

Committing to change? A case study on volunteer engagement at a New Zealand urban farm

Daniel C. Kelly¹

Accepted: 14 February 2023 / Published online: 13 April 2023 © The Author(s) 2023

Abstract

Urban agriculture is a promising avenue for food system change; however, projects often struggle with a lack of volunteers—limiting both their immediate goals and the broader movement-building to which many alternative food initiatives (AFIs) aspire. In this paper, I adopt a case study approach focusing on Farm X, an urban farm with a strong volunteer culture located in Tāmaki-Makaurau Auckland, New Zealand's largest city. Drawing on a significant period of researcher participation and 11 in-depth interviews with volunteers and project coordinators, I first contextualise and explore the history of Farm X, then offer themes to describe key factors which help or hinder their volunteer engagement. Engagement is helped by *strong leadership*, *learning by doing, socialising around plants*, and *contributing to a movement*. Conversely, engagement is hindered by *time scarcity, economic hurdles*, and *struggles over direction*. Drawing on McClintock's (Local Environ 19(2): 147–171, 2014, 10.1080/13549839.2012.752797) insights into the hybrid and contradictory nature of urban agriculture as a tool for social change, the paper continues with a discussion of two important trade-offs involved in both farm management and the movement building promoted by Farm X: focused leadership verses volunteer agency; and asking more verses less of volunteers. Finally, I suggest several avenues that may be useful for other urban agriculture projects interested in movement building.

Keywords Volunteer · Urban farm · Movement building · Case study

Abbreviations

AFIs Alternative food initiatives CSA Community supported agriculture

"We've tended on this planet to live against nature... the greatest challenge I think always is to work and live within nature—within, not just with but within—and you do that... you do that when you commit to a garden"

(interview participant E, male)

Introduction

Food systems are contested territory. Despite decades of agri-business dominance, industrial and globalised food systems are now routinely critiqued, and their power, processes and outcomes challenged (e.g., Commerce Commission

☐ Daniel C. Kelly dkel042@aucklanduni.ac.nz

2022; Joy et al. 2022; Vermeulen et al. 2012). Many options for different systems exist (e.g., Ajl 2022), but for city-dwellers, an increasingly common pathway is urban agriculture (Sage et al. 2020). Defined broadly as the production of food in urban areas (Ackerman 2012), urban agriculture is often described as a movement—reflecting its association with 'alternative food initiatives' (AFIs): a range of practices claimed to challenge the hegemony of industrial-capitalist food systems and the negative social, environmental, and economic outcomes with which they are associated (Harré et al. 2022; Sharp et al. 2015).

More specifically, Sharp et al. (2015) describe participation in urban agriculture (including urban farming, community gardening, and school gardening) as sitting at the intersection of three key AFI domains: food production, food supply, and increasing access to (and experience of) food in ways that differ from agri-business. Efforts here have been celebrated for such factors as increasing access to fresh food (McClintock 2014), showcasing ecologically accountable forms of production (Taylor and Lovell 2014), increasing community cohesion (Firth et al. 2011) and demonstrating alternative economic models for sales and distribution (King 2008). As Sage et al. (2020) argue, urban agriculturalists



⁵⁸ Awaroa Road, Sunnyvale, Auckland 0612, New Zealand

are increasingly aware of this social change potential, and organising as a movement to achieve their goals.

Despite this, ideas of 'urban agriculture a movement for social change' have also been critiqued, with scholars pointing out the ways certain projects reproduce neoliberal ideas, further perpetuating the status quo (McClintock 2014; Pudup 2008; Webb 2020). Using the example of state-sponsored school gardens in California, Pudup (2008) explains how the neoliberal logic behind calls to 'eat local' and 'vote with your fork' elevates individual consumption as a singular pathway to (market-based) change. In the process, structural inequities are side-lined, leaving individual citizens "in charge of their own adjustment(s) to economic restructuring and social dislocation through self-help technologies centered on personal contact with nature" (Pudup 2008, p. 1229). Similarly, Rosol (2012) suggests that Berlin's once-disruptive community gardening movement has now shifted towards "a form of voluntarism" (p. 557) supported by municipal governments as a way to capitalise on free labour, maintaining green spaces otherwise neglected by neoliberal cuts (Rosol 2012).

While these responses highlight risks associated with existing power co-opting urban agriculture's social movement potential, McClintock (2014) points out that such singularly critical perspectives can themselves limit possibilities for change. As a result of economic pressures linked to urban land prices, labour costs and the 'cheapening' of food perpetuated by agri-business' global disregard of externalities (e.g., water health, soil quality, atmospheric stability, labour etc.; Patel and Moore 2018), urban agriculture projects have been forced to experiment with a range of different, innovative and sometimes contradictory approaches, involving varying degrees of state support, market integration and volunteer labour (Classens 2015; Ernwein 2017; McClintock 2014). In light of this reality, McClintock (2014) argues that urban agriculture is by necessity both neoliberal and radical: a diverse, complex and contradictory space that, as with capitalism more generally, contains both opportunities for difference and obstacles which limit this change. Echoing Gibson-Graham's (2008) call for research which "helps us see openings [and provides] a space of freedom and possibility" (p. 619), this insight shifts inquiry away from the pursuit of a single and morally 'right' strategy—as if any one 'solution' could 'solve' a complex problem (Rittel and Webber 1973)—and into a richer, more contextual space, inviting us to consider multiple perspectives, strategies and scales, and ultimately to focus on the processes by which difference enters the world; in McClintock's (2014) words "on how and where urban agriculture arises" (p. 157).

Volunteering in urban agriculture

Farm labour is central to urban agriculture; however, many AFIs operate outside of the formal economy and so must find ways to attract and retain sufficient volunteers to achieve their goals (Cohen and Reynolds 2015; Drake and Lawson 2015; Earle 2011)—a requirement that varies considerably. Some AFIs are highly dependent on volunteers and wouldn't exist or function in their absence; for example, community gardens (Cohen and Reynolds 2015) and activist networks organising explicitly for food system change (Massicotte and Kelly-Bisson 2019). For other (often more commercial) AFIs like urban farms, volunteers may be useful but not strictly necessary, enabling additional work beyond the core commercial tasks undertaken by paid staff (Ekers et al. 2016); for example, expanding productive capacity and/or increasing consumer awareness of alternative food (and by extension, its market penetration).

These differences are complicated further by AFIs' inherently political nature. While AFIs require volunteers to help achieve their day-to-day work (for example, growing seedlings, weeding, harvesting), there is also a sense in which volunteers help to facilitate the broader work of movement building with which AFIs are associated, whether the volunteers actively support this or not. At a base level this includes the material 'prefiguring' of a world centred around local sustainably produced food (e.g., Rutt 2020), but may also extend to more movement-oriented requirements to "educate, agitate, organise" (The Democratic Federation 1883), mobilising resources to achieve common goals (McCarthy and Zald 1977) and enabling the expansion necessary to challenge the hegemony of industrial agriculture.

In this paper, I'll argue that this distinction—between supporting existing projects and actively growing the movement—is crucial to understanding volunteer engagement in urban agriculture. Following Wilson (2000), I define volunteering as "any activity in which time is given freely to benefit another person, group, or organization" (p. 215), noting that considerable differences exist between the commitment of those volunteering in support of existing projects and those volunteering to develop, lead and launch a project. In this sense, Diani's (1992) social movement definition is useful. Diani (1992) defines a social movement as "a network of informal interactions between a plurality of individuals, groups and/or organizations, engaged in a political or cultural conflict, on the basis of shared collective identity" (p. 8). This suggests a higher threshold for 'movement participants' beyond more casual volunteers, including shared awareness of the issues with food, and an associated collective identity.

Further challenges relate to the framing of volunteering under neoliberalism (Dean 2014; Eliasoph 2011). As Dean



(2014) explains, the rise of neoliberalism has seen volunteering increasingly promoted as a pathway to individual 'career development' and/or 'skill building', reframing otherwise (or additionally) altruistic tendencies within a singularly competitive, alienated and market-based logic. This promotion of instrumental or extrinsic motivations can sit at odds with the deeper commitment and collectivity demanded by social movements (Dean 2014); for example, Handy et al. (2010) shows how student volunteers who prioritised resumé building volunteered less time overall than those with more altruistic motivations. Similarly, Bauman (2007) notes that such individualistic approaches can increase the likelihood for people to "abandon commitments and loyalties without regret' (p. 4)—raising a fundamental question for those who promote urban agriculture as a social movement: not just how to attract volunteers, but how to engage them to stay with, promote, and ultimately grow urban agriculture as a movement?

Existing research on AFI volunteer engagement suggests a range of important (sometimes contradictory) factors, from socialising (Teig et al. 2009) through to an individual drive for independence from corporate food (Turner 2011). While some volunteers do connect their participation to a movement for social change—for example, in Melbourne (Kingsley et al. 2019), Oakland (Lyson 2014), and Edinburgh (McVey et al. 2018)—such motivations sit alongside less radical aims like the provision of food and stress release (Kingsley et al. 2019), a diversity reflecting the broad and multi-functional nature of many AFIs (Sharp et al. 2015). By way of contrast, research noting limits to participation highlights factors like inter-personal disputes about garden management (Drake and Lawson 2015), the often-underestimated and challenging realities of growing food (Drake and Lawson 2015), barriers created by participant homogeneity and its associated racial and class privilege (Lyson 2014), and modern society's undervaluing of a connection to food production (Rose 2013).

In line with Pudup's (2008) critique of general terms like 'community gardening', this research reveals no singular type or motivations, but rather stresses the importance of context and more specific, nuanced analyses of not just volunteer engagement, but AFIs more generally (London et al. 2021; McClintock and Simpson 2018; Okvat and Zautra 2011; Sharp et al. 2015). This need for deeper research is particularly important in New Zealand (Sharp et al. 2015). A small number of studies have explored New Zealand initiatives, for example, farmers markets (Parkins and Craig 2009), community gardens (Webb 2020), Māori food production (Piatti 2015), dumpster diving (Sharp et al. 2016), and food policy councils (Haylock and Connelly 2018) with recent research emphasising the lack of funding and legislative oversight that these initiatives operate within (Hanna and Wallace 2021). However, urban agriculture research in New Zealand pales in comparison to that overseas, reflecting both the relative infancy of organised AFIs in New Zealand, and a paucity of research on initiatives that do exist (Sharp et al. 2015; Webb 2020).

The case study

In this paper, I focus in on the factors that have helped and hindered volunteer engagement at one (locally novel) AFI in Tāmaki-Makaurau Auckland: a self-described urban farm and teaching hub, referred to throughout as Farm X. Consistent with calls for increased specificity in both urban agriculture (McClintock 2014; Sharp et al. 2015) and volunteering research more generally (Wilson 2000), I adopt an in-depth case study approach (Yin 2009), combining significant researcher participation at the farm with 11 semi-structured interviews with volunteers and key project organisers. Drawing upon recent scholarship on "people-focused" systems (Harré et al. 2021), I start from the assumption that Farm X has been successful in that they have attracted the volunteers necessary to establish and maintain the farm, and that it is worthwhile to consider how this has been achieved, for both the project's own sustainability and other organisations with similar goals. In addition to considering volunteer engagement more generally, particular attention is paid to Farm X's emphasis on volunteering as supporting a 'delicious (r) evolution' and the tensions, contradictions, and possibilities involved in promoting urban agriculture as a social movement against industrial agri-business.

Method

Approach to knowledge

Consistent with my training as a community psychologist (Riemer et al. 2020), I highlight and practice an epistemology that values subjectivity, specificity and nuance; what Kidder and Fine (1987) call big Q qualitative research. Big Q research doesn't just emphasise the qualitative techniques used to gather and analyse data (e.g., open-ended questions), but also a qualitative worldview where all knowledge is contingent, incomplete and partial, and where the outcomes of the analysis are significantly informed by my own positionality and the ongoing revising, refining and reinventing that characterises a big Q approach to research (see also Braun and Clarke 2021).

Researcher positionality and participation

My involvement with Farm X began as a volunteer myself, attending regular working bees during the farm's establishment—some two years prior to the formal research.



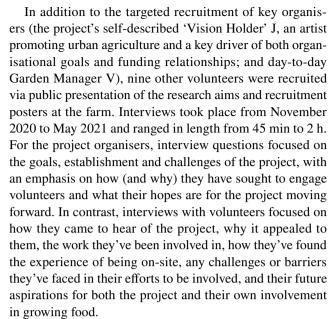
Alongside many others, I sweated for and ate of the site, digging rocks from beds, planting cover crops and propagating seedlings, raising mounds of hot compost, harvesting fruits and leaves, developing friendships and deepening my understanding of both the potential and challenges associated with growing food as a tool for change. Like many (but not all) volunteers, I was then younger than 30, university-educated, and, having returned from a significant period of volunteering on other farms overseas, in-between other commitments.

In line with Brannick and Coghlan's (2007) take on 'insider research', these experiences provide insights "not only through the detached observational role but through the subjectively immersed role as well" (p. 66). From regular attendance at the working bees held in late 2018 to establish farm infrastructure through to decreased but still semi-regular involvement over 2019, these experiences helped to shape the formal period of study and its emphasis on volunteer participation as one key limitation/enabler for growing urban agriculture as a movement. In line with Harré's (2019) ingredients for community research, my (practiced and ongoing) commitment to this movement provides an important degree of "skin in the game... a compelling sense of personal recognition rather than just wanting to help [a community] with their problems" (p. 84).

Further insights come from deeper participation over the 8 months of formal engagement, spanning from July 2020 through to the end of February 2021. During this period, I was more closely involved in the work at Farm X than ever before, attending bi-weekly harvest sessions organised around preparing food boxes and regular evening working bees focused on planting and maintaining the garden. As a result, the analysis presented here is also informed by a huge range of informal conversation and observation, both in-person and online. In combination with the formal interviews and regular field notes taken after each day of farm work, these help to provide the "thick description" sought by ethnographers (Geertz 1973, p. 3), grounded in the direct words of garden participants, promotional materials shared by Farm X online, and my own experiences and subjectivity.

Interview details

As an insider researcher, I drew on the above experiences to shape not just the analysis but also the research focus, the specific questions asked of interviewees, and to ensure that those recruited were at least broadly representative of volunteers at the site. While representativeness isn't a focus of Big Q qualitative research per se—reflecting criticisms of its claims to generalisability verses qualitative research's more contextual engagement (Braun and Clarke 2021)—I wanted to include some of the volunteer diversity that has been involved at Farm X, both for its own sake and for the nuance that differences here introduce (McClintock 2014).



Of those interviewed, some were involved at the project's conception (T, C, H, E), while others were more recently engaged (S, O, P, K, F). Gardening experience and awareness of the politics of food varied considerably amongst interviewees, as did their frequency of engagement. In terms of demographics, those interviewed were largely (but not exclusively) younger than 30 and identified as Pākehā/ NZ European—aligning with my general experience of participants at the site; a relative homogeneity reflecting some combination of neighbourhood demographics, selfsimilarity in social networks (e.g., de Klepper et al. 2010), and the racial and class privilege associated with 'spare' time for activities like gardening (e.g., Lyson 2014; Meenar and Hoover 2012). In contrast to my observations at the site, 7 interviewees out of 11 identify as male, a bias that likely reflects my own gender and approachability, and one that risks misrepresenting the considerable presence of female volunteers at the farm. A demographic summary of the research participants is provided in Table 1. In the analysis to follow, they are identified using a letter of the alphabet and their self-described gender.

Table 1 An overview of demographic variation amongst the interviewees

Ethnicity	European	Māori	Chinese
	9	1	1
Age	18-30	30-65	65+
	6	4	1
Gender	Male	Female	Non-specified
	7	4	0



Analysis

Consistent with Braun and Clarke's (2021) six stage approach to reflexive thematic analysis, I first familiarised myself with the data, transcribing the interviews before entering an iterative process of reading, note-taking, and coding in NVivo. This began with a deliberately broad and inductive 'bottom up' approach (Braun and Clarke 2006, 2013) focusing on semantic or direct meanings offered by interviewees, for example, 'haven in the city', and 'what people have learned there'. As my familiarity with the data increased, I began to notice and code more latent meanings—described by Braun et al. (2019) as "a deeper, more implicit or conceptual level of meaning" (p. 853)—for example, 'caring for nature' and 'dissatisfaction with modernity'. After several iterations, I had 97 separate codes.

I then constructed themes—used here to describe "clusters of meaning" (Braun et al. 2019, p. 855)—focusing on the various factors that help and hinder volunteer engagement across individual, social, and cultural levels. Potential themes were built and rebuilt in an iterated process assessing completeness, distinction and the 'story' they told (Shostak 2022)—informed by feedback from my PhD supervisor Professor Niki Harré, participants at two online conferences, and the anonymous peer reviewers who helped direct and refine the analysis shared here. Over the course of this feedback (including multiple revisions while writing; Braun and Clarke 2021), my analysis evolved and deepened, grappling with complexity of efforts for social change under neoliberalism, eventually encompassing the seven core themes shared below. While still partial and contingent (for such is the nature of knowledge in a big Q qualitative worldview; Kidder and Fine 1987), the analysis shared here is nonetheless one I hope will contribute to the development of urban agriculture as a self-conscious movement, both in New Zealand and elsewhere.

Results

First, I provide some context for Farm X then describe key themes detailing factors that have helped and hindered their volunteer engagement.

Context

Farm X is located in Tāmaki-Makaurau Auckland, New Zealand's largest city, on a small 600 m² site near the central city. At the time of its 2017 conception, urban farming was locally novel (in an economic sense distinct from community gardening; Giacchè et al. 2021), reflecting the economic dominance of industrial export-oriented agriculture and New Zealand's history as a settler-colonial nation

developed (in part) to provide food for the British Empire (Belich 2001). Farm X was instigated by an arts-based non-profit who had previously run a number of smaller projects focused on plants, education and sustainability. Responding to an invitation from Auckland City Council to pitch for a neglected community garden site, the non-profit proposed to trial a micro-enterprise focused on sustainable food that would be able to pay a manager's wage; as Farm X's 'Vision Holder' J—also a volunteer—described in our interview, "an urban farm that actually creates jobs, that proves that these systems that we're talking about actually work."

While approved in principle, a year of meetings passed with no formal lease signed. Key issues were fundraising and obtaining a lease long enough to justify the proposed infrastructure spend—a seeming paradox. No lease would be granted without funds to establish infrastructure, but without a lease the project was insufficiently secure to raise the necessary funds. Frustrations grew and eventually the group turned to direct action. As Farm X's Garden Manager V explained, "[Vision Holder J] called me up and said look, someone's just got to step up and do it". So V—who, while part of the planning group, wasn't then employed as manager—organised a number of working bees to prepare growing beds and began, with significant volunteer input (and no formal permission), to grow food on the site.

Efforts here had the desired effect, with regular weekend working bees in spring 2018 transforming the site from grass into a number of rows for production: "once we did start digging... then it started really gaining momentum" (H, female). A one-year lease was secured, water connected, and funds raised to cover wages for some of Garden Manager V's time, much of which was initially volunteered. Farm X's capacity to grow and sell produce increased, building relationships with local chefs and working towards a position where farm income could cover the manager's wage. However, the administration involved with supplying restaurants sat at odds with the farm's small scale, and as their capacity grew a decision was made to shift towards a communitysupported agriculture (CSA) scheme, providing weekly food boxes to local residents in exchange for a larger 'seasonal' payment upfront. As Garden Manager V explains, it meant "every leaf we grew could get out to people... it's another way to engage with the community".

This engagement has been central to the project's success. In addition to selling 35 produce boxes weekly under a paid CSA subscription scheme, Farm X (which continues to sit under the umbrella of the original arts-based non-profit) now also runs a paid composting service, a CSA scheme selling seedlings at the start of each season, and a week-long paid course in sustainable farming. At \$35NZ per box per week, CSA shares are an affordable if exclusive option, sold preferentially to those within in walking distance of the farm—a relatively affluent and



Avenues for engagement at Farm X

Observing Volunteering Paying Tuesday harvest (morning) Friday harvest (morning) Wednesday working bee (evening) Compost team Drop-in volunteering Paying Compost CSA Compost Service Education program

Fig. 1 Overview of the various avenues for engagement offered by the site (as at July 2021)

densifying suburb on the urban fringe. The project pays no rent or water utility bills, using the income generated to employ 1.5 full time equivalent staff: Garden Manager V, and a paid apprentice; part of the non-profit's succession plan and ambition for future sites. These employees are supported by an 'open-gate' policy for drop-in volunteering, regular working bees run early on Tuesday and Friday mornings (where produce is harvested and prepared for the CSA boxes), and more education-focused evening working bees on Wednesdays, from 5–7 pm in summer and 3.30–5.30 pm in winter.

Volunteer numbers vary week to week and season to season, but are consistently higher for the evening working bees, ranging from just a few volunteers (for example, when raining in winter) through to regular groups of 10–15 in summer. Paying CSA members may occasionally volunteer, but for the most part those who volunteer in the garden are distinct from those who pay for produce (and volunteers only occasionally receive left-over produce themselves). New faces are a regular occurrence, as are returning volunteers; however, the frequency of engagement varies considerably: some come regularly and intensely for a short period; others are less frequent but have longer histories of engagement. While volunteers were crucial for a majority of work during farm establishment, the farm's core tasks are now largely within the capacity of their paid staff. Volunteer labour remains important for harvests and further intensification (e.g., helping to establish the seedling CSA) while also contributing to the farm's goals of education and outreach. Variation in attendance at harvest time is buffered by the combination of paid staff and a 'core crew' of more committed volunteers: one (H) who has been reliably and regularly present since the farm's inception; others who have been involved deeply but for shorter periods in an informal intern-type relationship. Occasionally, larger organised groups of up to 30 people (e.g., a workplace) may visit for a one-off day of volunteering (Fig. 1).

Factors that help volunteer engagement

Results from the interview analysis are organised into two categories, capturing themes which help volunteer engagement (*strong leadership, learning by doing, socialising around plants,* and *contributing to a movement*); and themes which hinder volunteer engagement (*time scarcity, economic hurdles,* and *struggles over direction*) (Fig. 2).

Key themes and sub-themes involved in volunteer engagement at Farm X

- Those which help volunteer engagement
 - 1. Strong leadership
 - Asking your networks for help
 - Being flexible
 - 2. Learning by doing
 - Expert guidance
 - Collective experimentation
 - 3. Socialising around plants
 - Passion is contagious
 - · Working together helps community grow
 - 4. Contributing to a movement
- · Those which hinder volunteer engagement
 - 1. Time scarcity
 - 2. Economic hurdles
 - 3. Struggles over direction

Fig. 2 Overview of the themes and subthemes that help and hinder volunteer engagement



Strong leadership

The first key factor that helps volunteer engagement at Farm X is *strong leadership*, reflecting clear organisational goals and the on-site impact of Garden Manager V, both coordinating and inspiring volunteer input. Further detail on the nature of this leadership is provided by the subthemes *asking your networks for help* and *being flexible*.

Asking your networks for help refers to the ways that Garden Manager V's leadership at Farm X has embraced and communicated their need for volunteer participation, helping to create a project in which many feel involved and indeed, important. This asking was most explicit in the establishment phase of the project, but has also featured throughout as volunteer numbers (and the need for them) have waxed and waned. As one longstanding volunteer described it, directness here can help to 'up-rank' Farm X relative to other commitments: "suddenly volunteers turn up who might not have even thought about turning up, but because they know that we need an extra pair of hands, they drop everything and come" (H, female).

Requests for help can be split between more general ('one-to-many') communication over social media facilitated by Garden Manager V—such as the Facebook events used for the initial working bees—and more specific ('oneto-one') shoulder-taps focused on certain tasks. While these requests are necessarily limited by the networks of those involved, for example, excluding those who are less online (and likely skewing participation towards younger demographics), for those reached, these provide powerful incentives for participation. For example, one interviewee, a novice gardener with social network ties to V, explained how "I just went one random day and [V] was pumped that I was doing building and wanted me to build a table for him... I like doing little building projects" (Q, male). While limited in the time demanded and often just a one-off, such help has been crucial to the farm's establishment and is notable for the ways in which it relies less on an interest in gardening (or a political analysis of the issues with agri-business) and more on communication and the social relationship between volunteer and garden coordinator.

This combination of communication and personal networks also played a significant role in Farm X's establishment where, in addition to a broader call out, Garden Manager V drew heavily upon friends and the community connected to the shared house where V lived. In V's words, "it was a Facebook event on the [Farm X] page... and then we invited [the non-profit's] people, but really, to be honest, the people that started that site off were my immediate kind of community, heaps of my friends and friends of friends". While the vast majority of this group have had limited involvement since, they provided labour and enthusiasm at

a crucial time—a tension/opportunity for movement building explored further in the discussion.

Being flexible refers to the ways in which Farm X's opengate policy and relaxed approach to volunteering makes it easy for participants with different levels of availability and interest to each be involved in their own way at different times, increasing or decreasing participation as their circumstances change. In particular, participants enjoyed being part of a larger 'wrap-around' community, and the welcoming, non-bureaucratic nature of volunteering facilitated by Garden Manager V. This wasn't just the case during farm establishment but has continued into its functioning weekto-week. For example, "they're always so good about you know, like, just come when you can, which I think is really nice because previous places I've volunteered, it's kind of like, these are the times you come and go and they kind of felt like there was a bit of pressure to be there" (F, female); "I think there's always such a big cycle of people there that that's, you know, it's not really like a big responsibility to be there or anything like that" (S, female); "that is a big part of [Farm X], it's super chill, it's super relaxed" (Q, male). Important factors here were a range of different activities, a large community of occasional volunteers, and a range of regular times when volunteers were welcomed on site.

Learning by doing

A further theme that enabled volunteering was the importance of *learning by doing*, reflecting the education Vision Holder J describes as a core aim of Farm X: "This project is really about building capacity... there is no movement if you haven't created capacities at multiple levels, so capacity to imagine, capacity to do, capacity to share... that's very intentional". Crucially, this education is hands-on, providing a welcome point of contrast from other more distant modes, for example, "I found the garden and I was like, this is so much better, so hands on compared to like, watching a You-Tube video" (F, female); "I tend to retain it, just cause you've immediately put it into practice sorta thing" (Q, male); "We planted the whole row so we were able to see the work from scratch... we learnt a lot in that one session" (K, male). As one of the more experienced interviewees noted, this focus is common to many gardeners: "the strongest force that I have in terms of actually finding new pathways, new ways of doing things... it's through experiential learning, it's actually learning by doing" (E, male).

Responses here are further divided into two sub-themes, reflecting key differences in the type of 'learning by doing' prioritised: *expert guidance*, and *collective experimentation*. *Expert guidance* refers to the ways volunteers are engaged by Garden Manager V's experience (as evidenced by the site's commercial outputs) and his skill and willingness to share farming knowledge via a classic teacher-student hierarchy.

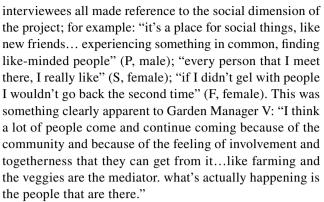


For example, "what [V] has done is the true knowledge... that's the true production we the urbanised people need to know" (P, male); "even when we're super busy [V] will spend time, you know quality time with people explaining what's going on, and answer any questions" (H, female); "I guess it's just good to learn from someone who does know" (Q, male). Alongside informal volunteer instruction, Farm X's focus on expert-led education has since expanded to include a paid, multi-day course offered several times throughout the year.

This approach can be contrasted with collective experimentation, referring to a more organic and participatory process extending beyond the specifics of market gardening and into a realm of both physical and social transformation, for example, during the direct action that created the farm. Volunteering was less formalised during this period and V's leadership left considerable space for agency and a sense of ownership amongst those keen to participate. For example, T—who helped build much of the farm's infrastructure before becoming less engaged—describes how "it felt a lot more ramshackle at first. Like we were figuring out what we were trying to do with the space before we really even knew too much of how to do it". More than any growing knowledge, T notes that this period taught him "about existing with a group of people that have different thought patterns to your own." Similarly, C—another early and enthusiastic volunteer who eventually stopped participating—pointed out how the dynamic early on was one of learning to function together, taking those involved beyond a backyard growing scale and into a zone of novel collaboration at odds with top-down plans for professional infrastructure. In C's words, distinguishing that experience from the teacher-student dynamic in the sub-theme above: "it was a space where I did learn, through the process, and we learnt together—it's not [V] taught us it, because he went through that process too". For volunteers of a particular type, this sense of agency, possibility and having a collective project is a significant motivator, albeit one that came to clash with the top-down direction later taken by Farm X (explained further in the theme struggles over direction).

Socialising around plants

Socialising around plants refers to the interpersonal aspects enjoyed by volunteers and the way that Farm X's physical location and focus on plants facilitates a point of commonality that helps transcend other differences. For example, H—an older but highly committed and long-standing volunteer—described the enjoyment she gets from being part of the Farm X community, noting that while "there's mostly young people that come in... there doesn't seem to be an age thing in the garden, you know everyone's just accepted for who they are." Similarly, other



Participant responses raised two further sub-themes: passion is contagious and working together helps community grow. Passion is contagious refers to the ways that enthusiasm in a social context can be both inspiring and infectious. Many participants spoke about how their volunteering was a source of excitement, linking this back to the passion for gardening shared by both Garden Manager V and the other volunteers. For example, "It's kind of exciting because you're like planting seeds and you're making things grow" (S, female); "the real ones... the true [Farm X] followers [laughs]... they're very inspiring to be with" (H, female); "we have kind of learned together... one person gets an obsession and that draws other people in" (C, male); "it's fun, it's exciting ... you want to be part of it" (K, male); "I literally leave and I'm like, buzzing just cause I really enjoy being there" (F, female). In this sense, Farm X can be understood as a 'third place'—a public zone distinct from work and home (Firth et al. 2011)—where people can meet, interact, and in doing so, create and deepen points of interest; a crucial element for movement building.

Relatedly, working together helps community grow refers to the ways in which the material changes and collective work involved in gardening (a bed cleared of weeds, a compost heap built) helps to create a sense of shared progress, achievement, and ultimately a social network made up of those participating. This was particularly the case in the project's establishment phase, but also extends to Farm X's functioning week-to-week—with interviewees emphasising their sense of productivity and the social layer that shared work involves, for example: "it's quite enjoyable getting some physical exercise done while doing something useful" (Q, male); "it seems like you do a lot in the hour there but it's because there's, you know, heaps of other people there" (F, female); "I mean four people, or even two people doing the micro-greens is way more fun than having to do the whole thing on your on your own" (H, female). Others explicitly linked this progress (and sense of fun) with the social network Farm X has helped make. For example: "there is... a community of people who have grown up around it who know each other who wouldn't have otherwise" (C, male); "you've got people who obviously have got



relationships now with [Farm X]... they all bring something to the garden" (E, male).

Contributing to a movement

The last major factor driving volunteer engagement is contributing to a movement—referring to reasons for volunteering linked to supporting the existence and prefigurative aspects of Farm X, most significantly as a functioning alternative to industrial agri-business but also as part of a broader movement for social change, described in Farm X's promotional materials as a "delicious (r)evolution". As one volunteer explained, affirming the initial ambitions of farm management and the ways these aligned with his own politics, "it is prefigurative... it's small urban food production, organic... showing people what's possible" (C, male).

Specific motivations here were multiple and often overlapped within a single volunteer, from upholding a generalized and altruistic 'volunteer identity' to valuing the farm's commercial viability and/or the political statement of growing organic food in an urban setting. For example, F-a sub-30-year-old corporate professional with aspirations of starting a growing-based business—linked her participation to a longer practice of volunteering in environmental conservation: "it's wanting to do my part... we've spent a lot of time volunteering, like even when we were in Australia, we had our regular volunteering every weekend fortnight." However, F was also specifically attracted by Farm X's economic orientation and its significance, both for challenging agribusiness dominance and expanding her own future options: "I like how it's run, how they do like the boxes, and then that pays their way... I think I had really like low expectations... I was quite blown away by the whole system there".

More explicitly politicised interviewees connected volunteering to larger struggles like climate change and decolonisation, emphasising close links between the personal and structural benefits associated with participation. For example, S—a university student who had recently moved from a rural town to the city—explained her interests in food sovereignty, climate action and the practical usefulness of growing food: "I just had a lot of climate anxiety and stress... and you're like oh my god, I gotta find somewhere that's doing something good". Similarly, C—a highly politicised volunteer and generation above the 20-30 year old cohort most common at the site—emphasised the practical value of supporting Farm X: "I'd say predominantly people that are attracted to keep coming back are the people who can clearly see that the society that we inhabit is unjust and is on a suicide path, and it's a place to actually, you know, be active in your opposition to that" (C, male). Though never the 'exclusive' factor, political motivations here align closely with the ways volunteering has been promoted by Farm X, with social media posts making regular references to movement building, local food, climate action, and the creation of urban farms as a form of "climate-change-ready infrastructure". As Garden Manager V notes, "we want to see a movement of urban food production".

Factors which hinder volunteer engagement

Responses here are divided into three themes: *time scarcity*, *economic hurdles*, and *struggles over direction*.

Time scarcity

Time scarcity refers to the range of interests, opportunities and obligations that volunteering at Farm X competes with. Interviewees almost all described time constraints as a key barrier to participation, with paid work a recurrent issue. For example: "it's quite hard to [garden] especially when you work full time" (F, female); "sometimes I haven't finished my work... that's the only reason to stop going back" (P, male). As Garden Manager V explains, a common pattern with volunteer engagement is that the volunteer shows up, becomes obsessed and volunteers regularly for a short period before being pulled back to other commitments. Similarly, volunteers described other commitments that limited their involvement, from team sports to family, moving homes, and study. For example, "there will be times, you know when there's family dramas or things like that... of course you just drop everything and the garden has to come second" (H, female).

Economic hurdles

Economic hurdles applies specifically to volunteers interested in farming careers, and refers to challenges raised about the economic viability of urban farming; something Farm X's movement-orientation hopes to change. Responses here had two prongs: one pointing out the difficulty of establishing urban agriculture projects and how this limits the associated job prospects available; the other acknowledging a disconnection between the money associated with farming and the high cost of living in New Zealand. In particular, interviewees drew links between New Zealand's housing crisis and the prohibitive effect high rent has, for example: "there's going be food in the city but of course.. land has value and value equates to profit by developers and so forth" (E, male); "part of me really wants to learn about it, and then like, the more sensible listening to my parents sort of side of things is like, it's gonna be hard enough as it is to be able to buy a property... work in urban agriculture isn't going to be the most lucrative profession" (Q, male); "probably the overarching thing holding us all down is the price of making mistakes... so like to play and make a mistake, you've



got to be paying rent like [laughs] it's a heavy cost, it has to work" (T, male).

Struggles over direction

Struggles over direction refers to the way individual differences in emphasis and values can lead to disagreements and/or, in some cases, disengagement. While mentioned rarely, responses here revealed a tension between the collective work required by Farm X and their top-down management—which, while incredibly welcoming and supportive of volunteers, remains focused on a specific 'vision' for the site that limits the opportunity for deeper, more collaborative engagement. For example: "that's one thing I struggled with... this old school not-for-profit style, which just feels super top heavy to me" (T, male); "I've kind of made a conscious decision at some stage that I didn't really want to be involved in non-democratic spaces... a democratic structure, a participatory structure for the people who are participants is the thing that I would kind of love to have seen added to the mix" (C, male). This is a tension acknowledged by Vision Holder J, who flags it as a necessary trade-off for achieving the site's specific and pre-determined outcomes (i.e., a market-oriented farm paying its manager's salary): "I have a very specific contention of this project and I don't want it to get side-tracked by...just human dynamics which you know... probably people would see that as a fault, but I wanted to really like get this project to be generating as many possible outcomes from itself as quickly as possible." This tension is explored further below.

Discussion

Volunteers play important roles in urban agriculture, but many organisations report difficulty attracting and retaining sufficient numbers to achieve their goals (Cohen and Reynolds 2015)—limiting both project functioning and broader aspirations for movement building (Sage et al. 2020). Following participation alongside and interviews with farm volunteers and organisers at a single, locally novel urban farm in Auckland New Zealand, I generated four major themes which help volunteer engagement: strong leadership, learning by doing, socialising around plants, and contributing to a movement. These sit alongside three themes which hinder volunteer engagement: time scarcity, economic hurdles, and struggles over direction. Considered holistically, these themes tell a story consistent with other volunteering literature (e.g., Wilson 2000): from the initial alignment of interests and pre-existing social connections which attract volunteers to Farm X, to the positive experiences and learning enjoyed while present, the social connections made, and ultimately, the other realities that volunteering competes with.

While Farm X's approach is validated by successes todate, its dual aims—showcasing a functioning economic alternative to industrial agri-business *and* building a movement to further challenge that hegemony—raise a number of tensions, reflecting key and inescapable trade-offs (e.g., McClintock 2014). Here I focus on two important tensions for volunteer engagement that emerged from the themes: the importance of focused leadership verses having space for volunteer agency, and demanding commitment verses being flexible.

Focused leadership verses volunteer agency

Leadership is an important part of Farm X's success. In line with existing work on the importance of paid professional help for community gardens (Fox-Kämper et al. 2018), interviewees all noted the impact of Garden Manager V and his networks, flexibility and passion, described by one participant as a "key man risk" going forward. Similarly, Vision Holder J's leadership off-site has been crucial for honing the farm's commercial elements; in J's words, proving "that these [alternative agricultural] systems that we're talking about actually work". This focus has seen Farm X emphasise their status as a managed 'urban farm' paying its own manager's wages while still needing and welcoming volunteers.

In contrast to purely commercial operations, this hybrid arrangement is justified by both the positive impact of Farm X's social movement framing (captured in the theme contributing to a movement) and the idea that exposure to (and participation in) alternative systems is in itself revolutionary, showcasing difference while building capacity to expand (e.g., Nettle 2014; Sharp et al. 2015; Tornaghi 2014). As Vision Holder J explained, there are a number of newer projects that "have been influenced by having had a space to come to, by spending time on it, by imagining what's possible." However, while Farm X's commercial aspects have been particularly successful for attracting volunteers interested in learning growing techniques from experts (as in the subtheme expert guidance), the close management and singular vision behind their commercial outputs has also operated as a source of conflict for volunteers who would prefigure an alternative world in a governance space as well as in the garden (captured in the theme struggles over direction).

This tension—between focused leadership and volunteer agency—is common to many community projects. For example, in their work exploring community garden governance structures, Fox-Kämper et al. (2018) contrast top-down approaches, where a certain group's outcomes are prioritised and enforced, and bottom-up approaches, which are more open, collaborative and ultimately community-led. Similarly, research in North Carolina raises tensions between



garden management styles that are directive, where volunteers have little room for strategic input, verses collaborative, where garden goals emerge more collectively (Gilbert et al. 2020). In both cases, these researchers note that while tighter management is often associated with the uniform outputs required for market competition (and thus income to support professional help), the lack of agency risks alienating volunteers who wish to have greater say. In this sense, it is telling that those volunteers (C, T) who enjoyed Farm X's less formal establishment phase and the greater room for agency and experimentation it involved (captured in the subtheme *collective experimentation*) were also those who struggled with its later top-down approach (captured in the theme *struggles over direction*).

As McClintock (2014) suggests, such difference can't be resolved, but rather speaks to alternative (and in many ways complimentary) strategies for change; a recognition that complex problems require multiple, sometimes contradictory, approaches (e.g., Hassan 2014). For example, while Farm X has prioritised a single vision at the expense of some volunteers continuing, that vision has also inspired many others to participate, facilitating the creation of a highly visible and successfully functioning AFI: a small-scale, organic vegetable farm organised around a CSA scheme that all are welcome to participate in. Similarly, while various researchers emphasise the ways such formal openness can be hamstrung by both racial and class dynamics (e.g., Aptekar 2015; Lyson 2014; Meenar and Hoover 2012), the relative homogeneity of Farm X's participants (including age) shouldn't be viewed as a reason to reject their efforts but rather a reminder of the importance of distributing power and resources, helping to support similar (self-led) opportunities in other communities (Esteva and Prakesh 1998; Penniman 2018), i.e., those where not receiving food in exchange for labour might be a more significant barrier to participation. Nonetheless, while Farm X attracts certain demographics more than others and utilises a governance structure similar to that of most commercial farms, their growing techniques, scale, market approach and flexibility with drop-in volunteers sets them apart—achieving the educational aims of their social change agenda on multiple levels. These include teaching specific food production techniques to interested volunteers, 'doing difference' in an economic sphere via the Farm's CSA (Gibson-Graham 2008) and ultimately increasing awareness of alternatives to industrial agriculture via encounters with the farm's physical use of urban space.

Despite this, in pursuing such a singular vision, Farm X has—by necessity—foreclosed other more socially radical pathways, leaving them for other projects. As one of the lapsed volunteers noted, "I think we should be really positive about [Farm X] whilst at the same time learning from what could be added to that to make more resilient spaces...

we don't know what else might have been achieved with more imaginations at the table" (C, male). This emphasis on plurality and collective decision-making speaks to the deeper interpersonal and often neglected dimension of social change, the idea that we don't just need to transform how and where our food is produced, but also how we relate to one another: how decisions beyond ourselves are made and ultimately, who gets to have a say (e.g., Holloway 2010; Prilleltensky 2014; Stein 2019). Indeed, in Patel's (2009) discussion of the differences between food security (defined by the United Nations) and food sovereignty (envisioned by peasant-led movement La Via Campesina), he points out that if food sovereignty is about people's right to define their own food and agricultural systems, then its realisation requires a transformation of the forces which currently limit that right: "a society in which the equality-distorting effects of sexism, patriarchy, racism, and class power have been eradicated" (p. 670). While lofty in aspiration, recent work by Graeber and Wengrow (2021) draws on longstanding feminist scholarship to emphasise that such transformation begins at the interpersonal level, in the intimate spaces (the gardens?) where we meet, work and live day-to-day (see also Holloway 2010). In New Zealand at least, the potential for more collective and democratic forms of agriculture remains under-explored.

Demands made of volunteers

A further tension concerns strategic differences between demanding deeper commitment of fewer volunteers verses asking less of a wider pool. For Farm X—locally novel, centrally located, and interested in minimising barriers to participation—asking less has been a successful strategy, enabling a wide group of volunteers to be involved on a casual basis, most significantly during the farm's establishment, but also during their ongoing business week-to-week. As explored in the theme being flexible, interviewed volunteers enjoyed this relaxed 'drop-in' volunteering, matching participation with their interest and availability. This was contrasted against stricter experiences elsewhere, for example, with volunteer rosters and fixed start and finish times. However, while such flexibility has its upsides (in terms of making participation available to a wider range of participants and minimising risks of volunteer burnout), it sits in tension with the commitment and consistency demanded by both the business side of an established urban farm and aspirations for movement building. As Bauman (2007) notes, while neoliberal prioritising of individual benefits—like Farm X's emphasis on volunteering as a pathway to learn from expert growers—may attract volunteers, such instrumental framing risks a shallow and ultimately fickle level of commitment, especially given the difficulties of finding paid urban agriculture work (captured in the theme economic hurdles).



This commitment (and the associated development of a change-oriented "collective identity") are particularly important for movement building (Diani 1992). As Vision Holder J explains, the demands of leadership are significant and require far greater commitment to change than volunteers showing up for a novel experience: "It has to be a calling—more than just oh this is fun or more than this is a good thing to do—it has to be a calling for... those initial people." For example, while Farm X's establishment was a labour-intensive period relying on many different people, the majority casual volunteers, it was itself driven by regular and committed volunteering on the part of J, V and the organising group. However, in line with McClintock's (2014) claims about urban agriculture's contradictory nature, the significance of this committed leadership sits at odds with the commitment facilitated by Farm X's flexible approach to volunteers, revealing a key tension between their dual goals of establishing a functional alternative to industrial agriculture and also growing the movement. While top-down management has provided a strong and appealing vision that has helped to attract many casual volunteers, most significantly during the exciting period of farm establishment—a model that may well help initiate more farms that can later pay key staff to sustain operations beyond that first push—it has also alienated several of the more committed volunteers involved early on. Taken together, these factors beg the question, central to all movement-building and ripe for further research: how to preserve the focus and appeal of strong leadership while still leaving space for interested volunteers to deepen their commitment?

I end with a brief discussion of an alternative strategy: one that balances increased demands with increased support. Research on the Brazilian Landless Workers' Movement linked to La Via Campesina—emphasises the importance of establishing a formalised support network, helping to buffer the precarity associated with AFIs' 'economic outsider' status (and the privilege otherwise required to engage) by prioritising solidarity, mutual aid and peer-to-peer learning within a democratic and identity-providing framework (Massicotte and Kelly-Bisson 2019). Similarly, work by Flachs (2022) on farming cooperatives in India explains the ways in which such democratically-organised agricultural programs help to provide stable alternatives to models of destructive economic growth through "local social institutions, diversified socioecological life, and local control". These approaches offer elements New Zealand urban farms may wish to consider (but which Farm X did not provide). For example, supporting committed volunteers with formalised training programmes, regular food in exchange for their labour, regular social engagements and/or more say in project governance; a hybrid model of increasing commitments and agency alongside the flexibility and openness that has characterised Farm X's successful approach to date.

As research from Peru shows, such ongoing participation in community gardening's physical work can help to galvanise a specific "organic subjectivity" previously absent, drawing participants into efforts for political change (Cody 2019, p. 105) and encouraging the "collective identity" argued to be crucial for social movements (Diani 1992). To this end, future research might explore differences in politicisation amongst garden participants over time, and the various factors that can contribute to or detract from efforts here.

As McClintock (2014) points out, there are limits to what we can ask of a single project. By inviting volunteers to learn by doing, Farm X have not only attracted sufficient numbers to achieve their immediate goals (the creation of a functioning farm) but also helped to educate and expose far more to the viability and possibilities of urban agriculture; an important aspect of movement-building. Per Gibson-Graham (2008), it's vital that these efforts be celebrated, but in the same breath, it's important to acknowledge the tensions raised here. To truly build urban agriculture as a movement, organisations will need to walk the fine line between asking a little and asking a lot, balancing strong leadership and focus with space for agency and responsibility—not just 'leveraging' volunteer labour, but creating pathways that help to build and sustain a collective identity for the movement (Diani 1992). This will, by definition, extend beyond the bounds of any one project or vision—for such is the task associated with breaking neoliberalism's hold. As Escobar (2021) explains, echoing the Zapatista call, responses here ultimately require "a world where many worlds fit" (p. 9; see also Holloway 2010). For urbanites interested in social change, farm volunteering might hold the seed.

Acknowledgements Many thanks are due to Professor Niki Harré, my primary supervisor, for her close guidance and feedback on this manuscript. Credit is also due to Dr. Shiloh Groot, my secondary supervisor, for her support and advice conceiving the project, and both Professor Christa Fouche and PhD candidate Sean Nicholas for their spirited discussion in our meetings on some of the issues with food explored further here. Lastly, I wish to thank both the organisers and volunteers of Farm X (including my generous participants!) and indeed all involved in food system change; your commitment helps makes this world new.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.



References

- Ackerman, K. 2012. 7—Urban agriculture: Opportunities and constraints. In *Metropolitan sustainability*, ed. F. Zeman, 118–146. UK: Woodhead Publishing.
- Ajl, M. 2022. Everything stays the same while everything changes. *Development and Change* 53 (6): 1398–1420. https://doi.org/10.1111/dech.12732.
- Aptekar, S. 2015. Visions of public space: Reproducing and resisting social hierarchies in a community garden. *Sociological Forum* 30 (1): 209–227. https://doi.org/10.1111/socf.12152.
- Bauman, Z. 2007. Consuming life, 1st ed. Oxford, UK: Polity Press.
- Belich, J. 2001. Paradise reforged: A history of the New Zealanders from the 1880s to the year 2000. Honolulu, Hawai'i: University of Hawai'i Press.
- Brannick, T., and D. Coghlan. 2007. In defense of being "native": The case for insider academic research. *Organizational Research Methods* 10 (1): 59–74. https://doi.org/10.1177/1094428106 289253.
- Braun, V., and V. Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2): 77–101. https://doi.org/10.1191/1478088706qp063oa.
- Braun, V., and V. Clarke. 2013. Successful qualitative research: A practical guide for beginners. London: SAGE.
- Braun, V., and V. Clarke. 2021. Thematic analysis. In Analysing qualitative data in psychology, ed. E. Lyons and A. Coyle, 128–147. London: SAGE.
- Braun, V., V. Clarke, N. Hayfield, and G. Terry. 2019. Thematic analysis. In *Handbook of research methods in health social sciences*, ed. P. Liamputtong, 843–860. New York: Springer.
- Classens, M. 2015. The nature of urban gardens: Toward a political ecology of urban agriculture. *Agriculture and Human Values* 32 (2): 229–239. https://doi.org/10.1007/s10460-014-9540-4.
- Cody, K. 2019. Community gardens and the making of organic subjects: A case study from the Peruvian Andes. *Agriculture and Human Values* 36 (1): 105–116. https://doi.org/10.1007/s10460-018-9895-z.
- Cohen, N., and K. Reynolds. 2015. Resource needs for a socially just and sustainable urban agriculture system: Lessons from New York City. *Renewable Agriculture and Food Systems* 30 (1): 103–114. https://doi.org/10.1017/S1742170514000210.
- Commerce Commission. 2022. Market study into the retail grocery sector—Final report. https://comcom.govt.nz/_data/assets/pdf_file/0024/278403/Market-Study-into-the-retail-grocery-sector-Final-report-8-March-2022.pdf Accessed November 11 2022.
- de Klepper, M., E. Sleebos, G. van de Bunt, and F. Agneessens. 2010. Similarity in friendship networks: Selection or influence? The effect of constraining contexts and non-visible individual attributes. *Social Networks* 32 (1): 82–90. https://doi.org/10.1016/j. socnet.2009.06.003.
- Dean, J. 2014. How structural factors promote instrumental motivations within youth volunteering: A qualitative analysis of volunteer brokerage. *Voluntary Sector Review* 5 (2): 231–247. https://doi.org/ 10.1332/204080514X14013591527611.
- Diani, M. 1992. The concept of social movement. *The Sociological Review* 40 (1): 1–25.
- Drake, L., and L.J. Lawson. 2015. Results of a US and Canada community garden survey: Shared challenges in garden management amid diverse geographical and organizational contexts. *Agriculture and Human Values* 32 (2): 241–254. https://doi.org/10.1007/s10460-014-9558-7.
- Earle, M. 2011. Cultivating Health: Community gardening as a public health intervention. Unpublished master's thesis. Wellington School of Medicine and Health Sciences, University of Otago.

- Ekers, M., C.Z. Levkoe, S. Walker, and B. Dale. 2016. Will work for food: Agricultural interns, apprentices, volunteers, and the agrarian question. *Agriculture and Human Values* 33 (3): 705–720. https://doi.org/10.1007/s10460-015-9660-5.
- Eliasoph, N. 2011. Making volunteers: Civic life after welfare's end. Princeton, New Jersey: Princeton University Press.
- Ernwein, M. 2017. Urban agriculture and the neoliberalisation of what? ACME: An International E-Journal for Critical Geographies 16(2). https://ora.ox.ac.uk/objects/uuid:b12f78ab-82ca-46da-8eeb-25905a3fc6f0
- Escobar, A. 2021. *Pluriversal politics: The real and the possible*. Durham, NC: Duke University Press.
- Esteva, G., and S.M. Prakesh. 1998. *Grassroots post-modernism:* Remaking the soil of cultures. London, UK: Zed Books.
- Firth, C., D. Maye, and D. Pearson. 2011. Developing "community" in community gardens. *Local Environment* 16 (6): 555–568. https://doi.org/10.1080/13549839.2011.586025.
- Flachs, A. 2022. Degrowing alternative agriculture: Institutions and aspirations as sustainability metrics for small farmers in Bosnia and India. Sustainability Science 17: 2301–2314. https://doi.org/ 10.1007/s11625-022-01160-9.
- Fox-Kämper, R., A. Wesener, D. Münderlein, M. Sondermann, W. McWilliam, and N. Kirk. 2018. Urban community gardens: An evaluation of governance approaches and related enablers and barriers at different development stages. *Landscape and Urban Planning* 170: 59–68. https://doi.org/10.1016/j.landurbplan.2017.06.023.
- Geertz, C. 1973. The interpretation of cultures: Selected essays. New York, NY: Basic Books.
- Giacchè, G., J.N. Consalès, B.J.-P. Grard, A.-C. Daniel, and C. Chenu. 2021. Toward an evaluation of cultural ecosystem services delivered by urban micro-farms. Sustainability. https://doi.org/10.3390/su13041716.
- Gibson-Graham, J.K. 2008. Diverse economies: Performative practices for 'other worlds.' *Progress in Human Geography* 32 (5): 613–632. https://doi.org/10.1177/0309132508090821.
- Gilbert, J., C. Chauvenet, B. Sheppard, and M.D. Marco. 2020. "Don't just come for yourself': Understanding leadership approaches and volunteer engagement in community gardens. *Journal of Agriculture, Food Systems, and Community Development* 9 (4): 1–15. https://doi.org/10.5304/jafscd.2020.094.019.
- Graeber, D., and D. Wengrow. 2021. *The dawn of everything: a new history of humanity*. New York, NY: Farrar, Straus and Giroux.
- Handy, F., R.A. Cnaan, L. Hustinx, C. Kang, J.L. Brudney, D. Haski-Leventhal, K. Holmes, L.C.P.M. Meijs, A.B. Pessi, B. Ranade, N. Yamauchi, and S. Zrinscak. 2010. A cross-cultural examination of student volunteering: Is it all about résumé building? *Nonprofit* and Voluntary Sector Quarterly 39 (3): 498–523. https://doi.org/ 10.1177/0899764009344353.
- Hanna, C., and P. Wallace. 2021. Planning the urban foodscape: Policy and regulation of urban agriculture in Aotearoa New Zealand. *Kōtuitui: New Zealand Journal of Social Sciences Online* 17 (3): 1–23. https://doi.org/10.1080/1177083X.2021.1996403.
- Harré, N. 2019. Let's assume people are good: Rethinking research in community psychology. *The Australian Community Psychologist* 30 (1): 81–91.
- Harré, N., S. Birdsall, D. Hikuroa, D. Kelly, K. Nairn, and T. Roycroft. 2022. Participation for a better future: Communities of action for the environment in Aotearoa New Zealand. In *Routledge inter*national handbook of community psychology, ed. C. Kagan, A. Constanzo, J. Akhurst, J. Alfraro, R. Lawthom, and M. Richards. London, UK: Routledge.
- Harré, N., C. Blythe, L. McLean, and S. Khan. 2021. A people-focused systems approach to sustainability. *American Journal of Community Psychology* 69 (1–2): 114–133. https://doi.org/10.1002/ ajcp.12550.



Hassan, Z. 2014. The social labs revolution: A new approach to solving our most complex challenges, 1st ed. San Francisco, CA: Berrett-Koehler Publishers.

- Haylock, K., and S. Connelly. 2018. Examining the insider/outsider dimensions of local food system planning: Cases from Dunedin and Christchurch New Zealand. *Planning Practice and Research* 33 (5): 540–557. https://doi.org/10.1080/02697459.2018.15464 70
- Holloway, J. 2010. Crack capitalism. London, UK: Pluto Press.
- Joy, M.K., D.A. Rankin, L. Wöhler, P. Boyce, A. Canning, K.J. Foote, and P.M. McNie. 2022. The grey water footprint of milk due to nitrate leaching from dairy farms in Canterbury, New Zealand. *Australasian Journal of Environmental Management* 29 (2): 177– 199. https://doi.org/10.1080/14486563.2022.2068685.
- Kidder, L.H., and M. Fine. 1987. Qualitative and quantitative methods: When stories converge. *New Directions for Program Evaluation* 1987 (35): 57–75. https://doi.org/10.1002/ev.1459.
- King, C.A. 2008. Community resilience and contemporary agriecological systems: Reconnecting people and food, and people with people. *Systems Research and Behavioral Science* 25 (1): 111–124. https://doi.org/10.1002/sres.854.
- Kingsley, J., E. Foenander, and A. Bailey. 2019. "You feel like you're part of something bigger": Exploring motivations for community garden participation in Melbourne. *Australia. BMC Public Health* 19 (1): 745. https://doi.org/10.1186/s12889-019-7108-3.
- London, J.K., B.B. Cutts, K. Schwarz, L. Schmidt, and M.L. Cadenasso. 2021. Unearthing the entangled roots of urban agriculture. Agriculture and Human Values 38 (1): 205–220. https://doi.org/10.1007/s10460-020-10158-x.
- Lyson, H.C. 2014. Social structural location and vocabularies of participation: Fostering a collective identity in urban agriculture activism. *Rural Sociology* 79 (3): 310–335. https://doi.org/10. 1111/ruso.12041.
- Massicotte, M.-J., and C. Kelly-Bisson. 2019. What's wrong with permaculture design courses? Brazilian lessons for agroecological movement-building in Canada. *Agriculture and Human Values* 36 (3): 581–594. https://doi.org/10.1007/s10460-018-9870-8.
- McCarthy, J.D., and M.N. Zald. 1977. Resource mobilization and social movements: A partial theory. *American Journal of Sociology* 82 (6): 1212–1241. https://doi.org/10.1086/226464.
- McClintock, N. 2014. Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. *Local Environment* 19 (2): 147–171. https://doi.org/10.1080/13549839.2012.752797.
- McClintock, N., and M. Simpson. 2018. Stacking functions: Identifying motivational frames guiding urban agriculture organizations and businesses in the United States and Canada. Agriculture and Human Values 35 (1): 19–39. https://doi.org/10.1007/s10460-017-9784-x.
- McVey, D., R. Nash, and P. Stansbie. 2018. The motivations and experiences of community garden participants in Edinburgh, Scotland. Regional Studies, Regional Science 5 (1): 40–56. https://doi.org/10.1080/21681376.2017.1409650.
- Meenar, M., and B. Hoover. 2012. Community food security via urban agriculture: understanding people, place, economy, and accessibility from a food justice perspective. *Journal of Agriculture, Food Systems, and Community Development* 3 (1): 143–160. https://doi. org/10.5304/jafscd.2012.031.013.
- Nettle, C. 2014. Community gardening as social action. Oxford, UK: Routledge.
- Okvat, H.A., and A.J. Zautra. 2011. Community gardening: A parsimonious path to individual, community, and environmental resilience. *American Journal of Community Psychology* 47 (3): 374–387. https://doi.org/10.1007/s10464-010-9404-z.

- Parkins, W., and G. Craig. 2009. Culture and the politics of alternative food networks. *Food, Culture and Society* 12 (1): 77–103. https://doi.org/10.2752/155280109X368679.
- Patel, R. 2009. Food sovereignty. *The Journal of Peasant Studies* 36 (3): 663–706. https://doi.org/10.1080/03066150903143079.
- Patel, R., and J.W. Moore. 2018. A history of the world in seven cheap things: A guide to capitalism, nature, and the future of the planet. San Francisco, California: University of California Press.
- Penniman, L. 2018. Farming while black: Soul fire farm's practical guide to liberation on the land. Vermont, USA: Chelsea Green Publishing
- Piatti, C. 2015. Enacting the alter-native: A theoretical reframing of local food initiatives in Aotearoa/New Zealand. PhD dissertation, University of Otago, New Zealand. https://ourarchive.otago.ac.nz/ handle/10523/5954
- Prilleltensky, I. 2014. Meaning-making, mattering, and thriving in community psychology: From co-optation to amelioration and transformation. *Psychosocial Intervention* 23 (2): 151–154. https://doi.org/10.1016/j.psi.2014.07.008.
- Pudup, M.B. 2008. It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum* 39 (3): 1228–1240. https:// doi.org/10.1016/j.geoforum.2007.06.012.
- Riemer, M., S.M. Reich, S.D. Evans, G. Nelson, and I. Prilleltensky, eds. 2020. Community psychology. In pursuit of liberation and well-being, 3rd ed. London, UK: Red Globe Press.
- Rittel, H.W.J., and M.M. Webber. 1973. Dilemmas in a general theory of planning. *Policy Sciences* 4 (2): 155–169. https://doi.org/10. 1007/BF01405730.
- Rose, N. (2013). Optimism of the will: Food sovereignty as transformative counter-hegemony in the 21st century. PhD dissertation, College of Design and Social Context, Royal Melbourne Institute of Technology.
- Rosol, M. 2012. Community volunteering as neoliberal strategy? Green Space Production in Berlin. Antipode 44 (1): 239–257. https://doi. org/10.1111/j.1467-8330.2011.00861.x.
- Rutt, R.L. 2020. Cultivating urban conviviality: Urban farming in the shadows of Copenhagen's neoliberalisms. *Journal of Political Ecology*. https://doi.org/10.2458/v27i1.23749.
- Sage, C., C. Kropp, and I. Antoni-Komar. 2020. Grassroots initiatives in food system transformation: The role of food movements in the second 'Great Transformation.' In *Food system transformations*, ed. C. Sage, C. Kropp, and I. Antoni-Komar, 1–19. London, UK: Routledge.
- Sharp, E.L., W. Friesen, and N. Lewis. 2015. Alternative framings of alternative food: A typology of practice. *New Zealand Geographer* 71 (1): 6–17. https://doi.org/10.1111/nzg.12069.
- Sharp, E.L., E. Schindler, N. Lewis, and W. Friesen. 2016. Food fights: Irritating for social change among Auckland's alternative food initiatives. *Kōtuitui: New Zealand Journal of Social Sciences Online* 11 (2): 133–145. https://doi.org/10.1080/1177083X.2016.11581 97.
- Shostak, S. 2022. "How do we measure justice?": Missions and metrics in urban agriculture. *Agriculture and Human Values*. https://doi.org/10.1007/s10460-022-10296-4.
- Stein, S. 2019. The ethical and ecological limits of sustainability: A decolonial approach to climate change in higher education. *Australian Journal of Environmental Education* 35 (3): 198–212. https://doi.org/10.1017/aee.2019.17.
- Taylor, J.R., and S.T. Lovell. 2014. Urban home food gardens in the global North: Research traditions and future directions. Agriculture and Human Values 31 (2): 285–305. https://doi.org/10.1007/ s10460-013-9475-1.
- Teig, E., J. Amulya, L. Bardwell, M. Buchenau, J.A. Marshall, and J.S. Litt. 2009. Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens. *Health*



- and Place 15 (4): 1115–1122. https://doi.org/10.1016/j.healt hplace.2009.06.003.
- The Democratic Federation. 1883. Socialism made plain, the social and political manifesto of the Democratic federation. The Democratic Federation. Accessed 16 June 2021. https://books.google.co.nz/books?id=8rVbAAAAQAAJandprintsec=frontcoverandsource=gbs_ge_summary_randredir_esc=y#v=onepageandqandf=false
- Tornaghi, C. 2014. Critical geography of urban agriculture. *Progress in Human Geography* 38 (4): 551–567. https://doi.org/10.1177/0309132513512542.
- Turner, B. 2011. Embodied connections: Sustainability, food systems and community gardens. *Local Environment* 16 (6): 509–522. https://doi.org/10.1080/13549839.2011.569537.
- Vermeulen, S.J., B.M. Campbell, and J.S. Ingram. 2012. Climate change and food systems. *Annual Review of Environment and Resources* 37 (1): 195–222.
- Webb, V. 2020. "We just have to get them growing their own food": The cultural politics of community gardens. PhD dissertation,

- Massey University, New Zealand. https://mro.massey.ac.nz/handle/10179/15485
- Wilson, J. 2000. Volunteering. *Annual Review of Sociology* 26: 215–240.
- Yin, R.K. 2009. Case study research: Design and methods, 4th ed. London, UK: SAGE.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Daniel C. Kelly is a Pākehā New Zealander writer/researcher and 5th generation migrant of Irish ancestry, sent south by the same combination of colonisation, enclosure and hunger that informs his work today. He is a PhD candidate at the University of Auckland and a keen poet, seed saver, and community gardener

