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URBAN AGRICULTURE: A POTENTIAL TOOL FOR RECONNECTION IN URBAN SPACES

AGRICULTURA URBANA: HERRAMIENTA POTENCIAL PARA LA RECONEXIÓN EN ESPACIOS URBANOS

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Abstract:
The concept of Urban Agriculture, represented by the act of gardening, challenges the idea that agriculture is strictly a rural practice and exposes a spatial model in which agricultural and urban activities coexist in the same place for the benefit of its residents. Integrating agriculture into the city becomes even more relevant today as we face a society disconnected from nature, a loss of the sense of community, and the disconnection between food production and ourselves. This article explores how food production in urban suburbs represents an opportunity to create harmony in urban spaces and recover the collective well-being of our country.

Keywords: urban agriculture, nature connectedness, urban gardens, nature deficit disorder, reconnection

Resumen
Sembrar en la ciudad, representado por el concepto de Agricultura Urbana desafía la idea de que la agricultura es estrictamente rural y presenta un modelo espacial donde las actividades agrícolas y urbanas coexisten en un mismo espacio. Reintegrar la siembra en la ciudad toma aún más relevancia hoy mientras nos enfrentamos a una sociedad en un estado de desconexión con la naturaleza y con el sentir comunitario. Este ensayo explora cómo la producción de alimentos en espacios comunitarios representa para Puerto Rico una oportunidad de crear armonía en los espacios urbanos, así recuperando el bienestar colectivo de nuestro país.

Palabras claves: agricultura urbana, conexión con la naturaleza, huertos urbanos, déficit de naturaleza, reconexión

Introduction

In March 2020, I found myself locked at home, adapting to the new urban reality implicated by the arrival of COVID-19. Trying to keep myself busy, the search for new hobbies began, including gardening. What started with a basil plant quickly turned into a small-scale garden. I fell in love with the process of growing food. I would spend most days in my home backyard learning how to germinate, sow, and harvest, something I had never done and even refused to do as a child when my grandmother tried to motivate me to accompany her to the garden and help her. As time passed, I began noticing new and unexpected connections with myself, nature, and my neighborhood. While growing varieties of herbs, vegetables, and flowers, I could experience and connect directly with nature in what became a personal oasis in times of uncertainty, as seen in Figure 1. This experience serves as an invitation to reflect on the dynamics that arise in urban areas and the need to create spaces in cities that are functional for our well-being.

FIGURE 1: URBAN GARDEN IN GUAYNABO, PUERTO RICO (2021)
SOURCE: PHOTOGRAPH TAKEN BY AUTHOR

The urban-rural divide and re-integration

Humans have maintained an intimate relationship with nature for years, primarily for subsistence purposes (Keniger et al., 2013). We obtained our food through practices such as hunting and gathering. However, as populations increased and with the growing need to obtain more significant quantities of food, these practices evolved into agriculture (Steel, 2008). In early-developed cities, agriculture and proximity to fertile land were essential to these civilizations (Steel, 2008). According to Keniger et al. (2013), "as modern society emerged and human population

condensed into urban areas, industrialization freed many people from dependence on direct consumptive interactions with nature" (p. 914).

The continuous expansion of cities was undoing the link between urban and rural, creating the perception of the urban as civilized, as opposed to the rural, understood as uncivilized (Steel, 2008). This conception led us to think of urban and rural as incompatible in space configuration, creating a mental map that urban and rural spaces are separate and do not interact. Moreover, many of us were taught that important agricultural practices belong strictly in rural areas. However, throughout history, agriculture has had its place in cities, specifically pre-industrial cities, as urban dwellers moving from the countryside to the city implemented agricultural practices close to their homes (Steel, 2008). Similarly, this was common in Puerto Rico. I remember the stories told by my grandparents of how they planted plantains, beans, oranges or *chinas*, and more, along with raising chickens or pigs for self-consumption, even for selling. In different geographic locations, proposals to bring agriculture to the city have emerged, with movements such as the Poor People's Gardens in the UK, Workers' Gardens in France, and Victory Gardens and Liberty Gardens in the United States (Gallisá, 2020).

Returning to concepts: Urban Agriculture

As established before, gardening in the city has a long historical trajectory; however, recently, this idea has received a great boom under the concept of *Urban Agriculture* (UA). Mougeot (2000) defines UA as an industry located in intra-urban (within the city) or peri-urban (on the outskirts of the city) areas, which grows, processes, and distributes a diversity of food and non-food products, involving an exchange of products and services from and for the city. The primary focus of UA is precisely food production, but it also implies social, economic, health, and environmental impacts on the urban spaces where it is practiced Meaning, that, unlike traditional rural agriculture, UA interacts with the urban system and is integrated into the system itself (Zeeuw, 2004). For example, in rural agriculture, the main goal is to produce, while UA is based on providing a series of services, such as the greening of the urban landscape and recreation opportunities, and represents a variety of health benefits (Lohrberg, 2016). In practice, UA is diverse, and its functionality varies from educational, community, and therapeutic gardens, urban farms, and gardens in occupied spaces, among others (Lohrberg, 2016).

While gardening during the 2020 pandemic, I noticed people becoming more interested in developing home-urban gardens. Garden centers were always full of people but empty of materials due to the increased interest and supply chain changes. This led me to infer that in uncertain times people were seeking ways to occupy their

minds and be in direct contact with nature. Samuelsson et al. (2020) mention that nature in urban spaces, which includes practices like gardening, "offers resilience for maintaining well-being" (p. 1). Furthermore, Marsh et al. (2021) published an article that includes a survey measuring the effect that COVID-19 had on gardeners. After conducting the interviews, three thematic categories arose among the participants: a) gardens as a refuge, b) gardens and greater affection, and c) attunement to nature. First, gardens as a refuge: Participants understood gardens as a sanctuary, a safe place in perilous times, physically, mentally, and emotionally (Marsh et al., 2021). Second, gardens and greater affection: people's experiences were associated with emotions rather than material goods, provoking in many a sense of gratitude, precisely for the refuge and freedom experienced in those spaces (Marsh et al., 2021). Third, gardens and attunement with nature: "Gardens enabled people to immerse in and reconnect with nature, and they articulated positive consequences from this experience" (Marsh et al., 2021, p. 4). Notably, this third category represents an association between contact with nature and a sense of connection to it, meaning that gardening helped people feel a sense of stewardship and want to protect nature (Marsh et al., 2021). The categories found by Marsh et al. allude to the idea that gardens became an oasis for people to find peace and security by contacting nature during the pandemic. As the authors tell us, "the refuge was also experienced as a multi-dimensional space, where geography met emotion, sensation, community, and mental well-being" (p. 30).

Reconnecting with nature

In recent decades there have been increasing calls for people reconnecting with nature. The idea of reconnection implies a return to connectivity that was once present. If this disconnection was evident in our society before COVID-19, we could only assume that this disconnection was magnified with the arrival of the pandemic and enclosure. Soga & Gaston (2016) refer to this phenomenon as the extinction of experience. This term alludes to the separation of human beings from their natural environment. They ascribe two leading causes: loss of opportunity and loss of orientation (Soga & Gaston). The loss of opportunity refers to the concentration of human activity in urban spaces, implicating a separation from the natural environment (Soga & Gaston). On the other hand, loss of orientation refers to the reduced emotional affinity and the "loss of people's positive orientation toward engaging with nature" (Soga & Gaston, p. 96).

Now, what does it mean to have a connection with nature? Moreover, why is this connection so important to us? Chavaly (2020) describes that "the concept of connection to nature sees nature as an integral aspect of human life and as one that has direct effects to health" (p. 85). In turn, Shultz (2002), an author within the field of eco-psychology, understands that connecting with nature refers to how

individuals include nature in their view of themselves. This concept of connecting with nature has a degree of ambiguity since, as mentioned by different authors, it is a feeling which cannot be measured, where we recognize ourselves as an innate part of nature. Gardening during the pandemic became a way for me to be in direct contact with nature by using all five senses daily. For instance, I felt the soil by gardening without gloves (Figure 2), I heard the birds that would hang out around the garden, I smelled the aroma of plants like *culantro* or *recao*, I saw the variations of green in the plants around the garden, and I tasted the sweetest strawberries and freshest tomatoes. Using all my senses in nature allowed me to experience a greater connection with the Earth and, ultimately, with myself.

FIGURE 2: CONNECTING WITH NATURE IN THE GARDEN (2021)
SOURCE: PHOTOGRAPH TAKEN BY AUTHOR

A particular concept that we should consider is Nature Deficit Disorder (NDD), articulated by Richard Louv in his book *Last child in the woods: Saving our children from nature-deficit disorder* (2005). Louv (2009) defines NDD as a "…growing gap between humans and nature that has implications for common health and well-being" (p. 2). Furthermore, the author describes NDD as a cultural phenomenon rather than a medical diagnosis. The situation is as follows: Children spend more

time in contact with technology and less time outdoors, i.e., in nature (Louv, 2009). We can agree that fewer children are playing in parks, and running around barefoot on the grass, giving free rein to their creativity.

This lack of contact with the natural world could cause the loss of children's ability to experience the world directly, resulting in the inability to relate to others and think for themselves (Chavaly, 2020). In his approach, Louv (2009) focuses on children because they are the ones who are currently experiencing this lack of connection with nature. However, it is to be expected that NDD will become a global cultural phenomenon that will affect us all equally regardless of age due to the reduced direct contact with nature and, consequently, the reduced affection towards it, which means that we must ask ourselves: How are we going to face global threats such as climate change when there is a growing disconnection with our environment?

One of Louv's proposals to mitigate NDD is to bring nature into the classroom by greening schoolyards or working on hands-on learning in nature, which will result in more curious and calm children in the classroom (Louv, 2009). Based on this recommendation and the abovementioned issues related to Urban Agriculture, we can continue encouraging practices in Puerto Rico, such as school gardens that allow children to learn through nature. This direct contact and connectivity with nature can provoke a genuine concern resulting in a commitment to protect it (Shultz, 2002). If we want to conserve and preserve the resources of our planet, it is essential that we give back to children the experience of nature, with the purpose of helping them cultivate an environmental consciousness and a feeling of affection towards our land. In addition, by working on initiatives like school gardens, we are also exposing our younger generations to the importance of the agricultural sector on the island. In the context of Puerto Rico, this is extremely important as we face a significant growth in food insecurity and the generalized rejection of agriculture as a worthy practice. Furthermore, Ortiz et al. (2018) mention that being in contact with the land through practices like UA promotes in communities the desire to learn and explore and even the desire to return to the land.

Having established the current need to reconnect with nature and its resources, it is necessary to explore why this connection is so beneficial to humans. There are a variety of theories that attempt to explain why this connection is so favorable. Among the main ones, we will find: a) the biophilia hypothesis, b) the attention restoration theory, and c) the stress reduction theory (Capaldi, 2015). Despite each having a different approach, all three suggest that nature supports human well-being and functioning (Capaldi, 2015). Keniger et al. (2013), in their article "What are the benefits of interacting with nature?" reviewed 57 publications related to the benefits of being in contact with nature. As a result of this research, the authors conclude that

there are six types of benefits that result from this interaction. These are: a) psychological and well-being, b) cognitive, c) physiological, d) social, e) spiritual, and f) tangible.

As mentioned before, through the experience of gardening in my neighborhood, I understood that the most effective way to connect with nature was to experience it directly. However, not only is UA a way to experience nature directly, but it can provide access to interact with nature in urban spaces where green infrastructure is limited. Commonly, city planners and those who create public policy have considered green infrastructure a luxury rather than a necessity, even though it clearly benefits our well-being (Soga & Gaston, 2016). According to De Felipe (1999), "the vast majority of citizens want good environmental conditions, that is, to ensure that nature, sacrificed by inadequate planning and speculation, recovers the space lost in large urban areas" (p. 13).

Traditionally, when we want to experience nature and its benefits, we must mobilize outside the city limits to reconnect. In Puerto Rico, the phenomenon of *el campo*, meaning the countryside, is very complex because somehow most of us feel a connection to this other Puerto Rico that lives in our imaginary through direct experiences or relation to family members who live in *el campo*. UA is an opportunity to bring this experience of connection and peace to the cities, breaking the dichotomy between urban and rural, thus integrating nature into urban areas as spaces of connection and refuge.

Reconnecting with the community

Beyond connecting with nature and learning the art of gardening, there was a key but certainly unexpected dynamic that I found in the development of the garden: the connection with my urban community. This space that began for my recreation became a way for me to interact and share with my surrounding community. We would share seeds, exchange harvests such as carambolas from their tree for tomatoes from my garden, share knowledge, experiences, and more. This dynamic led me to consider the exponential impact that gardening spaces could have when developed on a larger scale to attend to the lack of community ties in urban and suburban spaces. Furthermore, German sociology manages the concept of transition from *geimenshaft* to *gessellschaft* in society (Palen, 1991).

First, *gemeinschaft* refers to a society based on community ties, where common values are shared and are commonly associated with rurality and agricultural practices. In contrast, *gesellschaft* refers to a society based on political and economic interests, where money has replaced sentiment (Palen, 1991). Many of us who live

in the city experience a lack of *gemeinschaft*, i.e., community-based connections which are traditionally prominent in rural spaces. Gallisá (2020), in his book *Agro-urban rehabilitation of the city,* describes urban gardens as tertiary places where interactions between members of the same community, particularly between younger and older generations. In addition, Gallisá mentions that creating more tertiary places in urban centers will implicate greater social cohesion.

A concept that encapsulates the essence of connecting with nature through practices like UA is the idea of a Harmonious Society, articulated by the president of the People's Republic of China, Hu Jintao (Chan, 2011). This concept is a call for a society with social stability; in the Chinese context, it proposes to address the social disparities between economic vs. social, human vs. nature, domestic development vs. openness to the world, and urban vs. rural (Chan). Puerto Rican society should also aspire to this vision of balanced and harmonious development within urban and rural spaces, including the search for harmony between humans and nature. For this reason, one of the ways to establish this much-needed harmony is to break with the conceptual clash between urban-rural, ensuring that nature takes back its place within urban areas, utilizing Urban Agriculture as one of the leading practices adopted by communities.

In collaboration with communities and planners, spaces can be designated, and selected by the communities themselves, bringing back harmony to the cities. The garden is an oasis, a space that allows me to connect with my community, the natural environment, the food I am eating, and ultimately myself. Community-based Urban Agriculture is the future base of the urban structure of Puerto Rican cities, let us create spaces within cities that encourage harmony and connection all around as we move forward in a sustainable future for us and the environment.

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