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Culturalisation and urban horticulture in two World Heritage Cities

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Abstract

Horticulture features widely in research about urban agriculture. Interest is motivated by eco-technical challenges, such as improving household nutrition in expanding mega-cities, closing urban waste cycles through agricultural processes, and examining 'SMART' potentials for the low-carbon production of fruits and vegetables. Studies also link participation in urban growing with political expressions of citizenship. These illuminations largely neglect socio-cultural insights, despite the important traditional contribution horticulture has played in shaping urban cultural landscapes and frequently culture appears as a faint backdrop to urban regeneration, or a proxy for consumption. To help illuminate the role of culture and its actor constellations within urban horticulture, the cases of two UNESCO World Heritage cities, Bath (UK) and Bamberg (Germany), are compared.

Drawing on Luhmann's social systems theory and its derivatives, notably Nassehi's concept of cultural contingency, the article examines cultural dimensions of urban horticulture in the two cities and identifies four types of culturalisation, or empirically observable and complex bundles of practices that explain how urban horticulture is governed and executed. This indicates the local historical embeddedness of rivalry/competition and cooperation among urban gardeners, and the relevance of culture as a potential for innovation in urban horticulture.

Keywords: urban horticulture, culturalisation, UNESCO World Heritage, Luhmann's social systems theory, rivalry, cooperation, tradition, innovation.

Culturalisation and urban horticulture in two World Heritage Cities

Introduction

Urban horticulture is usually captured within a broader literature directed towards understanding urban agriculture (UA), or the production of food in city spaces. Horticulture relates to gardening aspects of UA. Recent UA scholarship has tended to

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focus on eco-technical, political or economic functions associated with the challenge of developing sustainable food systems in, and for, the urban sphere. For example, UA in the global south is studied in relation to its potential for improving household food security, especially in expanding mega-cities (Mougeot, 1994, De Zeeuw et al., 2011, FAO, 2012). In the global north, UA appears as a form of ecological architecture (Viljoen et al., 2005), and an expression of citizenship (Barron, 2016, Sonnino and Hanmer, 2016, Veen et al., 2012). Zeunert (2018) goes as far as to define six primary 'dimensions' of UA that connect nutritional, democratic and environmental benefits. As such, distinctions between geographically dispersed UA functions can be linked through a normative interest in UA as a way to facilitate social justice (Tornaghi, 2017).

In pursuing this and other multifunctional UA goals including sustainability and social cohesion (Koopmans et al., 2017), people in many cities have actively experimented with new modes of production and provisioning, leading to the proliferation of formats of organisational and social innovation (Pleyers, 2017, Kirwan et al., 2013, Grivins et al., 2017). This in turn has resulted in (and been driven by) municipal engagement with UA as a contribution towards commitments such as the UN's 2030 Agenda for Sustainable Development (Ilieva, 2017), exemplified by the unveiling of a manifesto for sustainable urban food systems – *The Milan Pact*[1] – signed by scores of city councils representing 400 million citizens.

In food studies, an agri-policy consensus has crystallised around the concept of 'sustainable intensification' (Marsden, 2012) as an approach to enhanced food security, by producing more food without additional environmental damage in response to

[1] http://www.milanurbanfoodpolicypact.org/ accessed 30th April 2018.

predictions of a world population of 9 billion by 2050, of which 70% could be urban dwellers (United Nations, 2014). Cities are connected to this policy discourse, for example through the European Commission's hi-tech SMART cities approach, where regional competencies and advantages, coupled with technological advancements (such as aquaponics, solar farming and productive or 'edible' buildings), can lead to sustainability transitions in food provisioning (Maye, 2016) and clustering of entrepreneurial innovation in a process of regeneration.

As a departure from such eco-technical perspectives, this article advocates an examination of the importance and functions of culture within European urban horticulture in the World Heritage cities Bath and Bamberg, for two reasons. Specifically, the article aims, firstly, to define and identify forms of 'culturalization' in UA; and, secondly, to understand how these forms constitute a potential for/obstacle to co-operation and innovation practices in UA. However, we are also keen to think about UA beyond the global urgency of food security linked to patterns of urbanisation. According to Jayne et al. (2010) *'the urban world is not made up of a handful of global metropolises, but characterised by heterogeneity'* and '*half of European cities have a relatively small urban centre of about 50,000 – 100,000 inhabitants*'[2]. At this scale, more light remains to be shed on how culture is embedded in UA and how the management of culture contributes to the construction of the governance mosaic of UA at the local level.

[2] http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_European_cities accessed 17th May 2017.

The article proceeds as follows. Culture in urban food geography is discussed, appearing firstly as an important but incidental backdrop within which to organise urban food provisioning (distinct from production). Secondly, culture is presented as a pseudonym for consumption within agri-food studies. These perspectives reiterate the spatial characterisation of cities as locations of shopping and eating rather than of growing, separating consumption from the business of farming. The paper then introduces (multifaceted, even paradoxical) understandings of culture as the effect of doing practices of 'culturalisation', i.e. producing and relying on culture in different ways, drawing on Niklas Luhmann's system-theoretical work and its derivatives. We suggest, finally, that four (ideal-type) forms of culturalisation are discernible from our field research, illustrated with reference to primary data. Self-descriptions of these by people engaged in horticulture in Bath and Bamberg - provincial cities where long histories of food production persist - are protected and/or being revitalised, and exert influence on the way that their foodscapes are formed. Consequently, the case is made that cultural practices help diverse actors in small cities to build their future ambitions for urban horticulture upon shared knowledge of those practices.

Food and culture

Food and culture seem self-evidently linked; Montanari (2006) proposes that all actions involved from procuring to digesting food represent cultural performance, situated by Dirksmeier and Helbrecht (2010) in place. Scholarly intersections between food and culture are rich, with prominence in cultural studies (Jordan et al., 2011), regional economic development (Marsden, 2010, Tregear et al., 2007) and food heritage (Di Giovine and Graham, 2014). It serves the purposes of this article in discussing the

function of culture in reproducing UA, to focus on two framings of the food-culture connection. The first pictures food as an important facet of the urban cultural economy. The second associates culture with food consumption. The reason for isolating these two framings is to demonstrate the way that culture is perceived as a narrow, almost incidental influence on urban commercial activity or an expression of prevalent consumer behaviour.

Food within the urban cultural economy

Horticulture has been a feature of European cities for centuries (see for example Toussaint-Samat (1994)) and was famously revived by the English social reformer Ebenezer Howard within Garden Cities until post war planning separated urban and rural spatial functions (Marsden and Sonnino, 2012, Woods, 2009). Today, cultural aspects of city food provisioning remain substantially post-productive. Restaurants and bars form lucrative 'food quarters' in many UK cities including, for example, Manchester (Bell and Binnie, 2005) or the streets around London's Borough Market (Smith, 2018). Similar German examples include the Viktualienmarkt in Munich and Sachsenhausen in Frankfurt. Increasingly, spaces are made for rural producers or their agents to have direct retail contact with urban consumers, but food is brought in from outside the city. Parham (2014) has offered an international account of the relationships between household and workplace eating patterns, and the corresponding physical and social design of cities. Some studies, highlighting shopping, give special attention to *'[s]treet fairs and farmers markets* [which] *are art forms of city living'* (Petrocci, 1981). In Barcelona, most famously, substantial footfalls make markets like *La Boqueria* attractive to visitors searching for an authentic experience of local food (Crespi-

Vallbona and Dimitrovski, 2017); while in Riga, Russian and Latvian food markets have helped connect these two communities in the renovated *Kalnciema Quarter* (Grivins et al., 2017). Food preferences have been examined for how they influence the form and character of urban neighbourhoods, influenced by the outlets they contain (Cummins et al., 2005, Roe et al., 2016, StreetFoodFestival). Bristol, once billed to become *'the Barcelona of Britain'* (Oatley et al., 1999), has a food strategy, a food festival, and a food policy council, while the city's cultural strategy celebrates restaurants and bars targeted at the visitor trade in historic neighbourhoods. Notably, the impact of food poverty and diet-related obesity also features, because *'[t]he quality of our culture shows up dramatically in our physical and mental health… It influences the variety and quality of food in our diet'* (Bristol City Council, undated). This recalls (Sonnino and Hanmer, 2016), who makes the case for understanding the cultural dimensions of urban food governance, namely the values and meanings upon which municipal food policies are developed. Yet, such municipal values can be normative and meanings can be exclusive. Undeniably, food has become an effective driver of the culturalisation of the urban food economy, expressed by Hinde and Dixon (2007) as *'the flowering of what are known as culture industries or creative industries' and* pioneered in distinctive organisational forms, not least by small and medium-sized enterprises, and linked to certain socio-economic customer profiles (Donald and Blay-Palmer, 2006). In many ways, food reveals the ethnic and cultural diversity of a city, yet in the terms of the cultural economy, culture remains an aspect, or outcome, of economic development, enterprise zoning and regeneration.

Culture as consumption

Distinctly within agri-food studies, culture has been used to isolate the practice of consumption. Attention to consumption has helped to counterbalance, or bridge, insights into the politics of food production with knowledge of wider social changes in post-industrial economies, including working patterns and family structures (Goodman and Redclift, 1991). This became especially relevant as consumers demonstrated concern about the negative impacts of globalised and industrial food production at the check-outs. Although these concerns are not new - Eve Balfour and Rachel Carson highlighted environmentally destructive agriculture in the 1940s and 1960s respectively - the distinctive pro-market ideology of the 1980s and 90s helped promote entrepreneurialism as the way to differentiate food qualities and meanings, leading to commercial innovations which now seem commonplace, such as fair trade, diversity in organic retailing formats and farmers' markets. This 'cultural turn' was critiqued for aligning culture too narrowly with consumption while neglecting socio-structural and material culture (Gregson, 1995), which locks many consumers into unhealthy consumption patterns. Consumption was, furthermore, questioned as the optimal mode for tackling ecological or social ills (Soper, 2008). Such framings retain a technical emphasis on applying consumption as a driver of demand-led change in the commercial food supply chain, or in tackling public health. The situation is complicated within UA where a blurring of consumer-producer boundaries is evident (for example, in allotment gardening) and has resulted in considerations of how engagement in UA initiatives reflect the political ideals of social movements (McLintock, 2014, Certomà and Tornaghi, 2015, Lyons et al., 2013). Davies (2019) presents non-commercial practices of urban food sharing as forms of activism and social solidarity as well as a tool for

reinforcing kinship networks, while taken-for-granted and historically embedded horticulture can result in substantial proportions of household consumption being obtained from non-market forms of urban self-provisioning. Examples include household gardening in Poland and Czechia (Smith et al., 2015), which is represented as a 'quiet' but overlooked, quantitatively significant and culture-based contribution towards food sustainability. Such explicit examinations of culture remain rare, insofar as they frame taken-for-granted social practices that (sometimes over long periods) have persisted to shape the city's distinctiveness. Insights are especially relevant where heritage is a facet of officially defined local identity, as they are in Bath and Bamberg.

Projecting culture as a canvas which offers stable meanings around which everyday practices are built is not unjustified, yet it inhibits research about the ability of culture to govern social relations and re-arrange power geometries (Barnett, 2001). Less is known about how, and through which actor-constellations, culture is produced in urban horticulture. Here a bond between culture and society is established, as envisaged by social systems theory (Luhmann, 1997) and drawing on this, we pursue understandings of culture in this article as: *meaning produced and functionalized in the complex web of social relations between different people and their respective collectives*.

We draw on social systems theory and build on the following assumptions and key issues. Firstly, that society is a relational whole and its reality is produced by different social systems observing their environment (namely other social systems, as well as the material environment). Secondly, systems make sense of their observation by judging and adapting them to their '*Eigenlogik*', by which Luhmann means specialisations and social interests. Thirdly, this contributes to an overall multi-

perspective of different (sometimes even oppositional) world-views to form an irreducible condition of contemporary society. In the following section, we will argue that culture can be better understood by taking these three assumptions seriously.

Producing culture in actor systems: the practice of culturalisation within urban horticulture

The relevance of culture, tradition and identity emerges from urban horticulture practices in Bath and Bamberg. By extension, an understanding of horticulture in these cities cannot be taken into account without cultural perspectives, because the practice is embedded within a complex historical background. Each city clings to specific local identities built on tradition and culture. Despite their modest size, these (and all) cities constitute complex phenomena, exhibiting intricate cultural geographies that shape possibilities for, and limits to, preserving and/or practicing urban horticulture.

Geertz suggests that culture refers to different systems of meaning, and is shaped in a system of differences to other cultures (Geertz, 1973). In supporting this, calls must also be acknowledged to understand the power of culture by its ability to serve as a holistic and stable rationale for social systems (Bennett, 2015). Yet our case is not that culture is (in an ontological and essentialist sense) holistic and stable, rather that social collectives frame culture in particular ways, and that the practice of framing can be observed empirically.

Nassehi (2003) helpfully deduces a particular ‘paradox of culture’, which stems from two empirically derived propositions namely, one the one hand, that the result and meaning of one’s own culture can only be grasped by observing that culture’s difference

in relation to other cultures. This clarifies that culture is something contingent, changeable and mouldable:

> 'The pattern of a culture, then, is not expressive of an essential set of relations between a people, place and way [of] life but is a conjunctural and pliable articulation of those relations that derives its distinctive qualities from the creative, form-giving capacity of the people concerned (Bennett, 2015 p.555).

On the other hand, it has already been emphasized that culture is used absolutely to serve as a reliable, perhaps normative meaning-producing mechanism, which demands stability and fixedness. Culture relates to the *'invisible algorithm that rules our social life'* (Nassehi, 2008, p.148) and the driving forces that stand behind our daily routines. Culture is thus a form of identity-creation which tries to articulate, secure and re-arrange forms of social order with reference to actors and their respective social collectives (White, 2008, Beckert, 2009, Baecker, 2003).

Nassehi proposes an empirically derived concept of culture (see Nassehi 2003, 2008), arguing that culture is relative and contingent yet, in the 'normal' functioning of any system, this contingency is removed by the normative framing or 'coding' of culture (ie. the accepted way of doing things) *in* a social system. Consequently, this article does not attempt to trace the culture *of* a system (its inherent system of meaning), but instead attempts to explore the production, the use and function of culture *within* the social system of urban horticulture. Culture, as the matter-of-course of a system, is usually regarded as something that is not readily offered for disposal – and is hence taken-for-granted (Nassehi, 2003, p.289). In other words, culture produces orientation, sense-making and provides social systems with certainties amid the uncertainty of their respective social environments. It follows that culture represents meanings in social systems produced via observation and comparison; and these meanings adapt to, and are

viable within, the *Eigenlogik* and the identity of the respective system. The meanings that thereby become stabilized and unquestioned themselves assure the system's identity. Finally, the stabilization of the contingency of culture may be achieved by treating one's own culture asymmetrically in relation to others, for example as better, older or more sustainable etc. (Nassehi, 2010, p.379).

In summary, in approaching the paradoxical constitution of culture, inspiration comes from Luhmannian system theory. With further support from Nassehi, it is possible to argue that culture results when a system observes and compares itself with other systems.

We call this complex bundle of observing and comparing actions *the practice of culturalisation*, which produces as its most common outcome, the taken-for-granted 'culture' within a particular system. Culturalisation indicates an empirical understanding of culture (Nassehi, 2003, p.308) because culture is the result of empirically observable operations in heterogenous actor constellations that also can be observed by others. Research in Bath and Bamberg, which will now be introduced, applies Nassehi's perspectives in culture to examine how culturalisation in each city helps to explain the way that urban governance of UA is organised and executed in each city.

Research foundations, data collection and analysis

The authors' interests in urban horticulture started at a 2013 conference on rural geography[3], and participation in the European Commission FP7 project SUPURBfood[4], which included fieldwork in Bath where a strong Transition Town network and a committed council resulted in a dedicated Local Food Strategy and initiatives including a city-regional network of public food procurement professionals. The Strategy triangulated three areas of policy attention: improving the sustainability of the city's food footprint; supporting the economic performance of the district's agriculture; and improving food related public health (BANES, 2014b). Unlike Bamberg, where urban horticulture forms an intrinsic part of the World Heritage management plan, the revision of an equivalent plan in Bath did not include comparable commitments (BANES, 2016). The two World Heritage cities both have extended traditions of urban horticulture and a shared policy interest in food. In Bamberg, this is linked directly to the maintenance of World Heritage designation, while in Bath policy projects normative visions of urban sustainability.

In September and October 2015 mutual visits allowed the authors to interview over 30 people including commercial and community gardeners, councillors and officials, civil society networks and food activists, brewery employees and heritage officials. Breweries were included because they play a key role in communicating and interpreting the meanings of local food. Breweries also represent important links in

[3] http://www.ruralhistory.eu/newsletter/2013/rhn-2013-043

[4] Grant agreement 312126. See wwwsuburbfood.eu

local supply chains, especially around Bamberg where brewers are regular clients of urban gardeners. For all interviews 19 identical questions were used, preceded by documentary desk research that identified demographic, administrative, agri-food and socio-economic details drawn from municipal data sources. In October 2016, an additional visit to Bamberg included a workshop hosted by the World Heritage Office, attended by 20 participants including growers, council and heritage officials and civil society groups. Final interviews were concluded in 2017.

Data analysis followed a two-stage process. Firstly, interviews and workshop discussions were recorded. Secondly, after transcription, manual data analysis led to the generation of themes which identified how culture is deployed and framed by the different actors and social systems in Bamberg and Bath. These themes emphasised meanings and signifiers attached to quality and locality of food, factors inducing or inhibiting rivalry and cooperation, and the roles of the local state. They were further condensed into sequential inquiries which emphasised:

(1) The historical embeddedness of rivalry/competition and co-operation in Bamberg and Bath.
(2) The relevance of culture as a potential for/obstacle to co-operation and innovation practices in urban horticulture.

Urban horticulture contexts in Bath and Bamberg

Gilmore's map of 1697, when Bath had 3,000 inhabitants, shows much of the city

outside the old walls surrounded by orchards[5]. Medieval maps of Bamberg (e.g. the 1602 Zweidler Map[6]), similarly reveal extensive horticulture, and identify an area near the city centre as *Gärtnerstadt*, or the Gardeners' District. Figures 1 and 2 below illustrate historical and contemporary distribution of urban horticulture in Bath and Bamberg respectively.

Figure 1: Inglescombe nursery, Bath, 1886 (Museum of Bath at Work).

[5] Gilmore's map can be viewed online at the Museum of Bath Architecture http://museumofbatharchitecture.org.uk/explore/objects-from-the-collection/

[6] Zweidler's map can be viewed online at Bamberg's World Heritage website: http://medienportal.bamberg.info/image/nachstich_des_zweidlerplans_au-58/

Figure 2: Distribution of Bamberg's urban horticulture nurseries 2016 (Stadt Bamberg)

In Bath, most commercial horticulture gradually disappeared as the city expanded or was incrementally redesigned by the Georgians, Victorians and post-war planners (Davis and Bonsall, 1996). However, Bamberg's *Gärtnerstadt* (ordered into the *Obere* or upper, and *Untere* or lower divisions) remains not only intact but commercially active, covering about 20 hectares.

From the 14th century, food production in Bamberg was connected with the orchards and viticulture of St Michael's monastery, and became a prominent spatial feature and economic function of the city (Haupt, 1866). Commercial horticulture in the format recognisable today emerged shortly afterwards, when around 30 gardeners cultivated local varieties of garlic, savoy cabbage, onions, potatoes, radish and liquorice. By the 19th century, around 540 families were engaged in horticulture, almost

a quarter of Bamberg's total employment, although by the 2000s this figure had dropped to 2% (Gehringer, 2009, Dix, 2017).

Substantial decline in Bamberg's urban horticulture began, in common with Bath and for similar reasons, in the 1960s with rapid post-war expansion and the restructuring of retailing. New supermarkets began to outprice the small-scale gardeners, most of whom still cultivate up to 2 hectares, and equally struggled to compete with larger rural or peri-urban nurseries. Simultaneously, innovations in production, marketing and sales, including the development of specialist niche-markets, were inadequately exploited by the gardeners. Lastly, post-war agriculture was shifting to the cultivation of more productive (and thus cheaper) varieties, which replaced less efficient local cultivars. With the inclusion of the *Gärtnerstadt* in Bamberg's World Heritage designation, new attention was directed to towards cultural aspects of urban horticulture reflecting an increasingly diverse local population and rising tourism. In 2009, €1,3m of federal funds[7] were used to finance direct marketing, educational promotion, project management, an upgrading of the quality of public spaces, and the reopening of the Museum of Gardening and Viticulture (*Gärtner- und Häckermuseum*), together with new ideas for re-using any plots previously abandoned by gardeners. The museum charts at least 500 years of horticulture in the city, presenting films and paraphernalia that reveals contributions made by the mainly Catholic gardener fraternities to seasonal religious festivals, particularly *Fronleichnam*, or Corpus Christi. The gardening businesses have shaped the architectural form of the streets where the museum lies (see Figure 3, below).

[7] *Investitionsprogramm Nationale UNESCO-Welterbestätten*

Figure 3: Traditional buildings in the Gardeners' District, Bamberg (Source: Author)

These investments included the establishment of the *Interessensgemeinschaft Bamberger Gärtner*[8] (Bamberg Gardeners' Association), which dedicates itself to cooperation and joint marketing among the remaining 20 gardeners across both the upper and lower *Gärtnereien*, and to express the contemporary commercial needs of the gardeners with one voice.

In Bath, a number of civic groups highlight the desire to increase self-provisioning, celebrate the community dimensions of food production as a social and physical activity, and are reviving rural cultural traditions associated with farming. Unlike Bamberg, there is no formal structure or tradition for organising civic food groups in Bath. This is because they have a range of objectives, organisational models and stakeholders, compared with the ostensibly commercial focus of the Bamberg

[8] http://www.gaertnerstadt-bamberg.de/

gardeners. The *Local Food Strategy* presents illustrative case studies that include groups engaged in horticultural production, such as the Bath Organic Group, which has, for over twenty years, been selling its produce at Bath farmers' market, thereby combining characteristics of the alternative food movement, such as direct producer-to-consumer retail, with a revival of commercial market gardening on land it rents in the heart of the city. Others, such as the South Side Food COOP, are concerned with the affordability of nourishing fruits and vegetables and supply low-price fresh produce to co-operative members, many of whom live in less affluent areas of the city, through an arrangement with a farm close to Bath. Food redistribution schemes, such as Bath Food Cycle, are by now universally familiar methods for reducing waste by transforming surplus supermarket food into hot meals for people in need. Finally, but not exclusively, Transition Bath has a dedicated food group which planted a nuttery (nut orchard) on an area of the Bath Skyline owned by the national land-owning charity The National Trust. Such undertakings have prefaced a call for the re-introduction of food spaces in the city, eventually adopted in the Local Plan (BANES, 2014a:260-1), and have led to civic groups being routinely consulted in municipal strategic developments linking food and public health.

New civil society networks have also emerged in Bamberg, notable for their collaboration with commercial gardeners. An example is the *Sortengarten*, established in 2013. Its purpose was to find, conserve and cultivate local heritage seed varieties that have vanished from commercial cultivation, but that are still grown locally – often in private gardens. Cultivating these seeds and producing recipes based on traditional local dishes was one step towards revitalising the local distinctiveness of Bamberg's urban horticulture. Bamberg's Transition Town group established a *Selbsterntegarten* (self-

harvesting garden) in 2016. The group rents currently unused land from one market gardener, who helps train Transition members and manages their plots for a small fee. This collaboration remains uncommon in Bamberg, where most commercial gardeners remain sceptical of such 'green' initiatives.

Formats of culturalization: open and closed cultures

In reviewing the deployment of culture in these urban horticulture actor systems, it is possible to empirically identify four different and ideal-type forms of culturalisation. These relate to different actor constellations and serve different purposes in highlighting the significance and function of each. The assignment of one form of culturalisation to a specific actor constellation reflects the findings in the case of this time and space-specific research and does not exclude the overall possibility of evolution. As described above, different social systems observe each other and the state of observing opens up the possibility of adapting or changing a particular culturalisation for a one's own interests and purposes. In line with systems theoretical thinking, such culturalisations can be understood as a set of possibilities that, once released into the social world, might be used by other, different actors if they suit the respective *Eigenlogik* of that actor system. Since the culturalisations here happened empirically at the same time, each might also influence and change another if this serves a purpose.

(1) *Culturalising urban land use management: sites to be cared for.* Bamberg's Upper *Gärtnerstadt* is included within city land use plans, which preclude building development and prescribe urban horticulture. In 2016, the whole of the Gärtnerstadt was included in the German UNESCO list for intangible cultural heritage, in relation to *'horticulture accompanied by various social, religious,*

and corporate traditions of the gardeners' (Deutsche UNESCO-Kommission, 2017). In this framing, an official culturalisation of Bamberg's urban horticulture becomes visible and culture is understood as a bundle of practices, habits, traditions and spatial structures that merit protection and societal stewardship, because they represent the material and symbolic heritage of the city. Culture in this sense is an indicator that, in Bamberg, horticulture is important enough to be protected and cared for by state authorities, relying on the Latin understanding of *'cultura'*, as something to be cared for (Baecker 2003). In Bath, official culturalisation excludes urban horticulture insofar as it is absent from the UNESCO documentation. However, the local authority binds food to the city in multiple ways through the Local Food Strategy which has fostered a culture of engagement around food among local politicians and expanded the council's sphere of influence, as suggested by this senior official:

> '…a primary benefit of the LFS has been to highlight and expand the role that food plays in a much more strategic sense… previously all food-related work was rather disparate. While the LFS has helped to significantly raise the profile of food issues with councillors, it has also helped us to engage with other partners, in order to help address a whole range of food-related challenges. In some cases… [the council] had no previous relationship, some partnerships are entirely new'.

(2) *Culturalising the past: authentic tradition and identity.* Strong family traditions, expressed in festivals, museums and religious customs form part of Bamberg's identity and reflect the gardeners' material and non-material culture. Recently, renewed integration into urban political life revealed a growing self-awareness when five gardeners were elected to Bamberg city council. Culture, for the gardeners, is a set of invisible routines and traditions which shape conservative

(often backward-looking) identities, drawing self-worth from their long-established position in the local community. But this culture of urban horticulture still poses an obstacle to co-operation as it is fragmented: the gardeners do not consist of a single identity unit. Historically, they have been organised within fraternities, mirroring parish divisions. To an extent, the concomitant rivalries still linger: there is strong allegiance to fraternities but weak cooperation across them (marriages which breached fraternity boundaries were discouraged well into the 1960s). The fraternal ties have formed a bonded or closed culture, sceptical of cooperation with outsiders. Culture is also understood as a set of practices that serve as a resource to secure an inherited identity – both in material and symbolic forms – but that also limits openness and willingness to co-operation, as suggested by this World Heritage official:

> ‘There is no single [type of] gardener... They form different subgroups. Very often the groups do not know each other and this has increased rivalry, egoism and competition, but inhibited co-operation. Everyone is worried about losing something if he or she opens up to co-operation. That was one reason why the *IG Bamberger Gärtner* was established, to help increase trade between the gardeners’.

In Bath, such practices are memories. Even so, the importance of traditional local foods remains, although ingredients are sourced from a wider region than in Bamberg. Different bundles of meaning and routines now help local breweries to reinvent and renew Bath’s self-adopted (but centuries old) tradition as offering an elevated level of visitor experience, and the distinction of local particularity holds exogenous, rather than endogenous potential, as suggested in the next two quotations, voiced firstly by a brewery marketing executive, followed by the brewer:

> 'Our marketing message is linked to quality… we are fully aware that our customers find regional/local sourcing important and we provide menus printed with maps and details about where ingredients are sourced.'…
> 'Keg distribution helps with our expanding export trade to Scandinavia. There is also growing export of bottled beer to Russia. Demand for locally-brewed beers is strong, but not just locally.'

(3) *Culturalising resident's consumption: the taken-for-granted quality and affordability of local food.* When local food is served in Bamberg's ten breweries, food from the *Gärtnerstadt* contributes to the city's urban spatial identity. Breweries are places of consumption for locals and tourists alike. Yet local products are connected with normal and historically unproblematic everyday use, and are taken-for-granted. Consequently, there is a measured appreciation of local cuisine, because food and its producers, the gardeners, are regarded as a 'cultural matter-of-course'. Here, a particular consuming culture of taken-for-granted local and cheap urban food is observable. Food is qualitatively consistent, locally distinctive, and habitually enjoyed by locals, as explained by a brewery manager:

> 'Are [customers] aware [that we sell locally grown food]? We try to communicate this on our menus, but I believe, unfortunately, that it is perhaps more important that the food tastes good. I don't want to say that customers are indifferent [about food origin] but I don't think this preoccupies them much. … The main thing is that you get quality with us, it tastes good, and it is affordable...'

It is this expectation that often poses questions about the kinds of vegetables that should be cultivated in Bamberg, according to a commercial grower:

> 'Well, if we hadn't always had our own irrigation well, we wouldn't cultivate anything here. This is sandy soil, the water drains away quickly. If I used metered water, that would be [expensive]. That would work out at €1.20 for a lettuce, how could I sell that? Or more like 2€ in high summer, while Lidl sells it for 40 cents.'

In Bath, the exact opposite situation prevails. Local food is associated with high quality visitor experience and marketed as special (recalling 'the appeal of Bath as an exclusive resort for "the quality"' (Davis and Bonsall, 1996, p.25). Local food is not necessarily for the everyday, in the words of a tourism board official:

> 'Without a doubt, food and drink will continue to be a driver of the consumer's interest. Therefore as a tourist board, you're going to look at that and think "we'll use food as a lever to bring people here". We make sure we've got a good enough offer.'

Awareness of food origin is linked to extraordinary sensuality and geographical association with an image of the 'West Country'. This locks out some residents, and wealth and health inequalities was raised in interviews. Strategic actions around food attempt to change consumption cultures - revisions of the day-to-day taken for granted routines - through food and health programmes in schools and care homes, community nutrition programmes using local produce, weight loss support, and encouraging commercial food outlets to reduce salt and sugar. This is expressed by a public health officer:

> 'Some communities in Bath have residents on low incomes. … A higher incidence of mental health issues has become evident, and more people are using food banks. … A key tension is that farmers need to secure a higher income which is a stark contrast to some of the problems linked to inequality in deprived communities. Bath has a vibrant food culture – lots of cafes, restaurants and shops. This is particularly good for the tourist industry and affluent people and helps to develop the local economy. But what difference does this vibrant culture make to people

living [in less affluent neighbourhoods] on low incomes? It just creates a bigger perception of the gap.'

(4) *Culturalising otherness: alternative food networks and social innovation.* The establishment of Bamberg's *Sortengarten* shows that efforts to increase the appreciation of locally distinctive vegetable varieties has extended beyond the market position of the commercial gardeners. The initiative was established by civil society networks, with the support of a gardener, revealing how innovative gardeners readopt a societal and communal role in strengthening co-operation between heterogenous actors. In some respects, this is an emergence of a counter-culture by a new cohort of non-commercial gardeners to establish alternative networks that promote social openness, innovative ideas and the renaissance of the historic biodiversity of Bamberg's urban agriculture. Subsequently, the Transition Town affiliated *Selbsterntegarten* (self-harvesting garden) was established as an opportunity by untrained enthusiasts to grow vegetables by renting land from a commercial gardener on the outskirts of Bamberg. It stresses co-operation and collective action, and pays for the professional knowledge a commercial gardener, thereby setting up an emerging form of bridging social capital (Putnam, 2000, p.22).

Bath hosted the UK's first farmers' market in 1997 and has been awarded Sustainable Food City status for its work on public food. The council-civil society links are, however, also associated with austerity in public finances that have resulted in cuts of 40% in the Council's budget and job losses. In consequence, some voluntary groups, as expressed by the Transition Bath Food Group member, below, have found themselves busy both with their own efforts

to pursue practical environmental improvements, and have become *de facto* delivery agents for council strategies:

> 'Transition Bath Food Group (FG) is involved in a range of projects, including a community nuttery on land … owned by the National Trust (NT). A management plan has been agreed with the NT and work is carried out by a FG member who has experience of vineyard and orchard management. This member also teaches apple tree pruning and the FG owns equipment that people can hire to press and bottle their own apple juice. We have run a lot of talks on food related issues but there were so many that they have been scaled back in favour of practical activities. We also work with the council … and have been instrumental in the development of the allotment strategy'.

Discussion and conclusions

On the face of it, the horticultural practices in Bamberg seem in better shape than in Bath, if solely judged against the survival of both commerce, space and the reproduction of traditions among the self-referential gardeners. However, Bamberg's fraternal structures and rivalries have inhibited co-operation due to a closed culture and bonding social capital. Change, by and large, has been generated from outside – especially by the World Heritage office and partner civil society associations. In Bath, the almost complete loss of commercial horticulture has led to a culture of openness, whereby new activist groups seek to regain horticultural skills and agency, which has in turn led to a collaboration with the state and with commercial farmers outside the city, partly structured by the Local Food Strategy. These examples of alternative culturalisations have supported the success of food initiatives in both cities and can be seen as a form of bridging or open culture and social innovation, through new/renewed cultures of producing local food associated with formats of social co-operation. They are forms of 'irritation' to established social systems and actor networks which stimulate (the

performance of) self-reflexivity and the importance of established practices. Despite being marginalized by some commercial gardeners, alternative food network members nevertheless reintroduce an appreciation of performing urban horticulture and its culture which, they hope, might revive it in wider civil society, as suggested by a member of the Bamberg *Selbsterntegarten*:

> 'At the beginning most of the gardeners thought that we were hippies and that there would be loads of people on the field during evenings drinking beer, being loud and leaving litter. But now they are noticing that we have a strong sense of responsibility and are keen to practice urban horticulture and willing to learn more about this practice. I think this has weakened the inhibitions on their side'.

Our demonstration in this article of different cultural formations and different types of produced culture in Bath and Bamberg suggests that culture persists in both cities as an empirical framework for examining meanings and functions within social networks. In this respect, the distinctions – notably the relative presence/absence of commercial horticulture, the inclusion/absence of horticulture in the World Heritage plan, the different perspectives of food quality – are important details, but indicate a common need to consider culture *per se* as a significant factor in urban spatial governance.

It has been argued, firstly, that culture is the key to understanding how different social systems (re)produce identity, meaning and functions both internally, and in relation to other systems, as they collectively face dynamic social complexities. The argument has applied broader interpretations of culture drawn from the sociology of Luhmann and Nassehi to examine how the cultures of particular actor constellations influence social structure, taken-for-granted practice and perceptions of self-identity.

Secondly, although literature on UA is expanding, culture remains largely absent as a research consideration. This needs to be rethought, because urban horticulture is an ancient European tradition, and cities are being re-examined for their potential for sustainable production. In Bamberg the essence of this tradition is strong, if rigid and fragile; in Bath it is being reinvented to a limited extent.

One risk, it seems to us, in pursuing eco-technical approaches to sustainability through horizontal municipal and NGO-led peer networks, is that the spatial particularity and local distinctiveness of diverse cultural food practices could become obscured by normative objectives to cut carbon, save water, improve public health, and so on, even though such interventions are clearly vital and increasingly to be identified in cities.

A suggestion made at the Bamberg workshop was for an exchange between each city's gardeners, to compare practices, goals, policies and market circumstances. In reflecting on this, Hüther's (2013) work on 'communal intelligence' is pertinent, which advocates collective engagement and community education in order to develop future capability in relation to limits in natural resources and to changes in the level of public services and functions that citizens can expect their local authorities to provide. As discussed, culture is more than a context in the unfolding of social life. It is not formed from a single, coherent national or regional culture and hence there is no single culture which can be calculated and counted upon, for example by local government. Factors such as shifting political priorities and public sector financial austerity - exemplified by budget cuts in Bath, leading to a decision not to renew the Local Food Strategy beyond its initial term and followed in 2019 by the election a new administration - mean that local authorities inevitably exhibit inconsistent or dynamic forms of culturalisation. To

take culture seriously as an enabling factor in the development of future capability in cities, those involved in governing spaces should seek to recognise different forms of culture and their possibilities and limitations for social collectives. Understanding culture and addressing it appropriately might also be helpful in collaborative planning (Healey 2003) and in capturing the *Eigenlogik* of the range of people in local settings seriously. If this can be achieved, civil participation may deepen while local identities are also strengthened.

Further research is needed to articulate the relationship between culture, the cognitive and organisational infrastructures that Hüther outlines, and sustainable outcomes in practice, in order to understand and carefully develop good governance of the socio-cultural complexity of urban horticulture in particular, and UA in general.

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References

BAECKER, D. 2003. *Wozu Kultur?,* Berlin, Kadmos.

BANES 2014a. Bath and North East Somerset Placemaking Plan. Options Document ed. Bath: Bath and North East Somerset Council.

BANES 2014b. Local Food Strategy 2014-2017. *In:* HEALTH, P. (ed.). Bath: Bath and North East Somerset Council.

BANES 2016. The City of Bath World Heritage Site: Management Plan 2016-2022. *In:* HERITAGE, W. (ed.). Bath: Bath and North East Somerset Council.

BARNETT, C. 2001. Culture, geography and the arts of government. *Environment and Planning D: Society and Space,* 19**,** 7-24.

BARRON, J. 2016. Community gardening: cultivating subjectivities, space, and justice. *Local Environment*.

BECKERT, J. 2009. The social order of markets. *Theory and Society,* 38**,** 245-269.

BELL, D. & BINNIE, J. 2005. What's Eating Manchester? Gastro-Culture and Urban Regeneration. *Architectural Design,* 75**,** 78-85.

BENNETT, T. 2015. Cultural Studies and the Culture Concept. *Cultural Studies,* 29**,** 546-568.

BRISTOL CITY COUNCIL undated. City Life - a cultural strategy for Bristol. Bristol: Bristol City Council.

CERTOMÀ, C. & TORNAGHI, C. 2015. Political gardening. Transforming cities and political agency. *Local Environment,* 20**,** 1123-1131.

CRESPI-VALLBONA, M. & DIMITROVSKI, D. 2017. Food markets from a local dimension – La Boqueria (Barcelona, Spain). *Cities,* 70**,** 32-39.

CUMMINS, S., FINDLAY, A., PETTICREW, M. & SPARKS, L. 2005. Healthy Cities: The Impact of Food Retail-led Regeneration on Food Access, Choice and Retail Structure *Built Enviornment,* 31**,** 288-301.

DAVIES, A. 2019. *Urban Food Sharing - Rules, Tools and Networks,* Bristol, Polity Press.

DAVIS, G. & BONSALL, P. 1996. *Bath: A New History,* Keele, Keele University Press.

DE ZEEUW, H., VAN VEENHUIZEN, R. & DUBBELING, M. 2011. The role of urban agriculture in building resilient cities in developing countries. *The Journal of Agricultural Science, suppl. Foresight Project On Global Food and Farming Futures,* 149 S.1**,** 153-163.

DEUTSCHE UNESCO-KOMMISSION, E. V. E. 2017. Wissen. Können. Weitergeben. Bundesweites Verzeichnis Immaterielles Kulturerbe. Bonn: Deutsche UNESCO-Kommission e.V.

DI GIOVINE, M. A. & GRAHAM, P. B. 2014. *Edible Identities: Food as Cultural Heritage*, Ashgate Publishing Limited.

DIRKSMEIER, P. & HELBRECHT, I. 2010. Intercultural interaction and "situational places": a perspective for urban cultural geography within and beyond the performative turn. *Social Geography,* 5**,** 39-48.

DIX, A. 2017. Gemüse aus Bamberg. Geographien von Herkunft, Tradition und Qualität. *Geographische Rundschau,* 1/2017**,** 34-39.

DONALD, B. & BLAY-PALMER, A. 2006. The Urban Creative-Food Economy: Producing Food for the Urban Elite or Social Inclusion Opportunity? *Environment and Planning A: Economy and Space,* 38**,** 1901-1920.

FAO 2012. Growing Greener Cities in Africa. First status report on urban and peri-urban horticulture in Africa. Rome: Food and Agriculture Organsiation of the United Nations.

GEERTZ, C. 1973. *The Interpretation of Cultures,* New York, Basic Books.

GEHRINGER, H. 2009. Die Gärtnerei in Bamberg. Aspekte ihrer historischen Bedeutung. *In:* SCHEINOST, M. (ed.) *Vom Wirtschaftsfaktor zum Welterbe. Bambergs Gärtner und Häcker.* Bamberg: Stadtarchiv Bamberg

GOODMAN, D. & REDCLIFT, M. 1991. *Refashioning Nature - Food Ecology and Culture,* London, Routledge.

GREGSON, N. 1995. And now it's all consumption? *Progress in Human Geography,* 19**,** 135-141.

GRIVINS, M., KEECH, D., KUNDA, I. & TISENKOPFS, T. 2017. Bricolage for Self-Sufficiency: An Analysis of Alternative Food Networks. *Sociologia Ruralis,* 57**,** 340-356.

HAUPT, A. 1866. *Die Bamberger Gärtnerei, ein Theil der freien Wirthschaft.,* Bamberg, W. Gärtner.

HINDE, S. & DIXON, J. 2007. Reinstating Pierre Bordieu's contribution to cultural economy theorizing [Paper in special issue: Economic Society. Gilding, Michael and Majoribanks, Tim (eds).]. *Journal of Sociology,* 43**,** 401-420.

HEALEY, P. 2003. Collaborative Planning in Perspective. *Planning Theory*, 2, 101-123.

HÜTHER, G. 2013. *Kommunale Intelligenz: Potenzialentfaltung in Städten und Gemeinden,* Hamburg, edition Körber-Stiftung.

ILIEVA, R. T. 2017. Urban Food Systems Strategies: A Promising Tool for Implementing the SDGs in Practice. *Sustainability,* 9**,** 1707.

JAYNE, M., GIBSON, C., WAITT, G. & BELL, D. 2010. The Cultural Economy of Small Cities. *Geography Compass,* 4**,** 1408-1417.

JORDAN, J., FUCHS, A. & JAMES-CHAKRABORTY, K. 2011. Apples, Identity, and Memory in Post-1989 Germany. *In:* JAMES-CHAKRABORTY, K. (ed.) *Debating German Cultural Identity 1989 -2009.* Martlesham: Camden House.

KIRWAN, J., ILBERY, B., MAYE, D. & CAREY, J. 2013. Grassroots social innovations and food localisation: an investigation of the Local Food programme in England. *Global Environmental Change,* 23**,** 830-837.

KOOPMANS, M., METTEPENNINGEN, E., KUNDA, I., KEECH, D. & TISENKOPS, T. 2017. Creating Spatial Synergies around Food in Cities. *Urban Agriculture and Regional Food Systems.*

LUHMANN, N. 1997. *Theory of Society,* Stanford, Stanford University Press.

LYONS, K., RICHARDS, C., DESFOURS, L. & AMATI, M. 2013. Food in the city: urban food movements and the (re)- imagining of urban spaces. *Australian Planner,* 50**,** 157-163.

MARSDEN, T. 2010. Mobilizing the regional eco-economy: evolving webs of agri-food and rural development in the UK. *Cambridge Journal of Regions, Economy and Society,* 3.

MARSDEN, T. 2012. Towards a Real Sustainable Agri-food Secuirty and Food Policy: Beyond the Ecological Fallacies. *Political Quarterly,* 82**,** 139-145.

MARSDEN, T. & SONNINO, R. 2012. Human health and wellbeing and the sustainability of urban-regional food systems. *Current Opinion in Environmental Sustainability,* 4**,** 427-430.

MAYE, D. 2016. Smart cities food governance: critical perspectives from innovation theory and urban food system planning. *In:* DEAKIN, M., DIAMANTINI, D. & BORRELLI, N. (eds.) *The Governance of City Food Systems.* Rome: Fondazione Giangiacomo Feltrinelli.

MCLINTOCK, N. 2014. Radical, reformist, and garden-variety neoliberal: coming to terms with urban agriculture's contradictions. *Local Environment* 19**,** 147-171.

MONTANARI, M. 2006. *Food Is Culture,* New York, Columbia University Press.

MOUGEOT, L. E. 1994. *Cities Feeding People: An Examination of Urban Agriculture in East Africa,* Ottowa, International Development Research Centre.

NASSEHI, A. 2003. *Geschlossenheit un Offenheit - Studien zur Theorie der modernen Gesellschaft,* Frankfurt am Main, Surkamp.

NASSEHI, A. 2008. *Soziologie. Zehn einführende Vorlesungen,* Wiesbaden, VS Verlag.

NASSEHI, A. 2010. Kultur im System Einige programmatische Bemerkungen zu einer systemtheoretisch informierten Kultursoziologie. *In:* (EDS), W.-S. M. (ed.). Heidelberg: VS Verlag für Sozialwissenschaften

OATLEY, N., GRIFFITHS, R., BASSETT, K. & SMITH, I. 1999. Cultural policy and the cultural economy in Bristol. *Local Economy,* 14**,** 257-264.

PARHAM, S. 2014. *Food and Urbanism: The Convivial City and a Sustainable Future,* London, Bloomsbury.

PETROCCI, B. 1981. The New Urban Marketplace: Street Fairs and Farmers' Markets Revisited. *Journal of American Culture,* 4**,** 163-168.

PLEYERS, G. 2017. Local food movements: from prefigurative activism to social innovations. *Interface,* 9**,** 123-139.

PUTNAM, D. 2000. *Bowling Alone: The Collaps and Revival of American Community,* New York, Simon and Schuster.

ROE, M., SARLÖV HERLIN, I. & SPEAK, S. 2016. Identity, food and landscape character in the urban context. *Landscape Research,* 41**,** 757-772.

SMITH, E. 2018. *The Borough Market Cookbook,* London, Hodder and Stoughton.

SMITH, J., KOSTELECKÝ, T. & JEHLIČKA, P. 2015. Quietly does it: Questioning assumptions about class, sustainability and consumption. *Geoforum,* 67**,** 223-232.

SONNINO, R. & HANMER, O. 2016. Beyond food provision: Understanding community growing in the context of food poverty. *Geoforum,* 74**,** 213-221.

SOPER, K. 2008. ALTERNATIVE HEDONISM, CULTURAL THEORY AND THE ROLE OF AESTHETIC REVISIONING. *Cultural Studies,* 22**,** 567-587.

STREETFOODFESTIVAL. *Street Food Festival* [Online]. Available: https://street-food-festival.de/#street-food-festival [Accessed 13th August 2018].

TORNAGHI, C. 2017. Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment. *Antipode*, 49**,** 781-801.

TOUSSAINT-SAMAT, M. 1994. *History of Food*, Oxford, Blackwell.

TREGEAR, A., ARFINI, F., BELLETTI, G. & MARESCOTTI, A. 2007. *Regional foods and rural development: The role of product qualification*.

UNITED NATIONS, D. O. E. A. S. A., POPULATION DIVISION (ST/ESA/SER.A/352) 2014. World Urbanisation Prospects: The 2014 Revision, Highlights

VEEN, E., DERKZEN, P. & WISKERKE, J. 2012. Motivations, Reflexivity and Food Provisioning in Alternative Food Networks: Case Studies in Two Medium-sized Towns in the Netherlands. *International Journal of Sociology of Agriculture and Food*, 19**,** 365-382.

VILJOEN, A., BOHN, K. & HOWE, J. E. 2005. *CPULs - Continuous Productive Urban Landscapes*, Architectural Press.

WHITE, H. 2008. *Identity and Control. How Social Formations Emerge*, Princeton, Princeton University Press.

WOODS, M. 2009. Rural geography: blurring boundaries and making connections. *Progress in Human Geography*, 33**,** 849-858.

ZEUNERT, J. 2018. Dimensions of Urban Agriculture. *In:* ZEUNERT, J. & WATERMAN, T. (eds.) *Routledge Handbook of Landscape and Food.* Abingdon.