliness [10].

Although these activities are linked only through consumer interaction within the food system, they provide an important platform for liveability, placemaking and design. The use of open-air food businesses "contribute to the character of the area and, possibly, of the entire city" [20].

3 THE GOAL OF FOOD DESERT TRANSFORMATION

All over the world, cities have experienced a trend towards urbanisation, causing the separation of people, both physically and culturally, from the sources of their food. When food deserts are present in rural or urban areas they often contribute to food insecurity by limiting food choices [22, 23]. The problem with food desert communities has been around for a long time, but as more studies reveal the impact of food deserts on health and sustainability, more professionals and decision-makers are becoming aware of the issue. One of the reasons why a food desert is closely related to health is because access to nutritious food is correlated to the community's overall quality of life and neighbourhood liveability.

The topic of food desert communities is gradually making its way into design and planning discussions, because food access and availability affects obesity rates, diabetes, chronic diseases, and other health-related illnesses [24]. According to PolicyLink and The Food Trust, studies indicate that disparities in income, transport, and physical access to retail may make it more difficult for low-income communities to buy healthy and affordable food than those in higher-income communities.

Without access to healthy produce, communities are missing the commercial vitality that makes neighbourhoods liveable and helps local economies thrive. In fact, the combination of increased access to goods and profitable employment for the seller creates a positive outcome

for the community. According to Jacobs, "a well used city street is apt to be a safe street" [2], because the more people who are active outside their homes, the more *eyes on the street* are watching for crime and other undesirable activities. People need a reason to be on the street and commercial activity is one of the most compelling ones: the more diverse the commercial activity, the more vibrant one can expect an area of a city to be. Although these activities are linked through consumer interaction within the food system, they have the potential for urban regeneration [17] and provide an important platform for liveability, placemaking and design.

Given the immense benefits of public space on community life, underserved neighbourhoods in need of revitalization face significant difficulties recruiting commercial activities, because of their undesirable market characteristics and difficult land assembly for larger developments. Vacant lots are a common feature but they are often disconnected from each other and difficult to gather for regeneration projects. However these lots could become good sites for alternative initiatives.

Attracting and stimulating healthy food options in food deserts is an important component of a broader strategy aimed to reinvigorate disinvested areas, improving health and urban outcomes in places that need them most. A shared recognition of the role that food plays in creating more liveable, vibrant neighbourhoods and healthy communities has inspired support for different projects and initiatives, bringing temporary approaches back to the city. Farmers' markets, mobile food trucks, food hubs, and community gardens provide innovative small-scale options that reduce barriers to healthy food, a creative and agile response to gaps in food access.

Building on this definition, the goal of food desert transformation includes access to food for all residents, with particular attention to reach healthy, affordable, culturally diverse and sustainably grown food within a reasonable walking, transit or cycling distance. The need for healthy and affordable food in neighbourhoods has been recognized as an important dimension of quality and equity. Increasing food retail options, including interim activities, would be a mean to promote a livelier and healthier city, a potential tool that may generate positive community changes, if the agenda used to promote it specifically address existing inequalities.

4 THE ROLE OF MOBILE FOOD VENDING IN URBAN FOOD-POLICY, FOOD SECURITY AND REVITALIZATION

As seen previously, challenges exist for many residents in accessing fresh and healthy food, whether for reasons of physical access, lack of familiarity, or affordability. In order to decrease the size of food deserts, work must be done to determine how these areas can decrease food insecurity. One way is increasing access to fresh and healthy food through systems that are flexible enough to accommodate the nutritional and financial needs of the community. Researchers have stressed the need for alternate retail food outlets in food deserts [25, 26], revealing how temporary mobile food options provide an inexpensive way to make produce available to communities. These initiatives are often successful because these travelling vehicle house various produce and transport them to different location, bringing heavy foot traffic in nearby streets, revitalizing existing local businesses and activating the public space.

With growing attention towards mobile food vending, US cities are now struggling with what role vendors could play in urban areas. There is confusion from planners and policymakers that are unsure how to regulate and accommodate mobile food vendors in the contemporary city [27]. The practice of mobile food vending raises a number of questions about the role of street food in cities, the responsibility of municipalities to defend the public

health and safety, and ownership and rights to public space. With renewed interest in vending, these arguments over how, when and where vending should occur have come to light.

From a regulatory point of view, introducing mobile food vendors, with trucks or carts, into a community can be solved by improving rules that target mobile vendors, conferring them more freedom to sell produce in food deserts [28]. Mobile food vending serves as a small and affordable catalyst for urban revitalization, responding quickly to changing needs - as their mobility enables vendors to adapt to changes – and yielding to higher priority uses of space [29].

Returning streets to multiple uses could help improve public health. Slowly, organizations and cities are spreading these benefits to the underserved, allowing private buyers and sellers of food to meet and trade in the public street.

The *New York City Green Carts* program addresses a huge service gap by recruiting private vendors to bring fresh produce into food deserts. The program, adopted in March 2008, establishes hundred permits for vendors to operate mobile fruit and vegetable carts in high needed neighbourhoods throughout the five boroughs. Locations were determined using data from the Department of Health and Mental Hygiene Community Health Survey, showing that more than three million New Yorkers were living in dense areas with limited access to nutritious, affordable food. NYC Green Carts was established to increase availability of fresh fruits and vegetables in neighbourhoods, where at least 14% of residents reported eating no fruits or vegetables the days before.

From the establishment, community surveys found that the percentage of adults eating at least five daily servings of fresh produce increased by three percentage points between 2008 and 2010 [30]. By introducing mobile food carts that carry fresh produce in previously underserved urban areas, the city is contributing to increase access to a variety of fresh fruit and vegetables, reinvigorating the urban space. As explained in *PlaNYC*, sustainability cannot be achieved without a proper access to retail, including healthy food. Moreover, the city recognizes the important role street food served in building communities, supporting local identity, and bringing individuals together around the vital issue of access to healthy food.

According to researchers at Columbia University's School of International and Public Affairs (SIPA), the access to healthy food in otherwise underserved high density and low-income neighbourhoods has increased, influencing customers' consumption of fruits and vegetables, and creating jobs. These results made it a blueprint for other cities, with Philadelphia, Chicago and Los Angeles all experimenting with similar programs [31].

In March 2010, the Philadelphia Department of Public Health launched *Get Healthy Philly*, a public health initiative that brings together government, community-based organizations, academia, and the private sector. Get Healthy Philly envisions a city where all residents can live, work, shop, and play in an urban environment that promotes healthy eating and active living. The initiative works to ensure that citizens can enjoy long, productive lives free from disease, disability, and premature death, due to unhealthy lifestyles. Early researches have reported that only one out of ten people gets a daily serving of fruits and vegetables and people living in low-income neighbourhoods have less access to grocery stores, eating more fast food and fewer fresh produce (more information available on Special Reports and Publications, Phila.Gov - Public Health). From the beginning, Get Healthy Philly has been working to make it easier for these communities to eat better and be active. In fact, the program maintains a network of over 600 healthy corner stores, it brings new farmers' markets to low-income communities, and supports street food vending around the city.

Another initiative is the *Healthy Food Truck*, a partnership that provides nutritional labelling and promotes healthier meals. This project has been proposed to Campus Health Initiatives in February 2013, and it officially started few months later under the *Eat Well* initiatives. The mission helps food trucks to becoming healthy hot spots where the quality of life of customers is promoted. The project is unique because it uses a business-friendly, community-based approach, increasing the chances for success and sustainability. The aim is to achieve a vibrant food truck scene that fosters nutritious eating habits through promotion, encouraging healthier decision making and products that are, by default, better.

Access to healthy, affordable food is vital for sustainable communities and cities. As seen in other contexts, Seattle has made a healthy, local, sustainable food system a priority, with the aim to improve health, to promote equity, and to strengthen the city economy. For these reasons and as part of the city's efforts to increase street life and make the city more *walkable*, Seattle has encouraged street food vending, increasing the public use, enjoyment, and safety of urban places. *Stockbox Grocers* are temporary food establishments around the city, based in a reclaimed shipping container and placed into the parking lot of existing businesses or organizations. Stockbox are designed to offer fresh produce to communities that don't currently have access to good food, creating dozens of mobile stores located in food deserts and within walking distance of home, work and school. Additionally, in July 2011, Seattle adopted a new ordinance regarding street food vending. The new legislation makes it easier to be a street vendor, increasing public use, enjoyment, and safety of city public right-of-way. Thanks to these projects, programs and initiatives, the city has discovered that, with proper design and management, mobile food vending can be a great way to encourage walking, to add vitality to the street, and to promote local economic development, even in the most delicate parts of the city.

Something similar happened in Toronto, a city where a significant number of citizens face economic and geographic restrictions to accessing healthy and culturally appropriate food on a regular basis. While low income is the biggest barrier, a large part of the community live in neighbourhoods that have few quality and affordable food retail options within easy walking distance, along with relatively poor access to public transit. Even people living in areas that are well served by healthy food retail can face challenges, especially people with disabilities, seniors, newcomers, and single parents with young children.

In order to achieve an appropriate food system and a more liveable city, healthy food for all is necessary, in a way that all residents would eventually access to affordable, sustainable, culturally appropriate food. The *Mobile Good Food Market* is a truck that travels across the city selling affordable fresh food in urban areas, selected through consultation with local communities and analysis of access gaps. In order to give people in food deserts access to fresh and healthy food, *FoodShare* Toronto, in partnership with the municipality and United Way Toronto, came up with this food truck functions as a mobile market stall stocked up with seasonal fruits and vegetable. The Mobile Good Food Market is designed to strategically expand the access to fresh produce in isolated and underserved communities, while also increasing food knowledge and the public realm. The truck sells local and imported produce, responding to both the growing demand for locally grown produce, and the culturally diverse produce desired by immigrant communities.

All these initiatives and programs encourage healthy food vending by tapping opportunities for small business entrepreneurship and food access, providing a double task: mobile healthy food counteracts inequalities, preventing health issues and leading to more liveable neighbourhoods, and it builds a sense of community, filling vacant urban places with vitality and activity.

5 CONCLUSIONS

There are many opportunities for new retail models in urban areas, particularly in low-income neighbourhoods where standard models often don't accurately assess demand. The use of mobile food vending is only one of the first steps: it does not solve the issues of food deserts, but it would eventually alleviate it. With more street food vendors becoming easily accessible to communities, the severity of food deserts can be mitigated, thus improving the quality of life and the liveability of these neighbourhoods.

One approach towards a healthy street vending policy would be to increase the number of permits allowed for vendors that sell nutritious foods. These local ordinances could regulate the types and numbers of licenses, increasing licensing of healthy mobile vendors and establishing nutritional standards and locations. Another potential healthy vendor policy would be for municipalities to reduce permit fees that prospective vendors would pay if the food they sell meets nutritional requirements, or to stimulate vendors to do business in particular under-utilized public spaces.

Healthy mobile food vending forms an important part of the programming of neighbourhood revitalization: mobile food vending provides vibrant, although smaller scale, gathering places where neighbours can get to know each other, it provides opportunity for jobs and activates the public realm, encouraging more sustainable and healthier lifestyles. Such policies require sufficient infrastructure for enforcement, increased capacity and resources, new regulations and support programs. Even though there is a need for investments of resources, a new vending policy has the potential to create new jobs opportunities that would generate tax revenue. Moreover, these regulations would consider the potential of smaller community-based efforts and private activity to improve streets and other public space for temporary, low-cost actions and long-term change.

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