HISTORICAL PERSPECTIVES ON THE TIES BETWEEN CITIES AND FOOD

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Old postcard showing La Villette market in Paris

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The 20th century marked a step change in how cities think of their food supply. In the preindustrial world, where cities grew organically, urban layouts were heavily shaped by food, as witnessed by the city center locations of sites such as markets and slaughterhouses. Hygiene policies and then the imperatives of food security in an urbanized world, gradually pushed food and farming out of the city entirely, engendering a progressive distancing between cities and their food. This distancing encompasses many forms, at once geographical, economic, cognitive and political. Some cities, such as Toronto, Canada and Belo Horizonte, Brazil have pioneered incremental reappropriation of food policies by a variety of urban actors. The revival of urban food policies extends well beyond questions of urban agriculture and food production. However, urban agriculture does have a role to play in this respect. The challenge is less about feeding cities – it is a form of farming with a limited production potential – than about reintroducing nature and agriculture into the heart of the city, while simultaneously rebuilding social ties. The symbolic dimension should not be underestimated.

INTRODUCTION

Cities were closely linked to their food until the advent of the Industrial Revolution in the 19th century. Town centers were laid out to enable close access to locations judged to be of strategic importance: buildings symbolizing political, legal and religious power, but also markets. The market, just like the slaughterhouse, made visible to townsfolk the processes by which supplies from farming were turned into food. In this model of the "organic city" (Steel, 2008), town centers were literally shaped by food. Conversely, globalization and the rise of global cities around the turn of the 20th century had the effect of distancing cities not only from their national economy but also from the local embeddedness, incrementally weakening the ties between the city and its food. Recent environmental, social and health crises, and the emergence of the city as the primary force of the 21st century, have gradually made it possible to reintegrate the question of food, long abandoned by urban policymakers, into the agenda for public policymaking in cities. In this new era, the capacity of urban agriculture to speed up a revitalization of the ties between cities and food is a question that needs raising.

DISTANCING THE CITY FROM ITS FOOD

LIMITS OF THE INDUSTRIALIZED FOOD SYSTEM

A series of technical and scientific advances that began in the late 19th century have revolutionized and industrialized traditional farming, leading it into the era of modernity, such as the use of extracted resources (first coal then oil), mechanization, and the development of pesticides and herbicides. The discovery of the Haber-Bosch process, named after two German chemists, which makes it possible to fix atmospheric nitrogen to produce nitrate fertilizers for use in agriculture, paved the way to higher yields while ending the reliance on natural fertilizers and recycled manure. The rise of this system of modern agriculture was a response to the overarching necessity of feeding an ever-growing population in the aftermath of the Second World War. In France, an integrated system was put in place to meet this demand, including banks, insurers and research and teaching bodies all dedicated specifically to the farming sector. Creating this system proved to be a success: yields rose, food was abundant and safe from a public health standpoint, and so on. Some business activities formerly exercised in towns and cities, such as slaughterhouses, moved to the outskirts in parallel with a policy drive to align the urban environment with the precepts of hygiene. This process of relocation helped to increase the distance between towns and food, as did planners' increasing lack of concern for food-related issues.

And yet, for close on 50 years the agro-industrial system has been showing its limits and is the target of increasing criticism for economic, social, environmental and health reasons.

- **From the economic and social standpoint**, the question of how to share the value added among the various actors in agro-alimentary chains is debated increasingly heatedly. As regions have become ultra-specialized, the vast majority of value added is now divided among dominant actors (seed companies, agri-food businesses and supermarket operators), to the detriment of producers. Furthermore, over-production leads to large-scale wastage and foods losing their value at a time when food insecurity is on the rise.

- **From the environmental and health standpoint**, the conventional agricultural model has also proven to have limits and negative consequences. Agriculture is one of the major greenhouse-gas-emitting industries contributing to the climate emergency. The use of synthetic products combined with intensive growing methods and limited crop rotation leads to soil pollution and impoverishment, lower
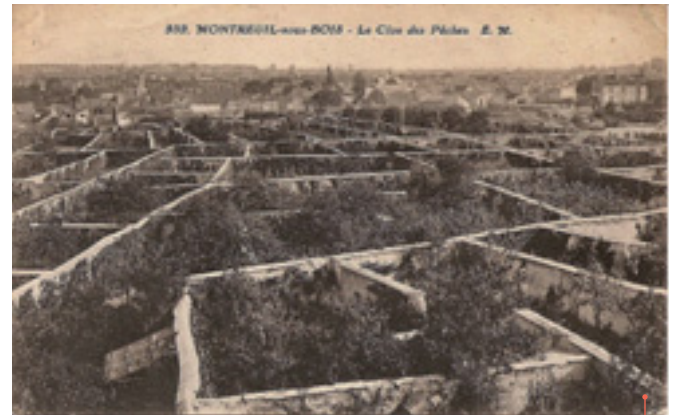
Old postcard showing Montreuil, near Paris

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biodiversity and, inexorably, to yields that are flatlining. And the sheer abundance of food, the massive use of fats, sugars, salt and chemical additives to provide texture, flavor and conservation in processed foods, leads to people becoming overweight or obese, which are risk factors for pathologies such as cardiovascular diseases and some cancers.

MANY FORMS OF DISTANCING

The distancing between cities and their food is at once geographical, economic, cognitive, social and political.

- **Geographical distancing**: urban sprawl and lower transportation costs using fossil fuels lead cities to seek supplies from sources at ever greater distances.

- **Economic distancing**: arises due to the multiplicity of intermediaries between agricultural producers and consumers to transport, process, store and distribute food.

- **Cognitive distancing**: there are very few contacts between urbanites and the rural world. Knowledge of the agricultural and food industries is mediated exclusively through science and the media. Some urbanites are unable to identify many types of fruits or vegetables, let alone describe how they are grown. This lack of knowledge can create a degree of anxiety in the minds of people who eat food about which they know nothing in terms of how it was grown and processed.

- **Social distancing:** the individualization of food behaviors at the expense of commensality erodes the social norms that made food something everybody took for granted. Each individual is now responsible for their own food choices and has to define, in the face of incessant pressure, what is and is not good to eat.

- **Political distancing**: people's control over their food system is reduced to choosing what to buy, and where. They feel stripped of their ability to influence the system, powerless in the face of special interest lobbies.

Supermarkets are in many ways a symbol of these forms of distancing: the foods displayed on the shelves are packaged in ways that suit the retailer, rendering the work put in by the producers invisible to consumers.

But the situation can be qualified in two ways. First, markets remain one of the rare places where city and food come together, and markets continue to have a place in the urban fabric. Second, this distancing is not taking place at the same speed in every part of the world. There remain many cities, particularly in developing economies, where the boundaries between urban and rural, producer and consumer, are far more porous. In many African and Asian cities, people grow food or raise animals, grind seeds, grate manioc, dry foods; street-sellers cook in front of their customers; urbanites retain links with their home villages, and so on.

TOWARD A NEW BALANCE BETWEEN CITIES AND FOOD

CITIES, CRITICAL ACTORS FOR THE 21ST CENTURY

While the 20th century was that of the nation state, the 21st may well be the century of the city. Firstly, in a purely structural sense, since over 50% of the world's population already lives in towns and cities; there are now 4.2 billion urbanites compared to 751 million in 1950 (when 30% of the population was urban). In 2050, almost two-thirds of the world's population will be living in cities, a total of 6.7 billion people. Africa and Asia, continents that are today predominantly rural, will account for 90% of urban growth. In these two continents there are three countries where the pace of change really stands out: China, India and Nigeria will together account for 40% of urban growth in the years leading up to 2050.

The rapid growth in the extent of built-up areas poses major challenges to cities in terms of housing, infrastructure, transportation, energy, employment, health and education. As places where human activities are concentrated, cities also accumulate factors that fly in the face of sustainability. For example, cities produce 70% of greenhouse gas emissions. But for the past two decades or so, cities have emerged as key actors across their territories by reclaiming social, political and economic power in the face of gradual disengagement on the part of states. Cities are also in the frontline in the quest for responses to contemporary environmental challenges. Ever since the 1992 United Nations Earth Summit in Rio de Janeiro, more and more Agenda 21-related initiatives are being rolled out by municipalities of all sizes. Networks that have been established to help deal with the climate emergency include Metropolis (139 cities), the International Council for Local Environmental Initiatives (over 1,500 local government authorities) and the C40 Cities Climate Leadership Group (94 cities). At the end of 2018, the combined efforts of 27 city-members delivered a 10% fall in greenhouse gas emissions compared to the peak recorded five years previously. In addition, almost 1,000 cities from all over the world belong to a network of transition towns, helping them to design resilience strategies to cope with this major risk and reduce our collective oil dependency. These networks facilitate exchanges of best practices and promote collaborations, including with the private sector. They also comprise a political force able to influence national and international policymaking.

These resolute commitments to ushering in greater sustainability are gradually leading cities to look at the food implications too and rethink their policies in this area, encouraged by the Milan Urban Food Policy Pact. The 180 cities that are signatories to the Pact are all committed to fostering the development of sustainable food systems.

THE REVIVAL OF URBAN FOOD POLICIES

Cities' responses to the ever-greater distancing in their relationships to food involve myriad initiatives that aim to relocate food to urban centers or nearby. Cities have considerable assets and resources at their disposal when it comes to managing food questions. They produce biomass on a daily basis that, if properly recovered and processed, can become a source of fertilizer for farmers. They are places with great concentrations of knowledge (research centers, universities, etc.), infrastructure and decision-making centers, meaning that they also have the wealth needed to roll out innovative urban food strategies. For some 20 years, an ever-growing number of cities have been developing their own food policies that take account of a range of different dimensions, from production to processing, and including distribution, consumption and waste management. There is an array of levers available to them as they seek to foster relocalization: catering services, particularly school kitchens (for example by including clauses that place certain obligations on suppliers); land-use management (for example protecting productive spaces); setting up farmers' markets; etc.

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Some cities have pioneered this drive to reconnect with their food. One such is Toronto, Canada, which has been trialing innovative urban food policies since the early 1990s, setting up the Toronto Food Policy Council to represent views from all areas of the food sector. North America is one of those regions where distancing of ties between the city and its food is pushed to extremes. In Toronto, setting up the Food Policy Council led to the expansion of community gardens on vacant lots in districts that had been identified as food deserts. Today, over 300 North American cities have a Food Policy Council.

Belo Horizonte, Brazil's third city and the capital of Mina Gerais state, has also been extremely proactive in terms of its food policy (Rocha, 2001). In 1993, Brazil was still classified as a developing country. Poverty was persistent: 38% of the local population lived beneath the poverty line and large numbers of people were going hungry, with 20% of children under three suffering from malnutrition. Two municipal bodies dedicated to food security were set up during the 1990s: the Municipal Supply Secretariat (SMAB) and the Municipal Council for Food Security and Nutrition (COMUSAN). SMAB quickly became a crucial component of municipal food policy. As of 1995, it operated on a US$17.8 million budget, 46% from the federal government, 45% from the municipality and 9% generated by its programs. The aim was to supply the city with healthy farm produce in a win-win relationship. On the one hand, the city's poor gained access to good quality food. On the other hand, rural and peri-urban farmers, who struggled to find buyers for their produce, had access to a larger market. A number of initiatives were put in place: support for low-priced restaurants, setting up a food bank, imposition of a quota for local products in school kitchens, etc. The initiative proved to be effective and met with real success as it played a role in embedding the issue of food security into Brazilian policymaking at the national level. In 2003, when president Luiz Inacio Lula da Silva took office, he was inspired by this example to instruct his government to set up a national hunger eradication policy called *Fome Zero* (Zero Hunger).

Cities are incrementally reappropriating their food. Having been pushed out beyond the city boundaries, agriculture too is returning to urban spaces in the form of urban agriculture.

WHAT PLACE DOES URBAN AGRICULTURE HAVE IN PROVIDING FOOD FOR CITIES?

LIMITED POTENTIAL IN TERMS OF FOOD SECURITY

The years either side of the turn of the new millennium saw a sharp uptick in urban agriculture projects, created by actors with a wide range of backgrounds: residents' collectives, nonprofits, local government authorities as well as private businesses. Despite the wide range of sometimes divergent objectives, relocalizing food production inside urban spaces forms part of a wider move by cities to reconquer the food system.

But urban agriculture cannot really pretend to offer a pathway toward food independence for cities. Plots of city land devoted to growing crops in cities are tiny in comparison to current production and food needs. And

Logo of the Toronto Food Policy Council - ©Neglia Design

Fruit market in Cuba

since urban agriculture is unable to meet all food needs, it is important to keep the phenomenon in proportion. Even if peri-urban agriculture is included in the overall result, market gardening still prevails even though it represents a very small portion of our daily diet. For example, cereals and oilseeds are almost never grown in cities.

Havana is one of the rare cities to have developed an urban agriculture model that is focused on food self-sufficiency. After the collapse of the communist bloc in the early 1990s, Cuba was suffering from a severe economic crisis. Due to the U.S. economic blockade of the island, imports, food in particular, were under threat at a time when the country was experiencing a massive rural exodus. Against this backdrop, the authorities decided to revise the food production system with the primary aim of being able to keep the capital supplied with food. Vacant open areas in Havana were transformed into kitchen gardens.

This unique program is an outlier – very few other urban agriculture projects are in any sense productivist. The pitfall with relocalization of food policies occurs if they are presented as being a way of fundamentally calling into question the industrial agri-food system, whereas they are primarily simply a change of scale (Born & Purcell, 2006). Relocalizing is not necessarily about challenging the current system or making it

any more sustainable. Urban agriculture, even in its most extreme forms, cannot suffice to deliver a comprehensive response to all the challenges and limits of the conventional agricultural system. Fundamentally, urban agriculture has aims other than food security, including social cohesion, education, absorbing rainwater to avoid flooding, and district cooling.

DEEPLY SYMBOLIC AND A POTENTIAL FOR INNOVATION

Urban agriculture embodies a very powerful symbolism. It heralds a progressive return to the "organic city" by bringing urban centers closer to their food and promoting the protection of productive spaces within the city. It also argues in favor of changes to how cities are laid out, promoting methods that are more in harmony with the natural environment. This role is both ecological and educational. Agriculture in urban settings is generally focused on reinforcing community ties and social cohesion by reaching out to include disadvantaged people, training people who are alienated from the job market and helping to foster inter-generational ties. This symbolical power should not be underestimated, as it plays a very important role in promoting the spread of innovative urban food policies.

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Urban agriculture on the outskirts of Havana - ©Arnoud Joris Maaswinkel

Urban agriculture is also a valuable driver for innovation. For example, it can change people's perceptions of the role of the farmer. Traditionally something passed from father to son and agriculture is currently struggling to attract newcomers to the profession. Urban agriculture offers a chance for new types of farmers to emerge from a wide variety of backgrounds. They do not always intend to become life-long farmers. They may turn to this activity for a few years, as just one project or one more experience among life's many. Even if the image of the profession that they convey, albeit involuntary at times, can attract criticism from traditional farmers for a number of reasons, at the very least it helps to alter public perceptions of farmers and to rebuild bridges between the urban and rural worlds.

CONCLUSION

Never before has the planet produced so much food per head of population. Famines are almost a thing of the past and today's food crises mostly result from conflicts or disasters. And yet the agricultural model that has made this possible is widely criticized. At the other end of the chain, food is cheaper, more varied and of better quality. But people are increasingly perplexed and uneasy about their food, leading them to seek new relationships and to retake control of their food system.

City food policies set out to provide answers to these challenges. They build on civil society initiatives that allow them to experiment with alternatives, encouraging new ways of producing, distributing and consuming. Urban agriculture is part of this movement. It explores one way to reconcile city with agriculture that 20th-century modernity has scrupulously separated and specialized. It is inventing what may emerge as a third space, a new "rurbanity" where rural and urban combine and complement one another. This new arrangement is not only spatial. It is also social and economic, a mix of primary, secondary and tertiary activities because this form of "rurbanity" does not only aim at producing food. It also produces services to the environment and models of living things and systems, raising in turn the question of how these should be paid for. Can they be left for the market to regulate?

What is happening here is the invention of another form of "development", where agriculture and food can no longer be reduced to simply producing and consuming nutrients. How food is produced, traded and consumed is as important as what is produced, traded and consumed. For it is this "how" that defines our relationship with the world, our environment and other living things.

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