

Human Geographical Research on Urban Agriculture: A Literature Review*

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인문지리학에서 도시농업 연구의 현황과 과제: 영어권 문헌을 통한 고찰*

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Abstract : Urban agriculture is becoming a popular phenomenon and its policy relevance is increasing in Korea, but little research has been undertaken among human geographers in the country. Existing literature has yet to propose any analytical focus and direction adequate to specific circumstances of Korean urban agriculture. This article is designed to address the knowledge gap by reviewing related literature published in English. Through a broad examination of the literature, the concept of urban agriculture is clarified and cross-national and inter-regional diversity in terms of emergent contexts, institutional settings, and practice types are also outlined and compared in the beginning. Then, a more focused review of human geographic literature helps finding that researchers are immersed in place, territoriality, and scalar politics. These studies make an important contribution to the understanding of urban agriculture's political potentials and limits, but their over-emphasis on place, territoriality, scalarity acts as an hindrance to the examination of how the emergence and the evolution of urban agriculture is influenced by the circulation of knowledge, information, technology, policy, and associated political processes. In this context, this article calls for a shift of analytical attention towards relational politics beyond place/territorial/scalar politics. Such an analytical reframing is particularly important to Korea because trans-local/transnational benchmarking and associated politics of competition, contestation, and negotiation have been crucial to the recent resurgent of urban agriculture in the country.

Key Words : Urban agriculture, Place, Territoriality, Scale, Relational politics

요약 : 도시농업의 대중화로 정책적 중요성이 부각되고 있지만, 이에 대한 학문적 탐구가 우리나라 인문지리학자들 사이에서는 아직까지 미흡한 실정에 있다. 경험적 연구가 일부 존재하지만, 기존 문헌에서는 탐구의 초점과 방향을 적절하게 제시하고 있지 못하다. 그래서 본 연구에서는 우리보다 활발하게 연구가 진행 중인 영어권의 도시농업 관련 문헌을 검토하고 문제점을 비평하여 우리나라 사정에 적합할 것으로 기대되는 연구의 방향성 하나를 제시하고자 한다. 이 과정에서 우선 관련 문헌을 폭넓게 살펴 도시농업에 대한 개념을 정립하고, 거시적 차원에서 국가 및 지역 간에 존재하는 다양성을 출현의 맥락, 제도적 환경, 실천의 양상 등을 중심으로 파악하였다. 그리고 인문지리학 문헌에 초점을 두고 연구 동향을 살펴 현재의 도시농업 연구가 장소, 영토성, 스케일을 둘러싼 정치 과정에 몰두하고 있는 사실을 발견하였다. 이런 형식의 연구가 도시농업의 정치적 잠재력과 한계를 동시에 이해하고 설명하는데 기여를 하고 있는 것은 사실이지만, 장소성과 영토성에 몰두한 나머지 도시농업의 성립과 변화에서 지식, 정보, 기술, 정책 등의 전파와 이전 효과를 제대로 이해하고 설명하지 못하는 문제점도 표출하고 있다. 그래서 장소/영토성/스케일 차원의 정치에서 탈피해 관계의 메커니즘을 중심으로 도시농업을 탐구해 볼 필요성을 제시했다. 우리나라 도시농업 발전에서는 초국적 벤치마킹, 학습, 수정적용 등의 역할이 중요하고, 수용 모델의 적용을 둘러싼 경쟁, 경합, 협상의 정치가 존재하기 때문이다.

주요어 : 도시농업, 장소, 영토성, 스케일, 관계정치

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I. Introduction

Urban agriculture is becoming a popular phenomenon in Korea. According to a recent study of Korea Rural Economic Institute (Heo *et al.*, 2016), urban agriculture participation is found to markedly grow to 1,084,000 in 2014 from 153,000 in 2010. During the same period, the total area of urban agriculture increased from 104 ha (hectare) to 668 ha as well. National policy plays an important role in the growth. Most importantly, the National Urban Agriculture Act was enacted in 2011, and then the Five-Year Urban Agriculture Promotion Plan started in 2013. An increasing number of municipalities and provincial authorities are also endeavoring to devise local strategies for urban agriculture promotion in forms of local ordinance, promotional plan, and governance arrangements (Lee, 2015a).

Despite the popularization of urban agriculture and its growing policy relevance, little research has been undertaken among human geographers in Korea. Only a handful of case studies about Nodeul Urban Agriculture Park have emerged thus far (Kwon, 2014; Lee, 2015b; 2016a; 2016b), and there is no focused review of 'how' human geographers have researched urban agriculture in the country. Against this backdrop, this article is designed to offer a literature review of human geographical research on urban agriculture, with particular attention to scholarly works published in the English-speaking world where research on urban agriculture is more active and related conceptual and methodological development is more noticeable. The review includes an outline of inter-national and inter-regional differences, a critique of a dominant perspective in existing studies, and an analytical reframing of urban agriculture as relational politics, which is deemed to be more adequate to Korea, to inform subsequent concrete studies.

Therefore, the remaining is composed of four sections. In Section II, urban agriculture is defined in reference to highly cited literature, and then characterized as a 'hybrid' practice that forges a variety of networks between urban spaces and rural practices and generates multi-

farious benefits in their overlapping sphere. Then, through a broad review of regional/national accounts and cross-national comparative studies, diverse emergent contexts, institutional settings, and practice forms of urban agriculture are outlined and compared in Section III, from a global geography perspective. Following Section IV is dedicated to critiquing a dominant approach of place/territorial/scalar politics in the human geographical research on urban agriculture, and in this line the necessity and usefulness of relational approaches is discussed in concluding Section V. The significance of the relational reframing lies in the fact that trans-local, transnational learning, knowledge transfer and modification, and policy mobility have played a crucial role in the rise and the development of urban agriculture in Korea (Lee, 2015a).

II. Defining Urban Agriculture

Urban agriculture is composed of food production practices, such as plant cultivation, beekeeping, and animal farming, and urbanized spatial contexts at varied geographical scales and locations including box gardening, backyard cultivation, rooftop gardening, inner-city vacant lot cultivation, school and community gardening, green-belt farming in urban fringe, etc. (for more detailed explications, see Lee, 2015a; 2016a). Focusing on both attributes, the Community Food Security Coalition (CFSC) defines urban agriculture as "the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities" (Lee, 2016a: 164).¹⁾ Therefore, urban agriculture is distinguishable from far more conventional forms of 'rural' agriculture, and this 'spatial' differentiation is much clearer in Mougeot's (2010) conception, which also indicates the local sourcing of production inputs as another important defining feature, with a particular emphasis on urban agriculture as an 'industry':

Urban agriculture is an industry located within (intra-urban) or on the fringes (peri-urban) of a town,

a city or a metropolis which grows and raises, processes and distributes a diversity of food and non-food products, (re)using largely human and material resources, products and service found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area.

(Mougeot, 2010: 2)

In short, urban agriculture can be seen as a hybrid practice that bridges the urban and the rural. This betweenness, which DeSilvey (2003) terms as a 'third space', is found to generate multifarious possibilities, which are hard for one to achieve by itself without the other. They include benefits attained at the individual level (e.g., dietary habit change, health improvement, and psychological restoration), and positive ecological and sociocultural externalities such as improved biodiversity, regenerated urban ecology, educational effects, and community empowerment (Lee, 2016a). Out of these achievements, several grassroots initiatives have risen to globally renowned models, such as the Denver Urban Gardeners (DUG), Growing Power Inc. in Milwaukee, P-Patch in Seattle, Operation Green Thumb in New York City (Schmelzkopf, 1995; Smith and Kurtz, 2003; Broadway, 2009). However, beyond the relatively well-known model programs there are a

variety of urban agriculture forms and practices, which are reviewed below from a global perspective.

III. Putting Urban Agriculture in Its Places: A Global Outlook

Urban agriculture was once considered to be agricultural initiatives and practices in the cities of developing countries (Bryld, 2003; Hampwaye *et al.*, 2007; Premat, 2009; Eriksen-Hamel and Danso, 2010; Mougeot, 2010; Redwood, 2012; Orsini *et al.*, 2013). However, it is also increasingly identified and researched in the context of more advanced, post-industrial cities in the Global North (Broadway, 2009; Broadway and Broadway, 2011; Colasanti *et al.*, 2012; Ernwein, 2014; Mok *et al.*, 2014; Tomaghi, 2014). In the meantime, as Table 1 shows, there is a clear division in the framing of urban agriculture between less developed countries and more advanced societies, with regard to emerging contexts, institutional settings, dominant practice categories.

In the Global South, urban agriculture is found, and/or hoped, to be a useful means to cope with a variety of underdevelopment problems such as food and nutrition insecurity, public health concerns, poverty, gender inequality, and environmental degradation (Orsini

Table 1. Comparison of Urban Agriculture in Select Countries and Regions

Region	Emerging contexts	Institutional settings	Practice types
Global South	Underdevelopment	Unregulated	Informal economy
Global North			
USA	Urban decay	Voluntarism	Community gardens
U.K.	Urban decay, Activism	Legal protection	Allotment
Germany	Rural decay	Legal protection	Leisure gardens (in peri-urban areas)
Asia-Pacific			
Australia	Middle-class culture, Scientific discovery	Voluntarism	Home garden
Japan	Rural decay	National policy	Leisure gardens (in peri-urban areas)

et al., 2013), which are also driven by various domestic and international factors including rapid rural to urban migration, economic and political crises, structural adjustment programs, and climate change. While its potentials to economic and social progress are highly lauded, urban agriculture generates mixed results in terms of the expected development outcomes (Mougeot, 2010). As McGee and Yeung (1977) reported from South Asian cities in the 1970s, urban agriculture can play an important role in food distribution and job creation in the so-called 'informal' sector. However, in much research on the less developed cities, urban planning regulations unfavorable to cultivation and lacking protection for crops, as well as the presence of social inequalities in terms of landownership, income, education, and gender, are reported to be major difficulties in the promotion of urban agriculture (Bryld, 2003; Hampway *et al.*, 2007; Mougeot, 2010).

Like the literature on urban agriculture in developing countries, disadvantaged urban residents' food security is also an important research topic in the Global North. This aspect of urban agriculture, as geo-historical studies reveal, was especially crucial in the period of war emergences and economic crises (DeSilvey, 2003; Lawson, 2005; Pudup, 2008; Mok *et al.*, 2014). During the World War II, for example, national campaigns of 'Victory Gardens' in the United States, 'Dig for Victory' in United Kingdom, and 'Growing Your Own' in Australia were waged for domestic food security. National authorities played an important role in the spread of the 'war gardens' in association with patriotism and civic responsibility, but the war propagandas also became deeply rooted in popular culture as a cover of *World's Finest Comics* of the time demonstrates (Fig. 1). As a result of the campaigns, the number of victory garden grew to 20 million in the United States in 1944, accounting for 40% of national fresh vegetable supply (Mok *et al.*, 2014).

In major economic crises such as the Great Depression, city-level initiatives such as vacant lot 'relief gardens' for the poor and the unemployed emerged and re-emerged

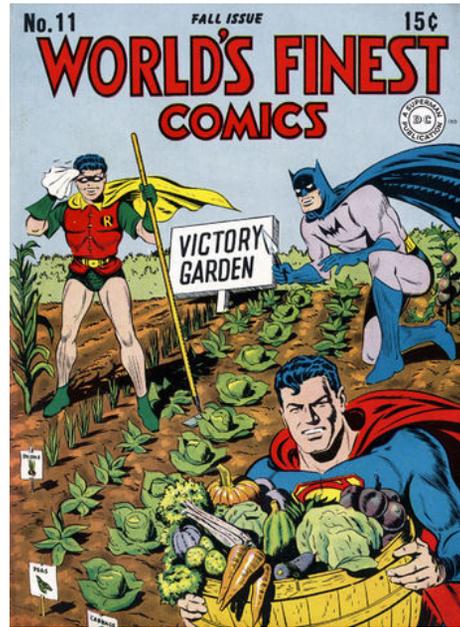


Fig. 1. Victory Garden Featured in *World's Finest Comics* (September, 1943)

Source : DC Comics, 1943: Cover.

intermittently in crisis-stricken industrial cities of the United States (Lawson, 2005; Moore, 2006; Drake and Lawson, 2014). Detroit's Pingree Potato Patches in 1884 is referred to as such programs' prototype (Fig. 2), which was replicated in Chicago, Providence, Buffalo, and Boston in 1885 (Broadway, 2009). In the United Kingdom, unemployed allotment plottolders received special treatments such as discount costs for cultivation materials (such as seeds, fertilizers, and tools) and reduced rent (DeSilvey, 2003). Different from the trans-Atlantic context, middle class rather than the poor was more dominant in Australian urban agriculture owing to the country's backyard 'home garden' tradition, which was rarely accessible to poor urbanites (Mok *et al.*, 2014).

Meanwhile, the current resurgence of agricultural practices in the advanced societies is explained in relation to the 1970s' rise of proactive grassroots movements in existing studies, from which a clue of national differences and international learning can be found (Section V). In the United States, 'community gardens'

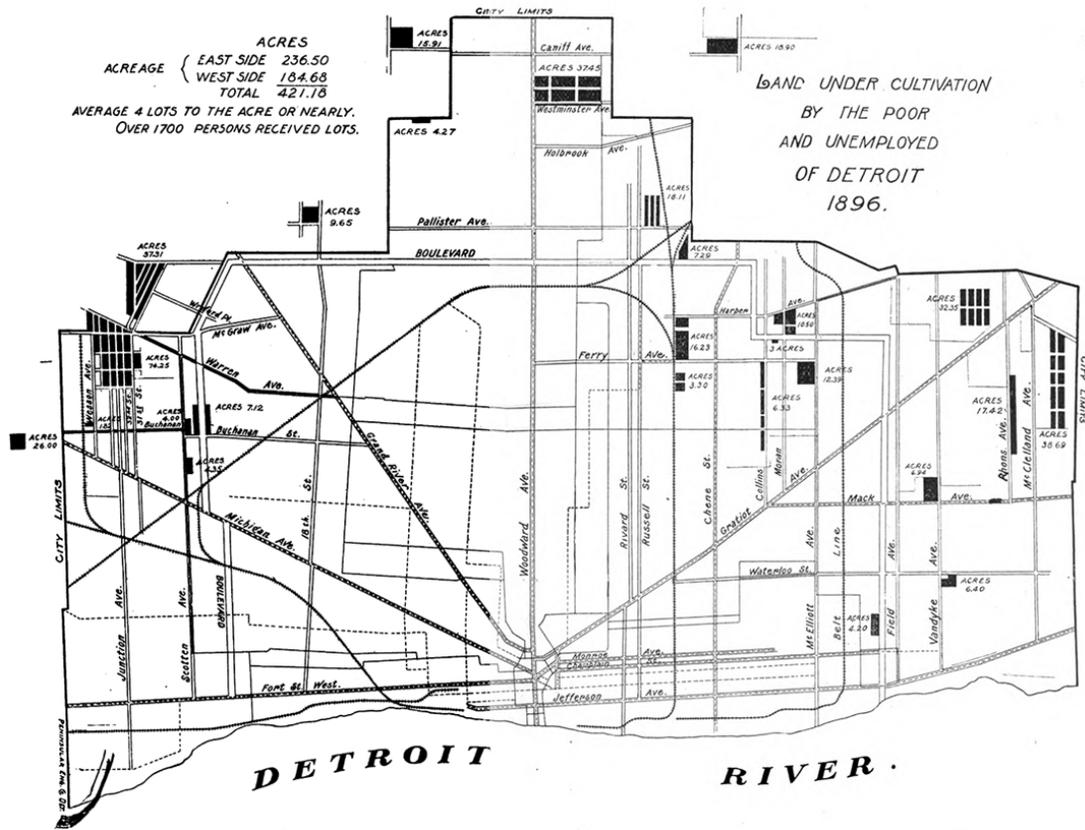


Fig. 2. Location of Pingree Potato Patches in 1896

Source : Conline, 1896: 16-17.

emerged in inner-city abandoned lots as a response to post-industrial urban decay and suburbanization (Kurtz, 2001; Lawson, 2005). In the United Kingdom where the Allotment Act allowed a relatively stable plot tenure arrangement, the increase of derelict plots were a more compelling problem (Thorpe, 1975; DeSilvey, 2003). To turn the “doles of land allotted to the laboring poor... to productive leisure [sites] for all classes” (Thorpe, 1975: 178), continental-style ‘leisure garden’ was introduced from the late 1960s, and then abandoned plots started to be filled by environmentally conscious young people, who utilized their cultivation as a means to resist global capitalism (DeSilvey, 2003).

Among other European countries, Germany and France have an equivalent long history of allotment movement from the nineteenth century (Nilsen, 2014). In France,

according to Ernwein (2014), the Marshall Petain era ideal of “travail, famille, and patrie”, or “labor, family, nation”, which urged cultivation in all idle lands, also laid an important foundation for the growth of allotment gardens and related regulations. At present, French allotment gardens are run mostly by nonprofit organizations, and they are subject to rural code (Keshavarzm, 2014). In Germany, its Allotment Act was passed in 1919 after the ‘kleingarten’ movement, and allotment plots turned into ‘leisure gardens’ after the World War II as the availability of cheap foods were greatly improved and the need of self-sufficient cultivation decreased (Lieske, 2009).²⁾

Finally, in Asia-Pacific region, Australia and Japan are found to be leading countries. Australia where middle-class home garden tradition matters experienced a scientific

knowledge driven resurgence of urban agriculture. More specifically, an eco-friendly agricultural system called ‘permaculture’ has played a key role in the growth of urban gardening in the country since local scientists Bill Mollison and David Holmgren invented the technology in 1978 (Mok *et al.*, 2014). In Japan, a national system of urban agriculture emerged in late 1980s, with emphasis of rural and peri-urban allotments for urban cultivators (Azuma and Wiltshire, 2000; Mok *et al.*, 2014). More specifically, modeled after German ‘kleingarten’ (Lieske, 2009), Agricultural Land Rental Law was established in 1989 to allow rural farm owners to subdivide their land for rent, and then Citizens’ Garden Promotion Law was introduced to legalize the construction of necessary facilities such as chalets and clubhouses on such allotments, or ‘shimin noen’. These legal supports were deemed to be necessary in order to address the problem of rural depopulation that persisted after World War II, and to meet a increasing demand of cultivation site among urbanites. In this sense, Japanese allotment laws can be understood as a deregulatory measure to agricultural land use that had prohibited physical modifications, unlike British Allotment Act focused on urban land provisioning for cultivation and land tenure protection. Similar to German kleingarten, shimin noen normally locates in peri-urban rural areas, and in that way both kleingarten and shimin noen are created in rural settings where urbanites are attracted to experience and enjoy agricultural during their leisure times.³⁾

To summarize, existing studies of urban agriculture identify and analyze a variety of motivations and incentives, rules and laws, and practice types (Table 1 above). In the meantime, urban agriculture is examined as a solution to underdevelopment problems in less developed countries, while its rise and fall in more developed countries are traced in relation to wider geopolitical, economic, and sociocultural contexts. In this way, the literature is attentive to local and national institutional settings.

IV. Urban Agriculture as a Territorial Politics

Referring to individual and societal benefits outlined in Section II, advocates including planners, architects, and policy-makers tend to understand urban agriculture as a means of sustainable development and public health improvement (Viljoen, 2005; Mendes *et al.*, 2008; Hou *et al.*, 2009). However, human geographers, instead of simply resting on advocacy attitude, pay attention to tensions, contradictions, conflicts, contestations, and negotiations that emerge in the hybrid setting, with emphasis on experienced realities (Tornaghi, 2014; Lee, 2016b). The critical geographical examination is centered on the nexus of policy, place, and people.

Regarding the relationship between policy and place-making, existing studies are attentive to the interplay between neoliberalism and urban cultivation, and there are two contrasting types of literature. First, some early studies highlight neoliberal policy, especially privatization of city-owned land, as a major threat to urban cultivation, and examine involving political contestations (Schmelzkopf, 1995; 2002; Staeheli *et al.*, 2002; Smith and Kurts, 2003; Eizenberg, 2012). Schmelzkopf’s (2002) political economic analysis of New York City’s community garden closures under the Giuliani administration in the 1990s is most illustrative. Referring to Polanyi (1944), she shows that social relations of the time, such as the city’s measure of putting community gardens on public auction, were deeply embedded in the capitalist market economy, and also its hegemonic econometric knowledge system, in which only measurable price rationale considered to be graspable and persuasive. In such a ‘regime of truth’, Schmelzkopf (2002) suggests, the ‘entrepreneurial’ city administration of Giuliani highly valued community gardens’ exchange potentials, and simply ignored their use values because “social goods ... cannot be measured by price alone” (Schmelzkopf, 2002: 331). In this context, Schmelzkopf (2002: 337) explains New York City ‘gardeners’ collective actions (including protests, petitions, opinions on newspapers and Internet, and citywide coalition

buildings) as resistant ‘tactics’ designed to address multifarious gardening values’ ‘incommensurability’ with capitalist real-estate market appraisals, and reclaim their “control over public space ... [and] right to the city” within the constraint imposed by the capitalist economy.

In that way, the political economic analysis also considers urban agriculture sites as a form of contested public spaces. This is in line with critical human geographic research on public spaces (Goheen, 1998; Staeheli and Mitchell, 2007; Staeheli *et al.*, 2009), in which geographers are attentive to the ways how multiple, contrasting, and conflict influences are exercised by different individuals and groups, instead of ascribing the public space making, or unmaking, process to a single dominant force such as modernity, capitalism, and the bourgeois (e.g., Habermas, 1989; Sennett, 1992). For example, Staeheli *et al.* (2009) reject any singular notion of the public space, highlighting its fragmentary nature, and consider the possibility of ‘multiple publics’, which are discursively and materially brought to the (re)making of a public space. They also conceptualize the formation of a public as a combined effect of diverse, often inconsistent and conflicting, norms and practices associated with community building, legitimacy construction, and property relations.

This perspective helps researchers examine grassroots vacant lot cultivation movements as a form of what Fraser (1990) calls ‘counterpublics’, in which subaltern groups challenge hegemonic ideologies and unequal social relations (Schmelzkopf, 2002; Staeheli *et al.*, 2002; Moore *et al.*, 2015; Kim, 2017). Community gardening’s association with alternative property politics of contesting neoliberal private property ownership is also found to emerge (Blomley, 2004; Eizenberg, 2012). Eizenberg (2012), for example, describes New York City’s community gardening as an assemblage of diverse subaltern communities with diverse configurations (e.g., women dominant family gardens equipped with children’s play gardens, casitas of Latino men, farm gardens of African American, eclectic culture gardens in gentrified and mostly white neighborhoods, ethnic/racial exclusiveness, and citywide

networks of gardeners), multiple discourses about legitimacy and illegitimacy (e.g., greenlining, cleanness, education, publicity, civic participation, safety, property value, development, housing shortage), and various proprietary relations (e.g., insecure lease on city property, NGO ownership, and unlicensed squatters).⁴⁾

In the meantime, some studies put emphasis on the role of scalar politics in such counter-hegemonic movements for community gardening (Smith and Kurts, 2003; Emwein, 2014). In New York City, according to Smith and Kurts (2003), community gardeners and activists were able to secure and insulate some of their cultivation sites from the city’s housing development scheme by forging wider ‘network of associations’ with individuals and organizations operating at the larger geographical scales, from the city to the state and to North America, as well as framing the neighborhood contest as a far broader issue. In other words, the dynamics of ‘scale jump’ (Smith, 1998) are found to be beneficial to the grassroots urban agriculture activism.

However, a more complicated relationship between urban agriculture activism and neoliberalism has also been revealed, as the analytical attention shifts toward human subjects and governmentality (Guthman, 2008; Pudup, 2008; Ghose and Pettygrove, 2014). In contrast to the analysis of place and scalar politics that characterizes urban agriculture activism as an antagonist political agenda, these studies highlight community garden activism as an attendant to neoliberal governance. For example, McClintock (2014) traces community garden activists’ evolution from counter-movement radicals to ‘garden-variety neoliberals’ in Oakland, California. To Pudup (2008), the transition is only a part of history. In her scathing Foucauldian analysis, Pudup (2008) genealogizes the United States history of organized project gardening from the late nineteenth century, and then finds a succession of social engineering in the projects: inculcating work ethics to urban poor in early counter-crisis measures; and cultivating neoliberal citizen-subjects in current programs. Examining a school garden and a jail affiliated program in California as ‘neoliberal spaces of govern-

Table 2. Key Features in the Place/Territorial/Scalar Politics of Urban Agriculture

Methodological grounding	Contexts of research	Analytical themes/categories
<ul style="list-style-type: none"> • Political Economy • Political Ecology • Governmentality 	<ul style="list-style-type: none"> • Neoliberal policy • Entrepreneurial city • Privatization 	<ul style="list-style-type: none"> • Counterpublics • Territoriality • Scale jump • Eco-gentrification • Subject formation

mentality’, Pudup (2008) also argues, making consumer subjects is at the heart of the programs, even though they are aimed to problematize hegemonic ideology such as capitalism and racism.

In some other cities like Vancouver in Canada, urban agriculture has lost its critical potential completely as real-estate developers take advantage of it as a ploy of what Dooling (2009) calls ‘ecological gentrification’ (for a review of gentrification, see also Shin and Kim, 2014). In the city, as Quastel’s (2009) political economy/ecology analysis shows, neoliberal planning policy and commercial real-estate developers make use of urban sustainability discourses to transform poor neighborhoods into upscale residential districts, and in the process community garden has emerged as a commodifiable consumer good. In turn, Quastel (2009) suggest, the private provisioning of gardening site makes appeal to middle to high-income class consumer citizen-subjects in real-estate market, and community gardening becomes a cultural practice of ‘eco-gentrifiers’ in Vancouver, “a well-developed urban crucible for the new political ecologies of gentrification” (Quastel, 2009: 698).

Meanwhile, a different dataset, particularly one about ordinary urban farmers, appears to generate a contrasting conclusion about citizen-subjectivity. aforementioned Pudup’s (2008) critique is informed by textual resources such as biographies and program documents, and thus it rarely captures the interactional dynamics among the participants of her case studies. In contrast, longitudinal interview data and ethnographic observations help Ghose and Pettygrove (2014) understand both opportunities and challenges of urban agriculture activism in

Milwaukee. Like Pudup (2008), they find Milwaukee grassroots organizations’ serve to ‘roll-out’ neoliberal policy tenets, such as welfare retrenchment, attendance to beautification of blighted neighborhood, temporary management of reserved land for future development, community care, and ‘conditional’ citizenship with subtle exclusive elements. However, Ghose and Pettygrove (2014) also highlight politically transformative potentials, implying that voluntary organization’s current control over city-owned property might be difficult to repudiate in the future. These opportunities of grassroots participation and property control, they emphasize, are created by internal contradictions of neoliberalization, which needs community activism and responsibility devolution at the same time.

Taken together, politics of territoriality appears to be at the center stage of the current political economic research about the relationship between policy and urban cultivation, in that control over gardening site is the starting point of explanation (Table 2). These studies are informed by Marxist political economic theory on neoliberalism, which is focused on the rise of entrepreneurial city and urban governance rescaling, and/or to a lesser degree Foucauldian governmentality approach that emphasizes the importance of understanding “techniques of neoliberalism, mundane practices through which neoliberal spaces, states and subjects are being constituted in particular forms” (Larner, 2003: 511).

The dominant analytical approach centered on territoriality is beneficial and problematic at the same time. On the one hand, it helps understand both opportunities and challenges involved in urban agriculture

activism, and in doing so successfully reveal the incompleteness of neoliberalism. Diverging empirical findings are evidence. As discussed above, urban agriculture is a counter-hegemonic practice where neoliberal policy puts a threat to existing urban plots (see above on New York City), but new opportunities of urban agriculture can also be created by attending to neoliberal policy especially where some neoliberal tenets such as neighborhood regeneration and community devolution help proactive voluntary organizations participate in public policy (see above on Milwaukee).

However, on the other hand, the dominant approach offers only a partial picture of urban agriculture. For the framing of urban agriculture as a territorial politics offers little insight of how the practices of territorial control and place identification are composed and decomposed through both locally intensive and spatially extensive relations. In other words, the analytical framing encourages researchers to limit their examination place-based contestation and related territorial/scalar processes (Table 2), and keeps them from tracing and contemplating on how the making, unmaking, and remaking of urban agriculture are connected to and associated with other places and cities. It is a serious research gap given that trans-local and trans-national influences have been crucial to the rise and the development of urban agriculture in many cities. For example, as briefly noted above, the emergence of relief gardens in Chicago and Boston in the late 1800s were influenced by their prototype Pingree Potato Patches in Detroit (Section III). The resurgence of allotment plotholding in the United Kingdom from the 1960s and the formation of shimin noen from the 1980s were also modeled after German kleingarten. These relational processes and dynamics are hardly captured by the dominant framing, which tends to proliferate the problems of 'structural imperative', 'territorial fix', and 'scalar trap' (Marston *et al.*, 2005; Allen and Cochrane, 2007).

V. Conclusion: Reframing Urban Agriculture as a Relational Politics

If indeterminate non/local relationalities, rather than structural imperative, are taken seriously, urban agriculture can be rethought as fluid 'bundles'. This framing is consistent with what Massey (2005) calls 'temporary constellations' of multilateral connectivities and relations, and in so doing it helps empirical researchers avoid common analytical pitfalls in the literature of place/territorial/scalar politics, which tends to deploy "shorthand... explain [of] the structural... forces that shape a place, without a full exploration of multi-locational and agentic relations" (Pierce *et al.*, 2011: 56). At the same time, analytical attention can be placed to unpacking the relational bundles, tracing their constituent elements, and interrogating their relations for an understanding of 'relational politics' of nearness and distance (Amin, 2004; Massey, 2005; Pierce *et al.*, 2011). For such an examination, 'site' is also a useful concept because "it is capable of accounting socio-spatiality as it occurs ... without requiring prior, static conceptual category" (Marston *et al.*, 2005: 425).

Relational thinking and exploration is rare in the human geographical analysis of urban agriculture, but there are two exemplary urban agriculture case studies that pay close attention to the compositional and de-compositional process of non/local relations and site formations, with no recourse to the ideas of territoriality and scale. One is Premat's (2009) anthropological study, which disentangles complicated relations and connections of post-Soviet era urban agriculture development in Havana, with emphasis of how organic urban cultivation landscapes in the city emerged through diverse associations, negotiations, and knowledge transfer between individual cultivators, local organizations, government officials, and global civil society organizations.⁵⁾ In her analysis, relational efforts made between the Cuban government and western intellectuals and media to construct Havana as a global model of urban agriculture are also meticulously traced.

Regarding such landscape's decomposition, Moore's (2006) geo-historical analysis of the post-War disappearance of subsistence gardens in Columbus, Ohio is noteworthy. In the analysis, she highlights how sustained intellectual exchange between Chicago School urban sociologists and the City of Columbus of the time constructed a normative narrative about the urban, and how the narrative irrationalizing, ruralizing, and thus othering urban agriculture contributed to the discursive and the physical colonization of subsistence gardens by the urban norm and associated material practices (i.e., urban planning techniques and development projects).

These model case studies suggest that geographic studies of trans-local learning and knowledge exchange may help understand the making, unmaking, and remaking of urban agriculture. Indeed, geographers increasingly believe that knowledge transfer can take place at a long distance. Amin and Robert (2008: 353-354), for example, argue that "the spatial configuration of knowing ... long assumed to require spatial proximity ... [but], relational proximity is not reducible to co-location". Professionals participating in long-distance relational knowing include 'mobile' policymakers, and as the aforementioned exemplar studies of Premat (2009) and Moore (2006) suggest, they may play a key role in the making and unmaking of urban cultivation sites. Therefore, 'policy mobility' research concerned with trans-national and trans-local policy exchanges can be a useful intellectual resource (McCann and Ward, 2011; 2013).

Such an analytical focus on trans-local learning, knowledge transfer, and policy mobility will be useful particularly to the understanding of urban agriculture in Korea. For the recent emergence and the development of urban agriculture in the country have been influenced by knowledge and practices somewhere else. For example, the rise of weekend gardens, or 'jumalnongjang' in the 1990s was influenced by leisure garden practices in Germany and Japan the popularization of urban agriculture began around 2005 while grassroots activists introduced a set of Cuban practices as a model, and local urban

agriculture activists have become more interested in benchmarking and learning North American model cities such as Seattle and Vancouver (Lee, 2015a; for a review of sustainable urban development in Seattle, see Shin, 2015). This transition appears to generate a condition for interest division, competition and contestation for ideal practices, and negotiation within the circle of influential urban agriculture activists. Such processual dynamics are to be more clearly addressed by reframing urban agriculture as an issue of relational politics, rather than relying on the dominant approach of place/territorial/scalar politics. Only a detailed tracing of the transition on the ground will prove the relevance of relational politics, and I leave it for another concrete research in the future.

Notes

- 1) CFSC is a North American coalition composed of about 300 member organizations and based in Portland, Oregon, USA, and it is dedicated to building sustainable local and regional food systems with attention to socioeconomic justice, anti-hunger, community development, sustainable agriculture, and community gardening. The definition of urban agriculture here was based on the coalition's past webpage, which is not available at this time. Therefore, this paper cites its definition indirectly in reference to another journal article.
- 2) Outside these countries, a variety of governance forms of allotment garden have also appeared. On the basis of Keshavarz's (2014) report, they can be categorized into four groups including: (1) multi-level governance of both national and local allotment garden laws (Austria); (2) centralized enforcement of national law (Denmark, Ireland, Lithuania, and Slovakia); (3) decentralized municipal level governance (Finland, Italy, Latvia, Portugal, Spain, and Switzerland); and, (4) states where other regulations such as

planning law, building code, and rural code preside over allotment gardens (Belgium, Luxemburg, Netherlands, and Norway). Among these countries, Denmark seems to have constructed a relatively stable legal foundation for allotment gardens. In the country, the Allotment Owners' Association was launched in 1908 to secure standardized contract conditions for leasing government-owned properties, and a national law on 'colony gardens' was introduced in 2001 to ensure permanent garden status, such that allotment plots cannot be closed without replaceable land.

- 3) Japanese-style leisure garden acted as a model for weekend gardens in the 1990s.
- 4) Examining the history of urban agriculture activism, Eizenberg (2012: 765) refers to New York City's community gardens as "a paradigmatic example of counter hegemonic spaces".
- 5) More specifically, Premat (2009) traces the development of self-sustaining and organic urban agriculture practices in Havana, such as 'organopnicos' (organic gardens in raised container with drip irrigation), 'parcelas' (vegetable garden lots in public or abandoned spaces), and 'patios' (small agricultural spaces in private housing), in relation to the Australian Conservation Foundation's project of dispersing permaculture technologies to developing countries in Africa, Asia, and Latin America from the mid-1980s, as well as the Cuban state's policy responses to post-Soviet era problems such as dwindled imports of food and agricultural production resources.

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