



Proceeding Paper

Eating, Community, Culture and Language: A Green Garden Approach [†]

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Abstract: Community green gardens in urban areas provide cultural anchors as well as fresh, inexpensive food for many city dwellers. Furthermore, green gardens offer an opportunity to educate young people about health, the environment, sustainable practices and animal lives. Unquestionably, more city and public resources should be allocated for expanding a network of city green gardens, especially in both private and public schools.

Keywords: urban farming; community gardens; gender; education; schoolyard gardens; veganism



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1. Introduction

This paper explores the growth and benefits of community green gardens in three boroughs of New York City: Manhattan, the Bronx and Brooklyn. The urban green garden movement emerged in New York City in the 1970s due to the failure of the food manufacturing industry to provide quality food in disadvantaged urban neighborhoods, where fast food chains abound, and fruit/vegetable stores and supermarkets are hard to find.

2. Eating, Community, Culture and Language: A Green Garden Approach

To sustain a healthy diet that also satisfies cultural norms and eating styles, communities impacted by economic, cultural, health and social issues rely mainly on green produce. A crisis engages people in dialogues to find solutions and to survive. New York City residents have faced hardships, food scarcity and limited food affordability, and found solutions in green garden projects. Green space is less accessible to urbanized cities, causing health and wellbeing concerns (Ferguson, et al. 2018) [1]. Nevertheless, community green gardens help solve the problems affecting disadvantaged communities. Community green gardens are “smaller plots of land usually integrated in the fabric of neighborhoods grown collectively” (Tharrey, et al. 2020) [2]. For small forms of food production, community green gardens are popular and their benefits are significant. For example, they have made it possible to feed the population; promoted the development of an urban culture favorable to agriculture; eliminated the abandoned spaces which in the past were breeding grounds for rodents and diseases; and provided positive social interactions for residents in the area (Companioni et al. 2002) [3]. In effect, green gardens have become sanctuaries for poor communities in New York City.

While many are independent or just community oriented, most community green gardens in New York City are educational settings and work in partnership with local schools. New York City has over 1000 green garden projects in its boroughs with many participants. A new green garden initiative is the Dyckman Farmhouse/Garden Kitchen Lab (DFH/GKL). In January 2021, the Dyckman Farmhouse partnered with the Garden

Kitchen Lab and opened a new garden in the Dyckman Farmhouse Museum, located in Manhattan's Upper West Side, and which focuses on children's education.

The DFH/GKL educates children about agriculture, culture and sciences. Children learn about the importance of green gardens and the eating habits of people from different cultures, as well as how to protect the environment and produce sustainable crops. They also learn "skills to start and sustain a food producing garden, while demonstrating the links between food production, the environment and their health" [4]. The DFH/GKL program differs from traditional community green gardens in its approach and definition as a "backyard-to-table, science-based, hands-on educational experience," as revealed in an interview with Fabiola Caceres, educational director of the DFH/GKL. It is an inter-generational, cross-cultural educational model that combines urban agriculture, culinary and STEM disciplines. It proposes to engage children and their communities to practice healthy food consumption and production. The program's curriculum is based on children and educators' feedback on their experience in activities in subjects such as anthropology, biology and culture. These activities introduce children to nature from scientific perspectives. Children learn by experience and formulate their own conclusions freely. Learning about cultural food consumption, healthy eating, composting, harvesting and planting make children resilient against unhealthy diets and eating habits.

Population growth challenges the economic and social structure of urban cities. The New York City population of 8,230,290 residents (as of 2021) has experienced the destruction of the infrastructure of its working-class neighborhoods—in housing, business, workplaces and green spaces. Ironically, these are the neighborhoods where low income and immigrant residents find affordable housing. Housing costs are unaffordable based on the salary of many residents, forcing them to sacrifice quality food for rent. The constant flow of people to large cities is making the problem worse. By 2050 it is estimated that perhaps up to nearly seventy percent of the population will reside in urban cities (U.N. 2014) [5]. Population increase in cities requires employment, food and green spaces for the inhabitants. Major industrialized cities are divided by socio-economic and racial factors, and it is not unfamiliar that those living in low income and racialized areas are more adversely affected by the lack of green space and nutritious food. Clearly, there are socio-economic and racial disparities about what is accessible to minority populations. As a result, New York City has augmented education programs about the creation of, participation in and benefits of community green gardens. Studies demonstrate the mental and health benefits of community green garden participants (McEachan, et al. 2016) [6]. A recent study suggests that the full health benefits of green garden participation happen over time and in the long run. This goal must be supplemented with other practices or activities, such as school nutrition courses, cooking classes, planting, harvesting instructions and eating habits and practices (Tharrey, et al. 2020).

The reality of economic and social factors in poor communities press residents to think about alternatives for self-sufficiency and sustainable production, maintain their communities, lift the morale of the residents, and develop an economy that creates job opportunities (Yi 2019) [7]. This is a strong approach for cities, whose residents "were less likely to feel invested in food production, conceive of opportunities for participation, or imagine spatial alternatives to the traditional farm" (Lamb 2014) [8].

Community green gardens are associated with women. Certainly, many community green gardens are created and maintained by women. Gender is important in the conception and participation in green gardens. The misconception that "gardens" are for women has caused bias against women and stereotypical discourse: women to the garden and men to the market. Community green gardens are not agricultural market activities that most men seek. Men disassociate themselves from green gardens because there are no financial benefits. In conversation with green garden managers, one noted the low participation of men in the creation and maintenance of markets. Since community green gardens relate to domestic consumption and production, men are less interested in participating. The study JArDins compared male and female gardeners against non-gardeners. It found that

the majority participants were female, held a university degree and had no experience in gardening (Tharrey, et al. 2020) but felt productive for having participated in the green garden. Gender influences participation in green gardens, but “ethnicity, class, age often play important roles in shaping specific patterns of participation” (Wooten 2003) [9]. Fabiola Caceres compared the participation of boys and girls in the program. While girls tend to outnumber boys, boys look at the financial possibility of becoming chefs. This male behavior is the consequence of the misconception that gardens are for women to embellish and for men to conduct business, confirming the stereotype. Changing the discourse about the green gardens as a profitable financial enterprise will change the stereotype.

3. Eating, Education, and the Language of Veganism

Cultural evolution, evident in urban green gardens from Section 2, can stimulate plant-based food ecology. In biology, organisms have relations to each other in their surroundings. This is true too for humans who manipulate, sometimes grossly, ecosystems to farm meat, seafood and dairy products. Our current ecology of food is mostly detrimental to our physical health, the earth’s climate and animal lives. Physical and global wellness can be achieved through education and awareness efforts geared toward a vegan culture. Our australopithecine ancestral relatives were, as our extant cousin great apes are now, essentially vegetarians eating and surviving well on mostly fruits, leaves, nuts and seeds. Relying less on technology and more on informative shifts in attitudes, values and beliefs, we can effect positive change in our ecology of food. Advances in climate and agricultural technology should follow, not lead, an ecologically friendly mindset.

While this is not a blueprint, imagine a schoolyard garden in nearly every urban school where the vegetables are processed in the cafeteria kitchen as vegan products. Promoting the ethic and language of veganism could be a revolutionary shift in how we teach young people about food, health, the environment and animal lives. Melded into veganism are substantive issues about climate change. One study says that even among animal products, those of the lowest impact on terrestrial and aquatic ecosystems far exceed vegan substitutes (Poore & Nemecek 2018) [10]. Much of this necessary change depends on the language about health and nutrition. Children do not need to think of meat, seafood and dairy as essential foods when they are really not so for most people in many industrialized nations.

Why would we widely establish schoolyard gardens? To what extent are infrastructure and social changes required in our food ecology, and where do individuals fit into this new mindset? How is veganism a sustainable solution, not a passing digression, and is it feasible in educational or local communities? Suffice it to say that many healthy vegans (including vegan athletes) demonstrate that one can thrive without meat, seafood or dairy. Many existing meat-rendering establishments, with the proper private investment and government subsidies, could shift to manufacturing vegan products. Cultural evolution would be the prime driver of a vegan economy, employing education, social media and celebrity endorsements.

If there is a schoolyard garden, presumably with a kitchen in the school, or a community garden, perhaps with a kitchen in a nearby church or community center, vegan foods could be prepared. Vegan stir fry, patties, fritters, tacos, loafs, salads or wraps are easy to make. Young people can gravitate away from junk food to become self-sufficient. Later, the national economy might catch the spirit of positive change. Here is an example. Organizations like Grow NYC and Earth Matter support community gardening. That which was originally established as a teaching garden a few years ago on Governors Island, between lower Manhattan and Brooklyn, was converted into a fresh food supply source during the 2020 pandemic. Given the infrastructure on that island, which was once a military operations base, kitchens could prepare vegan foods from the abundance of vegetables and fruits grown there. Imagine the social benefits of a community garden and kitchen operated by local entities governed by minorities and women provided with city, state or federal grants. Then, magnify that model across a city, state, country or the globe with other decommissioned public institutions large enough to accommodate plant

gardens and kitchens. Think how all of the malls across the industrialized world that have been decommissioned could be converted to indoor veggie and fruit farms, where former restaurants could be established as vegan kitchens. With the right funding, much of this food could be donated to shelters or given to needy families.

Most of the bad effects of meat and dairy are happening on a local level anyway. Factory farms will not shut down overnight but could be phased out and repurposed. Many agricultural creatures need not be born into a life of cruelty where their confinement and bloody persecution contribute to ecological degradation. Vegan agriculture uses far less land than animal farming, is environmentally optimal and can feed more people in a nutritional manner with far less energy loss and waste (Shepon 2018; Eshel 2019) [11,12]. In 2006, the United Nations Food and Agricultural Organization released a report indicating that eighteen percent of greenhouse gas emissions comes from industrial animal agriculture, noting a “community danger” (Bristow & Fitzgerald 2011) [13]. That percentage is more than pollutants from worldwide transportation. By 2010, global greenhouse gas emissions from agriculture, forestry and other land use jumped to twenty-four percent (Edenhofer, et al. 2014) [14]. The Böll Foundation (2014) [15] says meat and dairy farming is responsible for upwards of thirty-four percent of global heating through direct and indirect fouling emissions. Environmental researchers Matthew Hayek and Scot Miller (2021) [16] say greenhouse gas emissions from concentrated animal farming in the U.S. have been underestimated and therefore compromise sustainability projections, taking into account expected increases in global meat consumption. The U.N. Food and Agricultural Organization estimates of emissions from animal agriculture are out of date, ecologically inefficient and should be revised upward (Twine 2021) [17].

The primary audience for veganism is mainly young people, since their future is at stake. Wangari Maathai (2006) [18], a Nobel Peace Prize recipient and creator of the Green Belt Movement, talks about how school gardens in her country of Kenya helped wean students off unhealthy fast foods. Industrialized countries have an obligation to help developing nations secure a stable plant food system that does not destroy local farms or ecosystems. Mainstream media hardly reports on vegan issues if at all, and television news rarely covers factory farming or the dairy industry unless it is about “the economy.” Listening to and communicating directly with the language of non-vegans to foster “intergroup contact” is essential in overcoming bias (Pettigrew, et al. 2006) [19]. Crucial issues of good health and an uncontaminated environment should always transcend religious or political ideologies.

Animals do not need to be human food. Human consumption of animal products, whether flesh or dairy, equates to unnecessary cruelty and death. Animals are not fictional objects but subjects of a life (Regan 2004) [20], who value being alive, making it clear why some escape the slaughterhouse in an instinct for self-preservation (Colling 2020) [21]. Cows, much like sheep, pigs, etc., are peaceful; and so imagine the terror of any poor creature who can see and hear the bloody wails of death coming from others. While this does not need to be an ethical argument, a good illustration of that would be John Hill’s *The Case for Vegetarianism* (1996) [22]. Many of his points are still, regrettably, valid. Some readers will present counter claims that any argument for veganism is too difficult to achieve, personally or economically. First, it is easy to transition from meat and dairy to whole foods and vegan products, if done properly and gradually. Second, there is a cultural opportunity in veganism to invest in local, urban vegetable farming and the manufacture of minimally processed vegan foods. Like other authors, Hill covers the bad consequences of livestock production, needless animal cruelty, poor health, pollution and world hunger. We need to concentrate on the prevention of disease and the mitigation of global warming and not simply on diagnoses, pharmaceutical treatments, and short-term corrections. Unavoidably, there are moral questions and ethical dilemmas in these concerns. For instance, see a book called *The Moral Complexities of Eating Meat* (2016) [23]. Are there “moral complexities” about meat, seafood and dairy agriculture or is it just wrong and unhealthy?

Philosopher Lucy Schultz (2020) [24] points out how, traditionally, nature has been set off in contrast to culture. There was a time when we were part of nature; then, with the formation of cities, human culture separated from and eventually, with industrialization, invaded nature. At the same time, Schultz goes on, humans are biological animals derived from and evolved through nature. Where is nature? We have fabricated possessions from nature, but to whose advantage? Western art and philosophy created a false idea of “nature” as wildlife, a landscape, another world, etc. This flawed dichotomy, like the erroneous separation of mind and body promulgated by the seventeenth century philosopher Descartes, has enabled humans to justify their abuse of animals and ecosystems. Pivoting to a community-based vegan economy with local gardens through education is a viable starting point to mitigate health and climate ills and to promote an animal-friendly ethos.

4. Conclusions

New York City green garden activists challenge the “traditional farm” concept by appropriating empty, abandoned lots, residents’ private gardens and backyards to open green gardens for the community. This is a popular venue for people to engage in and experience the benefits of green gardens to “raise environmental awareness and encourage the adoption of more sustainable dietary practices” (Tharrey, et al. 2020). The movement is particularly ripe for educating the next generation of ecologically-minded and health-conscious citizens. The aforementioned benefits of community green gardens aid city residents to overcome the environmental and urban difficulties they encounter. To participate in a community green garden is an intercultural experience that alleviates hunger and transforms people’s conception of agriculture, nature, eating, culture and community.

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