

SPECIAL SECTION

Massive Urbanisation

Urban gardens on the edge of city-making in Metro Manila

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Abstract

Urban gardens have emerged at the cracks and edges of the densely built environment of Metro Manila, taking on a variety of forms that cultivate a sense of habitability amid harsh urban conditions. The empirical diversity in the spaces, practices and trajectories of urban gardens in the city, however, often exceeds their usual framings either as state-sponsored projects from above that seek to transform individual dispositions, or as grassroots initiatives from below that result from conscious collective resistance or encroachment. Framing gardens as a locus to understand city-making amid massive urbanisation, this paper aims to provide a different account of urban gardens by focusing on how they emerge from a certain edginess, characterised by a coming together of various actions, aspirations and relations, and by a mode of practice marked by a distinctive temporality and peripheral logic. Using particular accounts of gardening from across Metro Manila, the paper demonstrates the edginess of urban gardens in terms of four articulations: as interstitial, provisional, transversal and experimental. Making a garden work and maintaining its place in the city entail consolidating relationships between various urban elements that carve spaces of manoeuvre, produce diverse eventualities, and map onto the indeterminate politics of the maybe.

KEYWORDS

Manila, massive urbanisation, peripheral, temporality, urban agriculture, urban garden

1 | INTRODUCTION

Gardens of all types have emerged in Metro Manila at the cracks and edges of one of the worlds' densest urban regions. In this paper, I take gardens as interlocutors of the politics of temporality in the city and a window to understanding city-making in Metro Manila. Humble gardens become sites of inhabiting an increasingly uninhabitable city and of navigating confusing trajectories and configurations amid massive urbanisation. As spaces that often refuse or exceed attempts at settling them, gardens present a way of looking through the lens of spaces and practices long considered as not properly belonging to the city.

Metro Manila is often portrayed as fragmented, with well-provisioned privatised enclaves multiplying in different locations that tend to bypass the rest of the city, where urban life seems to proceed with different logics (Garrido, 2019; Shatkin, 2008; Tadiar, 2016). Its urban region continues to expand, extending such fragmented relations but also generating

new socio-spatial formations as urbanisation rolls out unevenly across the fringes (Jensen et al., 2020; Ortega, 2016; Saguin & Alvarez, 2022). Recurring threats of disasters amid the spectre of climate change have also increasingly incorporated visions of urban futures as green and resilient (Alvarez & Cardenas, 2019). Yet both enclave developments and resilience-building in the city have led to massive reshuffling of people within and away from the city centre into what residents have referred to as 'death zones' in the peripheries, where social housing with incomplete and inaccessible infrastructure sprawl in the middle of nowhere (Ortega, 2020; Saguin & Alvarez, 2022). At the interstices and edges of these parallel urban movements, urban gardening – a term used here to also refer to urban agriculture and urban farming – has sprouted somewhat unexpectedly, as marginal practices historically overlooked but has since quietly become a feature of Manila's urban landscape.

In this paper, I examine how Manila's gardens become sites of navigating increasing uninhabitability or the ways in which forms of urban life engage with the constant struggle of inhabiting a city under threat (Simone, 2016) amid trajectories of massive urbanisation. Diverging from other appraisals of urban agriculture, I demonstrate how urban gardens embody 'edginess', which is characterised by a coming together of various actions, aspirations and relations, and by a mode of practice marked by a distinctive temporality and peripheral logic. This edginess may be parsed further as various iterations: as formation, condition, location or setting of operating in-between worlds, where logics or capacities are drawn from a myriad of forces that produce new, uneasy modes of coexistence. Together, these contribute to diverse eventualities and outcomes, and plant the seeds for possibilities and moments of radical and modest openness. The unsettled spatiality and diverging temporalities in making a garden work and maintaining its place in the city entail consolidating relationships between various urban elements that carve spaces of manoeuvre, produce diverse eventualities, and map onto the indeterminate politics of the maybe that undergirds extended urbanisation. Casting light on the politics of the maybe through urban gardens demonstrates the ways that city dwellers make sense of and make do with uninhabitability by flipping things around and working with pre-given systems and structures.

Interviews with 65 urban gardeners or farmers, agriculturists, authorities and other participants of gardening initiatives between 2017 and 2019 as part of a research project on urban agriculture in Metro Manila serve as the source of these accounts. The cases included in the paper focuses on three spaces in Metro Manila where many urban farming initiatives take place: the residential northeast, the strip of lakeshore land in the southeast, and pockets of resettlement and informal settlement housing throughout the urban region. In the absence of an exhaustive survey or mapping of the types of gardens and gardeners in the city, identifying specific respondents from these areas required a snowball sampling method, beginning with city government officials who referred the research team to village leaders or project authorities within their jurisdictions, who in turn identified potential respondents within the localities. Many of these farming spaces – even state-sponsored gardens – were located in interstitial and in-between spaces, and except for the seasonally flooded lakeshore farms in Metro Manila's southeast, were very small in size (i.e., not exceeding 100 square metres). The inquisitive mode and snowballing sampling method allowed the research team to find gardens and their diversity, sometimes in surprising or unexpected places. Because many of these gardens appear and disappear or change considerably through time, it was important to begin with more established or visible state-sponsored gardening projects and proceed with exploring other modes of farming that exist near these sites.

After introducing Manila and the diversity of its urban agriculture spaces, I unpack moments of edginess by framing gardens as interstitial, provisional, transversal and experimental. I illustrate these varying features through accounts from multiple gardens across Metro Manila. I conclude with some reflections on gardens as a site of modest promise amid the unfolding trajectories of massive urbanisation.

2 | GARDEN VARIETIES AND PERIPHERAL EDGES

Like many cities in the Global South, Manila continues to experience massive urbanisation in its multiple senses, with more than 25 million people in a mega-urban region that is set to extend further in all directions where it can. Such an expansion has been driven by various rationalities and imaginaries, and has produced distinct spatial formations and corresponding contestations and inhabitation, particularly at the urban edges. These include infrastructural expansions into bodies of water to produce more land for projects framed as world class city-making, and conversion of agricultural lands to make way for enclave developments, planned green cities and resettlement housing projects that reconfigure the geographies of the urban peripheries (Ortega, 2020; Saguin, 2022).

Beyond these well-documented spaces of peripheral transformations, other spaces too provide a view of the politics of edginess at the margins. I take the example of urban farms and gardens as modest sites of peripheral city-making. Urban

farms exist in diverse forms, sites and arrangements, but are often seen as marginal to the city, in terms of the spaces they occupy, the practices they elicit, and the imaginations of their place in the city. Their forms include leftover agricultural lands, community gardens, farming in backyards and vacant lots and similar spaces often coexisting but playing a secondary role to other urban uses. City dwellers – recent migrants from the countryside and established informal settlers alike – establish and expand their farms in a manner similar to autoconstruction in housing: incremental, interstitial and often improvised (Caldeira, 2017; Simone, 2019).

Urban farming or cultivation in the city is not new to Metro Manila, with historical work on urban provisioning demonstrating the changing geographies of urban food within and beyond the shifting boundaries of the city, particularly during periods of crisis (Doeppers, 2016; Saguin, 2022). However, the increasing state legibility and recognition of urban agriculture is a recent phenomenon, with many urban farming projects initiated by the state emerging only in the late 2000s and 2010s as a result of decentralisation of several state functions in the 1990s and the relative ease of setting up a gardening project. Metro Manila is administratively governed by 17 local government units (16 cities and one municipality), all of which currently host at least one urban farming project in their jurisdiction, with the largest supporting more than a hundred gardens in a city-wide programme. State-sponsored gardens are often located in government or institutional spaces and have the primary goal of showcasing the possibilities of farming in the city in support of other private or community-led gardening ventures there (Saguin & Cagampan, *forthcoming*). Those who farm are diverse, ranging from urban poor residents who are able to gain access to open lands for farming as a source of income, to middle-class gated subdivision residents who farm for recreation. The availability and access to open space remains the most important consideration for establishing urban gardens and helps shape the eventual outcome of many gardening projects.

The diversity of farming spaces and practices contrasts with state efforts to institutionalise urban agriculture and map onto the shifting trajectories of urbanisation in the city. Particular visions of what gardening should look like has emerged in the process of initiating state gardening projects and instituting national policies and local ordinances. Local government officials have extolled the benefits of urban agriculture primarily in five terms: to promote food security and improve nutrition; to instil self-reliance and self-sufficiency, especially among the urban poor; to encourage environmental awareness; to provide an additional source of income; and to strengthen the bonds among families and communities (Saguin & Cagampan, *forthcoming*). Farming in the city, a relatively easy project to initiate that tends to require only a small space, is viewed in these terms as an activity that can improve the ecological, economic and social conditions of urban living without challenging the fundamental arrangement of space in the city.

As such, many state-sponsored gardening projects take the form of a community garden with a project structure and official linkages to state programmes. Yet the extent of gardens in Manila go beyond the official project modes espoused by state programmes and include a myriad of relations, arrangements, techniques and spatial forms. This includes farming in former agricultural areas that remain amid encroachment of the built environment, and individual or household initiatives to make a living through farming in spaces that are available or accessible. These have existed parallel to trajectories of urbanisation of Metro Manila despite them not being legible to, nor fully recognised by, the state.

The diversity of the spaces and the politics engendered by urban farming and community gardens have been surveyed in diverging literature on urban agriculture in the Global North and the Global South (Follmann et al., 2021; McClintock, 2014; Tornaghi, 2014; WinklerPrins, 2017). Their subversive, interstitial and radical character as alternative to conventional food systems and capitalist urbanisation may be read as ways of reclaiming space and the commons in the city (Bach & McClintock, 2021; Galt et al., 2014). But they may also simultaneously generate internal exclusions and displacement (Egerer & Fairbairn, 2018; McClintock, 2018; Neo & Chua, 2017; van Holstein, 2020), cultivate a variety of governmental subjectivities (Barron, 2017; Ghose & Pettygrove, 2014; Rosol, 2012), and become sites of contradictory negotiations (McClintock et al., 2021; Saguin, 2020). Urban agriculture appraisals often frame such practices as either state-sponsored or top-down projects that seek to transform individual habits and dispositions or as grassroots initiatives from below that result from conscious collective resistance or encroachment.

In this paper, I seek to take a parallel approach to urban agriculture by considering gardens as articulations of city-making that embody a sense of edginess. I focus on the 'urban work' that gets done in gardens (McLees, 2017) and their place in producing cityness. I situate urban agriculture – gardening and farming and their spaces and practices – within the multivalent concept of peripheries, margins and edges (Ren, 2021; Roy, 2011; Saguin, 2022; Simone, 2019). By margins, periphery and edge, I mean not only the geographic sites in the periphery but also the socio-spatial practices, relations and aspirations not often viewed as a lens to city-making. Edges and edginess may be viewed as multivalent, such as the patchwork urban fringe and in-between, liminal spaces that straddle dynamically two worlds (i.e., rural–urban or the official–transversal), generating a sense of precarity, uncertainty and unsettling in their temporalities. Their uneven placement in space paradoxically serves as seeds for forms of anticipatory urban politics as different groups of people and

practices are juxtaposed or entangled (Simone & Pieterse, 2018), contributing to the possibilities of flipping things around and unsettling urban order as captured by the term the politics of the 'maybe'.

Looking from the margins or the fringe (Keil, 2017) is generative to think through city-making that emerges as a result of leftover contiguities, the diverse juxtapositions that create emergent connections and eventualities in heterogeneous ways (Simone, 2019). There is no universal urban peripheral experience and thus it is important to situate the forms they take in particular places (Caldeira, 2017; Gururani & Kennedy, 2021). Specifically, I am interested in how edginess in gardens creates conditions of possibility or constrains trajectories of making claims, of carving spaces for manoeuvre and of urban possibilities. Edginess in this regard enables a sensitivity to viewing urban life beyond the centre, which moves parallel to and distinctly from the historical concern on cores and centrality that animate much work on urban studies. The blurriness and fuzziness of edges also expose their generative capacity to produce other possibilities and modes of urban life.

I illustrate urban garden edginess in Metro Manila using particular accounts from across the city in terms of four articulations: gardens as interstitial, provisional, transversal and experimental. These articulations embody edginess and peripherality to different degrees and are by no means the only forms that they take. While urban gardens are illustrative of edginess in the city in Manila, this is not a universal condition that can be ascribed to all gardens. Identifying how and why they emerge on the edge provides a window to understanding city-making processes through the humble space of urban gardens.

First, often located on the edge both in space and condition, gardens emerge at the interstices of the urban fabric. Their in-betweenness enables them to materialise in unexpected places and in spaces where they would otherwise not be permitted. But the same in-betweenness also makes them expendable and magnifies their precarity in the urban landscape. Second, gardening and farming are also marked by varying temporalities tied to their precarious place in the city. Gardening spaces and practices are characterised by a certain sense of provisionality and mutability, as they appear, disappear and reappear, often within particular conjunctures that render their futures uncertain. Both the interstitial and provisional aspects of gardens describe a sense of uncertainty – spatial for the former and temporal for the latter – that point to a condition of precarity as characteristic of edginess.

Third, urban gardening engages transversally at various points with official logics, suggesting a multiplicity of relations that may not adhere to the goals and what is expected of those who garden and farm. State-sponsored projects and gardening initiated by residents become sites where a particular peripheral logic coexists with, overlaps, coopts, subverts or transgresses official rationalities as gardeners and farmers attempt to make a living or inhabit the city through gardening. Fourth, similar to autoconstruction in housing, gardens are also incremental, incomplete and improvised, as never stable and always in the making through assembling of practices, materials, experiences and knowledge, as gardeners make do with what is available, resulting in beyond the intended. Together, these processes suffuse the edginess that is reproduced in city-making practices across space. They demonstrate how gardens become a site from where the politics of the maybe is projected as opportunities to remake urban life in both radical and modest ways.

3 | GARDENS AS INTERSTITIAL

Many urban farms and gardens in Manila thrive in spaces on the edge of urbanisation. These include zones in the fringe left over by the march of the built environment, at the urban–rural interface of transforming agricultural lands that re-evaluates the patchwork *desakota* spatial category (Ortega, 2012), or those located literally on the edge where the city meets the water where aquatic vegetables and seasonal crops are grown on seasonally flooded lands. Many other gardens sprout in pockets of interstices between more apparently urban uses of land, or anywhere where space allows in a dense environment, including walls, roofs, balconies and pavements. This spatial uncertainty marks the interstitial character of urban gardens.

In Manila, gardeners attribute the lack of space as the primary constraint and driver of urban farming. For gardeners, this lack is what marks these spaces as particularly urban and what distinguishes their activity from rural practices of farming on more extensive lands. Urban farming thus requires a distinct set of skills, knowledge, materials and labour to make cultivation in the city successful. It generates a certain sensitivity to making what is available work given these constraints and limitations. As a city agricultural officer remarked, 'people farmed before in the rural areas, but because [the city] has become highly urbanised, it is now called urban agriculture.'

Questions of space also tie with broader issues of land tenure, access, rights and ownership moulded by histories of occupation and struggles in the city. In Metro Manila, urban gardening and farming runs parallel to urban poor housing

movements and broader contestations in use of space in the city. In southern Metro Manila, a city agriculture office had proposed utilising vacant lots in middle-class subdivisions for farming by individuals from nearby urban poor settlements, a proposal that encountered strong resistance from the homeowners' associations. In another north-east gated subdivision, a piece of vacant land has become the point of contention between subdivision resident gardeners, who seek to expand the successes of their project to nearby available lots, and gardeners from a nearby informal settlement, who use the space for income. In Metro Manila's north-west, the local government has prioritised urban gardening in easements near rivers to deter informal settlements – historically known to occupy these interstitial spaces – from constructing homes. These examples show how gardening at the interstices requires navigating a complex set of existing spatial arrangements and relations that structure residents' ability to undertake gardening.

In a dense settlement in Quezon City in north-east Metro Manila with a long-standing reputation of being 'a street of no return', Rudy's lush rooftop garden stands out in an area where farming spaces have all but disappeared. Perched atop their house's second floor, and accessible only by a retractable ladder, the garden offers a view of the settlement that Rudy has seen grow expansively since he migrated from the countryside in 1984 (see [Figure 1](#)). After retiring and with financial aid from relatives and through knowledge transfer from an agriculturist acquaintance, he was finally able to build his own garden incrementally starting in 2016. He chose the rooftop as a site because all available open lands around his house have been occupied with increased in-migration to the neighbourhood since the 1990s. Growing and maintaining a garden in such a small space poses a number of challenges, from the high cost of the fencing and structural materials to getting irrigation water up to the rooftop. However, he is able to access gardening seminars and relies on free seeds from vegetable refuse in the neighbourhood market to keep costs down.

'It is my hobby, but at the same time, this is not only a hobby', Rudy claimed, suggesting further that he sees the garden as a form of investment, given the time and effort that he has put into the garden. Despite this, Rudy believes that the rooftop garden is not large enough to allow for food self-sufficiency, instead only being able to supplement their daily household vegetable needs. The garden, however, allows him to keep busy in retirement and allows for a fresh and airy space where he can rest amid the cramped density of the settlement. He has made plans to expand his garden and experiment with new possibilities of additional crops that could be cultivated in this small space. Despite Rudy demonstrating



FIGURE 1 Rooftop garden amid a dense settlement in Quezon City

that rooftop gardening is possible, other residents who are keen on building rooftop gardens of their own continue to be limited primarily by the financial costs of setting up a sturdy and working garden.

Growing a garden on the rooftop instead of on the ground also skirts issues of land conflict, about which in the neighbourhood there has been a long history of contention surrounding rights of use that residents continue to negotiate with the government through various state bureaucratic instruments. The nearby gated subdivision, whose lands are owned by a bank, claimed many of the residents' former farming spaces and shaped their ability to garden and their broader infrastructural access to the rest of the city. Once commonplace crops that residents cultivated in the area, and consumed or sold for income like banana, cassava, mango, sweet potato and malunggay, all but disappeared as lands where these grew were reclaimed for various other uses, from gated subdivisions and housing projects to formal state-sponsored vegetable gardens and road widening.

Gardens like Rudy's rooftop are forced to emerge in spaces where their presence does not challenge existing configurations of urban land use. Their ability to sprout at the interstices allows their existence as long as they do not intrude with other urban priorities. In this case, the function of gardens to provide livelihood income and subsistence also disappears as those who continue to practise gardening do so as a hobby or recreation in their spare time in whatever space is available.

Gardens also become interstitial when they are caught between various pressures of urbanisation. A parallel example is that of farming in the largest piece of agricultural land left in Metro Manila located in the jurisdiction of the local government of Taguig in the south-east where the city meets Lake Laguna. This stretch of shoreline has so far escaped the fate of other agricultural lands in the city that have been converted to other uses, owing to the seasonal flooding that prevented construction of permanent structures.

Residents like Efren, a third-generation tenant farmer, have found various ways to make a living in this stretch of marginal land, including the farming of rice, melons and vegetables, as well as occasional fishing activities. In the 1980s, farmers in this area made the switch from rice farming to the more profitable melon farming, currently supplying much of Metro Manila's summer melon needs. 'These were all agricultural lands until they were incrementally developed, structures were built,' Efren noted, 'When cities see development, the government would like to see its income grow.'

This piece of agricultural land – still more than 100 hectares – is under the jurisdiction of a city government that has seen much of its leftover farmlands converted to residential or commercial uses. As the site of a world-class central business district just a few kilometres from the shoreline where a few agricultural fields still exist, the city has branded itself as a *Probinsyudad*, a portmanteau of its hybrid rural–urban identity.

The local government's agriculture office continues to offer technical support to the remaining dozens of melon and rice farmers as part of its mandate to maintain this *Probinsyudad* identity. However, it has also embarked on a different kind of urban agriculture project, one that promotes gardening in constrained spaces such as schools, settlements and other institutional areas, using space-saving methods such as container gardening and vertical farming. The aim is to show that even in small spaces in a rapidly transforming built environment of the city, they will be able to promote food security despite urban developments. These projects become institutionalised as the newer type of urban agriculture that the city is promoting and prioritising, one that occupies less land than the more traditional melon and rice farms, and one that could coexist with the vision of a progressive city. The result for the melon farmers is their increasing marginalisation in the plans of the city, especially amid continuing threats of agricultural land conversion.

The melon farms and the tenant farmers inhabit a space that has been rendered interstitial by simultaneous forces of urban transformation tied to increasingly valuable land. Tenant farmers like Efren have lobbied to keep these lands amid looming uncertainty of conversion, reclamation and speculation surrounding proposed road-dike infrastructure and urban land developments. They feel a sense of inevitability in the eventual loss of their lands with the march of urban expansion in their in-between farming spaces. 'I just hope that the government will preserve these lands that we farm,' Efren says, 'even if progress has arrived in our city, we can still proudly show *Probinsyudad* to future generations.' For him and other tenant farmers who continue to hold on to this land, their claim to this piece of currently marginal but potentially valuable land is a claim for a place in the city's vision of its future, but it is also a politics of configuring vantage points, of attending to livelihoods and ensuring that they retain these spaces for its ability to sustain multiple ways of making a living.

The precarious edginess of their place in the city and uncertainty in the future marks a particular trajectory of the politics of the maybe as an articulation of interstitiality. Both Rudy and Efren show how their interstitiality makes them less visible and difficult to capture as a particular kind of space but also more easily disposable to make way for other urban uses of land. They both also embody a distinctive temporality that accompanies their interstitiality. Their continued

claims of gardens on the edge are driven by clinging to a hope of flipping things around and remaking practices and visions of what a city in the future should be.

4 | GARDENS AS PROVISIONAL

Apart from being located in in-between spaces, varieties of gardens in Manila also operate as a provisional use of urban space, as something seen as eventually giving way to other uses once these opportunities become available. These are framed within visions of progress and development in the city. 'Our city is for progress', claimed one local government official, remarking how the lack of land for agriculture is a mark of progress for the city. Gardens are therefore seen as occupying space that may be devoted to this goal of progress – often in the sense of constructing the built environment – and are thus often temporally precarious. Because they are located in areas where use is borrowed or temporary and with a high degree of uncertainty, many community gardens, for instance, have reverted back for government and private use once such need arises. Examples of once thriving community gardens that had to be dismantled or relocated include government agencies reclaiming land temporarily lent to gardeners in Paranaque in the south and Malabon in the north.

Despite being institutionalised as a state project with corresponding budget from the local government, the vision of gardens as a temporary feature of the urban landscape subjects them to a high degree of mutability and fungibility. State-sponsored community gardening projects, in particular, are dependent on changing priorities of city government officials and politicians regarding use of land and the place of urban agriculture in the city. The ease with which gardening projects could be set up and assembled by authorities also means that they are similarly easy to dismantle.

The secondary place of urban farming and gardening in the city renders them particularly vulnerable to being displaced due to infrastructure and other urban developments. The narrow strip of shoreline along the lake continues several kilometres south of the melon farms to Muntinlupa, where Domeng has made his living gardening and farming for nearly three decades. Domeng and his household maintain two sets of farming space: a vegetable garden along the shore that floods with the onset of monsoon rains, and a water spinach farm located several metres off the shore (see [Figure 2](#)). Water spinach, a vegetable used in many dishes and a crop that is easy to cultivate but is labour-intensive and time-consuming to harvest, grows well in these interstitial spaces. It enabled Domeng to earn a steady source of income that matches the seasonality of their shoreline vegetable garden. The spatial in-betweenness of Domeng's gardens and farms also produce a distinct temporality of livelihood and farming practices sensitive to changing conditions. 'We have worked out the rhythms of the rising water ... What we would do is to shift to water spinach, and then after that, fishing in the lake. And then come January when waters recede, we plant again.' As pioneer water spinach farmer in the area, Domeng has seen the transformation of their interstitial place through time: 'This area here used to be vacant, no one owned it. Now there are many who would like to farm but they could not because someone else has owned it.'

Gardening on this edge, however, has also been subject to threats of displacement and uncertainty over their futures in the area owing to their very interstitiality. A coastal road project has been in the works since 2015 under varying forms – from plans of an elevated road dike to a highway currently under construction. Both have been a crucial component of



FIGURE 2 Seasonally flooded melon and vegetable farms along the lake shore

the state's urban infrastructural agenda, which sees opportunities for expansion in coastal and shoreline areas of Manila in the hopes of addressing much of its problems with limited land availability. Speculation about these projects have also led to land reclamation and further land conversion, processes that further ease out the futures of gardening and farming activities in the area. Efren remarked 'Time runs its course. We cannot really say how things will turn out. Of course, there will come a time when local governments will think of new projects.'

Gardeners and farmers have demonstrated varying degrees of resistance and responses to these proposals, ranging from forming coalitions and tapping their networks of connections with the government to negotiate their place in the city such as the case of Efren to Domeng's quiet resignation that there is not much that they can do. Both, however, continue to aspire to garden and lament the loss of such spaces for future generations: 'Those who will suffer are those next in line, like my children; they will not taste the fruits of what we reaped here', says Domeng.

This provisionality and a looming sense of uncertain futures characterise many gardens throughout Metro Manila, which further configure gardening as a practice and what this means for residents. Those who borrow land to cultivate crops have to constantly renegotiate their terms of use. Household farmers and gardeners also often seek permission from caretakers or owners of vacant lots to cultivate crops temporarily, giving them up once the land is to be used for something deemed more properly urban.

Arlyn, who lives in the same neighbourhood as Rudy, used to farm for income in a land now claimed and fenced by the bank. She was able to continue accessing this piece of land by striking various agreements with guards and caretakers to allow her to harvest from the mango and coconut trees she had planted years before. She argued how she is not building any permanent structures on this private land as opposed to, for example, the more contentious construction of a housing settlement. 'I told them that their right is to the land and not to the fruits of the mango trees that I have planted there before. They told me it was okay as long as I do not build structures. I told them those are beyond me because my only concern is the trees.' In this instance, the temporary, provisional and mutable nature of her farming – seasonal planting and harvest of vegetables and fruits – allowed Arlyn to negotiate access to land and continue earning an income.

The temporal rhythms of actual gardening practices – preparing land, sowing, irrigating, harvesting – also vary considerably across gardens and crops. In some cases, particularly in state-sponsored gardening projects, their rhythms exceed project timeline and temporal visions of how land should be used in the city. Attempts to render gardens as a stable spatial-temporal category are unsettled by their provisional edginess. Gardens in the city appear, disappear and reappear, often within particular conjunctures that render their futures uncertain. These precarious spatialities and temporalities on the edge allow a politics of the maybe to emerge, one that is not predetermined or complete but is instead open to various possibilities of configurations and trajectories.

5 | GARDENS AS TRANSVERSAL

In promoting urban agriculture in the city, proponents extol the various merits of gardens in ameliorating urban life, from provisioning of food and income to improving the health of urban bodies and environments. The relative ease of setting up a gardening project at the individual, household or community level and multiplying them across spaces makes them particularly attractive for authorities to institute as a governmental project with particular goals and rationalities.

Local government authorities and neighbourhoods have set up hundreds of community gardening projects throughout Metro Manila, with aims of promoting food security, nutrition and sustenance; instilling discipline and self-reliance; improving environmental awareness; providing a source of supplemental income; and strengthening community and family ties and well-being (Saguin & Cagampan, [forthcoming](#)). Training sessions, seed distribution and other means of support have rolled out in various parts of the city, targeting specific groups of people that would potentially benefit from engaging in gardening.

The goals of many of these community gardens have been, according to project metrics, successfully met, such as in resettlement sites where gardens were introduced to address nutritional concerns of residents while enabling a stronger sense of neighbourly relations among the resettled. Yet for every model of a successful garden that authorities promote, there are dozens of other failed or unsustainable attempts at instituting gardens. In a resettlement site in the northernmost reach of Metro Manila proper, most residents simply do not have time to garden due to the long commutes between home in the city centre and work in the far fringe of the city. Other gardeners who participate in such projects do so with aims other than or beyond the official, which enables them to make a living in these inaccessible, incomplete and uninhabitable peripheries (Saguin, 2020).

Merly, a senior citizen who previously made her living from cultivating vegetables and root crops near her riverside home, was told to relocate to the resettlement site in 2016. The loss of her source of income has forced her to look for alternative means of earning money in the far-flung housing site. She initially joined a gardening project sponsored by the city government that aimed to provide for the nutritional and livelihood needs of the resettled residents while inculcating a sense of community. Owing to her prior experience in urban farming, her knowledge was valued by the project officials and participants. However, she has since moved beyond participating in the gardening project as she had difficulty walking to and from the community garden and as this limited the kinds of crops that she was able to cultivate. Merly eventually started gardening in vacant spaces in the resettlement site, which while technically not allowed for aesthetic reasons, was eventually tolerated by the housing authorities due to the temporary nature of her crops and the forms of concessions she was able to strike due to her stature as an experienced gardener. For example, she planted herbal plants in the space behind her house to comply with the desire of authorities to grow medicinal plants that also repelled mosquitoes for the benefit of the community, even if she had wanted to use the space for vegetables. Because of these concessions, she was able to push the possibilities of where she could cultivate, even eyeing the fences around the basketball court for potentially growing vine vegetables, moving beyond the intended use of these spaces and bypassing the space of the community garden as the proper space for gardening. In many ways, Merly's gardening practices run transversally with the purpose and logic of the official community garden established to ameliorate life in the resettlement site (Saguin, 2020).

The in-betweenness and provisionality of gardening projects are further magnified in moments where particular practices conflict with state-sanctioned and institutionalised logic. The case of Arlyn and the controversy between a communal garden and a state-sponsored garden is illustrative of the transversality of particular gardens and gardener practices. Arlyn, like Rudy, was one of the first to settle in this neighbourhood in Quezon City at the edge where government-owned and private lands meet. She and other 'original' migrants had to make do with housing and infrastructural absence in the area – for years, for example, they had no connection to the electricity grid and had to rely on diffuse light coming from the nearby gated subdivision. They found use for nearby open, vacant lots for cultivation to provide food and additional income amid such precarity.

After the hard work of clearing the thick cogon grasses, the gardeners started planting fruit trees like coconut and mango, root crops like sweet potato and cassava (see [Figure 3](#)). Eventually, they planted vegetable crops like mustard greens and Chinese cabbage, the latter of which Arlyn and other gardeners found to be particularly suited for the soil, the short cycle of cropping and the high demand in nearby settlements. Using farming knowledge acquired in the countryside, Arlyn recalled how she and up to a hundred other residents became engaged in farming in these communal plots until the late 1990s, when the *barangay* or village government decided to establish a vegetable garden project in parts of their farming land. The rest of their farming plots were also either fenced by the bank or were settled by newer migrants.

The state-sponsored and agriculturist-staffed vegetable garden became a pioneering demonstration farm. Because of its success in showcasing the possibilities and techniques of urban farming within constrained urban land, it welcomed visitors and became a renowned site of learning and knowledge transfer on urban agriculture. Its emergence, however, came at the expense of the residents who used the same lands to grow crops for subsistence or livelihood. For several years, conflict ensued between residents and the garden project personnel, until such time when communal farming in the area ceased to be feasible as more vacant lands were converted to dense housing. The vision of urban gardens as a fenced and staffed project, meant to demonstrate to the rest of the city the technical possibilities of urban agriculture, invalidated other visions of gardens, such as those of the community plots.

As the official logic of gardening and farming in the city became institutionalised through the state-sponsored garden, other modes of farming were rendered even more peripheral. Arlyn navigated such official logic by negotiating access to remaining open lands as a way to keep farming on her own terms without being involved or directly confronting the state-sanctioned vegetable garden. 'I did not want to participate there, I wanted a quiet life', she reiterated. By skirting participation in the state garden and moving alongside its rationality, she was able to continue securing space for farming and accessing lands that have been increasingly enclosed. Her practice of gardening embodied an unsettled edginess that contrasted with the government garden as a project fixed in space, and touted as the model for maintaining a green, productive space amid harsh urban conditions.

The multiple engagements and relations of residents with gardens as state projects are located not only within the spectrum of adherence to official logics as a project participant on the one hand to transgressive resistance on the other, but also transversally (Caldeira, 2017), as people undertake various modes of operations in these in-between spaces that may be in tangent or parallel to these dominant modes of appraising urban gardening practices. Transversality feeds on the edginess of urban practices in these spaces. The transversality of gardens enables seeing practices or outcomes that spill over beyond project goals or what is intended. They open such accounts to multiple trajectories and meanings of



FIGURE 3 Backyard garden with vegetables and fruit trees in Quezon City

urban agriculture rooted in particular contexts, exhibiting the energy of the politics of the maybe on the edge to unsettle and work around the official and established visions of city-making.

6 | GARDENS AS EXPERIMENTAL

Gardens are sites of incremental experimentation and improvisation. Many gardeners in Metro Manila learn the ropes of urban farming through everyday encounters with cultivating in the city, and making do with whatever materials are available on hand. Urban gardens are therefore often characterised by peripheral practices such as recycling materials like plastic water bottles for use as containers, reusing household waste and materials as compost, pesticides or seeds, and repurposing of space such as vacant lots or empty spaces. Gardens demonstrate that urban possibilities are assembled by practice and a consolidation of existing elements as a way of working with and around but also repurposing existing urban environments that are often on the edge of visibility.

Gardeners often contrast their knowledge as being derived from practice and experience, mixing learning from official training seminars on urban agriculture, with their own ways of learning from constant practice and from other gardeners. 'I've learned from training seminars, from social media, through my experience', says Rina, one community gardener in Quezon City, 'when you do the actual planting, you will eventually be familiar with different kinds of soil and compost.' Norma, a caretaker of a barangay-sponsored garden in the same city, notes the distinction between her rural farming experience and urban farming knowledge: 'I learned farming as a child in Iloilo, we had 1000 square metres of farm at the back of our house ... We did not study farming there; of course when your parents are farmers, you will also know. But here, we attended seminars on urban farming.'

For Jerry, an agriculturist in a state-sponsored garden in Quezon City, the specific context of urban gardening produces a distinct type of expertise that is a consolidation of years of experience dealing with emergent issues of cultivating in the city: 'When it comes to matters of urban agriculture, I am the expert even if I don't have degrees. My edge is my experience in experimenting.' Many urban gardeners combine their prior experience in rural farming as migrants from

the countryside with the particularities of gardening in an urban context to produce a dynamic assemblage of gardening practices. Jerry continues 'The barangay captain asked me to design a garden for the urban context. I told him I was used to extensive farming. So for three years, I did trial-and-error research on the proper design of the urban farm to make it arable – conducting an analysis of the soil and experimenting with compost mixtures.' He was able to prove that it is possible to produce in the city the same crops grown in the rural vegetable bowl of the island.

Gardens also come into being and are maintained through a particular coming together of materials, people, practice and knowledge, often exceeding project aims or resident intentions and producing varying trajectories that are not predetermined. For gardeners, what makes urban farming distinctive is the need to adapt to the constrained and distinct conditions of the city: lack of space, limited sunlight, poor soils and pollution. The challenges of growing in the city encourage urban residents to devise ways to enable cultivation. For several city agriculturists and authorities, urban farming is made possible through the use of technologies such as aquaponics, hydroponics and container gardening, and the development of specialised skills to overcome poor soil and space limitations in the city. Adapting to the urban context requires introducing new ways of doing farming, and thus the use of novel techniques often characterise many state-sponsored gardening projects in Metro Manila. This also aligns with futuring visions reproduced by city authorities of urban gardens as being part of progress in the city, only if it fits the mould of such technological innovations. An agriculturist summarises it as such: 'Urban agriculture requires technological innovation ... That is the future.'

Rudy's rooftop garden also presents an example of the improvisational and experimental character of gardening in an interstitial space. He combined his prior farming knowledge with know-how from interactions with his neighbours and from seminars. His 15 square metre garden uses recycled mineral water bottles and pails as plant boxes and containers for the soil and crops. He sourced his soil from a neighbour who had his own rooftop garden. He also constructed from scratch fences, trellis and mesh nets for vine vegetables to climb up and to keep away the sparrows who feed on the crops (see [Figure 4](#)). Rudy also quickly realised the need for adjusting irrigation volumes depending on the season, learning that the technique of spraying works better in particular weather conditions. He also developed his own mixture of organic fertiliser by combining compost sourced from a nearby solid waste facility with charcoal dust and ash, and he sometimes gets seeds from vegetable refuse in the neighbourhood wet market.



FIGURE 4 The use of repurposed materials in a rooftop garden

Gardens are incremental and always changing despite state ideals of urban agriculture projects as stable entities that occupy a particular space–time configuration in the city. Gardeners such as Rudy and many others continually add, expand and amend their gardening practice subject to varying shifts in their operations and context, adopting new techniques and reshaping relations with succeeding encounters. They build from unsuccessful attempts and new crops, techniques and networks of connections within and beyond what is allowable. Many gardeners also attempt to incorporate more land and, for community projects, more participants, but doing so would require adjustments in their modes of operation. In many ways, they resemble bricoleurs who make do with whatever is at hand and rework existing configurations that city life presents on the edge, leading to outcomes that are uncertain and unstructured.

Gardening as an experiment in making do through improvisational and incremental ways suggests these practices occupy a particular mode of temporality amid an atmosphere of edginess in the city. Edges become sites where such experiments take shape and achieve particular resonance for residents who live in such spaces. They also serve as experimental grounds from which residents project the ‘maybe’. These practices generate trajectories of inhabiting the city that are not always known or predetermined but present certain other possibilities in urban life, creating conditions for the politics of the maybe.

7 | CONCLUSION: THE MODEST PROMISE OF GARDENS

By way of conclusion, I return to the politics of the maybe and consider what garden edginess brings to our understanding of the trajectories of urban life in Manila's massive urbanisation. Edginess – operationalised in this paper as a form of precarity (interstitiality and provisionality), transversality and experimentality – describes modes of city-making that coalesce around diverse urban garden spaces and practices throughout the city. In a city like Manila, gardens expand what is possible, even as it remains unlikely that they will colonise a significant chunk of urban land use or that many residents will take up gardening and achieve universal success. Their diversity suggests various rhythms that embed in different urban trajectories which invite further redescription of their politics and navigating their tensions as they play out in manifold ways. Aspirational ambitions of gardeners in relation to the city and its inhabitants are often modest. A gardener in Quezon City, for example, related how the bitter melon and okra crops she planted on the path near her home became a way for her to demonstrate to her neighbours the importance of gardening and the possibilities of producing their own food even in such a limited space.

Gardens examined in this paper are sites of waiting and incompleteness, something that is unfinished and something that people do in the meantime and where futures are always uncertain as a result of their interstitial and provisional position in the city. Permeated by transversal logic and being experimental, incremental and improvised, they take time and effort and knowledge to make and maintain. Yet their existence allows the production of something concrete and something that they can consume and use. Their in-between location suggests such practices may or may not materialise into something else in the long future but they have immediate, urgent effects at present. Gardens build on to something else, to a promise of a future, whether in terms of the promise of self-sufficiency and improved well-being or the promise of their hard work bearing fruit. Even if the promise does not meet the lofty goals ascribed to gardening by authorities and proponents, their presence allows multiple possibilities of carving a space of manoeuvre, whether they align or diverge with intended trajectories. They provide a site where residents could stand by the promise of a city-to-come as a form of minor future-making (Kemmer & Simone, 2021), and a ground to experiment with remaking urban life.

Gardens' continuing edginess lies in these indeterminate trajectories, of whether their expected benefits or outcomes may or may not take shape, and of whether these spaces are sustained or dismantled. But these are also spaces where people develop a sense of commitment to a vision of their place in the city, one that also enables forming connections with other residents and with the land to arrest urban inhabitability. Despite many gardens being severely constrained by the various forces within and outside their operations, they present an avenue for modest aspirations for city-making rooted in practice and making do. They provide seeds for enabling a politics of the maybe in the city, where they often find their belongingness undermined or challenged. Cities are always in the making and in the process of becoming but gardens on the edge provide a window to understanding these particular city-making processes in Metro Manila and their indeterminate politics of temporality in the city.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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