

Urban agriculture and the social role of urbanism: Planning and ethics for communities and territories

Teresa Marat-Mendes¹, João Cunha Borges²

¹*Instituto Universitário de Lisboa ISCTE-IUL, DINÂMIA'CET-IUL, teresa.marat-mendes@iscte-iul.pt*

²*Instituto Universitário de Lisboa ISCTE-IUL, DINÂMIA'CET-IUL
joao_cunha_borges@iscte-iul.pt*

Abstract: UN Habitat III and the 2030 Agenda for Sustainable Development have challenged scholars to reappraise the urban environment from the sustainability perspective. The study of urban form (urban morphology), as well as of resources and materials needed for cities to function (urban metabolism) are two specific areas which have potential to assess the urban environment and their projected development. Departing from such contributions this presentation, focus on the contributions of an ongoing research Project (SPLACH – Spatial Planning for Change), which aims to promote a sustainable urban transition of Lisbon Metropolitan Area (LMA), informed on a desirable food-based urbanism, with impact on the improvement of environmental conditions and people's lives. LMA concentrates about 3 million inhabitants, whom mostly occupy its peripheral residential areas, mostly developed throughout 20th century. Many of these areas gave rise to relevant problems including social isolation and car dependency, while others have witnessed a number of municipal and private initiatives to counteract such issues, including the promotion of urban agriculture. SPLACH Project has surveyed a number of case studies which aim to theorize planning and housing dynamics occurred in LMA while identifying their impacts on territorializing ethical principles grounded on urban agriculture initiatives. Specifically, we will question what specific issues have been identified in SPLACH case studies which deem to provide opportunities to rethink urban planning and urban form towards a more sustainable environment and promote the social role of urban planning.

Keywords: urban agriculture; urban planning; ethics; Lisbon Metropolitan Area

Introduction

Urban planning has always questioned what constitutes a 'good city' and a 'good life' which it will promote. Yet, how to define 'good'? Aristotle, for example, believed theory and action tended towards 'a certain good', but conceded that 'good' meant different things for different people in different contexts. That modern democracies have barely managed to tackle these differences proves the everlasting importance of ethics.

Ideas and structures shaping our notions of how to live, good and bad, acceptable and unacceptable, our relations to others and behaviour standards is the terrain of ethics (Blackburn, 2001). Even when ethical dimensions are



not directly referenced, creative and critical acts are imbued in them, since we exist in what Blackburn (2001) calls an ‘ethical environment’ even when unaware of it.

Although ethics usually comprises a consideration of relations between human beings, sustainability, as it has been conceived since the publication of the ‘Brundtland Report’ (UN, 1987) challenges this traditional understanding of ethics. The official title of the report itself, ‘Our common future’, points this rather clearly – sustainability must envision the relation of our current practices and behaviors with life conditions which future generations will inherit from us (UN, 1987). As such, our unsustainable behaviors towards nature will inevitably compromise not only nature itself, but the survival of generations to come. These concerns led a great number of scholars to accept and research the emergence of the Anthropocene or Capitalocene, a proposed new geological age marked by deep alterations on the Earth by human action, particularly under the guise of capitalist development (Sagan, 2019). That alone makes sustainability an important ethical question.

As urban populations are expected to double until 2050 (UN, 2017), the impact of cities in social and ecological sustainability is a crucial area of study, to which many scholars in vastly different areas have already contributed. That is the case of urban morphology which studies the physical form of cities and the processes that form it in time (Oliveira, 2018), and also of urban metabolism, which identifies stocks and flows of materials and energy necessary for human activities (Fischer-Kowalski and Weisz, 2016).

Researchers in urban morphology and metabolism have contributed greatly to the understanding of the formal, morphological, political and environmental aspects of the city. However, we believe that alongside these more or less ‘tangible’ aspects of cities, the processes and consequences of their change over time and their variance across space must also be interpreted in the context of relationships between present and future generations, but also between human entities and ecosystems they explore. These can be included in the field of ethics, and it is an ethical reading that we aim to sketch here.

To do so, we first seek to establish an operative concept of ethics, which we will then confront with specific examples of planned neighbourhoods and the way they have been transformed, either through new planning or through their use by communities. Our ethical reading will include both top-down and bottom-up initiatives, and will mostly focus on processes of change as they represent important contributions for sustainability (Scoffham and Marat-Mendes, 2000) and ethics. We draw from preliminary results of ‘SPLACH – Spatial Planning for Change’, an ongoing research aiming to promote a sustainable transition of the Lisbon Metropolitan Area (LMA), by understanding links between urban form and socio-metabolism, particularly through the food system.

Urban agriculture emerges as one of the most outstanding themes in this context, in the LMA as in other world cities. As Purdy (2015) points out, food, treatment of animals and climate change, the paradigmatic Anthropocene problems, leave people uncertain of what to make of their key encounters with the natural world. As will be demonstrated, urban agriculture is not always born out of this conscious need to reconnect with nature, and in some respects, it may have adverse political results

Theoretical framework and literature review

A unique perspective on ethics is that of Austrian philosopher Ludwig Wittgenstein (1889-1951), who defined ethics as *the inquiry into the meaning of life, or into what makes life worth living, or into the right way of living* (Wittgenstein, 1965, 4).

In his first book the ‘Tractatus Logico-Philosophicus’ (1921), Wittgenstein conceived ethics as the discourse category that allows the possibility of thinking of good and evil, and states it is individually established through specific acts. However, Christensen’s (2004) reading of Wittgenstein’s posthumous ‘Philosophical

Investigations' (written from the 1940s to 1951) and 'On Certainty' (written 1950-1951) suggests a change in this understanding. In these later works, Wittgenstein's epistemological concepts had changed: he no longer believed the world could be described by pre-established categories, but rather by endless patterns in which these categories intertwined in use, which for Wittgenstein is always public. In this context, for something to constitute an ethical norm, it must be publicly assessable as such (Christensen, 2004).

When discussing an ethical dimension to sustainability and urbanism, this is extremely helpful, since it would be impossible to think of them as individually defined. They are not acts, but result from specific acts involving individuals. Acts including choices by an architect or urban designer on a plan, citizen use of public space, decisions by municipalities on construction or demolition, preferences of urban developers – acts with a public impact.

Surveying 20th century urbanism, Nielsen (2004) identifies ethical paradigms in urban models attempting to materialize specific relations between socio-political values and built environments. However, Nielsen (2004, 42) rightly observes even revolutionary ideas have been cannibalized by the market and devoid of meaning, concluding that *an ethical urbanism can only be created retroactively by theory*, that is, through ulterior interpretation. Although Nielsen's arguments are convincing and there may be some truth to his conclusion, we maintain that certain approaches to ethics remain useful not just in historiographical criticism, but in informing current and future planning practices, as is the ambition of the SPLACH Project.

Sustainability – unaccounted in Nielsen's survey – demands rethinking our ethical environment. Such is the approach of Kopnina (2018), who extends ethics to nature, namely plants, aiming at a sustainability-based ethics. Purdy (2015) also identifies a shift in notions of sustainable land-use, from wilderness preservation to food-production, from 'unaltered' landscapes to landscapes transformed by labour which connects people with land and with nature in general.

Indeed, changes in urbanization changed social attitudes between society and nature (Gandy, 2014). Tibbs (2011) suggests that culture is shifting towards greater concerns for ecology, while we have elsewhere discussed how sustainability is a structuring socio-cultural force in the present (Marat-Mendes and Borges, 2019). What is generically known as the food movement, which suggests a new picture of people and nature, where food production and preparation is a source of satisfaction and knowledge, which preserves, rather than exhausts, natural processes (Purdy, 2015).

Kopnina's review of environmental ethics around two different lines shows that if the inclusion of nature in our ethical ideas is a logical response to resource overexploration and climatic change, it is a complex matter – while land ethics acknowledges intrinsic value to ecological collectives (like ecosystems), deep ecology attributes it to individual living organisms. This ecocentrism vs. biocentrism debate – echoing early 20th century sociology debates between methodological holism (Marx, Durkheim, Radcliffe-Brown) and individualism (Weber, Malinowski) – has its implications, but we accept Kopnina's suggestion that the fundamental goal is a re-orientation of our world-view, in which limitless exploration of nature becomes unacceptable.

In Kopnina's proposition, different forms of describing the world – ecology, urbanism, economics and ethics – interplay in specific patterns, like Wittgenstein suggested in his later writings (Christensen, 2004).

Nielsen's (2004) ethical reading of Keynesian 1960s politics of redistribution identifies the construction of a modern industrial society as a driving force, controlling urbanization and forming a large middle-class to consume produced goods. We would add massive land-use conversions that eliminated rural soils to allow urban growth and the increasing segregation of urban and rural activities and territories. The latter, marking inequalities between city and countryside (Weaver, 1983), may have contributed to the collapse of the 'Keynesian consensus' in the 1970s, when its ethical principles of equality and justice were perceived as

limiting individual freedom (Nielsen, 2004), while the former exposes that only human entities were included in this ethical paradigm. With the later publication of the ‘Brundtland Report’ (UN, 1987) it became clear that, if not in ethics, in economics and planning, sustainability would have to become a touchstone.

One sign of change can be found in the growth of urban agriculture. It has been discussed for its historical role (Barthel and Isendahl, 2012), but also its advantages in creating social bonds (Parham, 2015), improving territorial metabolism (Ibañez and Katsikis, 2014; Faraut, 2017), changing patterns of human occupation (Viljoen et al, 2005; Napawan, 2016) and increased political participation (Lyons *et al*, 2013; Purcell and Tyman, 2015; Reynolds, 2016).

In the case of the LMA, urban agriculture has been noticed for its potential for economic development (Delgado, 2018), its role in establishing social relations and political participation (Cabannes and Raposo, 2013) as well as the changes in its planning (Oliveira and Morgado, 2016; Marat-Mendes *et al*, 2018). Dias (2018) has furthermore studied municipal urban agriculture case-studies in Lisbon and Cascais from a morphological perspective.

Here, we start by confronting this literature review with two examples of neighbourhoods from two LMA municipalities, namely the Lisbon neighbourhood of Chelas and the Amadora neighbourhood of Alto do Zambujal. After a description of each, a comparative reading will be presented and discussed against the background of ethics. The conclusion will draw suggestions for improving urban gardens and optimizing urban agriculture in Greater Lisbon.

Case studies from the Lisbon Metropolitan Area

In this section, we present two case-studies of the role of urban agriculture in planned urban areas. Thus, we selected two neighbourhoods planned between the 1960s and the 1970s, when several legal programs led to the planning of several council housing neighbourhoods, allowing an observation of residential space as planned by municipalities themselves. We present a brief overview of their current state and what forms of urban agriculture have emerged since their construction, as none of the original urbanization Plans proposed any space for agricultural activities.



Figure 1 – Case-studies location: 1 – Chelas Valley; 2 – Alto do Zambujal

The Chelas Valley

Until the 1960s, Chelas was a large extension of agricultural land. It remained practically untouched by urbanization, aside from small extensions of slums and some industrial facilities in the fringe closer to the Tagus river. The GTH – Gabinete Técnico de Habitação (Technical Office for Housing), a municipal planning office, was created to draw plans for Lisbon’s Eastern end, starting with Olivais Norte and Olivais Sul, also former agrarian properties expropriated by the municipality for the development of high-density council housing, inspired by the principles of modern urbanism (Gonçalves *et al*, 2016).

Architects José Rafael Botelho (b.1923) and Francisco Silva Dias (b.1930) were charged with the Chelas Urbanization Plan in 1960. In 1962, Silva Dias started its final version (GTH, 1966). Zones or estates were developed afterwards, all with specific compositions of high-density housing and public areas that included green parks and equipment. New elements of urban form were added to the urban landscape, including several high-rise slabs (in the Amendoeiras and Olival Estates), a city-building (the Condado Estate) and continuous sequences of buildings (the Lóios Estate). Many of the estates in Chelas can be considered megastructures as they came to be defined later by architectural critic Reyner Banham (1976), showing great creativity in the articulation of different urban elements into massive structures countered by large extensions of green space. The original plan was dismissed in the later developments, particularly after Silva Dias left the GTH in 1973, and corresponding zones have more conventional urban form solutions, namely tower-blocks.



Figure 2 – Lóios Estate, seen from the Municipal Horticultural Park



Figure 3 – Guerrilla Garden and Salgadas Estate on the background



Figure 4 – Guerrilla Garden and Flamenga Estate on the right



Figure 5 – Guerrilla Garden and Flamenga Estate on the background

The morose development of Chelas was hardened by the fact that planned equipment and infrastructures were only partially or never implemented. Particularly with mobility infrastructure, this translated into a relative segregation of Chelas from the remainder of the city. Furthermore, the whole neighbourhood has become isolated from the rest of the city, suffering from social exclusion, poverty, unemployment and criminality (Heitor, 2001). In 1998, a film by Leonel Vieira, 'Zona J' displayed the general negative perception Lisbon society had of Chelas. This led extensive demolitions in the Condado Estate in 2009, a solution whose positive impact remains unconfirmed. Another initiative of the municipality to tackle the problems of Chelas was the creation, in 2010, of an horticultural park between four estates – Zone O, Amendoeiras, Lóios and Flamenga. Significantly, these include some of the most impoverished areas of the Valley (Cabannes and Raposo, 2013).

However, despite its success, the horticultural park occupies only a parcel of overall land available for it. It has grown since its original layout, and all of its plots are currently occupied and profusely cultivated. Moreover, they add a luscious element to the urban landscape, contrasting with the That popular interest is greater than the park currently allows is testified by the nearby guerrilla garden, larger than the municipal park. These informal gardens – in which planted species are not significantly different from the ones in the municipal park – occupy an area never developed for urbanization. It is the leftover space between the Flamenga Estate, a council estate planned by the GTH, and the Olaias Slope, a facing urbanization for the middle-class privately developed in the 1980s. Standing between these two planned areas, the guerrilla garden is only one of several elements that are somewhat unarticulated – some housing rows, storage spaces, a motorway and a railway, as well as ruins of premodern houses. As we have defended elsewhere (Marat-Mendes and Borges, 2019), this neighbourhood seems to be returning to Lisbon's agrarian roots, which, in the undeveloped areas, proves to have never disappeared.

Alto do Zambujal

Alto do Zambujal is located on the borderline between the Lisbon and the Amadora municipalities. The latter is the smallest municipality of LMA, but also the most densely populated. With a large population and a relatively small territory, Amadora is still revising its Municipal Masterplan, which still dates from 1994 (Marat-Mendes *et al*, 2018).

The Alto do Zambujal Integrated Plan was started in 1973 and its implementation in 1974. Rising over a slope, the planned neighbourhood includes two significant estates, the Alto do Moínho, designed by Francisco Silva Dias, António Pinto Gomes and Ana Salta; and Zambujal, designed by Vítor Figueiredo and Duarte Cabral de Mello. Alto do Moínho is a low-density housing estate located on the lower end of the slope, with two- and three-storey semidetached houses, separated by small patios and flowerbeds. The green space surrounding the ruins of a windmill was left unoccupied and remains so today, with the exception of some small agricultural plots.

Zambujal is a high-density complex on the hilltop. It presents several rows of multi-storey slabs, although its lowest slab is a row of two-storey single-family houses. There is a generous amount of public space with large urban gardens, several underpasses, cafés and public benches. After the 1980s, the Zambujal estate was redeveloped to increase its density, and many other slabs, of a considerably poor design by architects other than Figueiredo and Cabral de Mello were added, sacrificing some of the originally planned green public area.

However, between the lower slab of the Zambujal Estate and the CRIL highway – which divides the Amadora and Lisbon municipalities – an extensive guerrilla garden has been created by locals. Additionally, some individual plots can also be found in the nearby urban park, at the centre of Alto do Moínho and even in the fringe of the Industrial Zone in the southwest of the neighbourhood. Urban farmers themselves designed plots, selected species and agricultural techniques and often recycle objects and materials to suit needs such as rainwater harvest, irrigation and storage.



Figure 6 – Alto do Moínho Estate



Figure 7 – Zambujal Estate



Figure 8 – Guerrilla Garden with the CRIL highway on the background



Figure 9 – Guerrilla Garden

Discussion

Both Chelas and the Alto do Zambujal belong to the ethical paradigm of Welfare States, as described by Nielsen (2004). However, in Portugal, a social-democratic welfare system do not start until 1974, when a military coup ended nearly 40 years of a conservative ruralist dictatorship. However, previous urbanization processes had shown Portuguese architects and planners were indeed aware of international urban debates, and managed to incorporate this knowledge in their practices.

The principles behind the 1964 Chelas Plan, designed to provide quality housing for poor populations are not unlike principles guiding other 1960s council housing in democratic countries (Borges and Marat-Mendes, 2019), showing a great capacity of GTH planners to overcome adverse political conditions. The vast green areas, supposed to provide leisure spaces between estates, as well as the extensive use of deck-access are both associated with the Doorn Manifesto and with the debates kickstarted by Team 10 (Heitor, 2001), a collective of architects whose most relevant projects were dependent on the construction of the city for the Welfare State (Risselada and Van Den Heuvel, 2005). In social housing, this *pas-de-deux* has proved sour, as several neighbourhoods planned under these principles have been systematically demolished (Hatherley, 2010). Chelas shares the same difficult outcome. Refurbishing and demolition work in some of the areas have tackled the social problems of some of the areas through changes in design. However, an observation of the urban agricultural practices in Chelas are a positive sign which has not been fully acknowledged. The appropriation of vacant space for food-production was not planned by the GTH, but the plan still had both conditions and space for it to happen, confirming the suggestion of Scoffham and Marat-Mendes (2000) that space is the asset allowing urban change to succeed. Indeed, if our age is one of uncertainty on how to reconnect with nature, experiments like in these neighbourhoods undoubtedly have an ethical dimension, insofar as they propose a necessary change in relations between humans and their environment (Purdy, 2015, 230).

In the Alto do Zambujal Plan, the commitment to ethical principles of justice, equality and dignity are clearer, as both Alto do Moinho and Zambujal were built after 1974. The former was even integrated in SAAL (Serviço de Apoio Ambulatório Local), a social housing program started by the First Interine Government. SAAL functioned in three key areas, Greater Lisbon, Greater Porto and Algarve and was only finished in Algarve when it was suspended in 1976 (Bandeirinha, 2007).

Despite their intended emphasis on public space, neighbourhood life and decent accomodation for all, these plans faced implementation difficulties and were for a long time left to neglect and social exclusion. Nowadays, they stand close to later mass-housing developments for the middle-class – namely the Olaias and the Alfragide developments, in Lisbon and Amadora respectively – but most estates in Chelas and Alto do Zambujal have had trouble being integrated in their specific areas. In many places within these neighbourhoods, public spaces are poorly kept, littered and underused, and sometimes were not even implemented as designed in the plans. In Alto do Moinho and the Amendoeiras Estate, this is not so, as residents' associations have been involved in maintenance and refurbishing processes.

These examples show that the ethical critiques to the Welfare State pointed out by Nielsen (2004) arrived to Portugal, only later. From the 1980s to the 2000s, Portugal saw tremendous increases in construction, mostly led by the private-sector, and the territory was urbanized at an unprecedented rate (Mourão and Marat-Mendes, 2016). Meanwhile, the key public policy for housing for most governments was easier access to bank loans (Drago, 2018). The State no longer ensures or programs housing conditions, but rather manages urban development and encourages people to individually borrow money and get housing for themselves. Thus, the 'welfare or freedom' critique of 1960s ethics identified by Nielsen (2004) can be confirmed in Portugal.

But what would Kopnina's (2018) suggestion of a nature-inclusive ethics tell us? Both Plans reserve generous amounts of green soil to counter urbanization, although also confirm 'urban parks' as non-productive. On the

other hand, these urbanizations displaced large agricultural explorations: activities changed in these areas, but so did land-cover patterns and ecosystems. Arguably, this was necessary, given the severe housing crisis at the time of design. Very different is the case of the largely unregulated urban growth in the 1980s and 1990s which advanced through massive land-use changes and resulting in a housing surplus (Mourão and Marat-Mendes, 2016). Besides ecosystem destruction, this process implies further damages to the environment since it runs parallel changes in Portuguese agriculture motivated by the EU Common Agricultural Policy (DGAGRI, 2003) and large public investment in car infrastructures.

Despite the eradication of productive green areas, in both Chelas and Alto do Zambujal, there is a strong emphasis on community spaces. These too have ethical importance – they echo the 1960s obsession with high-density neighbourhoods that maintained strong convivial bonds (Borges and Marat-Mendes, 2019). More recent developments, even in areas surrounding these two neighbourhoods, were arguably less focused in creating such public spaces and opted for more conventional solutions, with tower-blocks separated by leisure gardens and parking space. In a sense, it is the ambiguity of the urban forms employed in Chelas and in Alto do Zambujal that left enough space for unplanned initiatives to emerge.

Once we observe the same neighbourhoods as they stand today, we see further opportunities for ethical consideration. The return or resistance of urban agriculture is particularly telling. Although it is widely understood that allotment garden agriculture peaked in Western cities in crisis associated with the World Wars (Whitehand, 2019), the phenomenon is renewing, not least in Lisbon (Cabannes and Raposo, 2013; Delgado, 2017; Delgado, 2018; Dias, 2018; Marat-Mendes and Borges, 2019). Since cultivated species are mostly edibles, one wonders if informal agriculture spawns from the impact of the 2007 Financial Crisis on the food security of the urban poor (Delgado, 2017).

All these changes question the growing schism between urban and rural activities and territories. The rise in industrialization and urbanization seemed like a logical option for a country where the agrarian socio-metabolic regime (Krausmann *et al.*, 2016) lingered until the 1960s. However, sustainability forces us to reequate these developments. The food system allows us to link the food security of urban population and corresponding patterns of land-use. Cabannes and Raposo (2013) and Delgado (2018) observed that urban agriculture both formal and informal is important for self-consumption, particularly for impoverished communities within the LMA. However, Dias (2018) and Marat-Mendes *et al.* (2018) noticed that most municipal agriculture allotments are clearly meant for leisure purposes, with a particular emphasis on activities for the elderly with secondary productive value. Although recent Municipal Masterplans envision environmental strategies and emphasize the role of green areas, ethical and sustainable appreciation of plants within ecosystems as defended by Kopnina (2018) are generally lacking.

In the Chelas Valley, where the planned municipal horticultural park has failed to grow to its full potential, the lack of a clear strategy aimed at food security, productive land or ecosystem management is visible, especially when compared to the much larger guerrilla garden nearby. The latter seems more directly linked to the needs of local communities, not least because every aspect – from plot design to cultivated species – is ensured by farmers themselves away from top-down regulations. In Alto do Zambujal, where no municipal initiative exists, the guerrilla garden also shows tremendous initiative from local communities to vacant space in the neighbourhood. No less than expressing the will of farmers to improve their own food-security, this shows that local communities understand neighbourhood space as their own, a principle that was common to many social housing developments in the 1960s and 1970s (Borges, 2017; Borges and Marat-Mendes, 2019).

If guerrilla gardens constitute conscious use of public space, what ethical dimensions can be highlighted? As examples of ‘do-it-yourself’ attitudes, they represent a grassroots appropriation of vacant areas with tremendous sustainability potential – for soil and ecosystem maintenance, but also for recycling practices and increased food security.

However, it is important to stress that many of these urban farmers come from neglected communities, whose particularities seem to have fallen outside the reach of Portuguese public policies on housing. As confirmed by Nielsen (2004), the neoliberal paradigm that followed the collapse of Keynesian redistribution politics barely managed to ensure equity or opportunities for all – perhaps not even food for all.

Furthermore, what can we see in municipal attitudes? In Lisbon, whose Masterplan dates back to 2012, land is wholly classified as urban, and its system of green corridors does not have non-aedificandi status. In Chelas, the horticultural park has not grown, despite the existence of long waiting-lists in most municipal allotments surveyed by Dias (2018). As for the guerrilla garden, one may imagine that municipal intervention would eventually be unhelpful, since nothing indicates a commitment of the municipality to strengthen or protect its urban farms (Marat-Mendes *et al*, 2018). The case of Amadora is harder to assess, considering its conditions, but also its outdated Masterplan. There are no particular signs of interest for the green areas of Alto do Zambujal, although the municipality has recently created some horticultural parks in impoverished neighbourhoods like Falagueira. Yet, the lack of an updated Masterplan makes it difficult to understand whether this is included in a larger territorial or social strategy.

Conclusion

In 1943, Portuguese architect Francisco Keil do Amaral published a booklet with his notes from a trip to the Netherlands, where he went to survey local modern architecture. Among his descriptions of Dutch buildings and historical episodes, Amaral reflects upon the importance of architecture being assimilated by society and culture, inspired by an occasional conversation with two Dutch non-architects who advised him on buildings he should visit (Amaral, 1943, 32-34). This encounter with common citizens with informed opinions on architecture leads Amaral (1943, 35) to a very interesting definition of urbanism: *the science charged with the collective discipline of the interests and needs of urban settlements*. In treating the interests and needs of cities as a collective discipline, Amaral is definitely posing an ethical program for urbanism. The conversation with two informed citizens reveals to the architect that the city is not his concern alone, it is also the concern of inhabitants, who perceive space, and relate to it and may even transform it by themselves.

Such an ethical program for urbanism is not necessarily the same thing as identifying specific ethical inclinations within specific urban projects. Quite the contrary, it is a statement on the very nature of urbanism as a practice. If we accept Amaral's proposal, urbanism is always ethical, insofar as it designs and implements elements which will deeply impact people's lives. This can be interpreted as a challenge to rethink the actions and decisions of planning authorities and professionals.

In this context, municipalities could have an important role in shaping the future of the case-studies analysed here, particularly in the guerrilla gardens. This role could include improving informal gardens, contributing to education of farmers in sustainable agriculture and even creating strategies for professionalizing farmers, improving their financial and food security. However, Dias' (2018) research suggests there may be incompatibilities. Municipal allotments stick to limited morphological solutions – mostly rectangular grids – which does not happen in these guerrilla gardens, where plots are irregular in shape and size, prioritizing production needs instead of leisure opportunities. Thus, different designs show different understandings of the same phenomenon. Moreover, negotiations between needs of farmers for food and the municipal emphasis on leisure is not balanced, since farmers have no property rights over occupied land.

Indeed, Purdy (2015, 232-233) presents the ethical problems associated with the food movement – which must include urban agriculture – rather well: for him, it can either suggest an environmental ethic that melds its values to practices already in place, or it can suggest a new practice and identity, in which the relations of oneself with nature are redefined. In the surveyed case-studies, it would seem as though the latter has already come to pass. Sometimes without the encouragement or help of any municipal or public authority, communities have managed

to establish a new practice in the way they use public space, thus reshaping that space. However, if we assume these are practices already in existence, the question remains: will municipalities acknowledge them and seek to optimize them?

The ‘laissez-faire-laissez-passer’ attitude of municipalities (Cabannes and Raposo, 2013) poses more ethical challenges yet. Other than the lack of consideration for urban ecosystems in their real complexity, it may resemble a Victorian attitude in which the problems of the poor are of the poor themselves (Malpass, 2005). One must also remember that the surveyed neighbourhoods were planned as council housing, showing a State – first dictatorial and then democratic – which contributed directly to ensure quality urban space, including in residential schemes. In face of sustainability challenges, we must re-learn how to assess and conceive ‘quality’ urban space, which must necessarily encapsulate sustainability, but also validate forms of community appropriation of space if these represent an environmental improvement.

The food system and urban agriculture offer unique opportunities for observing urban planning decisions and attitudes ethically. In Chelas and Alto do Zambujal, large guerrilla gardens reveal a schism between priorities established by municipalities and by communities. This schism must also be understood by architects and urban designers, who must find creative ways to respond to societal demands. If Contal and Revedin (2011, 12) state that, being one of the oldest professions in the world, architecture is also one which regularly sells out to market forces, in the context of sustainable transitions, this must be understood as a challenge for architects and urbanists to redefine their priorities, also in ethical terms.

The interest clearly expressed by populations has not found echo in spatial planning and no legal framework concedes protection for informal gardens. Further study of the goals and needs of guerrilla gardeners in these areas is fundamental for any reassessment of the importance of their gardens, but this must also include a serious consideration on the positive impacts of agriculture on soils and its importance in counterbalancing urbanization and even the recycling of waste and materials.

These two case-studies are particularly suggestive when imagining a requalification, particularly considering their integration in urban plans of the 1960s and 1970s which deserve themselves further study. Interest in the work of architects like Silva Dias and Vítor Figueiredo has also increased recently (Ribeiro and Canelas, 2006; Maldonado and Borges, 2015). These two aspects suggest that both the green productive spaces and the built estates in these neighbourhoods can provide an integrated strategy for intervention in Chelas and in Alto do Zambujal. Such a change would have great potential, from an ethical and a sustainability point of view.

Finally, although ethical principles behind an urban or architectural design do not keep it from being used differently, specific uses do point out ethical rules. Even if these council housing neighbourhoods failed in some of their goals, their collectivist structures and their strong emphasis on public space may have played a role in creating communities capable of appropriating such spaces. Perhaps some ethical rules are indeed possible to express in urban or architectural forms, and if these can extend to the territory, including its ecosystems, they must certainly be studied and protected. Such an approach to urban planning, necessarily more inclusive, would help bring back more ethically-committed notions of urbanism, towards the ‘collective discipline’ identified by Amaral (1943), to which it is evermore pressing to return.

Acknowledgements

The authors would like to acknowledge the funding provided by Programme COMPETE2020 and FCT – Fundação para a Ciência e a Tecnologia, through the Grant POCI-01-0145-FEDER-016431 to support the present research.

References

- Amaral, F.K., 1943, *A moderna arquitectura holandesa* (Lisbon: Seara Nova).
- Bandeirinha, J.A., 2007, *O Processo SAAL e a Arquitectura no 25 de Abril de 1974* (Coimbra: Imprensa da Universidade de Coimbra).
- Banham, R., 1976, *Megastructure: Urban Future of the Recent Past* (New York: Harper and Row).
- Barthel, S., Isendahl, C., 2012, Urban gardens, agriculture, and water management: sources of resilience for long-term food security in cities. *Ecological Economics*, 86(C), pp. 224-234.
- Blackburn, S., 2001, *Ethics – a very short introduction* (Oxford, UK: Oxford University Press.)
- Borges, J.C., 2017, *The dissolution of the modern complex*. Unpublished MSc Dissertation, ISCTE, Lisbon.
- Borges, J.C. and Marat-Mendes, T., 2019, Walking on streets-in-the-sky – structures for democratic cities. *Journal of Aesthetics and Culture*, 11(1), doi - 10.1080/20004214.2019.1596520.
- Cabannes, Y., and Raposo, I., 2013, Peri-urban agriculture, social inclusion of migrant population and Right to the City - Practices in Lisbon and London. *City*, 17 (29): 235–250.
- Christensen, A.-M., 2004, Wittgenstein and ethical norms – the question of ineffability visited and revisited. *Ethic@*, 3(2), 121-134.
- Contal, M.-H., Revedin, J., 2011, *Sustainable design II* (Paris: Actes Sud).
- Delgado, C., 2017, Mapping urban agriculture in Portugal – lessons from practice and their relevance for European post-crisis contexts. *Moravian Geographical Reports*, 25(3), pp. 139-153.
- Delgado, C., 2018, Contrasting practices and perceptions of urban agriculture in Portugal. *International Journal of Urban Sustainable Development*, 10 (2), 170-185.
- Dias, A. M., 2018, The shape of food – an analysis of urban agricultural shapes in Lisbon’s Greater Area. Unpublished MSc Thesis, Instituto Universitário de Lisboa – ISCTE, Portugal.
- DGAGRI. 2003. Agricultural Situation in Portugal. Working document – European Commission, Agricultural Directorate-General. Date of access – 29-05-2019.
https://ec.europa.eu/agriculture/publi/reports/portugal/workdoc_en.pdf
- Drago, A., 2017, Is This What The Democratic City Looks Like? Local Democracy, Housing Rights and Homeownership in the Portuguese Context. *International Journal of Urban and Regional Research*, 41(3), 426-442.
- Faraud, C., 2017, Urban metabolism in practice. Working Paper. University College London, handle - <https://www.ucl.ac.uk/bartlett/development/sites/bartlett/files/wp186.pdf> (accessed 22-01-2019).
- Fischer-Kowalski, M. and Weisz, H., 2016, The Archipelago of Social Ecology and the Island of the Vienna School. In: *Social Ecology*, edited by H. Haberl, M. Fischer-Kowalski, F. Krausmann, V. Winiwarter. (Switzerland: Springer), pp.3-28.
- Gandy, M., 2014, *The fabric of space* (Massachusetts: MIT Press).
- Gonçalves, J.M., Carvalho, L.S., Santos, J.R., 2016. A cidade entre edifícios. Reflexão sobre meio século de mudanças num conjunto habitacional modernista. Handle - <https://www.researchgate.net/publication/310321346>.
- GTH – Gabinete Técnico de Habitação, 1966, *Plano de Urbanização de Chelas*. (Lisbon: GTH.).
- Hatherley, O., 2010, *A guide to the new ruins of Great Britain* (London: Verso).
- Heitor, T.V., 2001. *A vulnerabilidade do espaço em Chelas* (Lisbon: Gulbenkian).
- Ibañez, D. and Katsikis, N. (eds.), 2014, Grounding metabolism. *New Geographies*, 6, 2-9.
- Kopnina, H., 2018, Plastic flowers and mowed lawns – the exploration of everyday unsustainability. *Journal of Urbanism*. doi: 10.1080/17549175.2018.1527780.
- 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 (2), 157-163.
- Maldonado, V. and Borges, P.N. (eds), 2015, *Vitor Figueiredo – Projectos e obras de habitação social 1960-1979*. (Porto: Circo de Ideias.)

- Malpass, P., 2005, *Housing & the Welfare State: The Development of Housing Policy in Britain*. (London, UK: MacMillan.)
- Marat-Mendes, T., Borges, J.C., Dias, A.M., Lopes, R., 2018, Food system and Spatial Municipal Planning - analysis of its integration in the 18 municipalities of the Lisbon Metropolitan Area'. Presented at *Dinâmicas socioeconómicas e territoriais contemporâneas IV* - ISCTE, Lisbon, December 17th.
- Marat-Mendes, T. and Borges, J.C., 2019, Mapping sustainability transitions in contemporary culture. Presented at *Global Forum of Intellectual Capital*, ISCTE, Lisbon, May 20th.
- Mourão, J., and Marat-Mendes, T., 2016, Urban planning and territorial management in Portugal – Antecedents and impacts of the 2008 financial and economic crisis. In: *Cities in Crisis*, edited by J. Knieling, F. Othengraffen. (London: Routledge), pp. 157-171.
- Napawan, N.C., 2016, Complexity in urban agriculture – the role of landscape typologies in promoting urban agriculture's growth. *Journal of Urbanism*, 9 (1), 19-38.
- Nielsen, T., 2004, Ethics, aesthetics and contemporary urbanism. *Nordisk Arkitekturforskning*, 2, 23-46.
- Oliveira, R. and Morgado, M.J., 2016, Planning the Urban Food System of the Metropolitan Área of Lisbon. A conceptual framework. In: *Agriculture in an Urbanizing Society: Proceedings of the Sixth AESOP Conference on Sustainable Food Planning*, edited by R. Roggema (Leeuwarden. Newcastle: Cambridge Scholars), pp.7-29.
- Oliveira, V., 2016, *Urban morphology*. (Switzerland: Springer.)
- Parham, S., 2015, *Food and urbanism – the convivial city and a sustainable future*. (London: Bloomsbury.)
- Purcell, M., and Tyman, S., 2015, Cultivating food as a right to the city. *Local Environment*, 20 (10), 1132-1147.
- Purdy, J., 2015, *After nature – A politics for the Anthropocene* (Cambridge, Massachusetts: Harvard University Press).
- Ribeiro, A.I., Canelas, A., 2006, *Cinquenta anos de Arquitectura e Urbanismo em Portugal através da obra de Francisco Silva Dias* (Almada: Casa da Cerca).
- Reynolds, Richard. 2016. *On Guerrilla Gardening - A Handbook for Gardening Without Boundaries*. (London: Bloomsbury.)
- Risselada, M., Van Den Heuvel, D., 2005, *Team 10 – In search of a utopia of the present* (Rotterdam: NAI).
- Sagan, C. 2019., Ending the Anthropocene. Accessed 21-05-2019. <https://www.publicbooks.org/ending-the-anthropocene/> .
- Scoffham, E., Marat-Mendes, T., 2000. The 'ground rules' of sustainable urban form. In *Achieving Sustainable Urban Form*, edited by Williams, K., Burton, E., and Jenks M., (London, UK.: E&FNSpon), pp.97-104.
- United Nations (UN). 1987. Our common future. Accessed 21-05-2019. <http://www.un-documents.net/our-common-future.pdf> .
- Vijoen, A., Bohn, K. Howe, J. (eds), 2005, *Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities*. (Amsterdam: Architectural Press.)
- Weaver, C., 1983, *Regional development and the local community* (New York: Wiley).
- Wekerle, G.R. and Classens, M., 2015, Food production in the city: (re)negotiating land, food and property. *Local Environment*, 20 (10), 1175-1193.
- Whitehand, J.W., 2019, Green space in urban morphology – a historico-geographical approach. *Urban Morphology*, 23(1), 5-17.
- Wittgenstein, L., 1965, A Lecture on Ethics. *The Philosophical Review* 74.