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# The Pragmatic Pyramid: John Dewey on Gardening and Food Security

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**Abstract:** Despite the minimal attention paid by philosophers to gardening, the activity has a myriad of philosophical implications—aesthetic, ethical, political, and even edible. The same could be said of community food security and struggles for food justice. Two of gardening's most significant practical benefits are that it generates communal solidarity and provides sustenance for the needy and undernourished during periods of crisis. In the twentieth century, large-scale community gardening in the U.S. and Canada coincided with relief projects during war-time and economic downturn. More recently, small-scale gardening projects have emerged in schools, blighted urban areas, and communities of activists committed to increasing food security and resisting neo-liberal city planning policies. It is therefore surprising that pragmatist philosophers, who typically work at the nexus of theory and practice, have remained relatively silent about the relationship between gardening and food security. If more were to take up the challenge, they would find considerable guidance from several contemporary scholars working in diverse disciplines, from cultural geography to community studies, who explore the topic in a number of non-philosophical, though equally effective and imaginative, ways (e.g., ethnographic and action research). In this paper, I propose a tentative pragmatist model for understanding how gardens make our food system more secure—a model inspired by John Dewey's writings on school gardening, which I call the pragmatic pyramid.

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## **Dewey on Gardening**

While there is a burgeoning literature on the subject, 1 some background is in order for those unfamiliar with the connection between John Dewey and gardening. In the area of education, Dewey saw school gardening as a natural extension of the nature study movement, a late nineteenth- and early twentieth-century program of natural history education that brought school-aged children into closer contact with nature (Dewey 1996, MW 9:221; Armitage 2009, 55-8). More recent projects in which students grow, harvest and prepare food, such as Alice Waters's Edible Schoolyard Project, established in 1995 in Berkeley, California, and the Alexander Kitchen Garden program, founded in 2004 in Australia, are direct descendants of Dewey's own pedagogical experiments at the University of Chicago's Laboratory School, almost a century earlier (Pudup 2008; Townsend et al. 2014; Tanner 1991, 101). In the area of politics, Dewey understood grassroots activism to expand gardening in urban areas as a form of public education—since education is, as he professed in "My Pedagogic Creed," "the fundamental method of social progress and reform" (EW 5:93). Consistent with this creed, he insisted that school and community garden projects could help mobilize new immigrants in urban areas, offering them places to communicate, deliberate and organize for collective action (Dewey 1996, MW 8:269; Ralston 2012b).

In terms of *community*, school gardens are microcosms for the best that could be attained in the wider community. The microcosm concept is most clearly stated in a series of lectures Dewey gave to parents of children in his Laboratory School, titled *The School and Society*: "[W]hen the school introduces and trains each child of society into membership within such a little community, saturating him with the spirit of service, and providing him with the instruments of effective self-direction, we shall have the deepest and best guarantee of a larger society which is worthy,

lovely, and harmonious" (Dewey 1996, MW 1, 19–20; Ralston 2011b, 78–81). Gardens, whether in schools or communities, were for Dewey centers of solidarity, generating public space for "communication" and the cultivation of what is "common" (Dewey 1996, MW 1:10). In the context of the garden, the myth of American individualism converted into a more pragmatic collective reality—what might be termed *dynamic group pluralism*—whereby individuals cultivate their own plots while similarly affected by the activities of others, leading them to band together (as "publics") for mutual aid, comfort and common cause (Dewey 1996, LW 2:25).

While Dewey clearly articulated gardening's pedagogical, political, and communal benefits, he for the most part assumed that food security would be one among many motivating factors behind school garden projects. Having lived through the Great Depression, Dewey observed a period of revival for urban community gardens. Victory gardens were a mainstay of American society throughout the two world wars. In this period, school gardening also bloomed, though it became increasingly associated with nationalism, nativism, and racism, understood by many as a method for assimilating new immigrants (Rome 2008, 434). Despite these unfortunate associations, Dewey did his best to detach school gardening from the nativist impulses of his time, portraying the activity as a gateway for children to enter into more enriching adult experiences, including the tolerant pluralism that was necessary in a country filled with so-called hyphenated citizens (Italian-Americans, Irish-Americans, etc.) (Ralston 2012a, 1012b). In an essay titled "The Reorganization of the Curriculum," he wrote that gardening "is given a civic turn" when "the value of the gardens to the child and neighborhood is demonstrated" beginning "with the interest and effort of the children, [so that] the whole community . . . become[s] tremendously interested in starting gardens, using every bit of available ground" (Dewey 1996, MW 8:269). In other words, school gardening produces cascading benefits for immigrant communities, including improvements in food security.

Two possible objections can be brought against Dewey's argument for school gardening. One is that most urban school districts lack the resources to fund school gardening programs. While budgetary issues are a practical concern for program organizers, many school and community gardens receive generous donations through local fundraising campaigns, funding from non-profit organizations and foundation grants as well as the support of individual philanthropists, freeing the gardens to operate without strong government oversight or corporate influence.<sup>2</sup> Another objection is that school gardening places too much emphasis on the vocational thrust of agricultural education. Only the offspring of the urban and rural poor would be taught to garden (or farm), whereas the children of the elite would receive a more intellectually rigorous education. This was Richard Hofstadter's (1963) argument against Dewey's experimental approach to education. Learning-by-doing or education for the sake of "life adjustment," according to Hofstadter, dumbs down the

curriculum for those disadvantaged youth who need the benefit of an elite education most. Math and science education through practical training also lacks the rigor of theory-based lectures and pure experimentation. In Hofstadter's words, "[l]ife adjustment educators would do anything in the name of science except encourage children to study it" (Hofstadter 1963, 345; cited by Ryan 1995, 348). Dewey's use of practical activities, such as gardening and food preparation, as entryways to the study of traditional subject-matter, such as math and science, was unconventional in the late nineteenth and early twentieth centuries. It was also commonly mistaken for more familiar techniques, such as life adjustment and vocational training. However, these practical activities were intended to generate interest and enthusiasm for science among the less fortunate members of a community. Although vocational programs do tend to reinforce existing social hierarchies (as Hofstader claimed), Dewey rejected vocational training, or "learn to earn" programs, because they made education slavishly instrumental to work.<sup>3</sup> Instead, gardening and food preparation were meant to build bridges between economically and socially stratified communities, to create pathways for less-advantaged students to learn more abstract subjects necessary for growth in all modes of life, not simply the vocational.

More recently, researchers in disciplines outside of philosophy—from community studies' scholar Mary Beth Pudup (2008) to cultural geographer Hilda Kurtz (2001)—have made substantial progress exploring the connections between gardening and food security. In the present article I would like to take this argument one step further to claim that along with these recent writers, Dewey, and even contemporary Deweyans, would be welcome allies in the food movement, especially among those members who link food, justice and urban gardens in the struggle to solve the problem of food insecurity. In other words, they could happily contribute toward the common end of securing our food system, particularly for the less advantaged members of society.

# **Securing our Food System**

Today, addressing the issue of food insecurity usually begins with a critique of the prevailing food system. So, it is helpful to first define a food system before offering accounts of the food movement, food insecurity, food justice, and, finally, the development of the food security agenda in the past forty years.

# What is a Food System?

A food system is simply the group of behaviors, activities, and interactions that settle how food is made and distributed. Most food in North America is supplied by agribusiness or the industrial food conglomerates, which receive large state subsidies to overproduce such staples as corn and soy, and to employ chemical pesticides in order to maximize production and return on investment (Nestle and McIntosh

2010; Heynen et al. 2012). Since multinational corporations are the most powerful players in agriculture and food production, small farms and local food producers must contend with increasing regulation and encroachment by governments that are heavily lobbied by the agribusiness interests.

#### What is the Food Movement?

It would be more accurate to understand the food movement as plural, rather than singular. Debbie Dougherty observes "that food movements are not crafted in isolation. They have a dialectical partner in food production" (Dougherty 2011, 212). The *organic food movement* seeks to rid food of chemicals, whether pesticides, preservatives or other non-natural (or artificial) ingredients that endanger human health. Members of the *slow food movement* insist that human well-being depends on adequate leisure time to purchase, prepare, and consume food produced locally, including community gardens and area farms. The *buy local movement* also aims to increase the local sourcing of food, but on the grounds that it improves local economies and reduces carbon emissions resulting from long-distance food transport (Dougherty 2011, 210–1).

## What is Food Insecurity?

Due to the corporate stranglehold on agriculture and food production plus the efficient ways in which food products are regionally and globally distributed, it is now possible for consumers to purchase more food with more calories more cheaply. However, those foods that are most accessible and inexpensive typically lack nutritious content and their overconsumption leads to chronic health ailments, such as obesity, hypertension, and type-two diabetes (Morland and Filomena 2007; Heynen et al. 2012, 305). The problem is compounded for inner city residents, since neoliberal restructuring has led to disinvestment, the flight of supermarket chains, and the proliferation of mini-markets and fast food franchises in what are sometimes described as 'food deserts'. Consequently, the poorest suffer, paradoxically, from both hunger and obesity, from lack of access to nutritious food and an overabundance of calorie-rich foodstuffs. Unsurprisingly, the boundary line between urban dwellers with secure access to healthy foods and those burdened with food insecurity, including the associated health problems, often parallels the structural divide reflecting race-based, gender-based and class-based inequalities (Alkon and Agyeman 2011; Heynen et al. 2012, 305).

#### What is Food Justice?

Food justice is an attempt to redress maldistributions and procedural unfairness in how food is produced and distributed, similar to how environmental justice seeks the same with respect to environmental health. It typically combines concerns about *food access* and *food sovereignty. Food access* reflects the capacity to make and

enjoy healthy food. *Food sovereignty* is a community's prerogative to determine the structure of its own agricultural and food systems (Alkon and Agyemon 2011, 8). One way to integrate food security worries with food sovereignty rights is to develop centers of urban agriculture, i.e., gardening communities, designed to achieve food justice (Heynen et al. 2012, 305). Here, gardens have a multiplier effect (i.e., one person's effort becomes another's advantage). If this conceptual construct were an equation, it would resemble *food security plus food sovereignty multiplied by urban agriculture (a.k.a gardening) equals (or results in) food justice.* In order to better comprehend this equation, let us lastly examine the historical transition of food security concerns from global to community to glocal.

## The Changing Food Security Agenda

The food security agenda has been in a state of transition since the 1970s. From *global food security*, where the goal is to consistently accommodate the food needs of the entire world population (think of the golden rice project, a genetically-modified Vitamin-A enriched substitute meant to solve world hunger), to community food security, wherein local conditions for becoming food secure, such as having a stable job, access to quality food and confidence that one will not go hungry, are met (think of the experiments starting microenterprises using microcredit in Third World locales). The third and final stage, glocal food security, responds to criticisms that global food security denies our cultural relations to food and community food security presumes that food must be a commodity in a capitalist marketplace. Instead, a *glocal food security* agenda proposes that communities should embrace urban agriculture, especially community gardens, as a path toward "co-locating sites of food production and consumption" and also share best practices with likeminded communities across the globe (Heynen et al. 2012, 307; Schiavoni 2009). For instance, slow food movement leader Carlo Petrini argues in his book Terra Madre that we eaters must transform ourselves from consumers in a global food marketplace dominated by agribusiness to "coproducers" in localized but globally networked, or glocalized "food communities" (Petrini 2010; cited by Pollan 2010). In theory, this glocal food security approach sounds just fine. In practice—as we will see from the following four narratives—it sometimes works and, at other times, it has some rather problematic implications.

# **Five Gardening/Food Justice Narratives**

Since narrative plays such a critically important function in communications among gardeners and activists, I relate five stories of how gardening and food activism has affected diverse individuals and communities—some positively, some negatively.

## Narrative #1: Fighting the Good Fight against the Neo-liberal Establishment

"El Jardin de la Esperanza" ("The Garden of Hope"), a community garden in an ethnic enclave of New York City came under attack by the neo-liberal establishment and the gardeners fought back. In the essay "Elegy for a Garden," environmental ethicist Andrew Light tells the story of how Mayor Rudolf Giuliani had it bulldozed in order to sell the land to low-income housing developers. On February 15, 2000, urban garden activists engaged in a "prolonged campaign to save the garden," resulting in the arrest of thirty-one of their ranks and a spectacle of gardening politics-in-action:

Esperanza, in its final stages, was a site to behold. Environmentalists, especially the group "More Gardens!," along with community activists, had constructed a giant coqui over the front entrance of the garden six months before, looking out over the front wall of the garden and protecting it from bulldozers. The coqui is a thumb-sized frog important in Puerto Rican mythology as the symbolic defender of the forest—in one story its loud croak scares off a demon threatening to destroy a rain forest. In this guise it became a symbol for community pride and a focal point for environmentalist and pro-garden organizers in the city. (Light 2004, 1)

Invoking the mythopoetic narrative of the protective coqui, the protesters forged a bond of symbolic unity in support of preserving Esperanza—literally, the garden by that name and, figuratively, the hope of protecting all community gardens in New York City as sources of community and healthy food.

## Narrative #2: Keep the Multinational Food Companies out of our Gardens!

In Vancouver, the Pine Street Community Gardens was started by a group of guerrilla gardeners who reclaimed a city-owned vacant lot for planting and cultivation. In 2006, they were offered financial and material sponsorship from a multinational food company, known for making unhealthy mayonnaise. Some gardeners wished to accept the offer, but most rejected it because of the association (and corporate branding) the gardens would consequently have with unhealthy, processed food. One gardener wrote that, "I do not agree at all with a multinational coming in and interfering in any way with our community garden. Many high schools have made similar mistakes by allowing large companies to come in and promote their products. Much damage has been done with high-school kids consuming products that are very bad for them" (Black 2013, 6). Similar stories are commonplace. One might even say that the anti-corporatism, anti-consumerism, and anti-capitalism of the counterculture 1960s have found new life in contemporary communities of food movement and urban gardening activists.<sup>5</sup>

# Narrative #3: Greedy Gardeners and a Looming Ecological Crisis

In San Francisco, California, Guerrilla Grafters have been grafting fruit tree branches on to the ornamental trees that line the streets and replacing stands of wildflowers

with vegetable gardens, envisioning a city turned into a food-producing farm. Conservation biologist Marielle Anzelone (2013) warns that this kind of urban food/gardening activism could be disastrous for ecosystem services, particularly bee pollination, undermining agricultural production elsewhere. If native wildflowers and trees are displaced by non-native plants and a monoculture of commercial fruit trees, it might be initially possible to feed the urban poor might, but in the long-term the loss of pollinating flowers and the resultant loss of bees could spawn an ecological crisis:

A farm-filled landscape would undermine the critical ecological process. Bumblebees rely on wildflowers for a steady supply of pollen and nectar. But fruit trees bloom for only a few weeks a year. When forests and meadows are lost (to development and farming), places for bees to eat also disappear. (Anzelone 2013)

Anzelone proposes that urban food/gardening activists instead plant indigenous pollinator-friendly wildflowers and, if they still want to grow food in the city, plant native edibles, such as blueberries, Juneberries and beech plums that would provide sustenance for other urban fauna, not just humans.

### Narrative #4: Class and Race-based Paternalism in the Food Movement

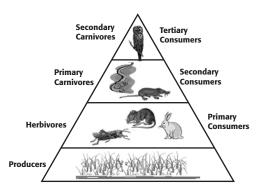
As part of a class project, students from the University of California, Santa Cruz, sought to partner with Hispanic youth in nearby Watsonville, showing them how to grow, harvest, and sell organic vegetables locally. Many of these youth were children of area farm workers. As Community Studies scholar Julie Guthman notes, the Santa Cruz students displayed "nary a trace of irony" in their zeal to help these young people. Watsonville's farming community already cultivates vegetables and, even if they switched to organics, it would be difficult to compete with the already established growers that had a foothold in the local Farmers' Markets. Guthman observes that there are "race-inflected, even missionary, aspects of alternative food politics despite the pretense [among its missionaries] of color-blindness" (Guthman 2008, 438).6 Although organic, slow, and buy local have different emphases, the discourses surrounding these three food movements overlap, reflect shared values, propound strong ethical positions and are even associated with classist attitudes about what constitutes valuable food (sometimes called "yuppie chow"). Debbie Dougherty argues that these food discourses must change and adapt if they are to remain relevant to the poor, homeless, and members of the working class (Dougherty 2011, 239). With the notable exception of community gardens designed to feed the urban poor, almost all the main initiatives of these food movements (e.g., fighting obesity, buying local and organic, as well as developing a healthier sweetener), she laments, have been co-opted by the upper-middle class. Dougherty concludes that social "class has hidden tentacles deep into our food supply chain—tentacles that have not been addressed in any useful way" (Dougherty 2011, 240).

## Narrative #5: Food Movement Activism and the Danger to Personal Health

The last narrative will likely resonate with those who suffer from an eating disorder or have witnessed others struggle with one. But it should also concern anyone who has felt the intense pull of activist fervor, especially when it demands extreme changes in diet and lifestyle. In her article "Chew on This," Rachel Adams, an American Studies professor at Columbia University, narrates an individual's journey into the world of food activism which jeopardized her personal health. Adams's food seminar student became involved in New York City's food movement, first working for a community-based agriculture program and then teaching a cooking class at a local housing project. Her student had been inspired by a local community gardening activist who appeared as a guest lecturer in Adams's class. After hearing the student's story of teaching residents how to make carrot soup, Adams observed that, "Looking at her slender body and orangey skin, I wondered whether she was living off carrot soup" (Adams 2013, 1). Adams was worried that her student's radical commitment to food justice had set the stage for the onset of a serious eating disorder. She laments that "it is clear that the health of the environment and social world does not always go along with personal health, and that the health of the body cannot be easily equated with healthful attitudes and feelings toward food" (Adams 2013, 5).

# Why a Pragmatic Pyramid?

I would like to suggest a tentative Dewey-inspired model of food security—what I call the *pragmatic pyramid*. Imagine the two classic pyramids: (i) the *ecological pyramid* and (ii) the *food guide pyramid*. In the ecological pyramid (also *trophic* or *energy pyramid*), there are primary producers (such as plants) at the bottom, then primary consumers (such as herbivores that eat plants) one level up, next secondary consumers (carnivores that eat herbivores) and finally tertiary consumers (or carnivores that eat other carnivores) (see Figure 1).



**Figure 1**: Ecological Pyramid; source: http://amazonrainforestbiome.wikispaces.com/Ecological+Pyramid

As Peter Singer reminds us, human consumption of secondary and primary consumers, operating in the dual capacity of tertiary and secondary consumers, is wasteful and cruel; not eating herbivores and carnivores, and restricting our consumption to producers, operating solely in the capacity of primary consumers, would likely reduce human/non-human animal suffering, eradicate food-related human illnesses and perhaps even solve the problem of world hunger. A similar logic applies to the food guide pyramid. In the 1992 original issued by the USDA, fats/oils/sweets lie at the top of the pyramid, milk/yogurt/cheese poultry/ beans/eggs/nuts at the third level, fruit and vegetables at the second, and bread/cereal/rice/pasta at the bottom (see Figure 2).

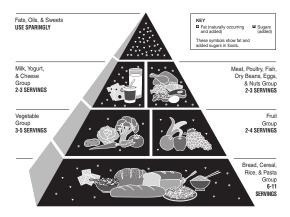


Figure 2: Food Guide Pyramid; United States Department of Agriculture, 1992

The most pragmatic strategy for achieving food security is to flatten the structure and focus on the bottom two levels, moving beans and nuts from the third to the second level, in order to transform less conscientious consumption behaviors into more individually and collectively accountable eating habits (see Figure 3).

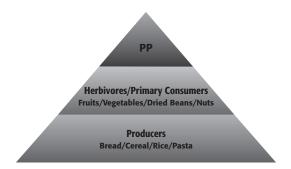


Figure 3: The Pragmatic Ecological-Food Pyramid

Besides becoming flatter, the resulting pragmatic ecological-food pyramid would encompass not only food consumption, but also food production, so that humans become both primary consumers and producers, at least in the sense that they replenish the food supply through urban agriculture or gardening. Integrating production and consumption in our day-to-day experience would require social planning and multi-disciplinary collaboration between agricultural scientists, ecologists and social scientists on a scale never seen before. Though still very sketchy, my proposal for pragmatic ecological-food pyramid is Deweyan in virtue of how it addresses a complicated (or so-called 'wicked') problem through the prisms of multiple disciplinary approaches and seeks to create a continuum of experience out of a previously bifurcated reality, viz., between the spheres of agricultural production and food consumption.8 The fundamental challenge, as the last three of the five narratives (above) illustrate, is to construct a pragmatic ecological-food pyramid that is not classist, a threat to the ecosystem, or a danger to the health of food movement activists. In other words (to borrow Immanuel Kant's phraseology), food security without democratic equality is empty; food justice without concern for environmental and human health is blind.

#### Conclusion

It is likely that during Dewey's lifetime securing the food system had a different meaning and sense of urgency than it does today. Nevertheless, Dewey was well aware of the plight of the urban poor, their lack of adequate nutrition, the existence of class and race-based structural inequalities and the need for various avenues, such as education and entrepreneurship, to escape these difficult conditions. Dewey reported on one school garden project in Chicago that spilled over into the surrounding community, yielding communal gardens and aid for the impoverished: "The district is a poor one and, besides transforming the yards, the gardens have been a real economic help to the people" (Dewey 1996, MW 8:269). Of course, urban gardening and local food production can contribute to relief efforts during periods of economic, and even environmental, crisis. However, this might strike us as too obvious a lesson—one that we do not need Dewey or philosophical pragmatists to teach us. The more important lesson, I believe, is that agricultural production and food consumption should both feature prominently in our everyday experience, as continuous and integral phases of what it means to grow more sustainable, food secure, democratic and egalitarian communities.

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#### Notes

- 1. See, for instance, Ralston 2011a, 2012a, 2012b and 2013, esp. chapter three titled "Gardening Politics."
- 2. For example, see the Whole Kids Foundation School Garden Grants program (Whole Kids Foundation 2014)
- 3. See, for instance, Dewey's 1996 essays "A Policy of Industrial Education" (1914), MW 7:93–7, "Industrial Education—A Wrong Kind" (1915), MW 8:117–22, "Learning to Earn: The Place of Vocational Education in a Comprehensive Scheme of Public Education" (1917), MW 10:144–51. For commentary on Dewey's critique of vocational training, see Westbrook 1991, 173–82; Whipps 2008, 62–4; and Wirth 1972, 72–5.
- 4. Here I use the expression *food movement*, but it more accurately described as *food movements*, including organic, slow food, and buy local movements. The differences between these three movements are discussed by Dougherty 2011, 239–40. I offer a brief summary based on Dougherty's account in the subsection titled "What is the Food Movement?"
- 5. Wendell Berry has claimed that corporations "will grow, deliver, and cook your food for you and (just like your mother) beg you to eat it. That they do not yet offer to insert it, prechewed, into your mouth is only because they have found no profitable way to do so." Cited in Pollan 2010.
- 6. Rachel Slocum has also brought attention to the "whiteness" of food movements. See Slocum 2006, 2007.
- 7. Note that I am not referring to Singer's extensive argument for how to solve the problems of world poverty and hunger, but instead to his passing example in the essay "Moral Experts" where he writes: "I might also want to know about the effect of a vegetarian diet on human health, and, considering the world food shortage, whether more or less food would be produced by giving up meat production." Singer 2001, 5.
- 8. On the nature of wicked problems, see Churchman 1967; and Rittel and Webber 1973. Environmental philosopher Bryan Norton describes wicked problems as "complex . . . problems [that] cannot be comprehended within any of the accepted disciplinary models available in the academy or in discourses on public interest and policy." 2011, 3.

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