

SECOND NATURE AND URBAN AGRICULTURE: A CULTURAL FRAMEWORK FOR EMERGING FOOD POLICIES

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Abstract: Given the increasing attention of research, practice and policy to urban food strategies, the paper explores appropriate frameworks for placing these strategies' spatial aspects into cultural contexts. Within the AHRC-funded research network Urban Transformations, we have debated current policy-driven responses to the definition of urban food strategies and the significance both may have on spatial quality. We noticed that, whilst a new common language is developing in relation to food systems governance and planning, a cultural framework has become (and always was) equally important for the planning and design of food-productive urban space.

Such cultural frameworks are much needed to enable the steady linking of urban food strategies to space making processes - including urban agriculture - and both of them to users' desires, routines and capacities. This is especially true within education and research where qualitative approaches are indispensable if lasting change in our collective aims for food-productive urban spaces is to be achieved. We contend that more practice-based theory - and philosophy - is required to successfully initiate space-focused urban food strategies as well as to back them up with supporting policy in the longer term.

In recent writing, the concept of Second Nature has been introduced to discuss, from different angles, the future of urban landscape in relation to the future of urban food production. This paper explores whether and how the concept of Second Nature could contribute to a cultural framework which, in turn, can support the formulation of a durable urban-space-focused food policy.

1. Introducing Second Nature

'... Instead I do believe with Adorno that everywhere where the same word means something different, "the oneness of the word reminds us of the oneness of the issue however hidden it may be" (Adorno 1954: 3). One must not understand the differences between the various usages of the term Second Nature as different definitions, but instead as different linguistic and conceptual sedimentations of the issue that is meant with the term Second Nature.'

(Hogh 2011: 1)

To put it simply, the food-productive city, town or metropolitan region – i.e. an entity including urban agriculture - requires three things:

- it needs to boast **urban landscapes that produce food** (and digest food waste),
- it needs an **urban population that likes this food** and wants to work with it,
- it needs **purpose-built, food-focused interconnections** between its productive urban landscape and its food-producing population.

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Each requirement - maybe slightly differently described - is known to involved planners, practitioners and researchers since the last 20 or 30 years. The benefits of urban agriculture have now also widely been accepted, and cities are now frequently talking about the need to readjust their current urban food systems. Recent developments in practical implementation have taken the subject beyond the pure case study stage into policy consideration with thousands of projects worldwide to show urban food growing, experiment with it and consume its fresh produce. Still, there is no widespread implementation. And there is no widespread acceptance. What is missing?

How do we more fully achieve each and all of the above requirements in the near future? Is there an overarching theory or philosophy that enables us to discuss *all* these aspects in a joint-up manner? Can this theory, philosophy reach a wide range of citizens better than the existing theories?

With this in mind, the authors started a few years ago to investigate the usefulness of the *Second Nature* concept to further the case for urban agriculture and food-productive landscapes (Viljoen and Bohn 2014). We wanted to establish whether and how exemplary meanings of *Second Nature* could inform our own assumption of the all-encompassing potential of the term:

The future of urban landscape can be linked to the future of urban food production. Food production happens on cultivated land. Cultivated land is man-made, be it urban or rural. The man-made has been linked to the concept of Second Nature [---> one meaning]. (Re-) introducing food-productive landscapes into urban sites may allow for new infrastructures and ecologies which can be considered that urban site's Second Nature [---> another meaning]. The production of food – sowing, tending, harvesting, but also processing, preparing - constitutes for many people a very embedded, regular activity, a custom, and, even more so, that food's consumption as exemplified in people's diverse, but distinct food cultures and eating habits. A personal custom, a habit can be seen as the person's Second Nature [---> a third meaning]...

These three exemplary interpretations are themselves interlinked, but could the term, the concept 'Second Nature' indeed form the basis of a culturally-driven urban agriculture discourse? Could it convey to the urban farmer, the policy-maker, to the researcher and educator – and, above all, to the wider public - what we mean when we imagine the future city to boast of continuous productive urban landscapes? And, by doing so, can this strengthen the policy development towards urban food strategies from a qualitative, spatial point of view?

2. Three interpretations of Second Nature

The concept of *Second Nature* has numerous meanings of whom we have chosen three, major ones, that seem especially relevant to discussions on the future of urban food production:

* *Second Nature* describes **BEHAVIOUR**: embedded, normalised habits and customs – everyday activities – that take place regularly, without a thought

---> [Second Nature as (part of) human nature]

---> habit ---> custom ---> everyday activities.

* *Second Nature* refers to **THE MAN-MADE**: especially to man-made space – usually urban – surrounding us in a similar way to '*first nature*', the natural

---> [Second Nature as anti-nature]

---> the urban ---> the urban defined as '*assemblies and encounters*' ---> non-nature.

* *Second Nature* proposes **A NEW WILDERNESS**: the re-introduction into the urban of new landscapes that focus on ecologies and infrastructure
---> [Second Nature as designed nature]
---> ecologies ---> ecological systems ---> infrastructure.

Each of the three interpretations of *Second Nature*, from their specific angles, seems to be able to explain, reflect and compliment strategies or desires behind the current and projected practices of urban agriculture and their qualitative effects on urban food production as well as on urban space production.

2.1 Second Nature as (part of) human nature ---> BEHAVIOUR ---> HABIT

One of the first usages of the term is attributed to Greek philosopher Aristotle who, around 330 BC, wrote:

'It is easier to alter one's habit than to change one's nature. For the very reason why habits are hard to change is that they are a sort of second nature, as Euenus says — "Train men but long enough to what you will, And that shall be their nature in the end."'
(Aristotle 330 BC: VII. 10, 5)

Whilst Aristotle's observation on human behaviour has no direct relation to food, it not only introduces the idea of habit and its inseparableness to the "natural characteristics" of humans, but also suggests that habits are mouldable, transformable. Either way, our cultivated and cultural acts of food production, food processing, food consumption etc. are probably some of the easiest examples to refer to when looking for practical application of Aristotle's thought.

In the early 19th century, German philosopher Georg Wilhelm Friedrich Hegel produced one of the most extensive investigations into the behaviour-related interpretation of *Second Nature* as part of his writings on human habit:

'[H]abit has quite rightly been said to be second nature, for it is nature in that it is an immediate being of the soul, and a second nature in that the soul posits it as an immediacy, in that it consists of inner formulation and transforming of corporeity pertaining to both the determinations of feeling as such and to embodied presentations and volitions.'
(Hegel 1830: §410A)

We make a note of this reading of *Second Nature* as a habit - as an 'immediacy' - because this concept interests us in relation to food and people. We will come back to it later on.

2.2. Second Nature as anti-nature ---> THE MAN-MADE ---> THE URBAN

300 years after Aristotle, around 45 BC, the term was used by Roman orator Marcus Tullius Cicero delivering one of today's most powerful spatial images in relation to *Second Nature*. It was Cicero who at such early time in history singled out the effects of human productivity on nature and on the urban environment. He delivered the first interpretation of *Second Nature* referring qualitatively to man-made urban space:

'...we sow cereals and plant trees; we irrigate our lands to fertilize them. We fortify river-banks, and straighten or divert the courses of rivers. In short, by the work of our hands we strive to create a sort of second nature within the world of nature.'
(Cicero 45 BC: §152)

Even though Cicero's quote is nowadays well known amongst urban planners and designers, it was, according to German philosopher Norbert Rath, only in the early 19th century – i.e. at a similar time to Hegel's work - that the term '*Second Nature*' started again to be studied intensively as meaning more than normalised habits by also being used to define the man-made, the cultured, as a development of the natural. These studies suggested that culture represents a somewhat higher, but different entity. Rath also describes that the contraposition of "nature" and "culture", as it was still sustained in philosophy at the beginning of the 20th century, '*could no longer be upheld towards the century's end*' (Rath 1996).

Henri Lefebvre's interpretation of *Second Nature* is helpful when envisioning a sustainable urban future and questioning methods for its design. For Lefebvre, urban environments are socially productive environments, and they are '*of second nature*'. According to Erik Swyngedouw and Nikolas Heynen, it is this notion that '*paves the way to understanding the complex mix of political, economic and social processes that shape, reshape and reshape again urban landscapes*' (Swyngedouw and Heynen 2003). Again not referring to food, but to the social production of urban environments instead, Lefebvre suggests:

'Nature, destroyed as such, has already had to be reconstructed at another level, the level of "second nature" i.e. the town and the urban. The town, anti-nature or non-nature and yet second nature, heralds the future world, the world of the generalised urban. Nature, as the sum of particularities which are external to each other and dispersed in space, dies. It gives way to produced space, to the urban. The urban, defined as assemblies and encounters, is therefore the simultaneity (or centrality) of all that exists socially.'
(Lefebvre 1976: 15)

What at first sight seems to be like a death blow to urban agriculture, could be equally seen as supporting its development. Focusing on social space - on the man-made, according to Cicero - food may be far removed from Lefebvre's thinking. However, we make another note of his notion of '*produced space*' in the *Second Nature* as he understands it - the urban. We will come back to it later.

2.3. *Second Nature as designed nature* ---> A NEW WILDERNESS ---> ECOLOGIES

Very recently, in 2009 and 2010, landscape architects Matthew Skjonsberg and Adriaan Geuze have reappropriated the term '*Second Nature*' in their writings about the future of urban landscapes:

'Our redefinition of the term "second nature" takes both Cicero's definition and behavioral connotations into account, but it differs in that for us "second nature" specifically describes a designed nature created in adjacency to existing urbanisation, capable of absorbing future city growth into itself while maintaining ecological systemic continuity.'
(Geuze and Skjonsberg 2010: 25)

For Geuze and Skjonsberg, the concept of *Second Nature* could provide a new strategy for an infrastructural landscape urbanism that redefines the relation between city and nature. Here, '*the ambition of second nature is the radically humane reformulation of the relationship between the urban and rural, one that amplifies civilisation's cultural legacy*' (Geuze and Skjonsberg 2010). Skjonsberg and Geuze don't speak about food, but we make yet another note, this time of these authors' notion of a '*designed nature*' and of the infrastructural dimension of *Second Nature*. We will come back to it later.

3. A framework for productive urban landscapes

So, can urban agriculture be part of a *Second Nature* – in this term's various meanings - to people, cities and urban landscapes in the 21st century? If yes, can or should planners, architects, designers play a role in making urban agriculture our *Second Nature*, given that their professions are engaged with the production of man-made space as well as with influencing people's behaviour?

The interdependencies of *First Nature* and *Second Nature* most significantly influence the authors' thinking about productive urban landscapes. It is the term 'productive' that establishes a valuable link between the urban and the landscape – or, in a way, between the "first" and the "second" - both of which, often, are still considered opposites in the public perception of space.

In relation to urban agriculture, there seems to be great opportunity for the '*town..., yet second nature*', [that] '*heralds the future world*', as Lefebvre said, to become productive and, at the same time, for that town's inhabitants to make a sustaining production process their own *Second Nature*. Such new lifestyle choices re-introduce experiences of *First Nature* into the urban, whilst, at the same time, generating a new type of urban space, of *Second Nature*. Both transformations have the potential to lead within the urban realm to a greater unity of nature, in a designed form, and culture.

One may say, that, in general, urban food strategies aim for such qualities. However, how do we reach the supportive public perception and active public participation necessary to implement these strategies or even just to fully develop them? How can we maintain public interest across longer timespans? And even with enough public interest, how do we ascertain the strong spatial focus which spurred those planners and architects who, more than 30 years ago, started to put the food question onto the table?

It is a great achievement that, internationally, food policy is starting to be created and addressed. This is a slow process due to the complexity of food issues as well as to the still widespread lack of acceptance. The discussed cultural framework for productive urban landscapes needs to branch out substantially in order to capture the breath of the urban food debate.

Within the AHRC-funded research network *Urban Transformations*, we have debated current policy-driven responses to the definition of urban food strategies and the significance both may have on spatial quality. We noticed that, whilst a new common language is developing in relation to food systems governance and planning, a cultural framework has become (and always was) equally important for the planning and design of food-productive urban space.

Following on from their investigations, the authors argue that an extended *Second Nature* concept can contribute to the cultural framework in question by addressing three realms significant to urban food systems planning and design (as per AESOP call):

- * **PLACE** ---> *Second Nature* can aid to (re-) construct cultural identity and values in relation to food and urban agriculture and to enhance the cultural potential of new relationships between the urban and the rural ---> **THE MAN-MADE**
- * **SOCIAL INNOVATION** ---> *Second Nature* can create new ways of supporting public involvement in the shaping of productive urban space and ignite opportunities and alliances between unlikely partners ---> **BEHAVIOUR**
- * **INFRASTRUCTURE** ---> *Second Nature* can provide a framework to discuss, implement and assess the physical urban agriculture allowing for a bio-diverse and continuous productive urban landscape ---> **A NEW WILDERNESS.**

Geuze and Skjonsberg, Hegel, Lefebvre, Cicero and Aristotle: All the writing discussed here – apart from our own – does not include food even though it also does not exclude it. However, the same writing taken together creates a web of thought centred around *Second Nature* and concerning space and lifestyle that, at the same time, provides ample networks and immediate connections for the subject of urban food.

From the authors' perspective, Skjonsberg and Geuze's concept of *Second Nature* - as a new designed, infrastructural "natural" landscape reshaping existing urban space '*while maintaining ecological systemic continuity*' (Geuze and Skjonsberg 2010) - can well be aligned with concepts around food-productive urban space, such as the CPUL concept (Viljoen 2005). The benefits would be mutual: On the one side, the landscape architects' notion of a '*designed nature*' receives with the food subject a strong impulse for its envisioned ecologies spreading across all seasons and ranging from seeding a landscape to composting it. The human becomes active, productive part of this *Second Nature* rather than remaining observer or consumer of it. On the other side, the integration of dramatic typologies of nature and the superposition of various layers of infrastructure services as envisaged by Geuze and Skjonsberg, can widen the reach of mostly food-centred productive urban landscapes. For both sides, planners and urban/architectural designers will be at the centre of translating theory into practice.

Thinking about food-growing activities as becoming people's *Second Nature* is fundamental to the longer lasting success of urban agriculture. Whenever ideas and emerging projects around urban agriculture are presented – to the wider public as well as to expert audiences – the required human processes and interactions will be questioned. '*Individual and collective behaviour*' as well as '*behaviour change*' are always on the agenda when discussing urban food strategies. To be able to address lifestyle and daily routines with reference to Lefebvre, Hegel or Aristotle will be of great advantage. People as well as institutions can find themselves in accounts of routines, pleasures and historical precedences. Whilst proponents of more sustainable urban food systems may anyway have argued along such lines, drawing on philosophical thought will strengthen their arguments and begin to place them among other fundamental societal theories.

With the steady growth of urban populations as well as urban and metropolitan areas the impact of infrastructure and building construction, i.e. of one reading of *Second Nature*, will continue to

increase. Urban space production is entirely man-made, and drawing on philosophers such as Cicero and Lefebvre will enable an informed discourse about origin, present and future of such man-made urban fabric. But man-made is not like man-made. The question is how that fabric is being produced and which aims it endeavors to achieve. Once more, we can see how urban and architectural design – and especially food-system conscious design – can influence and determine the spatial qualities of our environments. To be man-made is the great virtue of urban agriculture. Cities might enter a new era of Second Nature, when the man-made coincides with the natural and the cultured in what will constitute the food baskets of urban populations.

4. Conclusions

Whilst most of the theory that exists around urban agriculture and productive urban landscapes stems from a planning and design perspective, it often remains unconnected to other spheres of urban life. Policy therefore often overlooks the spatial necessities of urban food growing. Additionally, large numbers of the public remain unreached, and even when reached, they often shy away from confronting the necessary food-focused transformations that will strongly impact on everyday life and cities' cultures and identities.

Cultural frameworks are needed to enable the steady linking of urban food strategies to space making processes - including urban agriculture - and both of them to users' desires, routines and capacities.

The term and concept '*Second Nature*' - because of its versatility and polemical capacity – can break down the multiple barriers between the public, city administrators, politicians and food-connected industries and allow discussion, dispute and commonly shared visions of a food-literate urban future.

Linking the concept's origins in Ancient Rome (Cicero 45 BC) via its role in philosophical discussions in the 20th century (Lefebvre 1976) to the future of open space planning in contemporary cities (Geuze and Skjonsberg 2010) can serve to ground, describe and speculate on the fundamental and radical transformations to urban form and functions that will be a consequence of adapting to the multiple challenges of 21st century food supply.

By extending its main readings – Behaviour, The Man-Made, A New Wilderness – to include food production, the *Second Nature* concept is able to support a more widespread understanding of the multiple interdependencies of issues as diverse as spatial quality, urban space production, everyday activity and pleasure, food sovereignty, urban resilience, sustainability and urban landscape and architectural design - always in relation to food.

The usefulness of the Second Nature concept has been explored and tested on practical examples as part of the research network Urban Transformations. Three projects in Switzerland, Germany and the UK show how food-related transformations can be better explained and understood when referring to Second Nature. This is especially important for future education and research where qualitative approaches are indispensable if lasting change in our collective aims for food-productive urban spaces is to be achieved.

The concept of *Second Nature* can contribute to a cultural framework for the planned and designed production of food in and on urban space. This, in turn and maybe only later, can support the formulation of a lasting urban-space-focused food policy.

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Note: The quote by Hogh was translated from German by the authors.
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