

Connective storylines: a relational approach to initiatives in food provisioning and green infrastructures

Jongerden, J.^{1*}, Swagemakers, P.², Barthel, S.³

¹ Rural Sociology Group, Department of Social Sciences, Wageningen University, Hollandseweg 1, 6706 KN Wageningen, the Netherlands

² Grupo de Investigación de Agroecología y Agricultura Ecológica (GIEEA, Research Group in Ecological Economics and Agroecology), Faculty of Economic & Business Sciences, University of Vigo, Lagoas-Marcosende, 36310 Vigo, Spain

³ Stockholm Resilience Centre / Department of History, Stockholm University, SE-10691 Stockholm, Sweden

*Corresponding author: Joost.Jongerden@wur.nl

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Abstract

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Debates about the design and management of ecosystem services and interweaving of rural and urban spaces in metropolitan regions raise questions about how to conceptualize “*the local*”. Rather than presupposing spatial settings or identities as rural-urban or local-global, attention here shifts to the immediacy of connections and relations. Conceptualized in terms of activity space, this paper presents a relational analysis and a practice oriented approach. To illustrate the approach, we overview three case studies in food provisioning and show how an analysis in terms of a set of spatially organized activities can generate new insights.

Keywords: Activity space; food production; ecosystem services; relational spatial analysis

1. Introduction

In recent years, the interweaving of densely populated urban centers and green open spaces has been used to conceptualize the emergence of a new spatial identity: the city-region or metropolitan region (van der Schans and Wiskerke, 2012; Viljoen and Wiskerke, 2012). This idea of interweaving is partly driven by a growing attention to the relations between urban consumers and the spaces and landscapes where food is produced, and in which fresh produce is discussed as one of many ecosystem services of relevance for human wellbeing in cities (Barthel *et al.*, 2013).

The service of food provisioning, the main focus here, directs attention not only to the various ways in which urban consumers and rural producers and the spaces they develop are connected, but also to the provisioning of food from within cities themselves (urban agriculture, gardening). It quickly becomes apparent that the various forms of interweaving challenge common sense

understandings of urban and rural spatial identities and their assumed conceptualization as opposing categories. Instead of prioritizing the urban or the rural in thinking about food provisioning, this invites us to move towards a decentering of the city and the village, and directs attention to the detail of the various ways in which the two are *related and produce each other*, the particular ways in which relations are forged and resources and services tied together (Berger and Luckmann, 1967; Giddens, 1984; Massey, 1994; 2004). We could also take this a step further, and distinguish urbanization from the city.

Urbanization does not (only) create cities, but also transforms both city and countryside. The city, once whole and solid, has become fragmented and slippery, and villages become moments of neo-industrial production, service, and speculation. As Merrifield (2011) argues “the urbanization of the world is a kind of exteriorization of the inside as well as interiorization of the outside: the urban unfolds into the countryside just as the countryside

folds back into the city.” It is not only the urban of abstract processes and world markets that is shaping this process, however, since there is also another urban of encounter and embedment; that in which relations are *not* determined by commodification and financialization, in which the economy of exchange gives way to a new *moral economy* (van der Ploeg, 2008, van der Ploeg *et al.*, 2012; Öztürk *et al.*, 2014). When we talk about urban green infrastructures in this paper, therefore, we do not restrict ourselves to the city alone, but include also the rural and consider the various processes that shape and relate the rural and the urban.

Inspired by the work of Doreen Massey, this paper presents a relational spatial analysis, that is, an analysis of a spatial network of links and activities, of spatial locations and connections based on Massey’s concept of *activity space*. Massey defines activity space as “the spatial network of links and activities, of spatial connections and of locations, within which a particular agent operates” (Massey, 1995). Activity space is not a precise theoretical concept—there are no rules about where to draw the boundaries of any single space, or even how to define one as such; rather, it is a heuristic device. It is a useful tool “to help us into a particular way of thinking about the spatial organization of society” (Ibid). The concept of activity space sensitizes us to look carefully to the spatial organization of activities, instead of presupposing them by adding adjectives like “rural” and “urban” or “local” and “global.”

Therefore, we first further deepen a theoretical and methodological understanding of such a relational approach (Harvey, 1996; Soja, 1989; Amin, 2004; Hue, 2010) with the aim of providing an understanding of the *dynamics* of supporting, provisioning, regulating, and socio-cultural services, and, more generally, developing a *progressive understanding* of new forms of food provisioning services. Such a progressive approach does not celebrate the “local” in contradistinction to the world “outside,” but rather proposes an analysis of the local in terms of *connectivity*. In addition, the concept of activity space sensitizes us to the idea that space and place are *not external* to us, but *created in our practices*. After all, it is difficult to conceive of social activities that are not spatial or spatial activities that are not social. In the concept of activity space, social activity or practices and spatiality merge together, and the relevant question to be asked is that of how spatiality or spatial organization is related to which practices. A comparative case-study approach such as employed in this paper demonstrates this relational perspective. By means of conclusion the paper comprises a discussion and some theoretical remarks on the re-

conceptualization and emergence of a new spatial identity: the city-region.

2. Spatial setting

In our approach to the study of food provisioning and green infrastructures, we take the local as a starting point of analysis. It is important to outline from the beginning how we define the local. Though locality is a product of social relations, we do not follow the line of those (Koolhaas and Mau, 1995; Escobar, 2001; De Cauter, 2004; Auge, 2008) who argue that globalization is rendering places empty. Following Massey (2004) we uphold that

“if we take seriously the relational construction of space and place, if we take seriously the locally grounded nature even of the global, and take seriously indeed that oft-repeated mantra that the local and the global are mutually constituted, then there is another way of approaching this issue. For in this imagination 'places' are criss-crossings in the wider power-geometries which constitute both themselves and 'the global'. In this view, local places are not simply always the victims of the global; nor are they always politically defensible redoubts against the global. For places are also the moments through which the global is constituted, invented, coordinated, produced. They are 'agents' in globalisation.”

In Massey’s approach, these “agents in globalization” imply the construction of relations, the making of connections “beyond” the local. In this paper we will show how local actors actively construct their places and relations with the world “outside.” This means that different “collaborative” positions, their “contestation,” and “negotiation” become central to an analysis of food provisioning and green infrastructures (Mahon, 2007; Mahon *et al.*, 2012).

Following the centrality of relations, the challenge is to develop (positive, creative, visionary) governance strategies centered on the *inclusion of the lived experience of daily life* and the *struggle for its emancipation*. It has been argued that people or groups politicizing class, gender, environment or food, or in other words struggling for control over labor, markets and resources, “are usually much better and empowering in their strategies to organize in place, but often disempowered and fragmented when it comes to building alliances and organizing collaboration over space” (Harvey and Swyngedouw, quoted in Gibson-Graham, 2002). This observation is important in the sense that it not only turns attention to those relations “close by” and those which are stretched out, but also indicates

strengths and weaknesses in dealing with these relations and challenges researcher to look beyond “locality.” So, when we discuss the notion of the city-region or the metropolitan area, this is more than just a practical setting for analysis, since it is also a hook on which to pin our understanding of how constructions of socio-spatial relations occur and the problems that are encountered in these constructions (see also Wiskerke, 2009; Roep and Wiskerke, 2012).

Contrary to the idea that we have entered an era of “placelessness” (Auge, 2008), also dubbed “flatscape” (Relph, 1976), globalization does not deny a politics of place, but refashions it, and the globalization of social relations becomes another source in the production of places (Massey, 1994). Critiquing the idea that place has become irrelevant, Massey proposes a “relational conceptualization of place,” in which we have to bear in mind the following issues:

- First, place is a process, an intersection, which can be conceptualized in terms of what is tied together and how. This means that places, or physical objects, do not have objective characteristics, but are “the embodiment in physical form of all the actions everyone took to bring it into being” (Becker 1998), and indifferently so, regardless of whether we talk about a city or village or territory or land. (This is, of course, essentially a sociological conceptualization, within which is subsumed the complexity of political and economic and artistic and cultural and other material and immaterial realities.)
- Second, “places do not have boundaries in the sense of divisions which frame simple enclosures” (Massey, 1994). Boundaries may be necessary, in order to apply laws and collect taxes, for example, or for the purposes of study, but they are not essential for a definition of place as such. Fundamentally, our understanding of place should not be based on a counter-positioning to the outside world, based on a distinction between inner- and outer-worlds, but rather as an approach to place through the particular linkages and relations that stretch out from concentrations of interconnections. (The distinction may be imagined in terms of the difference between a map showing entities and one that shows connections.)
- Third, places are marked by different and often-conflicting identities, or conflicts and claims over what the identity is. Relatedly, places can be unique (for some people at a particular moment in time),

but this uniqueness does not arise from an internalized history, but social practices and wider social relations, which constitute places as unique for people. (Thus places may be denied, contested, mobilized, shifted, synthesized, integrated, and in any other way made and unmade and [re]fashioned alone or in combinations.)

The process character, the focus on linkages, and analysis of uniqueness as practice, challenges conventional understandings that presuppose rural or urban, local or global identities and settings. Discussing the characteristic of urbanization in Africa, for example, Geschiere and Gugler (1998) provide a nice example of what a relational approach to place may make visible when they show the open character of the city through the continuing commitment of urbanites to the village. Life in the cities can hardly be understood without taking into account relations with the village, and vice versa. The relations between urbanites and their place of origin play a role in, for instance, “the emergence of new entrepreneurial groups and the forging of new commercial networks.” More generally, the “urban-rural connection marks the specific trajectories of political, economic, and social changes in different regions: the struggle over resources, but also the varying coherence of kinship networks and the ways in which ethnicity is organized on the ground” (Geschiere and Gugler, 1998). The village (hometown), they argue, is a self-evident point of identification for many urbanites.

Similarly, in their work on the peasantry in Turkey, Öztürk, Hilton, and Jongerden (2014) also refer to the strong relations between city and village. Increasingly, they argue, not only are people/households spending their time split between two or three places of residence located in both rural and urban settings, but also in ways oriented towards living structures that include multiple residences, urban and rural: “Today, in Turkey, we see not only the post modernizing movements of urbanites between the city, gated communities in the rural suburbs, and fair-weather villages near the sea or in the hills, but also those who integrate a wide variety of other hybrid residence/employment combinations, including urban settlement with rural farming and family farm residence with urban employment, as well as those migrating between poor villages and rundown urban areas for reasons of subsistence” (Öztürk *et al.*, 2014). This challenges to go beyond the rural/urban binary with a dialectic implied by extended, hybrid “dual-settlement” and “multiplace living structures” (referring generally to practices and spaces). Such relations between city and villages hold other parts of Europe, and

elsewhere in the world, in varying combinations of (urban and rural) spatial settings.

3. Methodology

For the remainder of this contribution, we will try to think of food production from such a relational perspective, looking at food provisioning with the concept of activity space as a useful tool with which to employ a relational- and practice-based approach. In other words, if a relational approach suggests that we might understand places also in terms of social relations and connections, the concept of activity space is one conceptual tool for doing that.

Taking into account Born and Purcell's (2006) warning about the over-idealization of the "local," this article provides a conceptual framework for the identification, interpretation, and further construction of regional food provision and its accompanying cultural and regulatory ecosystem services. Such a framework serves as a heuristic device in which food provisioning practices are considered as *assemblages* of spatial practices that are characterized by short or longer chains and go beyond the local-global duality.

Approached through the lens of activity space, a focus on new social movements and initiatives demands that we refrain from labeling these "local." The activity space tool may very well highlight how some of the relations used as markers for these initiatives, such as short chains or sequentially direct (little mediated) connections between producers and consumers, are, indeed, organized in a physically short spatial range; but it may also show others, such as the provisioning of seeds and the mobilization of knowledge, that are not. Certainly, informed by and taking their place in global trends—an alternative globalization, as it were—many of these food-movements are also oriented to the wider world outside when it comes to the politics of food production (Barthel *et al.*, 2013).

The mapping of an activity space can also be useful in the identification of weaknesses, strengths, opportunities, and threats, related, for example, to whom to connect and where, or linkages to be shortened or extended. Case study research (Yin, 2003) on the daily life and activities of citizens illustrates and improves a progressive understanding in terms of a politics of connectivity to others and elsewhere: it provides context-dependent knowledge (Campbell, 1975; Flyvbjerg, 2006) that generates detailed insights about what is happening in the specific situation studied (Stake, 2000). The data on the case studies presented in this paper stem from both primary and secondary sources, mainly interviews and observation complimented by desktop-study, and were collected in the context of previous research

projects (see Jongerden and Ruivenkamp, 1994; Barthel *et al.*, 2010; Montari and de Roest, 2013; Swagemakers *et al.*, 2014); this article reformulates, reinterprets, and reframes the characteristics and dynamics of these case studies through the concept of activity space.

4. Activity space: three cases

Discussing three case studies in food provisioning—farmers' initiatives in the Netherlands and Italy and allotment gardens in Sweden—we here use the concept of activity space to show how these local initiatives are also about a "politics on wider global mechanisms" (Massey, 2004) and, moreover, about a refashioning of the connection between consumers and producers, and the spaces of consumption and production.

4.1 Allotment Gardens in Sweden

Urban gardening movements are currently blossoming on a grand scale and creating activity spaces in metropolitan landscapes worldwide (Bendt *et al.*, 2013). People are gardening in different ways in many kinds of urban green areas. In Europe alone, there are several million allotment/community gardens. In addition to spatially oriented issues of environmental design and city planning, these movements raise broader socioeconomic and political questions about the food strategies of cities, about how to navigate power-scapes, and about how individuals and collectives might become engaged (Barthel *et al.*, 2013).

Urban gardens and agricultures in themselves are not new phenomena, of course, having for several millennia constituted an integral part of the human agglomerations we today recognize as distinctly "urban" (Barthel and Isendahl, 2013). From this historical perspective, allotment gardening—the allocation of a carefully delimited piece of urban land with individual/family management rights for cultivation—is quite a modern feature, originating in Germany and Britain during the early 1800s (although allotments are shown circling the town/city on an engraved map of Birmingham, England from as early as 1732). Only at the beginning of the twentieth century did analogous gardens develop in Stockholm. As was the case in other parts of Europe, a small group of activists was pivotal, but the need came from a larger mass that migrated into industrial areas while still identifying with rural life. The movement was hence from the very beginning concerned with *bringing in the rural into the urban* and about providing the means for people to continue to (micro-) farm for self-sufficiency.

The allotment gardens were spread out along the metropolitan landscape, including in peri-urban areas. Gardeners could never live permanently at

allotments, but the produce was brought home and stored in their flats over winter, spatially connecting places of production and storage and consumption in chains of self-sufficiency. The primary difference in the allotment movement in Sweden as compared to other countries in Europe was that the most important facilitators were women. Especially important was Anna Lindhagen, the first chairperson of the Association of Allotment Gardens in Stockholm, founded in 1906, and whose personal network included some very powerful people in Stockholm, including her lawyer brother Carl, a social-democratic politician and chief magistrate of the city for almost three decades from 1903. During the 1920s, coalitions were made with garden movements on national and international levels, substantially expanding the activity space, and during WWII, some 10% of all vegetables, including potatoes, consumed in Sweden were produced in allotments (Barthel *et al.*, 2013).

Identities from a relational perspective in allotment gardens can be understood by studying how social practice evolves in communities, which, according to Wenger (1998) emanates from the interplay of *participation* and *reification*, a process of engaging with and sharing in focal points around which gardeners organize negotiation of meaning. These often result in, for instance, physical artifacts that are of importance for understanding how allotment gardens extend beyond the “local” into the world “outside” by way of activity space construction and development. Inanimate material *actants* (objects as agents or aids to agency) result from the participation-reification process interplay in garden movements, which, for instance, can be put to work when producing connective stories, narratives that are utilized in constructing new activity spaces (cf. Ernstson and Sörlin, 2009). Such connective stories are enabled by the use of things like the booklets, magazines, books, and garden exhibitions produced by people in allotment gardens, besides their core produce of vegetables, berries, and fruits. Hence, the activity spaces of allotment gardens tend to extend far outside the communities of practice, and in very tangible ways.

Regarding immaterial connections rather than tangible objects, we may consider “*weak links*,” which are important for assessing various kind of resources (Granovetter, 1973), connective stories are constructed to link individual gardens with resources of power as the need arises. One such story played out in Stockholm during the 2000s. When the Swedish National Railway Company planned to expropriate land used as an allotment garden site, a large-scale activity space was mobilized to construct a connective story. Claiming its legal right and acquiring legal

permission to exploit the area despite its geographical position within the borders of a protected park of national interest, the governmental body had over 100 trees cut down. Many garden plots were acutely threatened. Activists in the allotment area responded by using their personal contacts and created, in a carefully designed media campaign, a story that connected activities in the physical space of the allotment area with both ecosystem services and cultural heritage issues of value for the wider city. All the allotment garden plots were saved (Barthel *et al.*, 2010).

This story recounts the specification of a place centered on a physical location as determined by human value in terms of a complex of spatial (eco-cultural communicative) dimensions, its successful conclusion fixing that space as a material and immaterial reality, both in the public imagination and on the ground (indeed, as the ground), not just in the abstract, as a conceptual, but also very much at the social level. Indeed, participation within garden communities is a source for the creation of a shared sense of meaning and hence construction of collective identity. Participation here is about relating not only with other gardeners, but also with physical place, which generates depth and horizons of lived experience, emotionally reified as a *sense* of place (Barthel *et al.*, 2010). Over time, allotment gardeners identify with “shared pasts,” with rituals and with shared symbols and with the property-right arrangements they themselves once created and which tend to outlive the repertoires of social practices that first created them.

From a property-rights perspective, allotments can be regarded as urban green commons (Colding *et al.*, 2013)—which was, after all, their origin (as a facility for the landless poor in the face of enclosure). Leasehold for land to be collectively managed is one central point of focus around which negotiations are organized between the allotment movement and the wider city. In contrast to the situation for many community gardens in the U.S. where leaseholds are usually only given on a yearly basis, allotment leaseholds in Stockholm are usually written on long-term basis, with renewable contracts of up to 25 years between a local allotment association and the local municipality being common. These long-term arrangements enable allotment autonomy and encourage people to invest in and collectively learn about things like fertile anthropogenic soils and long-living organisms (e.g. fruit trees), as well as permaculture ecosystem services, such as fresh produce, pollination, and natural pest regulation (Barthel *et al.*, 2010).

4.2 Arable farming in the Netherlands

During the 1970s and 1980s, several NGOs emerged in the Netherlands questioning agricultural policies, environmental issues, relations between the global North and South, gender issues, and the prescriptive role of knowledge systems and technology development (Jongerden and Ruivenkamp, 1994; Wiskerke, 1994, 2000; Boef and Jongerden, 2000; Jongerden, 2010). Farmers active in such NGOs also tried to enact the changes they discussed, taking initiatives to do agriculture in a different way: rather than going back in time—as such movements are sometimes interpreted—it was about doing things differently and creating alternative futures. This resulted in several farmer groupings and projects aimed at by-passing the conventional (world) market by creating a different setting for the embedment of their farms (van der Ploeg and Roep, 2003; van der Ploeg, 2008), mostly based on creating direct relationships with (urban) consumers and emphasizing the immaterial characteristics of food products (Ruivenkamp, 2011). The *Zeeuwse Vlegel*, an initiative of arable farmers in the southwest of the Netherlands, is an example of this attempt to create a new mode of production.

The *Zeeuwse Vlegel* grew from multiple roots, or maybe better, routes. One of them was a wheat study-club, which can be considered a community of practice of people linked by craft or profession who organize learning and knowledge exchange, sharing experiences and information. These farmers' study clubs flourished in the 1980s in the Netherlands. In the wheat study clubs, farmers discussed the cultivation of wheat, use of varieties, fertilizers and pesticides, and compared results. Another root of the *Zeeuwse Vlegel* was discussion between young farmers organized in the *Zeeuwse Agrarisch Jongeren Contact* (Zeeland [province] Agricultural Youth Contact in) and the *Zeeuwse Milieu Federatie* (Zeeland Environment Federation) on the subject of reconciling agriculture and environment. In 1988, debates on a socially, economically, and environmentally sustainable agriculture resulted in the presentation of a plan for a “farmers' bread” that would meet these multiple criteria. Three years later, this plan materialized in what we now know as the *Zeeuwse Vlegel*, that is, a farm-based organization advocating and realizing an alternative agriculture through the production of bread.

As the brief discussion above indicates, the *Zeeuwse Vlegel* can be regarded as the product of several discussions, including, among others, those on the craft of farming (study clubs) and reconciliation of farming and environment (debates between farmers and environmentalists), but also as a practice of dis- and re-embedding

(van der Ploeg and Roep, 2003; van der Ploeg, 2003, 2008). This comprised a practice of (partial) disconnection from the world-cereal market and (re)creation of short-chain connections for the regional processing, distribution, and sale of wheat and bread, along with the new linkages that came with this (on the output side, the connections with millers and bakeries willing to bake and sell, and on the input side, the identification and supply of appropriate wheat varieties and associated legal arrangements).

Finding suitable varieties for an environmentally friendly cultivation of bread-wheat turned out to be rather problematic. The problem of the lack of suitable baking-wheat varieties could be traced to two causes. The first of these was that since the 1950s, baking quality had not been a criterion in plant breeding or a basis for the evaluation of varieties on their suitability for cultivation in agriculture in the Netherlands. In response, the *Zeeuwse Vlegel* managed to identify promising varieties, not by connecting to the formal system, but through its relation with an extension officer who happened to have, as a hobby, an interest in wheat and wheat varieties. This person came up with a list of varieties cultivated in France and Belgium and of possible interest for the *Zeeuwse Vlegel*. The varieties were tested for their suitability for environmental friendly cultivation under “Zeeland conditions” and for their use as baking wheat.

One of the varieties, *Sunnan*, appeared promising and was eventually to become a most important and appreciated variety for the farmers involved. This variety had a low yield but good disease resistance and excellent baking quality and gave a distinctive yellowish color to the bread. *Sunnan* had been developed by the Swedish breeding company Weibull AB. In 1991, a Dutch cooperative and representative of the breeding company in the Netherlands, Cebeco Handelsraad, withdrew *Sunnan* from the Variety List, which recommends varieties to farmers. Since it is forbidden to grow varieties that are not on the list, and *Sunnan* had been withdrawn, the variety could no longer be legally cultivated by farmers.

The *Zeeuwse Vlegel*, therefore, eager to keep *Sunnan* available, maintained the variety by saving seeds from previous yields, and claimed the legal right to maintain the variety, a claim they eventually won. With the objective of identifying and maintaining varieties, the *Zeeuwse Vlegel* received support from Bhutan, in the Himalayas, in accordance with a sustainable development agreement between the Netherlands and Bhutan

that gave the latter the right to identify and support development projects in the Netherlands.¹

Looking at the *Zeeuwse Vlegel* and the activity spaces of the initiative, we can identify a geographical range of actors with which it engages, from those in the immediate physical surroundings—farmers, environmentalists, bakers, millers—to those stretching out far beyond the farm and village and even province, to the national regulatory institutions of the Netherlands, farmers in France and Belgium (from whom they derived the *Sunnan* seed), Weibull AB in Sweden and even Bhutan. Around the issue of identification and supply of a wheat variety alone, an extended spatial network of links and activities, of connections and locations becomes visible.

From a sociological perspective labeling the “*Zeeuwse Vlegel*” as local is problematic. As our brief description shows, the *Zeeuwse Vlegel* is constructed from heterogeneous practices: debates between several actors on sustainability, a study-group (community of practice) of farmers on wheat production, discussions on markets, prices and economic sustainability, collaborations between farmers, millers, and bakers, new forms of international development cooperation, and others. It is not only that the “local” initiative called the *Zeeuwse Vlegel* can be understood as the product of a particular way in which such relations and connections are constructed, and some of these may have more “impact” than others and they may be geographically distant, but also that we are only able to think about an alternative construction of “global” food production in the first place because such initiatives as the *Zeeuwse Vlegel* are not just “local” (in the conventional, i.e., geographical sense).

4.3 Dairy farming in Italy

During the 1980s, farmers in the region Emilia Romagna, in the northern part of Italy, started the recovery and valorization of the *Reggiana* cow breed, which, since the 1960s, had been replaced by more productive cows. The *Reggiana* breed, often referred to as local and unique for the region, was bred by monks centuries ago taking rustic cows as a point of reference (an illustration of our argument, in that “uniqueness” is also to be considered a product of social practices and wider social relations). In 1991, cow breeders in the area started to re-valorize the *Reggiana* breed and began processing its milk into Parmigiano-Reggiano cheese. Hence, this initiative also represents a “relocalization” (Woods, 2011) or

anchoring of production in a specific (“local”) biophysical environment but with (mainly marketing) connections to the urban and global economy. For this, the *Consorzio di tutela del formaggio Parmigiano-Reggiano* sets the basic rules for milk delivery in what is the second most important milk producing area in Italy (de Roest, 2000).

In the early 1990s, in collaboration with the *Centro Ricerche Produzioni Animali di Reggio Emilia* (the Reggio Emilia Research Centre for Animal Production, CPRA) and with financial support from the Ministry of Agriculture, a two-year program was initiated in which milk from the *Reggiana* breed, delivered by different farmers, was kept apart from the other milk processed at the cheese production plant and separately processed and marketed. After the program, the initiative was continued as the dairy cooperative *Consorzio Vacche Rosse* (CVR). This was followed in 1996 by official recognition from the *Associazione Nazionale Allevatori Bovini di Razza Reggiana* (the National Association of Reggiana Breeders) and depositary of the *Razza Reggiana* (Reggiana’s breed) brand.

Most of the milk in the region is processed into cheese under the code of practice of this Protected Destination of Origin (PDO) cheese. This production system effectively localizes production, in which skills, networks, and the desire for self-employment are the main drivers, while simultaneously cheese consumption is globalized as a result of extended (urban) marketing networks (Picchi, 1994). The production regulation of the *Reggiana* breeders follows these production standards (written down in a regulatory framework), but goes beyond the regulation of Parmigiano-Reggiano cheese, especially those relating to the diet of the cows, and thereby emphasizes the local natural resources base. The animals that belong to members of the cooperative are fed only with fresh grass, hay, and GMO-free feed. They easily grow to ten years old (compared to four or five in conventional dairy farming).

The *Reggiana* breed and additional production features guarantee consumers high-quality production standards, while the milk itself has a higher correlation between genetic variants of milk proteins and cheese characteristics (Montanari and de Roest, 2013). The lower milk production per cow in general is compensated for by higher percentages of the milk phosphoprotein casein, which is also very suitable for long aging of the cheese (the cheese produced by the cooperative therefore is at least two years old, compared to one to one-and-a-half years in conventional Parmigiano-Reggiano cheese production). This brings an outstanding

¹ Signed in 1994 and representing an innovative approach to development cooperation, the Sustainable Development Agreement (SDA) was a paradigm shift from a traditional donor-recipient relationship to a co-operation based on equality, reciprocity and participation.

organoleptic quality to the cheese (flavor and aroma) and improves its digestibility, as well as contributing calcium, phosphorus, proteins, essential amino acids, and reduced lactose (Gandini *et al.*, 2010).

The use of the specific cow breed and related diet regulations result in a different grassland optimization and biodiversity conservation, and result in a different quality of cheese, while turning the ambition of breeding *Reggiana* cows into a market strategy challenged the farmers to think from the consumer perspective: consumers should appreciate when farmers make a good cheese and positively choose, when they do, to buy the distinctive product. As a consequence of these efforts and features, the *Reggiana* cheese was able to be niche marketed and find its way to consumers under the *Vacche Rosse* or *Razza Reggiana* label in farm shops and groceries in the region, in the online store of the cooperative, and overseas in cities such as New York, Montréal, Toronto, and Tokyo. Thus, although the *Reggiana* breed was initially perceived as beautiful but inefficient, its story has been rebuilt. New relations have been constructed at different aggregation levels (the field, the farm, research institutes and breeders associations), and breed numbers recovered from 450 cows in the 1980s to today's 3000.

Relating production features to consumers' perspectives and understanding of food provisioning, farmers producing under the *Vacche Rosse* and *Razza Reggiana* labels actively cooperate with research institutes that look for different characteristics in the end product. In this way, the producers valorize a production process in which "technology" supports the "artisanal labor process" (the work in the fields, care for the cows, concern with their balanced feed intake and how the grassland production relates to the fermentation process of the grass and how that impacts on the health and wellbeing of the animal). Alongside the participation in PDO schemes, the "alternative" milk processing cooperatives, and the breeders' association, the immediate natural environment of the farmer is also a part of the activity space of cheese producers and consumers, and hence of a (spatially distanced) urban green infrastructure which includes the rural.

Reggiana breeders have cut out some of the problems that accompany industrial production, such as its *long* relations in feed supply (dependence on global input prices) and usage of high-yielding cows (entailing globalized veterinary and pharmaceutical industry inputs); this represents the reordering of activity space in terms of a *contraction*. Against this, however, since the *Reggiana* breed and its particularities

relate to heterogeneous grassland production, biodiversity, and the ecosystem, the activity space of the breeders is characterized by an *extension* in terms of their interrelations with the natural environment, through the new institutional arrangements of a cooperative structure, incorporation of a research agenda, interrelations among the researchers, and establishment of a breeders association.

Or, while emphasizing the "local" (relocalization), we stress also that the reorientation in terms of the market has enabled the sale of the quality features of the production system to a targeted consumer on a globalized basis. The activity space, one may say, has both *intensified* at the (geographically) local level (with an increased number of connections of a greater variety of forms), while at the same time *widened* and also *deepened* at the global (become longer in reach and covering a greater area while also developing a potentially more resilient market). In Emilia Romagna, farmers, researchers at the research institutes, servants at the public administration and customers in niche markets have gradually developed into an interwoven network (a *rural-urban web*), in which activity space intertwines the local and the global in a specific but mutually interdependent way that is quite different in socio-economic and geo-physical orientation to the more "conventional" approaches of agro-business. This is represented by the connective storyline through which the cheese is seen by farmers and advertised to consumers, not just in terms of marketing, but also as an alternative, value-oriented imaginary.

5. Discussion and concluding remarks

We opened this paper by stating that the interweaving of densely populated centers and green open spaces and the "inside-out, outside-in" character of urbanization today has been used to re-conceptualize the emergence of a new spatial identity: the city-region. This region, we argued, is characterized not by the spatial identities of "urban" and "rural", but their simultaneous production. We have turned from an approach that presupposes spatial identities to one in which spatiality is part of practice: as noted, it is no less difficult to imagine an aspatial social sphere than it is to imagine an aspatial spatial sphere.

In the concept of activity space, the social and the spatial come together, as two sides of the same coin. In this relational conceptualization the socio-spatial assemblage is of particular importance: the initiatives are not simply to be considered a response to and "reactive countervailing force challenging the ruling paradigm of agri-industrialism" (Kanemasu and Sonnino, 2009), but also a *creative* response. While the last decades have been marked by a transition from a dominant productivist, basically state-coordinated project of

overproduction and food security moving towards a postproductivist era of coordination through food empires and global markets (van der Ploeg *et al.*, 2012), these initiatives offer a way of doing food production differently; they demonstrate a dynamic and social (re)constructivist process that radically differs in terms of activity space.

Motivated by the uncertainty created by neoliberal policies and the related abolishment of price-support and articulation of the farm to world markets, indeed, these spaces stress concerns that are not dictated by capital, but rather upon moral goods. This does, indeed, involve a valorization of the “local,” but also of things like the “environment” (ecological balance, sustainability) and “democracy” (participation, access, autonomy). This constitutes a *respatialization*, which takes place in the context of agriculture through what van der Ploeg and Roep (2003) analyze as strategies of *broadening*, *deepening* and *regrounding*, and which might themselves be extended or refigured somewhat in the light of the activity space approach.

“Broadening” primarily indicates a process of expanding income-producing activities on the farm outside of agriculture, partly to be less dependent on production at world market prices, such as through rural tourism. A lack of limitation to the immediate physical environment is inherent in the idea, as even the name “broadening” implies. In the context of the allotment gardening example, we might also consider its application within the urban context to cultivation by non-farmers, to an individual or small-scale broadening of food provisioning (a DIY approach beyond, that is, the use of income gained for the purchase of food as goods.).

“Deepening” refers to novel production strategies, to farms differentiating their productive potential by, for example, moving toward agricultural goods with alternative characteristics like ‘organic’ or ‘slow’ or regionally-specific products, and it implies a way to make such products recognizable, as targeted consumer goods, to create added value. This strategy can be considered not only as a withdrawing from the anonymous markets of food-empires, but also as the creation of social markets, in which also social and ecological qualities of products is valued, and producer-consumer relations are made visible. This visibility may have the form of direct relations, in the sense of a face-to-face intimacy, but may involve also a kind of proximity between actors actually located at a distance, by way of connective stories.

“Regrounding” refers to cost reduction by means of the use and reproduction of the natural resource base (van der Ploeg, 2000; Swagemakers and Wiskerke, 2011) and working outside the farm, as

well as new forms of cooperation, with obvious implications for the spatial organization of households and on-farm labor as well as the processing of raw materials (van der Ploeg and Roep, 2003; Aguglia, 2009; Domínguez García and Swagemakers, 2012).

The concept of activity space as a heuristic tool to look at food provisioning helps not only to make visible new initiatives in food provisioning, but also to incorporate ideas about different approaches to and methods of environmental and social sustainable food production and distribution. We have tried to illuminate an alternative construction of the local, but also how this alternative construction relates to the “world outside”, and simultaneously challenges this outside world, and thus to the limitations of a geographically-defined sense of space.

Employing the concept of activity space, the short case study analysis on allotment gardens in Sweden and arable and dairy farming in the Netherlands and Italy demonstrates a way to understand and evaluate “small scale” initiatives in terms of connectivity and process. These initiatives are local in the sense that they are grounded, localized, but at the same time they are concerned with altering the processes underlying food production: they are in other words “a local politics of the global” (Massey, 2004).

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References

- Aguglia, L., Henke, R., Poppe, K.J., Roest, A., Salvioni, C. 2009. Diversification and multifunctionality in Italy and the Netherlands: a comparative analysis In: Contributions Second meeting Wye City Group Conference, FAO, Rome, June 11-12, 2009, <http://edepot.wur.nl/13897>
- Amin, A. 2004. Regions unbound: Towards a new politics of place. *Geografiska Annaler* 86 (1): 33-44.

- Andersson, E., Barthel, S., Ahrné, K. 2007. Measuring social-ecological dynamics behind the generation of ecosystem services. *Ecological Applications* 17 (5): 1267-1278.
- Auge, M. 2008. *Non-places, an introduction to supermodernity*. London: Verso.
- Barthel, S., Folke, C., Colding, J. 2010. Social-Ecological Memory in Urban Gardens - Retaining the capacity for management of ecosystem services. *Global Environmental Change* 20 (2): 255-265.
- Barthel, S., Parker, J., Ernstson, H. 2013. Food and green space in cities: A resilience lens on gardens and urban environmental movements. *Urban Studies* (online): 1-18.
- Barthel, S., Parker, J., Folke, C., Colding J. 2014. Urban Gardens-Pockets of Social-Ecological Memory. In Tidball, K.G. and M.E. Krasny, (Eds.), *Greening in the red zone: Disaster, resilience, and urgent biophilia*. Dordrecht: Springer.
- Becker, H. 1998. *Tricks of the trade: how to think about your research while you're doing it*. Chicago: University of Chicago press.
- Bendt, P., Barthel, S., Colding, J. 2013. Civic greening and environmental learning in public-access community gardens in Berlin. *Landscape and Urban planning* 109: 18-30.
- Berger, P.L., Luckmann, T. 1967 *The social construction of reality: a treatise in the sociology of knowledge*. Harmondsworth: Penguin Publishers.
- Bolund, P., Hunhammar, S., 1999. Ecosystem services in urban areas. *Ecological Economics* 29 (2): 293-301.
- Born, B., Purcell, M. 2006. Avoiding the local trap: Scale and food systems in planning research. *Journal of Planning Education and Research* 26: 195-207.
- Campbell, D.T. 1975. Degrees of freedom and the case study. *Comparative Political Studies* 8 (1): 178-191.
- Colding, J., Barthel, S., Bendt, P., Snep, R., van der Knapp, W., Ernstson, E. 2013. Urban green commons: Insights on urban common property systems. *Global Environmental Change* 23 (5): 1039-1051.
- De Boeff, W., Jongerden, J. 2000. The Netherlands: A genebank, a farmers' organization and wheat diversity. In *Tales of the Unpredictable: learning about institutional frameworks that support farmer management of diversity*. PhD Thesis Wageningen University.
- De Cauter, L., 2004. *The capsular civilization*. Rotterdam: NAI Publishers.
- Domínguez García, M.D., Swagemakers, P. 2012. Minimizing marginalization: Field birds and farm development in the northern Netherlands. In: Á. Paniagua, R. Bryant, T. Kizos (Eds.), *Political ecology of depopulation: Inequality, landscape and people*. Zaragoza: CEDDAR
- Ernstson, H., Sörlin, S. 2009. Weaving protective stories: connective practices to articulate holistic values in the Stockholm National Urban Park. *Environment and Planning* 41 (6): 1460-1479.
- Ernstson, H., Barthel, S., Andersson, E., Borgström, S.T. 2010. Scale-crossing brokers and network governance of urban ecosystem services: The case of Stockholm. *Ecology and Society* 15 (4): 28.
- Escobar, A. 2001. Culture sits in places, reflections on globalism and subaltern strategies of localization, *Political Geography* 20: 139-174.
- Featherstone, D., Painter, J. 2013. *Spatial Politics: essays for Doreen Masse*. Malden: Wiley-Blackwell.
- Flyvbjerg, B. 2006. Five misunderstandings about case-study research. *Qualitative Inquiry* 12 (2): 219-245.
- Gandini, G., Pizzi, F., Turri, F., Negrisolo, F., Musella, M. 2010. *Razza Reggiana. Perché gli allevatori allevano bovini di razza Reggiana* [online]. Available at <http://www.consorziovaccherosse.it/wp-content/uploads/perche-allevare-razza-reggiana.pdf> (03 January 2014)
- Geschiere, P., Gugler, J. 1998. The Urban-Rural Connection: Changing Issues of Belonging and Identificatio. *Africa: Journal of the International African Institute* 68 (3): 309-319.
- Gibson-Graham, J.K. 2002. Beyond Global v. Local, economic politics outside the binary frame, in A. Herod and M. Wright (eds), *Geographies of Power: Placing Scale*. Oxford: Blackwell Publishers.
- Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structuration*, California: University of California Press.
- Goddard, M. A., Dougill, A. J., Benton, T. G. 2010. Scaling up from gardens: biodiversity conservation in urban environments. *Trends in Ecology and Evolution* 25 (2): 90-98.
- Granovetter, M. 1973. The Strength Of Weak Ties. *American Journal of Sociology* 78: 1360-80
- Hardt, M., Negri, T. 2004. *Multitude: war and democracy in the age of empire*. New York: The Penguin Press.

- Harvey, D. 1996. *Justice, Nature and the Geography of Difference*. Oxford: Blackwell.
- Hue, J. 2010. *Insurgent public space, guerilla urbanism and the remaking of the contemporary city*. London: Routledge.
- Jongerden, J., Ruivenkamp, G. 1994. *Patronen van verscheidenheid*. Wageningen: Wetenschapswinkel.
- Koolhaas, R., Mau, B. 1995. *Small, medium, large, extra-large (S, M, L, XL)*. Rotterdam: 010 Publishers.
- Mahon, M. 2007. New populations, shifting expectations: The changing experience of rural space and place. *Journal of Rural Studies* 23 (3): 345-356.
- Mahon, M. Fahy, F., Cinneide, M.O. 2012. The significance of quality of life and sustainability at the urban-rural fringe in the making of place-based community. *GeoJournal* 77: 265-278
- Massey, D. 1994. A global sense of place. In D. Massey (Ed.), *Space, place and gender*. Minneapolis: University of Minnesota Press.
- Massey, D. 1995. The conceptualization of place, places, cultures and globalization. In D. Massey and P. Jess, *A place in the world?* Oxford: Oxford University Press and Open University.
- Massey, D. 2004. Geographies of responsibility. *Geografiska Annaler* 1: 5-18.
- Massey, D. 2005. *For space*. Los Angeles: Sage.
- Merrifield, A. 2011. The right to the city and beyond. *City: analysis of urban trends, culture, theory, policy, action* 15 (3-4): 473-481.
- Montanari, C., de Roest, K. 2013. Consortium Vacche Rosse and Reggiana cow breeders network. LINSAs Case Study Report: Italy. CRPA, Emilia Romagna [on line]. Available at: http://www.solinsa.org/fileadmin/Files/deliverables/LINSAs_Reports/ITALY_FINALLinsa_CVR.pdf (17 November 2013)
- Nyhan, B. 2007. Building learning regions for innovation in Europe: A challenge for education and training. In B. Gustavsen, B. Nyhan, R. Ennals, (Eds.), *Learning together for innovation: promoting learning regions*. Luxembourg: Office for Official Publications of the European Communities.
- Öztürk, M., Hilton, A., Jongerden J. 2014. Migration as movement and multi-place life: some recent developments in rural living structures in Turkey. *Population, Space and Place* 20 (4): 370-388.
- Öztürk, M., Jongerden, J., Hilton A. 2014. *Commodification and the social commons: smallholder autonomy and rural-urban kinship communalism in Turkey. Agrarian South (forthcoming)*.
- Picchi, A. 1994. The relation between central and local powers as context for endogenous development. In J.D. van der Ploeg and A. Long (Eds.), *Born from within: Practices and perspectives of endogenous rural development*. Assen: Van Gorcum.
- Relph, E. 1976. *Place and placelessness*. London: Pion.
- Roep, D., Wiskerke, J.S.C. 2012. Reshaping the foodscape: the role of alternative food networks. In Spaargaren, G., Oosterveer, P.J.M., Loeber, A. (Eds), *Food practices in transition: changing food consumption, retail and production in the age of reflexive modernity*. New York/London: Routledge.
- Ruivenkamp, G. 2011. Tohumlar: Metalardan Paylasilanlara, in: M. Öztürk, M.T.. Dadak, J. Jongerden, Kirsal Kalkinmada Alternatif ve Yeni Yaklasimler, Kalkinma Merkezi-Heinrich Boll Vakfi: Diyarbakir.
- Soja, E. 1989. *Postmodern geographies: The reassertion of space in critical social theory*. London: Verso Press.
- Stake, R. E. 2000. Case studies. In N. K. Denzin, Y. S. Lincoln (Eds.), *Handbook of qualitative research*. London: Sage.
- Swagemakers, P., Wiskerke, J.S.C. 2011. Revitalizing ecological capital. *Geografisk Tidsskrift-Danish Journal of Geography* 111: 149-167.
- Swagemakers, P., Milone, P., Ventura, F., Simón Fernández, X. 2014. Resilient farmers' strategies and policy regulations: the quest for modernization on Dutch and Italian dairy farms. In: *Proceedings of the 11th IFSA Symposium*, BOKU, Berlin: 1835-1844.
- van der Ploeg, J.D. 2000. Revitalizing agriculture: Farming economically as starting ground for rural development. *Sociología Ruralis* 40: 240-260.
- van der Ploeg, J.D. 2003. *The virtual farmer. Past present and future of the Dutch peasantry*. Assen: Van Gorcum.
- van der Ploeg, J.D. 2008. *The new peasantries: struggles for autonomy and sustainability in an era of empire and globalisation*. London: Earth Scan.
- Van der Ploeg, J.D., Roep, D. 2003. Multifunctionality and rural development: the actual situation in Europe, In: G. van Huylenbroeck, G. Durand (es.), *Multifunctional Agriculture. A New Paradigm for European*

Agriculture and Rural Development. Hampshire: Ashgate.

van der Ploeg, J.D, Jingzhon, Y., Schneider, S. 2012. Rural development through the construction of new, nested, markets: comparative perspectives from China, Brazil and the European Union. *Journal of Peasant Studies* 39 (1): 133-173.

van der Schans, J.W., Wiskerke, J.S.C. 2012. Urban agriculture in developed economies. In A.M. Viljoen, J.S.W. Wiskerke, Sustainable food planning: evolving theory and practice. Wageningen: Wageningen Academic Publishers.

Wellbrock, W., Roep, D., Wiskerke, J.S.C. 2012. An integrated perspective on rural regional learning. *European Countryside* 4 (1): 1-16.

Wenger, E. 1998. *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wiskerke, J.S.C. 1994. Arable farmers: A new interpretation of sustainable baking wheat cultivation. In J.D. van der Ploeg, van Dijk (Eds.), *Beyond modernization: The impact of endogenous rural development*. Van Gorcum: Assen.

Wiskerke, H. 2000. The Netherlands: farmers' renewed interest in genetic diversity. In C.J.M. Almekinders, W.S. de Boef (Eds.), *Encouraging*

diversity: The conservation and development of plant genetic resources. London, Intermediate Technology Publications.

Wiskerke, J.S.C. 2009. On places lost and places regained: Reflections on the alternative food geography and sustainable regional development. *International Planning Studies* 14 (4): 369–387.

Wiskerke, J.S.C., Oerlemans, N. 2004. Zeeuwse Vlegel: A promising niche for sustainable wheat production. In J.S.C. Wiskerke and J.D. van der Ploeg (Eds.), *Seeds of transitions: Essays on novelty production, niches and regimes in agriculture*. Van Gorcum: Assen.

Wiskerke, J.S.C., Viljoen, A. 2012. Sustainable urban food provisioning: challenges for scientists, policymakers, planners and designers, In A. Viljoen and J.S.C. Wiskerke (eds.). *Sustainable Food Planning: evolving theory and practice*. Wageningen: Wageningen Academic Publishers.

Woods, M. 2011. Regions engaging globalization: A typology of regional responses in rural Europe. Paper presented to the Anglo-American-Canadian Rural Geographers Quadrennial Conference, Manitoba, July 2011.

Yin, R.K. 2003. *Case study research. Design and Methods* (third edn). Thousand Oaks: Sage.