

Contents

A Welcome from CAWR	1
Scientific & Organising Committee	2
Funders and acknowledgments	2
The Theme of the 2017 Conference	3
The Six Tracks	4
Special Event: The launch of the International Forum for an Agroecological Urbanism	5
Keynote Speakers	6
Pre-conference Day (PhD event)	8
Meet and Greet Session	9
Book Launch and Social Evening	10
Conference	11
Useful numbers	12
Map	13
Conference Programme	14
Book of Abstracts	27
List of Participants	154
Notes	155

A Welcome from CAWR

The Centre for Agroecology, Water and Resilience (CAWR) welcome you to the 8th Annual Conference of the AESOP Sustainable Food Planning group titled "Re-imagining sustainable food planning, building resourcefulness: food movements, insurgent planning and heterodox economics".

We hope you will enjoy the conference!

CAWR is the only centre for Agroecology in Europe that does not sit within faculties doing simultaneous research on green revolution technologies. It is also the largest centre in the world doing transdisciplinary research on the links between agroecology, sustainable food systems, water management, and community and socio-ecological resilience.

Food and water security is increasingly threatened by factors such as climate and environmental change, loss of biodiversity, conflict and market volatility. New knowledge, policies and technologies are needed to develop systems that are more resilient to change, and which ensure the health of our food and water supplies. Resilient systems are better able to withstand and recover from stresses caused by short-term change or long-term events, including natural processes like flooding, or human impacts such as war or water pollution incidents.

Through its focus on food and water, the Centre's research develops and integrates new knowledge in social, agroecological, hydrological and environmental processes, as well as the pivotal role that communities play in developing resilience. Unique to this Centre is the incorporation of citizengenerated knowledge – the participation of farmers, water users and other citizens in transdisciplinary research, using holistic approaches which cross many disciplinary boundaries. CAWR also aims to advance resilience science through creative work on a new generation of key issues linked to the governance of food systems, hydrological change, urban agriculture and water, biodiversity, stabilization agriculture, river processes, water quality and emerging pollutants.

The Centre is conducting research in the following themes:

- Resilient Food and Water Systems in Practice
- Fundamental Processes and Resilience
- Community Self-Organisation for Resilience
- Policies and Institutions to enable Resilient Food and Water Systems

For more information:

Visit our website: http://www.coventry.ac.uk/research/areas-of-research/agroecology-water-resilience/

Follow us on Twitter: https://twitter.com/CoventryCAWR
Like us on Facebook: https://www.facebook.com/CovUniCAWR/

Scientific & Organising Committee

Scientific committee:

- Chiara Tornaghi (group Chair)
- Arnold Van der Valk (group Secretary)
- Coline Perrin (PhD students coordinator)
- Andre Viljoen
- Michiel Dehaene
- Michel Pimbert
- Moya Kneafsey
- Stefanie Lemke
- Alexandra Franklin
- Jana Fried
- Luke Owen
- Colin Anderson
- Priscilla Claeys
- Jahi Chappell
- Adrian Evans

Organising committee:

- Chiara Tornaghi
- Moya Kneafsey
- Rosie Gibbard
- Josh Elliott
- Joanne Noone
- Liz Woodard
- Carole Fox
- Gloria Giambartolomei
- Alexandra Franklin
- Stefanie Lemke
- Colin Anderson
- Luke Owen
- Jana Fried
- Priscilla Claeys
- Marina Chang
- Lopamudra Saxena
- Adrian Evans
- Carla Kay
- Csilla Kiss

Funders and acknowledgments

We are grateful to Coventry University for funding the conference venue to allow us to host this event. We also thank the many CAWR staff who have dedicated their time to organising and delivering the conference, and offering solidarity housing to some conference delegates.

Finally, a big thank you to the Management Board of our research centre (CAWR), for providing financial support to this event as well as grants to make this event affordable and open to a broad participation, including non-academics and activists.

A collaboration between RUAF and CAWR has been able to provide the latest RUAF Magazine that is available throughout the conference.

The Theme of the 2017 Conference

After seventeen years from its early conceptualisation, and ten years on from its institutionalisation (Van der Valk and Viljoen 2014), sustainable food planning is a thriving transdisciplinary research and policy field bringing together policy makers, academics, and practitioners across the globe. Food charters, food strategies and food policy councils have multiplied, 'alternative food networks' have gained significant and growing shares of the food market and new forms of localisation of food production, including urban agriculture, are gaining ground and becoming central components of new food policy strategies.

Yet, the scale and speed of the 'food' crisis make us see these achievements as modest and utterly inadequate. Urban food poverty and malnutrition, and the related use of food banks, are on the rise even in some of the most wealthy countries of the world; the most vulnerable populations in both the global North and South are unshielded by austerity politics, food-commodity speculation, land grabbing or staple food price rises. Diet-related diseases (such as diabetes and obesity) are growing at alarming rates among children in the supposedly 'well-fed' countries of the world. We still waste between 30% and 50% of the food we produce while millions of farmers and land workers growing our food across the globe are struggling to make a living. And the environmental impacts of our food 'regime' and diets are devastating.

Planning for sustainable food production and food provision is more than ever urging us to look for more effective, equitable and just approaches that radically change not only the way we grow food, but the very core of our living space.

This 8th annual conference of the AESOP sustainable food planning group is dedicated to discussing ideas, approaches and practices that can help to re-invent food planning in light of the need to build *a resourceful, agroecological, urbanism*. Inspired by a seminal paper from Derickson and MacKinnon (2013), we use the term 'resourceful' as a particular way of intending the concept of 'resilience': an urbanism that creates the conditions for its inhabitants to control the means of their social reproduction, to have a say on, or directly control, the resources for their own survival; a space where land, water and nutrients serve the needs of the people (rather than profit), while respecting the ecosystem. A 'resourceful' urbanism creates living conditions that enable people to be resilient while at the same time challenging the root causes of the crisis that require us to look for resilience.

With 'agroecological' we explicitly refer to practices aligned to 'peasant agroecology' and the agroecology movement: a way of cultivating the soil, managing ecological relations and disposing of the produce that respects the environment and is based on cultural and social arrangements inspired by solidarity and mutuality.)

By 'urbanism' we refer to more than just buildings, zoning or planning. We refer to ensembles of the built environment and its regulation, the material infrastructure and the collective arrangements (for food provision, waste collection, land management, urban design, housing, energy and so forth) that are in place and to which we are all subjected. We include the urban, the peri-urban and the rural realm, and reflect on their mutual interconnections and dependencies.

While food has entered the planning agenda more than a decade ago, a resourceful and agroecological *urbanism* — which is more than closing metabolic loops through urban agriculture — is yet to be conceptualised. An urbanism in which food is not the latest 'fix' to be added as a new way to market, but rather a key and long forgotten component around which new and just social arrangements, ecological practices and ways of life must be reinvented.

The Six Tracks

The conference presentations are organised around six main tracks:

TRACK 1 – AGROECOLOGICAL URBANISM

This track includes contributions that address theoretical re-conceptualisations of urbanism (and its peri-urban and rural surroundings) in relation to food planning. This includes also discussions on the interlink between new and old urban and agrarian questions; critical discussions on planetary urbanisation, post-suburbia, insurgent urbanism; new ontological and epistemological definitions of urbanism; and the relation between daily experiences and urbanism.

TRACK 2 – POLITICAL PROCESSES

This track collects contributions focused on political processes and strategies, including pathways for radicalising and/or steering local, national or global agri-food strategies; experiences of people's led urban food policies and planning; justice and rights-based legal challenges; urban-based food, water and land access movements; experiences linking agrarian and urban food sovereignty movements; community self-organisation.

TRACK 3 - RESOURCEFUL LAND MANAGEMENT

This track includes, for example, contributions that discuss land reforms and land tax; common good land use; regulation or incentives that turns urban vacant spaces into food producing sites; regulation of private property rights in relation to land depletion and environmental degradation; innovative waste and nutrients management in urban areas; land and water rights) urban metabolism; innovative and radical ways to reshape urban-rural links.

TRACK 4 - AGROECOLOGICAL PRACTICES

This track includes contributions focused on a number of agroecological practices, including for example experiences that experiment with food producing and socio-environmentally just urban agriculture, urban agroforestry, urban permaculture, organic indoor production, rooftop and vertical growing, edible public space; foraging-enabling urban planning and design; urban water management; etc

TRACK 5 - POST-CAPITALIST ECONOMICS

In this track we have included contributions that discuss post-capitalist economics, including food decommodification, solidarity and shared economy, micro-farming, urban patchwork farms, community kitchens, food commoning and conviviality, alternative currencies, new urban commons sharing food, housing, and livelihoods, etc.

TRACK M - ALTERNATIVE METHODOLOGIES

This track was created after the call for paper, and collects a number of contributions that can contribute to the reflexivity of scholars and activist (and their various hybrids), help re-positioning, decolonising and generating novel approaches to food planning. They include provocative contributions around the role and transformative power of the performing arts, videos/films, sensory approaches, taste/smell, and deeper visceral/bodily interconnections with nature, the soil, and food.

Special Event: The launch of the International Forum for an Agroecological Urbanism

Tuesday 14th November, 9.45-11.00 am
Opening Plenary Keynote speech

What if solidarity, mutual learning, interspecies (more than human) exchanges, environmental stewardship, food sovereignty and people's resourcefulness were the principles of a new paradigm for urbanisation? How would urban design, property regimes, food provision, collective services, and the whole ensemble of planning and socio-technical arrangements change, if they were informed by urban agroecology? How can we begin to radically transform the food disabling urban landscapes that have systematically displaced food production, recovering both historical food growing practices and imagining new urban arrangements?

The call for papers for this 8th Annual Conference of the Sustainable Food Planning group has been shaped on the intellectual and social aims of the International Forum for a resourceful, reproductive and agroecological urbanism, which will be launched at the conference.

Chiara Tornaghi's and Michiel Dehaene's joint opening keynote speech (Tuesday 14th November, 9.45-11.00 am) will illustrate the thinking behind the Forum.

They contend that agroecology contains the political, social and ecological foundations for a radically alternative model of urbanisation – what they call a resourceful, reproductive and agroecological urbanism.

This is a call for building a shared journey with social movements, food activists and scholars and to multiply the spheres of urban life in which the values and logics of agroecology are articulated and engendered. They wish for a collective journey, a generative encounter of practices and ways of knowing and doing through which it can be possible to substantiate what an agroecological urbanism might look like.

As a vehicle for such a collective endeavor the International Forum is a statement against the isolation of disciplinary specialisation. A way to acknowledge the need to see the big picture. To think of transport, housing, food, the environment, private property rights, inequality and injustice all at once. From theory and practice. Strategising around emancipatory scholar activism, building political pathways. A space where social reproduction, agroecology, and resourcefulness are pillars of a non-co-opted urbanism

Keynote Speakers

(In alphabetical order)

Heather Anderson (Whitmuir Organics/Nourish Scotland)



Heather Anderson, together with her husband, Pete Ritchie, have been running Whitmuir Farm organically since 2000. In 2006 they diversified their mixed upland beef and sheep farm and opened their first farm shop. In 2009 they opened a larger farm shop with butchery and cafe and host 3 other businesses on the farm, employing some 30 people. They have campaigned relentlessly for the benefits of organic food production systems and reconnecting people with their food. They currently operate the 2000m² project on the farm - which combines community growing, cooking, food waste collection and composting with educational work on the global and local food systems. Pete is Director of Nourish Scotland, which campaigns to transform the food system in Scotland and Heather is now also a local authority councillor. Both have advocated land reform and systemic change to the food system in Scotland and played their part in building the case for a Good Food Nation Bill in the Scottish Parliament.

Michiel Dehaene University of Ghent, Belgium)



Michiel Dehaene (1971) (Ph D KULeuven 2002, MAUD 1997 Harvard University, Master Engineer-Architect 1994 KULeuven) is associate professor at the department of Architecture and Urban Planning, Ghent University, where he teaches courses in urban analysis and design. His work focuses on the epistemology of urbanism, dispersed urbanisation, and the grounding of design thinking in urban political ecology.

Emily Mattheisen (FIAN International)



Emily Mattheisen works with FIAN International, an international NGO working to protect and promote the human right to adequate food and nutrition. At FIAN Emily supports the work on human rights accountability and coordinates the Global Network for the Right to Food and Nutrition. Emily also works on the linkages between the Right to Food and the Right to the City, urban and territorial policy and accountability, and prior to working with FIAN, she was also part of technical task team which developed the Milan Urban Food Policy Pact.

Chiara Tornaghi (Coventry University, UK)



Chiara Tornaghi is a critical human geographer and scholar-activist with a background in politics, sociology and planning. After graduating in Political Science (2001, State University of Milan), she obtained her PhD in Applied Sociology and Social Research Methods (2005, University of Milano-Bicocca, Italy), and a Postgraduate Certificate in European Spatial Planning (2006, University of Newcastle, UK). Chiara has worked as lecturer and researcher at the University of Leeds (2008-15), TU Vienna (2009-10), University of Milano-Bicocca (2005-08) and Politecnico di Milano (2008). Since 2015 she works at the Centre for Agroecology, Water and Resilience, Coventry University, Coventry (UK) as Research Fellow in Urban Food Sovereignty and Resilience. Her recent work revolves around urban agroecology, food justice, and the politics of urban land.

Pre-conference Day (PhD event)

Monday 13th November 09:30 - 16:30

Venue: Square One, Coventry University, Priory Street, CV1 5QP

10.00-12.00 Warming up: Interactive training session with focus on personal skills

12.00-13.00 Lunch

13.00-14.30 Masterclass with expert (Kevin Morgan, is available until approx. 16.00)

14.30-14.50 Break

14.50-16.00 Topic discussion, discussion in groups about the topics Kevin Morgan touched upon

16.00-16.15 Wrap up from Berlin and prevision of next Workshop (Portugal) and Webinars

This informal meeting attempts to gather PhD students and young professionals eager to share their stories as well as learn from experienced researchers and experts in the field of food systems sustainability.

The day will be divided in two sessions. In the morning, starting from 10am, we will focus on training some fundamental skills for the development of the researcher. With the help of two senior research fellows from the Centre for Agroecology, Water and Resilience (CAWR) and some fun anecdotes, the attendees will get some hints on how to tackle some of the most common challenges in the career of a researcher (e.g. disseminating, writing, presenting, publishing, time management etc.). The discussion will be organised in small groups, to give the opportunity to everyone to share their experiences in a more comfortable setting.

After lunch, we will have the pleasure to attend a masterclass by Professor Kevin Morgan, from Cardiff University. He will give a presentation about his work and research, addressing some of the topics suggested by the participants, who will be previously consulted via email.

The open discussion that will follow will happen again in small groups, so that the attendees will have the opportunity to both interact with Professor Morgan and exchange ideas and perspectives among peers.

The day will conclude, around 5pm, with a brief informative session about the events and activities organized by the PhD group within the AESOP team for the next months.

For more information contact Gloria Giambartolomei: giambarg@uni.coventry.ac.uk

Meet and Greet Session

Monday 13th November 18:00 – 20:00

Venue: Drapers Bar and Kitchen

If you've just arrived and fancy a bite to eat whilst getting to know some new people, then why not come down to "Drapers Bar and Kitchen" where CAWR staff as well as other conference attendees will meet to network and/or catch up! From Drapers, there are many exciting restaurants that you can try, here are some of our suggestions:

Al-Bader: Lebanese (0.1 mile) Pizza Express: Italian (0.1 miles)

Playwrights: British/European (0.1 miles) Cosy Club: British/European (0.1 miles) Las Iguanos: South American (0.1 miles) Shin Ramen: Japanese (0.3 miles)

Habibi: Arabian (0.4 mile) Tumeric Gold: Indian (0.6 mile)



Book Launch and Social Evening

Tuesday 14th November 18:00 – 22:00

Venue: Square One, Coventry University, Priory Street, CV1 5QP

The social evening (free of charge to all conference delegates) includes an aperitif, a book launch with short presentations, book stalls and the opportunity to meet the authors (CAWR staff and associates), a dinner and a music performance. There will be 6 books available to purchase/pre order.

18:00 - 18:30 Arrival

18:30 – 18:45 Presentations from our authors

18:45 – 19:45 Meet the authors

19:45 - 20:30 Dinner is served

20:30 – 21:00 Music performance from Robin Grey

Conference

Tuesday 14th November 09:00 – 17:45 & Wednesday 15th November 09:00 – 17:45

Venue: Techocentre, Coventry University Technology Park, Puma Way, CV1 2TT

Car Parking

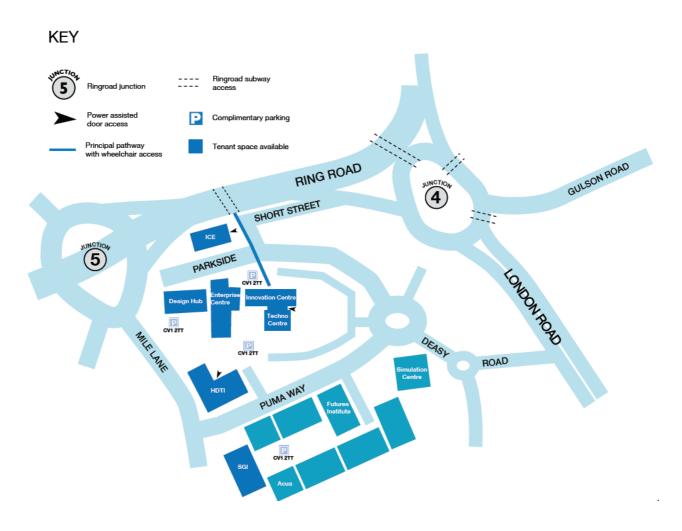
Please collect a ticket from the barrier upon arrival. The tickets will then be exchanged for a prevalidated ticket from the registration desk (at no cost). The new ticket can then be used to exit the car park at the end of the event.

First Aid

In the event of a first aid incident, please alert the reception staff at the Technocentre who will be happy to help.

Wifi Access

There is complimentary wifi available with notices throughout the building stating the login details. If you have any problems connecting, please report to reception.



Useful numbers

Registration desk: +44 (0)7557 425 458 Chiara Tornaghi (Chair): +44 (0)7557 425 355

University Protection Service if on campus +44 (0)2477 656 363

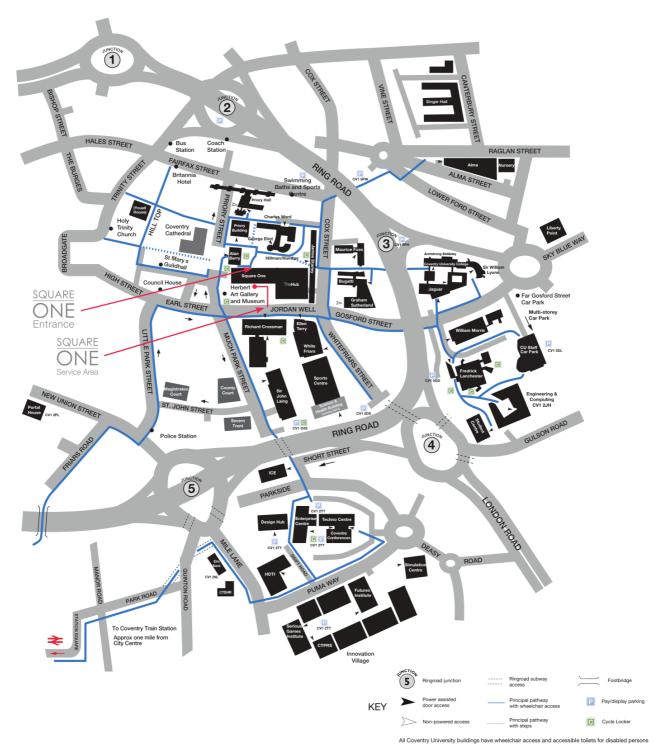
University Protection Service if on campus EMERGENCY: +44 (0)2477 655 555

Trinity Taxis: +44 (0)2476 999 999

Non-emergency police number: 101

Emergency services: 999

Map



Square One - Bar, Cinema and Entertainment Venue.

Off University Square, Priory Street, Coventry, CV1 5FB

To book and reserve event tickets, contact the Sales Office on 024 7765 5231 or email square one.ss@coventry.ac.uk



www.facebook.com/squareone3Dcinema





Conference Programme

DAY 1 – TUESDAY 14TH NOVEMBER – Technocentre, Puma Way, Coventry

8.00 REGISTRATION OPENS

(with coffee)

9.00 WELCOME INTRODUCTIONS

Room 1.3 (200)

Olivier Sparagano (Coventry University),

Michel Pimbert (Director of Centre for Agroecology, Water and Resilience, CAWR at Coventry University),

Chiara Tornaghi (Chair of AESOP Sustainable Food Conference; Research Fellow in Urban Food Sovereignty and Resilience, CAWR, Coventry University)

9.45 KEYNOTE SPEECH 1 (including commentary and Q&A)

Room 1.3 (200)

Chiara Tornaghi (CAWR) and Michiel Dehaene (University of Ghent, Belgium), "Food as an urban question, and the foundations of a reproductive, agroecological, urbanism" Launch: The International Forum for a Resourceful, Reproductive, Agroecological Urbanism.

11.00 - 11.30 COFFEE BREAK

11.30 - 13.00 PARALLEL SESSIONS - TIME SLOT 1

TRACK 1 AGROECOLOGICAL URBANISM Session 1 Slot 1 Room 1.3 (200) Rescaling food systems, rethinking the urban Chair: Tornaghi C./Dehaene M. Brand C., "The foster metropolis as a figure of the urban food planning renewal toward a resourceful and agroecological urbanism" Dezio C., Longo A., "Milano Bioregione: re-conceptualize the metropolitan area in	TRACK M ALTERNATIVE METHODOLOGIES Session 9 Slot 1 Room 1.4 (80) The Food Journey Chair: Sarrouy Kay C. Mama D, "The food journey" IMPORTANT: This is an interactive and sensory session. In order to attend this session you will have to register in advance (this is needed for preparation). Link to register here: https://goo.gl/forms/qXhkKZ	TRACK 2 POLITICAL PROCESSES Session 13 Slot 1 Room 2.1 (80) Food sovereignty, public policies and peoples' participation (part 1) Chair: Chappell J. Moragues-Faus A., Mattheisen E., "What do local policies for food sovereignty look like?" Alegado J. E., Visser O., "Competing, cosmetic and/or covert? Multiple food sovereignties and the	TRACK 3 RESOURCEFUL LAND MANAGEMENT Session 19 Slot 1 Room 1.2 (30) Collaborative and Collective Land Management and Tenure Regimes Chair: Franklin A. Pipart N. Plateau L. Maughan N., Maréchal K. "Towards viability of urban market gardening through innovative access to private properties and mutualisation of production means" Komisar J. "Using urban public space for edible gardens"	TRACK 4 AGROECOLOGICAL PRACTICES Session 27 Slot 1 Room 1.8 (30) Urban agroforestry and edible city planning Chair: Maughan C. De Graaf P. "Planning food futures now. Finding opportunities for food forestry in the Dutch Metropolitan Region Rotterdam The Hague" Van Dooren N., Van Dorp D. "Food forest: promising emerging practice for	TRACK 5 POST-CAPITALIST ECONOMICS Session 31 Slot 1 Room 1.1 (30) Food-producing commons in Europe (panel) Chair: Ferrando T. Panel with contributions from Ferrando T., Chang M., Claeys P., Diesner D., Logan R., MacKinnon I., Woods D.,
system" Hebinck A., Vervoort J., Barthel S., Gordon L., "Heterogeneity as means to resilient urban food systems? Identification of possibilities for scale-crossing" Buyck J., Bertrand N., "Urban fabric and local food systems confronted to a sustainable issue of land use"		positioning" Butterly D., Anderson C. "People's Policy Processes for Food Sovereignty: Reflections from England"	trusts for the enhancement of urban food security" Glatron S, Sachsé V., Del Monte B. "Shared urban gardens for transition towards democratic and ecological cities (France and Italy)"	systems?" Van Dooren N., Schulhoff M. "A food perspective on urban green space" Paganini N. Schelchen A., "Creating edible cities: Participatory Guarantee Systems as planning tool for agroecological cultivation and knowledge hub"	

13.00 - 14.15 LUNCH

Room: Lunch hall

14.15- 15.45 PARALLEL SESSIONS (SLOT 2)

TRACK 1	TRACK M	TRACK 2	TRACK 3	TRACK 4	TRACK 5
AGROECOLOGICAL	ALTERNATIVE	POLITICAL	RESOURCEFUL	AGROECOLOGICAL PRACTICES	POST-CAPITALIST
URBANISM	METHODOLOGIES	PROCESSES	LAND MANAGEMENT	AGROECOLOGICAL PRACTICES	ECONOMICS
S2	S7	S14	S20	S28	S32
Slot 2	Slot 2	Slot 2	Slot 2	Slot 2	Slot 2
Room 1.3 (200)	Room 1.4 (80)	Room 2.1 (80)	Room 1.2 (30)	Room 1.8 (30)	Room 1.1 (30)
Rethinking food and planning	Radical methodologies for	Food sovereignty, public	Food Systems Planning and	Food producing and socio-	AFNs reconfiguring just food
intersections	food sovereignty (panel)	policies and peoples'	Urban-Rural Place-Shaping	environmentally just Urban	systems
(part 1)	(part 1)	participation	Chair: Kneafsey M.	Agriculture	Chair: Buchanan C.
Chair: Dehaene M./Tornaghi	Chair: Von der Haide E./Van	(Part 2)		Chair: Lemke S.	
<u>C.</u>	Dyck B.	Chair: Chappell J.			Psarikidou K., Kaloudis H.,
_			Sonkin F., "Municipal Goats:	Maughan N. Pippart N.,	Fielden A., Reynolds C., "Re-
Caputo S., "Urban futures and	Grey R. "Three Acres And A	Halliday J., Hawkes C.,	Exploring Agroecological Place-	Plateau L., Visser M., Maréchal	configuring the Food-Hub
food production"	Cow - radicalising and	"Pathways for enabling local	Shaping and Multiple Ruralities	K., Hermesse J. "The challenge	Model: De-stigmatising Food
'	empowering a movement	food policies: the role of	in Sierra de Guadarrama	of (re)defining viability	Poverty?"
De Graaf P., "Planning urban	for food sovereignty"	people's participation"	(Spain)"	through agroecological	,
food together. Theoretical	,		,	practices: The case of urban	Darly S., "The urban-rural
approaches to urban food	Solomon D. "Soil Portraits,	Paul Dhason Jessy C.,	Darrot C., Maréchal G. "Self-	market gardeners in Brussels."	relationships: a resource for
planning practice in a	the 'real' Big Data" + art	"Sustainable Food	feeding city: the case of Rennes		informal food sector in the
complex, pluralistic society"	display	Production in a Food Deficit	- Presenting the urban context	Reckinger R., "Alternative	global city"
Rodriguez N., "Framing the	Yee "Performing	Region: The case of	and a project of extended urban	Paths Towards Sustainable	Skordili S., "New micro
analysis of food derivatives: A	collaborative consumption:	Kudumbashree as a	fruit trees"	Localized Food Sovereignty.	agrofood initiatives in crisis-
preliminary attempt to	A case-study of food sharing	Community Self	Rixen A. Scheromm P., Laurens	Convergence between	hit Greece: a promising
connect urban financialization	app Olio"	Organisation in Kerala, India"	L. Hasnaoui Amri N., Soulard C.,	Prosumers and Ethical	alternative or business as
and food-commodity trade"		Levidow L., "London's	"Building resourcefulness in	Entrepreneurs over Time."	usual?"
and rood-commodity trade		cooperative food-growing	periurban areas: agroecological	Sarlöv Herlin I., "Rus in Urbe?	
		activities building	initiatives in two towns near	A historical perspective on	Opitz I., Specht K., Piorr A.,
		community"	Montpellier and Nîmes	food cultures as drivers of	Siebert R., Zasada I., "Effects
		Community	·		of Consumer-Producer-
			(France)"	urban cultivated landscapes."	Interactions in Alternative
			Mazzocchi C. Filippini R., Corsi S.	Rayns F., Lennartsson M.	Food Networks on
			"Participation in Alternative	Davies G. "The Henry	Consumer's Learning about
			Food Networks (AFNs): a	Doubleday Research	Food and Agriculture"
			resource for territorial	Association's Member's	
			resilience. The Territorial	Experiment Scheme: A case	
			Agricultural Resilience Index for	study in the practical	
			planning"	application of citizen science"	

POSTER SESSION (all tracks)

POSTER SESSION (all tracks)

SLOT 2 (but posters will be in the lunch hall both days)

Room: Lunch hall

Chair: Brem-Wilson J.

Darly S., Boisrond S., Konté I., Letellier C., Plancqueel I., Yahioui H., "Hortus vs Ager, how edible backyards challenge the agrarian representation of urban sprawl impact on food production".

Densero E., Fassio F., Tamborrini P., Cirillo D., Pettenati G., Tecco N., Toldo A., Boella G., Peano C., "Turin Food Atlas. Sharing knowledge towards urban food policies"

Remiarz T., "Edible ecosystems: the missing piece in the urban food sovereignty jigsaw?"

Guzman Estrada I., "From bits to bites: Advancing adaptive capacities in urban food security through information systems"

Logan R. "What is the role of urban agriculture in food justice in the UK? - Action research in London"

Durrant R., Sandom C., Ely A., "Friend or Foe? Exploring the conflicts and compatibilities of rewilding and agroecology"

De Marinis P., "Impact assessment and agroecological reflexions on Microgardening experience in Dakar, Senegal"

Mama D., "The food journey"

Sabbe A., "Towards a regenerative city: rewiring urban metabolism flows in Singapore"

15.45-16.15 COFFEE BREAK

16.15-17.45 PARALLEL SESSIONS (TIME SLOT 3):

TRACK 1 AGROECOLOGICAL URBANISM	TRACK M Alternative Methodologies	TRACK 2 POLITICAL PROCESSES	TRACK 3 RESOURCEFUL LAND MANAGEMENT	TRACK 4 AGROECOLOGICAL PRACTICES	TRACK 5 POST-CAPITALIST ECONOMICS
S36 Slot 3 Room 1.3 (200) Rethinking food and planning intersections (part 2) Chair: Dehaene M./Tornaghi C. Jansma J. E., van der Valk A., "The planning of an Urban Food Scape through the lenses of Multi-Level Perspective on transition and Social Practice Theory: lessons of Almere Oosterwold (NL)" Washer D., Levelt M., Agricola H., van Bossum J., Jeurissen L., ten Brug L., "Evidence-based Food System Design. Sitespecific Planning for Linking Urban Food Consumption with Metropolitan Production" Lucertini G. Stempfle S., Dalla Fontana M., Reho M., Musco F., "Using the urban metabolism approach for assessing the food system in a planning perspective: an analytical framework"	S8 Slot 3 Room 1.4 (80) Radical methodologies for food sovereignty: (part 2) Chair: Von der Haide/Van Dyck Von der Haide E., "Queer Ecologies in Community Gardens. A performance lecture with film clips" Van Dyck B. "Liberate research. Tactics from popular education" Orrù A. M. "Corporeal Encounters with Farmscapes: curating an embodied methodology for ecological urban-making"	S12 Slot 3 Room 2.1 (80) Civil society and urban food actors: Chair: Owen L. Giambartolomei G., Forno F., Sage C., "Evaluating the role of 'food champions' as policy entrepreneurs in a comparative analysis of two cities" Durrant R., "Civil society and the transformation of food systems towards sustainability and social justice: a UK case study" Maréchal G., Lamine C., Darolt M., "Ecological transitions within agri-food systems: a Franco-Brazilian comparison" Hasanov M., "What is alternative about alternative food networks?"	S21 Slot 3 Room 1.2 (30) Land Rights, Ownership and Access to Land Chair: Pimbert M. Colombo L. Grando S. "Access to land pivotal in the food system reconfiguration." Cao R., "Urban Farms, City Governments, and Land Ownerships: Dilemmas and Opportunities under the Chinese Collective Property Right Regime" Barchiesi V., "Possible alternative to Land grabbing through territorial planning. Case study: Senegal River Valley" Hasnaoui Amri N., "Allocation of public land to farmers: a way for urban authorities to support a transition toward a nurturing agroecology?"	S26 Slot 3 Room 1.8 (30) Vertical farming, Wastewater and metabolism Chair: Saxena L./Chang M. Steglitz A. Million A., Franck V., Bürgow G. "ROOF WATER-FARM – From the pilot plant to large scale implementation" Zhou H. "From urban greening via urban agriculture to urban agritecture – a comparative study between Shanghai and New York" Samangooei M. "Individuals cultivating edible plants on buildings in England" Brisebois È., Audet R., Lefèvre S., "Montreal's Alternative Food System Faced with the Issue of Food Loss and Waste: Which Social Practices Can Transition into Sustainability?"	

TRACK 1 AGROECOLOGICAL URBANISM			
S3 Slot 3 Room 1.1 (30) Everyday reappropriations of the food experience in the urban realm (Part 1) Chair: Fried J.			
Coulson H. "Collective Urban Food Gardens as Ecologies of Care: Engendering a Care-full Alternative Urbanism"			
Buyck J. Courroux T., "Places, atmospheres and urban sustainability of bread: Explorations in the Grenoble metropolis"			
Rich M., Viljoen A., Smith H., "Creating the 'Healing City': Lessons learned from care farms in three European countries"			

17.45 DELEGATES walk from Technocentre to THE HUB/SQUARE ONE (approximately 8-10 minutes walk via underpass on the back of Technocentre, between Short Street and Much Park Street)

18.00 – 18.30 Music and Aperitif served

Room: Square One (the Hub)

18.30 - Book launch starts with speakers (Speakers: max. 3 min. each) followed by book stalls and informal 'meet the authors' mingling.

Room: Square One (the Hub)

Books:

- Everyday Experts: How People's Knowledge Can Transform the Food System (People's Knowledge Collective)
- Public Policies for Food Sovereignty: Social Movements and the State (Aurelie Desmarais, A, Claeys, P., Trauger, A.)
- Right to Food and Nutrition Watch 2017 The World Food Crisis: The Way Out 10th Anniversary Issue
- Beginning to End Hunger: Food and the Environment in Belo Horizonte, Brazil, and Beyond (Chappell, J.)
- Food Sovereignity, Agroecology and Biocultural Diversity (Pimbert, M.)
- Forest Gardening in Practice (Remiarz, T.)
- Gender, Nutrition, and the Human Right to Adequate Food: Toward an Inclusive Framework (Bellows, A., Valente, F., Lemke, S. and Maria Daniela Nunez Burbano de Lara)
- Political Ecology, Food Regimes, and Food Sovereignty: Crisis, Resistance, and Resilience (Tilzey, M.)
- Special Issue of RUAF Magazine UAM No. 33 "Urban Agroecology" (Produced by CAWR & RUAF)

19.45 DINNER served (during dinner, at 20.30: **music performance** by Robin Grey (from 'Tre Acres and a Cow") Room: Square One (the Hub)

(see menu)

Social event ends at 10.00 pm.

DAY 2 – WEDNESDAY 14TH NOVEMBER – Technocentre, Puma Way, Coventry

8.15 REGISTRATION AND COFFEE

8.40-10.10 PARALLEL SESSIONS (SLOT 4)

TRACK 1 AGROECOLOGICAL URBANISM	TRACK M Alternative Methodologies	TRACK 2 POLITICAL PROCESSES	TRACK 3 RESOURCEFUL LAND MANAGEMENT	TRACK 4 AGROECOLOGICAL PRACTICES	TRACK 5 POST-CAPITALIST ECONOMICS
S4 Slot 4 Room 1.3 (200) Everyday reappropriations of the food experience in the urban realm (Part 2) Chair: Fried J. Nunes R., Manna S., Ho A., "Affective spaces, and urban gardening places. The role of food, body and place on mental health in the city" Bouwman L., Swan E., Koelen M., "Back to Basics: applying a salutogenic approach to understand the origins of healthful eating " Rutherford T., "Bread and Roses: Stronger communities and healthier food systems from the inside out"		S15 Slot 4 Room 2.6 (30) Food consumption, diets and food Chair: Lemke S. Urbanczyk J., "Planning Resourceful Ways of Living with Sustainable Development Goals" Fava N., Garrido Y Puig R., Carrasco Bonet M., "Post- productive Ruralscape: The Role of the Food Market, Ter Brugent Case, Catalonia" Bonati S., Loda M., Puttilli M., "Reshaping urban spaces of consumption: a project for an Alternative Food Network (AFN) in the city of Florence" Scott C. K., Colasanti K., Pinard C., "The Weekend Food Odyssey: Perceptions of Transportation to Food Retail Sites"	S22 Slot 4 Room 1.2 (30) Regenerative and Restorative Land Management and Food Systems Planning (part 1) Chair: MacKinnon I. Baysse-Lainé A., Perrin C., Delfosse C. "Land as a common resource to achieve urban food relocalization. A farmland property rights approach to urban food commoning" Simon Rojo M. Dužì B. "Contesting the paradigm: Decentralizing, re-localizing, reconnecting and closing nutrient loops in the city of Madrid" Solomon D., Nevejan C. "Urban soils as a biological hotspot, with new roles for all ecosystem actors"		S33 Slot 4 Room 1.1 (30) Solidarity economy and decommodification of the food system (part 1) Chair: Tilzey M. Spijker S. N., "Liberty or Lunacy? Exploring Framings of Self-reliance in Foodscapes" Pottinger L., "Growing noncapitalist cultures of exchange: crafting a seedy economy?" Travieso E., "Redesigning food systems for economic, social, and ecological benefit in Chiapas, Mexico" Ulug C., Trell E. M., "Local collectives, community economy and autonomous food systems: the case of the Free Café (Groningen, NL)"

TRACK 2 POLITICAL PROCESSES	TRACK 2 POLITICAL PROCESSES		
Session 10 Slot 4 Room 1.4 (80) Food and social justice in Coventry (panel) Chair: Anderson C. Anderson C., Kneafsey M., Maughan C., Saxena L., Hodson E., McBrien T., "Food and social justice in Coventry."	Session 18 Slot 4 Room 2.1 (80) Urban governance, policy fragmentation and practical challenges Chair: Giambartolomei G. Maréchal G., Bodiguel L., Chiffoleau Y., "Public food procurement and diversity in short food chains" Manganelli A., "Challenging the enhancement of urban agriculture. Hybrid governance tensions in a multi case-study analysis."		
	Filippini R., Mazzocchi C., Corsi S., "Trends in urban food strategies" Doernberg A., Voigt P., Zasada I., Piorr A., "Urban food policies in German city regions: An overview about actors and steering instruments"		

10.10 - 11.00 - KEYNOTE SPEECH 2: Heather Anderson (Whitmuir Organics/Nourish Scotland) Includes Q&A Room 1.3 (200)

11.00 - 11.30 Coffee break (30 min)

11.30-13.00 PARALLEL SESSIONS (SLOT 5)

TRACK 1	TRACK M	TRACK 2	TRACK 3	TRACK 4	TRACK 5
AGROECOLOGICAL	Alternative	POLITICAL PROCESSES	RESOURCEFUL LAND	AGROECOLOGICAL PRACTICES	POST-CAPITALIST ECONOMICS
URBANISM	Methodologies		MANAGEMENT		
S5	S11	S17	S23	S29	S34
Slot 5	Slot 5	Slot 5	Slot 5	Slot 5	Slot 5
Room 1.3 (200)	Room 1.4 (80)	Room 2.1 (80)	Room 1.2 (30)	Room 1.8 (30)	Room 1.1 (30)
Post Sprawl policies for the	Delecolonising	Food policies and strategies	Regenerative and Restorative	Urban agricultural planning &	Solidarity economy and
horizontal metropolis	methodologies	(part 1)	Land Management and Food	design	decommodification of the food
Chair: Tornaghi C./Dehaene	Chair: Chang M.	Chair: Kneafsey M.	Systems Planning (Part 2)	Chair: Logan R.	system (part 2)
<u>M.</u>			Chair: MacKinnon I.		Chair: Tilzey M.
	Woods D. "Cooking Up	Stempfle S., Reho, M., "The		Daniel A.C., Aubry C., Colle M.,	
Sanz Sanz E., Martinetti, D.	revolution: recipes for	role of the foodservice sector	Wach E., Ripoll S., Taylor R.	Barbillon A. "Development of an	Simon Rojo M., Morales
"Operational modelling of	food democracy"	in tracing a possible pathway	"Pathways towards	urban agriculture project:	Bernardos, I., Sanz Landaluze,
peri-urban farmland for food		for food strategy-building in	regenerative food systems:	"projection" and "revelation""	J., "Food sovereignty
planning in Mediterranean		Venice. An explorative	small-scale farmers at the	Solman H. van der Valk, A.,	movements in urban food
region"		assessment"	centre of the transitions"	Pedroli, B "Alleviating tourist	strategies. Lessons from
De Marchi M.		Pettenati G., Dansero E., Toldo	Tuffour M. "Ghana's Urban	pressure on city centres by	Spanish cities"
"Transformations and		A., "The Turin food system	Change effect on urban	fostering alternative food	Buchanan C., "Collaboration
innovation in the Veneto		toward a metropolitan Food	agriculture: Farmer's	experiences away from tourist	and Autonomy in
region Food System"		Policy: an actor's perspective"	Adaptation Strategies in	hotspots"	Thessaloniki's Diverse Food
Lazzarini L., "The role of local		Nasr J., Teitel-Payne R., Kuhns	Accra"	Sanyé-Mengual E. Gasperi D.,	Economies"
actors in shaping Green Belt		J., "GrowTO revisited: From	Sarrouy Kay C. " 'This is what	Pennisi G., Rizzati N., Bazzocchi	Farrell B. "Re-dressing the
policies in Bristol City Region"		action plan to practice	we want to share with the	G., Magrefi F., Mezzacapo U.,	Bread Balance: An
policies in Bristor City Region		problems in Toronto's urban	we want to share with the world': Peasant Participatory	Centrone Stefani M., Orsini F.	Anthropological Perspective
		agriculture"	Videos on Agroecology and	Gianquinto G. "The use of vacant	on the De-commodification of
			Traditional Knowledge in	spaces for urban horticulture in	a Staple Food"
		Wunder S. "Rural Urban	Senegal"	the city of Bologna (Italy)"	· I
		Nexus: Sustainable land use	55.1.5541	, , , , , , , , , , , , , , , , , , , ,	Navarrete-Hernandez P.
		through integrated city region		Mees C. "Participatory design and	"Informal Food Chains:
		food strategies"		planning for food production,	Sustaining Rural and Urban
				shelter and cultural expression:	Livelihoods in Chile
				Shared urban gardens in New	
				York City"	

13.00 – 14.15 LUNCH (Room: lunch hall)
14.15 – 15.15 KEYNOTE SPEECH 3: Emily Mattheisen (FIAN International) Including Q&A Room 1.3 (200)
15.15-15.30 COFFEE BREAK
15.30 – 17.00 PARALLEL SESSIONS (SLOT 6)

TRACK 1 AGROECOLOGICAL URBANISM	TRACK M Alternative Methodologies	TRACK 2 POLITICAL PROCESSES	TRACK 3 RESOURCEFUL LAND MANAGEMENT	TRACK 4 AGROECOLOGICAL PRACTICES	TRACK 5 POST-CAPITALIST ECONOMICS
S6 Slot 6 Room 1.3 (200) Urban agroecology Chair: Dehaene M./Tornaghi C. Bowness E., Wittman H., "Bringing the Country into the City?: Exploring signals of agrarian citizenship and food sovereignty in the practice of urban agriculture in Brazil and Canada" Hagolani-Albov S., Resler M. "Urban Agroecology: The role of food citizenship and the geographic imagination Laycock R. "Can boundary objects be used for collaboration across timescales? Hope for grassroots sustainability initiatives with transient participants"	S37 Slot 6 Room 1.4 (80) The food journey (repeated) Mama D. "The food journey" IMPORTANT: This is an interactive and sensory session. In order to attend this session you will have to register in advance (this is needed for preparation). Link here: https://goo.gl/forms/q XhkKZIMX1Y4Bqnp2	S16 Slot 6 Room 2.1 (80) Food policies and strategies (part 2) Chair: Saxena L. Soma T., "Closing the Loop: A Social Innovation Approach to Tackling Food Waste in Canada" Burgos S. "Urban Food Districts: Comprehensive and strategical urban planning for competitive and sustainable food systems" Sequiri A. "The Edible District Policy: challenges and successes of implementation"	S24 Slot 6 Room 1.2 (30) Data and indicators for food planning processes (special session) Chair: Owen L. Zasada I., Doernberg A., Schmutz U. "Analysing and mapping food systems: How to make the approaches and tools operational and applicable for food governance and planning?" (open discussion)	S30 Slot 6 Room 1.8 (30) Producers, consumers and urbanrural links Chair: Franklin A. Dalla Fontana M., Maragno D., Lucertini G., Stempfle S., Reho M., Musco F. The potential impact of urban agriculture on food production, water management and energy consumption: the case of Padua. Heuschkel Z. "About the role of citizens in participatory farming models. Participation with and for whom?" Dezio C, Marino D. "Agricultural practices and local food initiatives. Which resilient processes in urban socio- ecological systems."	S35 Slot 6 Room 1.1 (30) Political agroecology Chair: Claeys P. Tilzey M. "Political Ecology, as Theory and Praxis, for Livelihood Sovereignty" Christodoulidis K. "Political agroecology in Crete" Mount P., Blay-Palmer A., "Just Food Farm: Using urban agroecology on public land to challenge the measurement of "value' in the social economy" Moeller N., Pederson J. M., "Agroecological tactics of state evasion in the rapidly urbanizing Ecuadorian Amazon?"

TRACK M		
Alternative		
Methodologies		
S38		
Slot 6		
Room 2.6 (30)		
Film screening		
von der Haide, E.		!
"Another world is		
plantable! Community		
Gardeners in North		
America"		
Language: English		
60 Minutes		
oo wiinates		
Orrù A.M.,		
"Organoleptic		
encounters",		
10 minutes		

17.00-17.15 PhD students reporting on their training and learning during the Pre-Conference event Room 1.3 (200)

17.15 Concluding remarks (15 min)

Room 1.3 (200)

Book of Abstracts: Contents

Competing, cosmetic and/or covert? Multiple food sovereignties and the politics of translation and positioning **Joseph Edward Alegado** & Oane Visser***********************************
Food and social justice in Coventry (panel) Colin Anderson¹, Moya Kneafsey¹, Chris Maughan², Tommie McBrien⁴, Lopa Saxena¹, Ed Hodson³35
Possible alternative to Land grabbing through territorial planning. Case study: Senegal River Valley Valeria Barchiesi
Land as a common resource to achieve urban food relocalization. A farmland property rights approach to urban food commoning **Adrien Baysse-Lainé ^{1,2} , Coline Perrin ² & Claire Delfosse ¹
Reshaping urban spaces of consumption: a project for an Alternative Food Network (AFN) in the city of Florence Sara Bonati ¹ , M. Loda ¹ , & M. Puttilli ¹
Back to Basics: applying a salutogenic approach to understand the origins of healthful eating **Laura Bouwman¹, Emily Swan² & Maria Koelen¹***********************************
Bringing the Country into the City: Exploring signals of agrarian citizenship and food sovereignty in the practice of urban agriculture in Brazil and Canada Evan Bowness, Hannah Wittman
The foster metropolis as a figure of the urban food planning renewal toward a resourceful and agroecological urbanism **Caroline Brand**:
Montreal's Alternative Food System Faced with the Issue of Food Loss and Waste: Which Social Practices Can Transition into Sustainability? Eliane Brisebois¹, René Audet¹, Sylvain Lefevre¹
Collaboration and Autonomy in Thessaloniki's Diverse Food Economies **Christabel Buchanan*** **Collaboration and Autonomy in Thessaloniki's Diverse Food Economies** **Collaboration and Properties** **Colla
Urban Food Districts: Comprehensive and strategical urban planning for competitive and sustainable food systems Sebastian Burgos
People's Policy Processes for Food Sovereignty: Reflections from England Butterly, D¹, Anderson, C²
Urban fabric and local food systems confronted to a sustainable issue of land use Jennifer Buyck ¹ , Nathalie Bertrand
Places, atmospheres and urban sustainability of bread: Explorations in the Grenoble metropolis Jennifer Buyck, Théo Courroux
Urban Farms, City Governments, and Land Ownerships: Dilemmas and Opportunities under the Chinese Collective Property Right Regime Ren Cao
Urban futures and food production Silvio Caputo
Political agroecology in Crete Konstantinos Christodovlidis

Access to land pivotal in the food system reconfiguration. The case of the Rome peri-urban area
Luca Colombo¹, Stefano Grando²51
Collective Urban Food Gardens as Ecologies of Care: Engendering a Care-full Alternative Urbanism **Helen Coulson** **52*** **The Coulson** **The Coulson**
The Food Journey Mama D
The potential impact of urban agriculture on food production, water management and energy consumption: the case of Padua. Michele Dalla-Fontana, Denis Maragno, Giulia Lucertini, Sarah Stempfle, Malteda Reho, & Francesco Musco54
Development of an urban agriculture project: "projection" and "revelation". **Anne-Cécile Daniel¹, Christine Aubry², Mélanie Colle¹, & A. Barbillon¹
Turin Food Atlas - Sharing knowledge towards urban food policies Egidio Dansero¹, Franco Fassio², Paolo Tamborrini³, Davide Cirillo¹, Giacomo Pettenati¹, Nadia Tecco¹, Alessia Toldo¹, Guido Boella¹, & Cristiana Peano¹
Hortus vs Ager, how edible backyards challenge the agrarian representation of urban sprawl impact on food production. Segolene Darly¹, Stephana Boisrond¹, Ibrahima Konté¹, Camille Letellier¹, Isabel Plancqueel¹, Houssem Yahioui¹57
The urban-rural relationships: a resource for informal food sector in the global city Segolene Darly
Self-feeding city: the case of Rennes - Presenting the urban context and a project of extended urban fruit trees **Catherine Darrot1*, Gilles Maréchal2**
Planning food futures now. Possibilities for food forestry in the Dutch Metropolitan Region Rotterdam The Hague Paul de Graaf
Planning urban food together. Theoretical approaches to urban food planning practice in a complex, pluralistic society Paul de Graaf
Transformations and innovation in the Veneto region agro-food system Marta De Marchi
Impact assessment and agroecological reflexions on Microgardening experience in Dakar, Senegal *Pietro De Marinis**
Milano Bioregione: re-conceptualize the metropolitan area in relation to the Food-City system *Catherine Dezio** & Antonio Longo** 64
Agricultural practices and local food initiatives. Which resilient processes in socio-ecological urban systems **Catherine Dezio** & Davide Marino**
Milano Bioregione: re-conceptualize the metropolitan area in relation to the Food-City system Catherine Dezio¹, Antonio Longo
Urban food policies in German city regions: An overview about actors and steering instruments **Alexandra Doernberg, Paula Voigt, Ingo Zasada, Annette Piorr
Civil society and the transformation of food systems towards sustainability and social justice: a UK case study **Rackel Durrant**

friend or Foe? Exploring the conflicts and compatibilities of rewilding and agroecology in the search for a 'resourceful agroecological urbanism' **Rachel Durrant, Chris Sandom, Adrian Ely
Re-dressing the Bread Balance: An Anthropological Perspective on the De-commodfication of a Staple Food. Bee Farrell
Post-productive Ruralscape: The Role of the Food Market, Ter Brugent Case, Catalonia Nadia Fava¹, Romà Garrido y Puig¹, Marta Carrasco Bonet¹72
Food-producing commons in Europe (panel) Tomaso Ferrando¹, Marina Chang², Priscilla Claeys², Dagmar Diesner², Robert Logan², Iain MacKinnon², Deirdre (Dee) Woods³
Trends in urban food strategies **Rosalia Filippini ¹ , Chiara Mazzocchi ¹ , Stefano Corsi ¹
Evaluating the role of 'food champions' as policy entrepreneurs in a comparative analysis of two cities. Gloria Giambartolomei ¹ , Francesca Forno ² , Colin Sage ³
Shared urban gardens for transition towards democratic and ecological cities (France and Italy) Sandrine Glatron ¹ , Victoria Sachsé ² , Beatrice Del Monte ³
Three Acres and A Cow - radicalising and empowering a movement for food sovereignty **Robin Grey************************************
From bits to bites: Advancing adaptive capacities in urban food security through information systems. Issac Guzman Estrada
Urban Agroecology: The role of food citizenship and the geographic imagination Sophia Hagolani-Albov¹, Megan Resler¹78
Collective work in professional market gardening: a resource in suburban agroecological experiments in Brussels Julie Hermesse ¹ , Maëlle van der Linden ² , Lou Plateau ¹
Sharing the Harvest: Exploring public dialogue in food (sovereignty) research Ella von der Haide¹, Barbara van Dyck²80
Pathways for enabling local food policies: the role of people's participation. Jess Halliday¹ & Corinna Hawkes²8
What is alternative about alternative food networks? Mustafa Hasanov
Allocation of public land to farmers: a way for urban authorities to support a transition toward a nurturing agroecology? Nabil Hasnaoui Amri ¹ & Coline Perrin ¹ 8
Heterogeneity as means to resilient urban food systems? Identification of possibilities for scale-crossing Aniek Hebinck ^{1,2} , Joost Vervoort ^{2,3} , Stephan Barthel ¹ and Line Gordon ¹ 84
About the role of citizens in participatory farming models - Participation with and for whom? Zoe Heuschkel89
The potential of community land trusts for the enhancement of urban food security **Boglárka Ivanegová¹, Ana Puhac²************************************

The planning of an Urban Food Scape through the lenses of Multi-Level Perspective on transition and Social Practice Theory: lessons of Almere Oosterwold (NL) Jan Eelco Jansma¹ and Arnold van der Valk²8
Using urban public space for edible gardens June D. Komisar
Can boundary objects be used for collaboration across timescales? Hope for grassroots sustainability initiatives with transient participants **Rebecca Laycock**** **Rebecca Laycock**** **Rebecca Laycock*** **Rebecca Laycock** **
The role of local actors in shaping Green Belt policies in Bristol City Region Luca Lazzarini
London's cooperative food-growing activities building community Les Levidow92
What is the role of urban agriculture in food justice in the UK? – Action research in London **Robert Logan**92
Using the urban metabolism approach for assessing the food system in a planning perspective: an analytical framework Giulia Lucertini; Sarah Stempfle¹; Michele Dalla Fontana; Matilda Reho¹; Franceso Musco
Challenging the enhancement of urban agriculture. Hybrid governance tensions in a multi case-study analysis. Alessandra Manganelli
Ecological transitions within agri-food systems: a Franco-Brazilian comparison Gilles Maréchal ¹ , Claire Lamine ² & Moacir Darolt ³ 99
Public food procurement and diversity in short food chains Gilles Marechal ¹ ,Luc Bodiguel ² , Yuna Chiffoleau ³ 96
The challenge of (re)defining viability through agroecological practices: The case of urban market gardeners in Brussels. Noémie Maughan¹, Nathalie Pippart², Lou Plateau², Marjolein Visser¹, Kevin Maréchal², Julie Hermesse³
Participation in Alternative Food Networks (AFNs): a resource for territorial resilience. The Territorial Agricultural Resilience Index for planning Chiara Mazzocchi ¹ , Rosalia Filippini ¹ , Stefano Corsi ¹
Participatory design and planning for food production, shelter and cultural expression: Shared urban gardens in New York City Carolin Mees
Agroecological tactics of state evasion in the rapidly urbanising Ecuadorian Amazon? Nina Moeller ¹ & Martin Pedersen ²
What do local policies for food sovereignty look like? Ana Moragues-Faus,¹ Emily Mattheisen²
Just Food Farm: Using urban agroecology on public land to challenge the measurement of 'value' in the social economy *Phil Mount**, Alison Blay-Palmer**
GrowTO revisited: From action plan to practice problems in Toronto's urban agriculture Joe Nasr ^{1,2} , Rhonda Teitel-Payne ¹ and James Kuhns ¹ 103
Informal Food Chains: Sustaining Rural and Urban Livelihoods in Chile

the city Richard Nunes¹, Senjuti Manna¹, Aileen Ho¹10
Effects of Consumer-Producer-Interactions in Alternative Food Networks on Consumer's Learning about Food and Agriculture Ina Opitz ¹ , Kathrin Specht, Annette Piorr, Rosemarie Siebert, Ingo Zasada ¹
Corporeal Encounters with Farmscapes: curating an embodied methodology for ecological urban- making
Anna Maria Orrù
Sustainable Food Production in a Food Deficit Region: The case of Kudumbashree as a Community Se Organisation in Kerala, India *Christabell Paul Dhason Jessy**
The Turin Food System Towards a Metropolitan Food Policy: An Actor's Perspective Giacomo Pettenati¹, Egidio Dansero¹, Alessia Toldo²
Towards viability of urban market gardening through innovative access to private properties and mutualisation of production means Nathalie Pipart, Lou Plateau, Manon Bertha, Noémie Maughan¹, Kevin Maréchal11
Growing non-capitalist cultures of exchange: crafting a seedy economy? Laura Pottinger
Re-configuring the Food-Hub Model: De-stigmatising Food Poverty? **Katerina Psarikidou*. Christian Reynolds*, Amy Fielden**, Harris Kaloudis*
The Henry Doubleday Research Association's Members' Experiment Scheme: A case study in the practical application of citizen science. **Rayns F.1*, Lennartsson M.2* and Davies G.2**** 11
Alternative Paths towards Sustainable Localized Food Sovereignty. Convergence between Prosumers and Ethical Entrepreneurs over Time. **Rachel Reckinger**
Edible ecosystems: the missing piece in the urban food sovereignty jigsaw? Tomas Remiarz
Creating the "Healing City": Lessons learned from care farms in three European countries Magda Rich¹, Andre Viljoen¹, Helen Smith²11
Building resourcefulness in periurban areas: agroecological initiatives in two towns near Montpellier and Nîmes (France) Annabel Rixen¹, Pascale Scheromm¹, Lucette Laurens¹, Nabil Hasnaoui Amri¹, Christophe Soulard¹11
Framing the analysis of food derivatives: A preliminary attempt to connect urban financialization and food-commodity trade Nelson Rodriguez
Bread and Roses: Stronger communities and healthier food systems from the inside out Theo Rutherford
Towards a regenerative city: rewiring urban metabolism flows in Singapore

Individuals cultivating edible plants on buildings in England Mina Samangooei	22
The use of vacant spaces for urban horticulture in the city of Bologna (Italy) Esther Sanyé-Mengual ^{1,} Daniela Gasperi, ¹ Giuseppina Pennisi, ¹ Niccolò Rizzati ¹ , Giovanni Bazzocchi, ¹ Francesca Magref Umberto Mezzacapo ¹ , Monique Centrone Stefani ³ , Francesco Orsini ¹ , Giorgio Gianquinto ¹	
Operational modelling of peri-urban farmland for food planning in Mediterranean region Esther Sanz Sanz¹, Davide Martinetti¹ Claude Napoleone¹1.	24
Rus in Urbe? A historical perspective on food cultures as drivers of urban cultivated landscapes. Ingrid Sarlöv Herlin	25
"This is what we want to share with the world": Peasant Participatory Videos on Agroecology and Traditional Knowledge in Senegal **Carla Sarrouy Kay***********************************	26
The Weekend Food Odyssey: Perceptions of Transportation to Food Retail Sites *Christian Kelly Scott1, Kathryn Colasanti, Courtney Pinard	27
The Edible District Policy: challenges and successes of implementation Arlinda Sheqiri	28
Food sovereignty movements in urban food strategies. Lessons from Spanish cities Marian Simon Rojo ¹ , Ines Morales Bernardos ² , Jon Sanz Landaluze ³	29
Contesting the paradigm: Decentralizing, re-localizing, reconnecting and closing nutrient loops in the city of Madrid **Marian Simon Rojo1, Barbora Duži2************************************	
New' micro agrofood initiatives in crisis-hit Greece: a promising alternative or business as usual? Sophia Skordili	31
Alleviating tourist pressure on city centres by fostering alternative food experiences away from touri hotspots Helen Solman ¹ , Arnold van der Valk ¹ , Bas Pedroli	
Soil Portraits, the 'real' Big Data Debra Solomon	3 3
Urban soils as a biological hotspot, with new roles for all ecosystem actors **Debra Solomon** & Dr. Caroline Nevejan**	3 4
Closing the Loop: A Social Innovation Approach to Tackling Food Waste in Canada **Tammara Soma**** 1.	3 5
Municipal Goats: Exploring Agroecological Place-Shaping and Multiple Ruralities in Sierra de Guadarrama (Spain) Flora Sonkin ¹ 1	36
Liberty or Lunacy? Exploring Framings of Self-reliance in Foodscapes Stephanie Nuria Spijker	37
Roof Water-Farm - From the pilot plant to large scale implementation Anja Steglich ¹ , Angela Million ¹ , Vivien Franck ¹ , Grit Bürgow ¹ 1	38
The role of the foodservice sector in tracing a possible pathway for food strategy-building in Venice. An explorative assessment. Sarah Stempfle ¹ , Matelda Reho ¹	
Political Ecology, as Theory and Praxis, for Livelihood Sovereignty Mark Tilzey	

Redesigning food systems for economic, social, and ecological benefit in Chiapas, Mexico *Emilio Travieso*** 141
Ghana's Urban Change effect on urban agriculture: Farmers' Adaptation Strategies in Accra Michael Tuffour
Local collectives, community economy and autonomous food systems: the case of the Free Café (Groningen, NL) Ciska Ulug¹, Elen-Maarja Trell
Planning Resourceful Ways of Living with Sustainable Development Goals Justyna Urbanczyk
Food forest - promising emerging practice for sustainable urban food systems? **Noël Van Dooren¹, Dick van Dorp¹**** 145
A food perspective on urban green space Noël Van Dooren¹, Marianne Schulhoff¹146
Pathways towards regenerative food systems: small-scale farmers at the centre of the transitions **Elise Wach¹, Santiago Ripoll², Rachael Taylor²
Evidence-based Food System Design: Site-specific Planning for Linking Urban Food Consumption with Metropolitan Production Dirk Wascher ¹ , Melika Levelt ² , Herman Agricola ¹ , Jessica van Bossum ² , L. Jeurissen & Lisa ten Brug ³
Cooking up Revolution: Recipes for Food Democracy Deirdre (Dee) Woods
Rural Urban Nexus: Sustainable land use through integrated, city region food strategies Stephanie Wunder
Performing collaborative consumption: A case-study of food sharing app Olio Orlena Yee
Analysing and mapping food systems: How to make the approaches and tools operational and applicable for food governance and planning Ingo Zasada¹, Alexandra Doernberg¹, Ulrich Schmutz²
From urban greening via urban agriculture to urban agritecture - a comparative study between Shanghai and New York Hemeng Zhou

Competing, cosmetic and/or covert? Multiple food sovereignties and the politics of translation and positioning

Joseph Edward Alegado¹ & Oane Visser¹

¹International Institute of Social Studies, The Hague, Netherlands jed.alegado@gmail.com

Twenty years since The World Food Summit which paved the way for the creation of an alternative movement against the dominance of agro-food corporations, food sovereignty has gained ground both within society and the State. Recent studies on food sovereignty have looked into the aims and visions of food sovereignty at the global, and to some extent national or local, level in various countries in the Global South. In unpacking what food sovereignty movement really stands for, various authors have stressed there are competing interpretations, visions, and practices of food sovereignty which can be highly differentiated and situated in the particular context of a country.

This paper builds on studies on 'multiple' (McMichael 2009) and 'competing' (Patel 2009; Schiavoni 2015) food sovereignties (Schiavoni 2015). Based on field work in particularly the Philippines this paper extends the dimensions of multiple food sovereignties distinguished by Schiavoni (2015) – scale, geography and institutions - with two additional dimensions.

One relevant dimension for studying food sovereignty we distinguish is 'explicitness' (whether food sovereignty movements are overt and outspoken or 'quiet' (Visser et al. 2015a; 2015b). The other dimension we distinguish is 'motivation'; namely whether actors employ an intrinsically motivated food sovereignty framing (i.e. in order to genuinely contribute to Food Sovereignty) or one based on more external / pragmatic motivations such as gaining access to government's or donor's projects. The latter variant of motivation entails the danger that food sovereignty in some circumstances might become cosmetic rather than substantial. The more food sovereignty gets traction geographically and across various political arenas, the more likely is such a trend to occur, especially in regions where food sovereignty is still relatively new and 'foreign'. As a result, 'quiet' and rather invisible food sovereignty movements might be closer to the 'ideal' of food sovereignty, than some actors with very outspoken, but more 'cosmetic' food sovereignty framing.

References

Goodwin, S. (2013) Analysing Policy as Discourse: Methodological Advances in Policy Analysis, Chapter 15, pp. 167-180. In L. Markauskaite P. Freebody and J. Irwin (eds): Methodological Choice and Design: Scholarship, Policy and Practice in Social and Entrepreneurial Research, Sydney, Springer.

McKay, B., Nehring R., and Walsh-Dilley, M. (2014) 'The 'State' of Food Sovereignty in Latin America: Political Projects and Alternative Pathways in Venezuela, Ecuador and Bolivia', Journal of Peasant Studies 41(6): 1175-1200.

McMichael, P. (2009). A food regime genealogy. The Journal of Peasant Studies, 36(1), 139-69.

Patel, R. Guest Editor (2009) Food sovereignty, The Journal of Peasant Studies, 36:3, 663-706, DOI: 10.1080/03066150903143079

Schiavoni, C.M. (2015) 'Competing Sovereignties, Contested Processes: Insights from the Venezuelan Food Sovereignty Experiment', Globalizations 12(4): 466-480.

Visser, O., Mamanova, N., & Spoor, M. (2015). 'Quiet food sovereignty' as food sovereignty without a movement? Insights from post-socialist Russia. Globalizations, 12(4). doi:10.1080/14747731.2015.1005968'

Wittman, H., A.A. Desmarais, and N. Wiebe, eds. 2010. Food sovereignty. Reconnecting food, nature and community. Halifax: Fernwood Press.

Keywords: food sovereignty, multiple and competing sovereignties, quiet food sovereignty, urban-rural dynamics, agrarian movements

Food and social justice in Coventry (panel)

Colin Anderson¹, Moya Kneafsey¹, Chris Maughan², Tommie McBrien⁴, Lopa Saxena¹, Ed Hodson³

¹CAWR, Coventry University, ²CAWR and Food Union/The Pod, ³Citizens Advice Bureau, Coventry, ⁴Coventry Men's Shed, Coventry

Cities in England and many other wealthy countries are home to growing numbers of people experiencing the effects of social inequalities and injustices. In Coventry, different groups are beginning to make sense of these conditions of food poverty and respond using a range of different approaches. Whilst charity (e.g. Food banks) and individualised service provision (e.g. Debt advice) are the dominant responses, these are problematic in the long term because they do little to change the wider conditions, policies and institutions that lead to poverty and food poverty in the first place. In this session, we will share some examples of collective responses to the structural causes of poverty emerging in Coventry. This will be followed by a facilitated interactive discussion which aims to further explore what's been done so far, but also consider the strengths and limitations of existing community level responses to structural poverty, and identify possible ways forward. Speakers will include representatives from local organisations including Coventry Men's Shed, People's Knowledge, Feeding Coventry, The Pod and Food Union. We welcome delegates to join us and share their own experiences and stories of collective responses to poverty from other places around the world.

References

Coventry Food charter, 2017, accessible online here: http://www.coventrypartnership.com/feeding-coventry/

Anderson, C.R., Saxena, L., Kay, C., Kneafsey, M., Wakeford, T., Tornaghi, C. and C. Maughan. Towards Food Justice in Coventry. Report. January 2017. Available at: http://www.coventryfoodjustice.uk/new-report-grassroots-responses-to-food-poverty-in-coventry/

Cadieux, K. Valentine, and Rachel Slocum. "What does it mean to do food justice?" Journal of political ecology 22 (2015): 1.

Lambie-Mumford, Hannah, and Elizabeth Dowler. "Rising use of "food aid" in the United Kingdom." British Food Journal 116.9 (2014): 1418-1425.

Key words: food justice, food poverty, community self-organisation, social justice

Possible alternative to Land grabbing through territorial planning. Case study: Senegal River Valley

Valeria Barchiesi

Politecnico di Milano, Italy valeria.barchiesi@mail,polimi.it

The research has the aim to analyse the phenomenon of Land grabbing with a territorial planning perspective. Consequently, it tries to define the possible contribution of a planner to the international debate about the issue, proposing a methodology and affirming the centrality of the territory in the debate.

Several researches faced the issue in juridical and environmental terms and a relatively extensive bibliography can be found about the numbers and the characteristics of unfair land deals.

But, according with a planner's way of looking at issues, it is interesting to translate in spatial terms the data, making a continuous comparison with other territories, with the objective to quantify the phenomenon and to facilitate the understanding.

The second part focuses on the analysis of the obstacles that large land acquisitions pose to the development of potentially rich territories and to the sustainability in its territorial dimension. It is then supported the necessity of an alternative model of development, which has more ambitious goals than foreign investments directed to exportation.

The methodology, developed to face this complex phenomenon from a planner point of view, is applied to the case study. For the Senegal River Valley, a territory particularly touched by this phenomenon, an alternative scenario is proposed. Practical actions and planning suggestions, which does not claim to be exhaustive or to solve such a complex issue, try to consider differently the territory and to state the necessity of a different model of development and a territorialisation of cooperation projects or foreign investments.

References

ACTIONAID, Il grande furto della terra Le responsabilità delle istituzioni e delle imprese nella corsa al land grabbing, 2014

Calori A., Magarini A., Food and the cities. Food policies for Sustainable cities, Economia e Sostenibilità, Edizioni Ambiente, 2015

Cotula L., Vermeulen S., Leonard R., Keeley J., Land grab or development opportunity? Agricultural investment and international land deals in Africa, IIED FAO IFAD, 2009

De Schutter O., Final report: The transformative potential of the right to food, Nations Unies, A/HRC/25/57, 2014

Quatrida D., Grandi progetti di sviluppo e risposte locali, l'irrigazione nella valle del Senegal, L'irrigazione nella Valle del Senegal, FrancoAngeli, 2012

Viljoen A., Bohn K., Planning and designing food systems, moving to physical, p. 385-392, in Sustainable food planning, edited by A. Viljoen and S.C. Wiskerke, Wageningen Academic Publishers, 2012

Keywords: Re-territorialization of food planning, Land Grabbing, Territorial planning, Senegal

Land as a common resource to achieve urban food relocalization. A farmland property rights approach to urban food commoning

Adrien Baysse-Lainé^{1,2}, Coline Perrin² & Claire Delfosse¹

¹Lumière Lyon, ²University – Rural Studies Laboratory, Lyon, France ²INRA-SAD, Innovation Research Unit, Montpellier, France

abl@posteo.eu

This paper investigates the role of land management in the way urban food relocalization initiatives can shape different food commoning practices (Tornaghi, 2014; Labonarska, 2015; Vivero Pol, 2016). It focuses on projects in which land is claimed and managed as a common resource. We explore how alternative land ownership models change the practices and representations of food towards several systemic goals. To do so, we build on Lavigne Delville's (2010) theoretical framework on farmland property rights to study a set of ten farms and community gardens located on publicly or collectively owned land in Lyon (France).

Lyon is one of the first French cities where agriculture and food have been addressed as planning issues (Brand, 2015). Local authorities currently develop strategies aimed at relocalizing food provisioning and gradually connect them with farmland preservation or acquisition policies. Such emerging public initiatives coexist with projects led by groups of eaters-growers and by the *Terre de Liens* movement, a civic land trust supporting a fairer land access for peasant's agroecology farmers.

Our analysis is based on twenty semi-structured interviews, complemented by documents' analysis. We investigate two community gardens (where food is produced on 5 ha by a paid market gardener and eatersgrowers, which is very unusual in France) and eight farms, covering around 30 ha (where farmers produce, transform and sell food). All supply local city dwellers. Five cases are in a hilly and wealthy suburb, four in a floodable and socially-deprived suburb and one in a periurban village.

We distinguish three systemic goals: i) food self-sufficiency, at the family and community scales, when eaters-growers control directly food production and provision: food is in these cases a material commons; ii) food sovereignty, at the city-region level, when eaters have a say as citizens: food appears as a territorial commons; and iii) food democracy (Collard Dutilleul, 2013), also at the city-region scale, when eaters involve in agricultural and food policies. The type of goal is less influenced by the social context than by the distribution of property rights on land. These small-scale initiatives open pathways to achieve a "resourceful agroecological urbanism".

References

Brand C., 2015, Alimentation et métropolisation : repenser le territoire à l'aune d'une problématique vitale oubliée [Foof and metropolization: rethinking the territory from a key and forgotten issue], PhD thesis in geography, Grenoble Alpes University.

Collard-Dutilleul F. (ed.), 2013, Penser une démocratie alimentaire [Thinking a food democracy], INIDA.

Labonarska A., 2015, "Geographies of urban food commons and justice", presented at the 2nd Conference on Agriculture in an urbanizing world, Rome, 14th-17th September.

Lavigne Delville P., 2010, "Tenure security, formalization of rights, land regulation institutions and investments. For a broader conceptual framework", Land Tenure Journal, 1: 5-33.

Tornaghi C., 2014, "Critical geography of urban agriculture", Progress in Human Geography, 38: 551-567.

Vivero Pol J. L., 2016, "The Value-Based Narrative of Food as a Commons. A Content Analysis of Academic Papers with Historical Insights", working paper, http://dx.doi.org/10.2139/ssrn.2865837.

Keywords: Alternative ownership framework, Food relocalization, NGO, Public policies, Urban food commons.

Reshaping urban spaces of consumption: a project for an Alternative Food Network (AFN) in the city of Florence

Sara Bonati¹, M. Loda¹, & M. Puttilli¹
¹Università degli Studi di Firenze
sara.bonati@gmail.com

Cities constitute interesting laboratories in which to research alternative spaces of consumption and where citizens can be co-producers of change (Tononi et al., 2017), being places that facilitate 'a systemic transformation of the food system' (Sonnino, 2016, 193). Thus today new food geographies (Goodman and Bryant, 2013) are taking place also in cities, with the aim to re-think the urban relationship with food and production chain and to overcome the metabolic conceptualization of urban systems.

According to these premises, this contribution will discuss a project for the construction of an alternative food network (AFN, see Holloway et al., 2006) in the city of Florence, called 'PanSAm'. Florence is a worldwide known city, famous for its monuments and for its rural surroundings. The Tuscany Region, in which the city is, is one of the main Italian regions for 'niche' agricultural production. In this context, the project aims to revitalize urban public spaces - and, more specifically, one of the two old markets of the city centre called Sant'Ambrogio - through the direct engagement of a network of citizens, local farmers and retailers into different forms of food commercialization and consumption.

The project has lived two phases: first of all, the re-negotiation of the relationship between urban and rural spaces, in which local rural realities have been connected with the interests of increasing 'aware' urban consumers. In this first phase, a survey on supply and demand has been realized. Then, the research group has focused on how to match the demand for sustainable, local and healthy food and the potential supply by the local farms involved in the network. In the second phase, the research has been oriented to rethink traditional urban spaces of consumption. In particular, it has tried to give new sense- making to old urban markets, overpassing the idea of pure merchant spaces and contrasting the Disneyfication or museumization processes that interested them. Thus, the project has been finalized also to return market spaces to their inhabitants promoting a process of reappropriation of the public space. Results of the process and final considerations will be presented and discussed.

References

Bryant R L and Goodman M K (2004) Consuming narratives: the political ecology of 'alternative' consumption. Transactions of the Institute of British Geographers 29 344–66 - Gandy, M., (2005) Cyborg urbanization: complexity and monstrosity in the contemporary city. International journal of urban and regional research, 29(1) 26–49.

Goodman M K and Bryant R (2013) Placing the practices of alternative economic geographies: alternative retail, the spaces of intention and ethical ambiguities in Environment, politics and development working paper series, Department of Geography, King's College, London paper n. 58 7–50 –

Holloway L, Cox R, Venn L, Kneafsey M, Dowlers E and Toumainen H (2006) Managing sustainable farmed landscape through 'alternative' food networks: a case study from Italy. The Geographical Journal 172 219–29

Sonnino R (2016) The new geography of food security: exploring the potential of urban food strategies. The Geographical Journal 182 190–200

Tononi, M., Pietta, A. and Bonati, S. (2017), Alternative spaces of urban sustainability: results of a first integrative approach in the Italian city of Brescia. Geogr J. doi:10.1111/geoj.12207

Keywords: alternative food networks (AFNs), sustainability, food geography, urban market, Florence

Back to Basics: applying a salutogenic approach to understand the origins of healthful eating

Laura Bouwman¹, Emily Swan² & Maria Koelen¹

¹Wageningen University, Chair group Health and Society, Wageningen, The Netherlands

²ES Education, Nutrition and Health;

laura.bouwman@wur.nl

Creating an enabling environment, allowing for healthful eating as the preferred and easiest choice is a top priority in research, practice and policy. Particularly since obesity rates remain high and social disparities continue unabated. Suggested health promotion strategies should focus on making healthy options available, accessible and affordable in diverse contexts. Yet do we actually know how healthful eating is learned and perpetuated in everyday life situations? Obesity research typically takes a biomedical approach to find risk factors of poor dietary practices. However singular focus on this approach limits he evidence base for public health practice as it fails to identify the resources that support healthful dietary practices. The Salutogenic Model of Health (SMH) is a socioecological model that complements the biomedical research paradigm by examining the psychosocial and contextual factors that support health and well-being. Gaining insight into the mechanisms and resources that support healthy lifestyles can help in designing a blueprint for novel strategies to enable healthful eating in diverse contexts.

The SMH was applied in four mixed methods studies to determine the origins of healthful eating within the Dutch context. The integrated findings show that healthful eating results from exposure to individual- and context-bound factors during childhood and adulthood and involves specific mental and social capacities relevant to cope with everyday life situations and challenges. Overall, healthful eating results from and enables three composite factors: 1) balance and stability in life, a balanced mixture of giving meaning to eating as an integral part of life, comprehending its importance to oneself, and having competencies to manage its social organization; 2) sense of agency, "be in the driver's seat" of ambitions and actions related to eating and life in general; 3) sensitivity to dynamics of everyday life, how people deal with and navigate through everyday challenging situations.

The findings show that factors representing the origins of healthful eating diverge from those causing poor diets. This implies that an additional set of factors should inform nutrition strategies. Strategies should take a holistic, balanced orientation to food and eating and facilitate health-directed learning processes through positive interactions and experiences with food.

References

Bisogni, C. A., Jastran, M., Seligson, M., & Thompson, A. (2012). How People Interpret Healthy Eating: Contributions of Qualitative Research. Journal of Nutrition Education and Behavior, 44(4), 282-301.

Bouwman, L., & Swan, E. (2014). Eating from a nutrition point of view. In J. Eckinger & D. Kaplan (Eds.), Encyclopedia of Food and Agricultural Ethics Dordrecht: Springer Science.

Bouwman, L. I., Te Molder, H., Koelen, M. M., & Van Woerkum, C. M. (2009). I eat healthfully but I am not a freak. Consumers' everyday life perspective on healthful eating. Appetite, 53(3), 390-398.

Sobal, J., Bisogni, C. A., & Jastran, M. (2014). Food Choice Is Multifaceted, Contextual, Dynamic, Multilevel, Integrated, and Diverse. Mind, Brain, and Education, 8(1), 6-12. doi: 10.1111/mbe.12044

Swan, E., Bouwman, L., Hiddink, G. J., Aarts, N., & Koelen, M. (2016). Applying the Salutogenic Framework to Nutrition Research and Practice. American Journal of Health Promotion, 30(2), 71-73. doi: doi:10.4278/ajhp.140127-CIT-46

Swan, E., Bouwman, L., Hiddink, G. J., Aarts, N., & Koelen, M. (2015). Profiling healthy eaters. Determining factors that predict healthy eating practices among Dutch adults. Appetite, 89(0), 122-130. doi: http://dx.doi.org/10.1016/j.appet.2015.02.006

van Woerkum, C., & Bouwman, L. (2014). '~Getting things done': an everyday-life perspective towards bridging the gap between intentions and practices in health-related behavior. Health Promotion International, 29(2), 278-286

Keywords: Nutrition promotion, Healthful eating, Salutogenic Model of Health, Coping capacity, Everyday life

Bringing the Country into the City: Exploring signals of agrarian citizenship and food sovereignty in the practice of urban agriculture in Brazil and Canada

Evan Bowness, Hannah Wittman

University of British Columbia, Vancouver, Canada evan.bowness@gmail.com

What role(s) do urban actors play in the development of the food sovereignty framework in particular and in and in food-systems change in general? Urban agriculture, while not a unified social movement in its own right, is a growing social practice surrounded by claims - including some movements for food sovereignty - to increase food security, empower consumers in decision-making about the food system, reclaim urban lands, close nutrient cycle loops and 'reconnect' urban residents to nature. As such, it occupies a rich conceptual space in thinking through mechanisms to repair the "metabolic rift" between town and country, driven by urbanization, capital accumulation and the industrialization of agriculture. Through the development of three case studies of urban agriculture initiatives that deploy the language of food sovereignty in Canada and Brazil, our paper explores if, how and to what extent urban agriculture can "close the rift" by discursively and materially mobilizing the urban into agrarian struggles related to social and ecological justice and food sovereignty. On one hand, principles, practices and values related to agrarian citizenship are expressed in urban settings, potentially broadening the collective identity of "agrarian citizenship." But on the other hand, some urban farming initiatives in North America, as part of growing alternative food movements, have also been widely critiqued for the exclusionary tendencies and 'foodieism,' diverting energy and resources away from participation in radical peasant struggles. Tensions in emergent urban agrarianisms are expressed differently across a number of interrelated urban actor positions (farmer, gardener, consumer, activist, and policy-maker). Our interrogation into whether and how the theoretical reach of food sovereignty extends into urban contexts through urban agriculture addresses the following interrelated questions: 1) what processes of urban agriculture radicalize and which ones deradicalize urban actors, 2) are urban agrarianism and rural agrarian citizenship different identity frames, if so how and what tensions exist between them? and 3) in what ways has urban agrarianism advanced and hindered food sovereignty as a political project? In unpacking the concept of urban agrarianism, our paper begins to clarify the 'urban food question' within the global struggle for food sovereignty.

References

Davila, F., & Dyball, R. (2015). Transforming Food Systems Through Food Sovereignty: an Australian Urban Context. Australian Journal of Environmental Education, 31(01), 34–45. http://doi.org/10.1017/aee.2015.14

Levkoe, C. Z. (2011). Towards a Transformative Food Politics. Local Environment, 16(7), 687–705. http://doi.org/10.1080/13549839.2011.592182

McClintock, N. (2014). Radical, Reformist and Garden-Variety Neoliberal: Coming to Terms with Urban Agriculture's Contradictions. Local Environment, 19(2), 147–171. http://doi.org/10.1080/13549839.2012.752797

Mincyte, D., & Dobernig, K. (2016). Urban Farming in the North American Metropolis: Rethinking Work and Distance in Alternative Food Networks. Environment and Planning A, 48(9), 1767–1786.

Schneider, M., & McMichael, P. (2010). Deepening, and Repairing, the Metabolic Rift. The Journal of Peasant Studies, 37(3), 461–484. http://doi.org/10.1080/03066150.2010.494371

Keywords: Urban agrarianism, food sovereignty, urban agriculture

The foster metropolis as a figure of the urban food planning renewal toward a resourceful and agroecological urbanism

Caroline Brand

Laboratoire Pacte, France carolinebrand@hotmail.fr

This paper proposes to contribute to the conceptualization of a resourceful and agroecological urbanism through the figure of the foster metropolis. The Urban Food Planning movement (UFP) (Morgan, 2009) aims at investigating the way planners and urban actors can help in building up more sustainable food systems and the way the food issue can become a prism through which urban development can be rethought. But since its constitution, the first branch of the movement has been dominant. In Europe, since Almere meeting, planning is dominantly tackled as a tool to implement more sustainable food systems (Morgan, 2009; Brand, 2015). In this objective, we argue that the UFP movement has not yet enough tackled the consumers' issues (culture, social, health) and the world of the traditional and conventional food stakeholders. These lacks prevent the UFP movement to reach its ambitions concerning a more sustainable food system but also alleviate its potential contribution to reinvent a more sustainable urban development. The paper argues that the figure of the foster metropolis could help to reactivate the less investigated branch of the UFP movement and allows UFP to be a proposal force to participate effectively in the conceptualization of a resourceful and agroecological urbanism. Based on the researches developed in my PhD, this paper presents the ways the figure of the foster metropolis, that goes beyond the food supply issue, opens opportunities to tackle the multi-sectoral, multi-actors and multiscale issues for a resilient urbanism based on a better transversality between planning issues, actors and scales of action and a reciprocity between spaces. The fostering look on urban regions allows a territorial transaction resulting in connections, articulations, combinations between spaces, actors, field and scales of action that are keys for a transition toward a resourceful and agroecological urbanism.

References

Brand C., 2015. Food and metropolisation: Rethinking the territory in the light of a forgotten vital issue. Phd in geographie, Grenoble-Alpes University, 656 p.

Morgan, K. (2009). Feeding the city: the challenge of urban food planning. International Planning Studies, 14(4), 341-348.

Vanier, M. (2008a). Le pouvoir des territoires. Essai sur l'interterritorialité. Paris : Economica, Collection Anthropos.

Vanier, M. (2015), Demain, les territoires, Hermann, 216 p.

Wiskerke, J.-S.-C., & Viljoen, A. (2012). Sustainable urban food provisioning: challenges for scientists, policymakers, planners and designers. In A. Viljoen & J.-S.-C. Wiskerke (Eds.),

Sustainable food planning. Evolving theory and practice (p. 598). Wageningen: WageningenAcademic Publishers.

Keywords: Urban food planning, foster metropolis, territorial transaction, transversality

Montreal's Alternative Food System Faced with the Issue of Food Loss and Waste: Which Social Practices Can Transition into Sustainability?

Eliane Brisebois¹, René Audet¹, Sylvain Lefevre¹

¹UQAM, Montreal, Canada

brisebois.eliane@courrier.uqam.ca

Food waste is a complex issue. With its environmental, socioeconomic and political aspects, it seems to be one of the biggest problem that touches food systems. Created to fight food waste issues, alternative food initiatives (AFI) emerge at local scales, especially in urban areas, like the city of Montreal in Canada. These initiatives are diverse: seasonal markets, community supported agriculture (CSA) basket programs, food sharing initiatives, social and educational programs, urban agriculture, urban fruit picking, etc. A two year qualitative study, documented these initiatives in Montreal. This research aimed to bring to light how those alternative food initiatives take into account the food waste and loss issue in their work and how the social practices they carry can contribute to the transition towards sustainability of Montreal's food system. We begin by documenting the kinds of initiatives that exist and who the main actors of the alternative food system are. We, then, did 20 semistructured interviews with these actors. The results showed that Montreal's AFI all carry socioenvironmental practices; in other words, they all work towards the transition to sustainability of the food system, but the way in which they challenge dysfunctional aspects of the food system vary. Concerning the food waste and food loss issue, we conclude that the way these problems influence AFI's social practices depend on their mission according to three different scenarios: 1) one of their goals is to fight food waste; 2) they have a variety of goals and their practices are influenced by the fact that they have to manage food because of their activities of production, marketing, etc., or; 3) their goals are centred around others aspects of alternative food system like education, short supply chains, connexion between food system actors, etc. Studying food systems by taking one issue such as food waste is a good way to understand how local initiatives are organized and how they can bring social change.

References

Allen, P., FitzSimmons, M., Goodman, M. et Warner, K. (2003). Shifting plates in the agrifood landscape: the tectonics of alternative agrifood initiatives in California. Journal of Rural Studies, 19, 61-75.

Evans, D. (2012). Beyond the Throwaway Society: Ordinary Domestic Practice and a Sociological Approach to Household Food Waste. Sociology, 46 (1), 41-56.

Garrone, P., Melacini, M. et Perego, A. (2014). Opening the black box of food waste reduction. Food Policy, 46 (0), 129-139. http://dx.doi.org/http://dx.doi.org/10.1016/j.foodpol.2014.03.014

Gille, Z. (2012). From risk to waste: global food waste regimes. The Sociological Review, 60, 27-46. http://dx.doi.org/10.1111/1467-954X.12036

Hinrichs, C.C. (2014). Transitions to sustainability: a change in thinking about food systems change? Agriculture and Human Values (31), 143-155. http://dx.doi.org/10.1007/s10460-014-9479-5

Lamine, C., Renting, H., Rossi, A., Wiskerke, J.S.C.H. et Brunori, G. (2012). Agri-food systems and territorial development: innovations, new dynamics and changing governance mechanisms. Dans I. Darnhofer, D. Gibbon et B. Dedieu (dir.), Farming systems research into the 21st century: the new dynamics (p. 229-256). Dordrecht: Springer.

Lutz, J. et Schachinger, J. (2013). Do local food networks foster socio-ecological transitions towards food sovereignty? Learning from real place experiences. Sustainability (5), 4778-4796. http://dx.doi.org/10.3390/su5114778

Oosterveer, P. et Spaargaren, G. (2012). Green consumption practices and emerging sustainable food regimes. The role of consumers. Dans G. Spaargaren, P. Oosterveer et A. Loeber, A. (dir.), Food Practices in Transition. Changing food consumption, retail and production in the age of reflexive modernity (p. 131-152). New York: Routledge.

Seyfang, G. (2006). Ecological citizenship and sustainable consumption: Examining local organic food networks. Journal of Rural Studies, 22, 383-395.

Warde, A. (2005). Consumption and Theories of Practice. Journal of Consumer Culture, 5(2), 131-153.

Keywords: Food waste, Alternative food system, Sustainability transitions, Social practices

Collaboration and Autonomy in Thessaloniki's Diverse Food Economies

Christabel Buchanan

Coventry University, Coventry buchanac@coventry.ac.uk

In Greece, as the country's economic crisis deepens, attempts to create and maintain new economic initiatives remain alive. This action does not only stem from an ideological crisis, including a loss of faith in capitalist structures and institutions, but from necessity as a consequence of debilitating austerity measures including heavy taxation and disadvantageous changes in law since the memoranda.

People involved in these alternative food economies aim to restore autonomy and their control of resources (Arampatzi, 2016). Autonomous spaces in Thessaloniki, operating to a varying extent outside of government regulation, support small producers, and especially those producing organically, and in some cases those who are selling without the required legal documentation or certification. Elsewhere, cooperative formations have been initiated, occupied urban gardens on the outskirts of the city allow families to cultivate for self-sufficiency, and markets without middlemen still continue in multiple forms.

Gibson Graham's (2006) framework for diverse economies encourages a pluralistic economy with the acknowledgement and celebration that other, more hidden economies exist outside of the narrow perception of a single dominant capital and growth based economy. The diverse economies framework combined with an emphasis on fluidity and transition is a helpful framework for looking at dispersed initiatives, which strive for self-organisation, commoning, and solidarity. This on-going participatory research process uses video, interviews and participant observation with members of food initiatives and enquires into how autonomy and democracy are perceived and acted upon in alternative food economies.

Additionally, as well as valuing the new food economies, it is important to balance this with a healthy level of constructive critique (Calvario and Kallis, 2016). I engage with questions and observations concerning the engagement of the state in these new economies of food, the barriers people face to collaboration, and how this is influenced by the social conditions created by the economic crisis. In the unstable legal context, legality is reconceptualised and treated as fluid, a necessity for survival, facilitated through occupied spaces and 'black' markets. Moreover, it will look at the tensions between seeking autonomy, and connecting with others for movement building, including the presence of distrust amongst producers.

References

Arampatzi, A. (2016). The spatiality of counter-austerity politics in Athens, Greece: Emergent 'urban solidarity spaces'. *Urban Studies*, 1, 16.

Calvario, R. and Kallis, G. (2016) 'Alternative Food Economies and Transformative Politics in Times of Crisis: Insights from the Basque Country and Greece'. Antipode.

Gibson-Graham. J.K, (2006). A Postcapitalist Politics. Minnesota University Press, Minneapolis.

Patel, R. (2009) Food Sovereignty. Journal of Peasant Studies. 36(3)

Pratt, J. and Leutchford, P., eds., 2013. Food for Change: The Politics and Values of Social Movements. Pluto Press. London.

Keywords: Food economies, autonomy, Greece, Participatory Video

Urban Food Districts: Comprehensive and strategical urban planning for competitive and sustainable food systems

Sebastian Burgos

Ku Leuven Belguim

s.burgosguerrero@gmail.com

The recognition of a historical absence on urban food systems by the academia, incentivized new discussion on planners and food systems only over the past 15 years. The predominant belief on food as an agricultural and rural issue, has fostered its detachment from the urban agenda, filling the gap with a predominant market driven strategy. This paper aims to provide a comprehensive vision on the food systems organization in urban areas, analyzing the need to integrate it into a broader urban strategy and strategical planning. The challenges and opportunities it portrays highlights the need to consolidate competitive and sustainable solutions for an increasing urban population. Thus, comprehended into a broader spectrum of issues of public concern such as health, social justice, economic prosperity, social cohesion, food security, culture, waste management and ecological integrity.

References

Campbell, M. (2004). Building a Common Table: The Role for Planning in Community Food Systems, Journal of Planning Education and Research 23:341-355

Eckert, J.; Shetty, S. (2011). Food systems, planning and quantifying access: Using GIS to plan for food retail, Applied Geography. Volume 31, Issue 4, October 2011, Pages 1216-1223

Kevin Morgan (2013) The Rise of Urban Food Planning, International Planning Studies, 18:1, 1-4.

Carsjens, G. J. 2015. Food in space: the spatial organization of food systems. Agric Eng Int: CIGR Journal, Special issue 2015: 18th World Congress of CIGR: 10-17.

Catherine Brinkley (2013) Avenues into Food Planning: A Review of Scholarly Food System Research, International Planning Studies, 18:2, 243-266

Kevin Morgan (2009) Feeding the City: The Challenge of Urban Food Planning, International Planning Studies, 14:4, 341-348.

Pothukuchi, K.; Kaufman, J. (1999). Placing the food system on the urban agenda: the role of municipal institutions in food systems planning, Agriculture and Human Values 16: 213-224, 1999.

Brent Mansfield & Wendy Mendes (2013) Municipal Food Strategies and Integrated Approaches to Urban Agriculture: Exploring Three Cases from the Global North, International Planning Studies, 18:1, 37-60

Agrillo, C.; Milano, S.; Roveglia, P.; Scaffidi, C. (2015) Slow Food's Contribution to the Debate on the Sustainability of the Food System, Paper prepared for presentation at the 148th seminar of the EAAE, Does Europe need a Food Policy?, Brussels, Belgium, 2015.

Toronto Food Policy Council (1999). Feeding the City from the Back 40: A Commercial Food Production Plan for the City of Toronto, A section of the Toronto Food Policy Council's submission to the City of Toronto's Official Plan. November 1, 1999

Ben Reynolds (2009) Feeding a World City: The London Food Strategy, International Planning Studies, 14:4, 417-424

Hammer, J. (2004). Community Food Systems and Planning Curricula Journal of Planning Education and Research 23:424-434

Haugum, M.; Grande, J. (2017). The Role of Marketing in Local Food Networks, Int. J. Food System Dynamics 8 (1), 2017, 1-13

Keywords: Food Policy, Urban Planning, Sustainable Food Systems, Strategical Planning

People's Policy Processes for Food Sovereignty: Reflections from England

Butterly, D1, Anderson, C2

¹Land Worker's Alliance, ²Centre for Agroecology, Water and Resilience

We live in a rapidly changing world with growing inequality and environmental destruction. Policy in all domains increasingly reflect the neoliberal agenda – one where profit and growth are viewed as ends in of themselves. People – their wellbeing, their relationship with nature and their humanity – are increasingly disregarded in decision making by elites. The case of food and agriculture is a case in point where policies are controlled largely by multinational corporations and financiers in the private sector along with their counterparts in science, government and mainstream NGOs.

Yet, it is not all doom and gloom. Social movements around the world are mobilising to contest the injustices of the current dominant order(s) and to build alternatives. The global food sovereignty movement reflects a call to put people and planet first and, through democratic reform, for food producers and those most affected by the injustices of the food system, to gain control over food policy and practice.

In different parts of the world, citizens are organizing grassroots processes to create people's food policy platforms to articulate the vision and policy demands from a food sovereignty perspective (e.g. in Canada, India, Australia). This talk will focus on England's A People's Food Policy process, which involved 18 months of dialogues, workshops and debates amongst grassroots organisations, NGOs, trade unions, community projects, small businesses and individuals. This people's policy process is embedded within a longer, ongoing, movement for food sovereignty in the UK. The resulting document was launched in June 2017, and is a manifesto demanding that governments, NGOs and people working on food policy put the wellbeing of people and environment first, develop integrated food policy, and create participatory decision-making approaches that empower those most affected by these policies. The document is now endorsed by over 100 organisations in the UK, creating an important platform to crystallise the argument for food sovereignty and to bring allies together around a common purpose. This session will highlight some key points from a reflective and participatory evaluation of the PFP process to discuss the role of these grassroots policy-oriented processes in the struggle for Agroecology and food sovereignty.

Visit www.peoplesfoodpolicy.org to download the full report.

References

A People's Food Policy (2017). A People's Food Policy. Available at: https://www.peoplesfoodpolicy.org/

Kneen, Cathleen. "Mobilisation and convergence in a wealthy northern country." Journal of Peasant Studies 37.1 (2010): 229-235.

A People's Food Plan (2015) Available at: http://afsa.org.au/blog/category/peoples-food-plan/

Nyeleni Forum on Agroecology (2015) Declaration of the International Forum for Agroecology. Retrieved from http://www.foodsovereignty.org/forum-agroecologynyeleni-2015/

Rahmanian, M. and T. Kesteloot (2017). The role of trust in building alliances of social movements: Organising the International Forum on Agroecology. In People's Knowledge Editorial Collective (Eds). (2017). Everyday Experts: How people's knowledge can transform the food system. Reclaiming Citizenship and Diversity Series. Coventry: Coventry University. Available at: www.peoplesknowledge.org/knowledgeFoodJustice

Anderson, CR, Pimbert, MP and Kiss, C (2015) Building, Defending and Strengthening Agroecology: Global Struggles for Food Sovereignty. Farming Matters. Available online at: http://www.agroecologynow.com/publications/

Keywords: participation, democracy, civil society, food sovereignty, policy

Urban fabric and local food systems confronted to a sustainable issue of land use

Jennifer Buyck¹, Nathalie Bertrand

¹ Institut d'Urbanisme de Grenoble, Université Grenoble Alpes, UMR PACTE, France jennifer.buyck@univ-grenoble-alpes.fr

Local food systems had remained 'a stranger to the planning field' (Pothukushi, Kaufman, 2000) until the beginning of the 2000s. Since, a large academic literature has been produced on the relationship between the city and agriculture, most often addressed from the point of view of a practice performed by and for urban dwellers rather than a more structured articulation between urban fabric and food production and farmland use and conservation. Today, expanding urban sprawl encroaching on farmlands in the city (but also urban issues of a reviewed density) have turned the urban food system into a central issue for sustainable urban planning (Morgan, 2009).

The aim of this paper is to investigate the impact urban land use policies on urban fabric. What is the importance of food dimensions in urban planning and urban planning practices? How and in which way does food governance shape the forms of metropolisation (urban development policies, urban spatial extend, values attributed to agricultural land, preservation of peri-urban agricultural land)? On the basis of two disciplinary insights (urban planning and territorial economics) we propose to give some elements of an ongoing research carried out in the regional Frugal project on urban forms and local food governance.

This communication, divided into three parts, is based on a case study: the Grenoble urban area (Auvergne-Rhà'ne-Alpes Nuts 2 region, France). First of all, a local history of urban fabrics in relation with food system is proposed. Then, we focus on the renewal of local urban planning documents—that is quite specific of Grenoble metropolis. Some urban sociabilities and innovative solidarities in regard with food system are also analyzed in a very deep way. At the end, through these three steps we contribute to the visibility, the definition and the explanation of the food landscape of grenoble urban area. It leads to a prospective synthesis of contemporaneous experiences in order to encourage their emergence, to consolidate it and to facilitate their introduction into the planning documents.

References

Bertrand N, (dir.) 2013, Terres agricoles périurbaines, une gouvernance foncià"re en construction, éditions Quae250pages

Buyck J., Dousson X. et Longuet P. (dir.), 2012, Agriculture métropolitaine/métropole agricole, Cahier Thématique No.11 Lille, ENSAPL.

Dansero Egidio, Pettenati Giacomo, Toldo Alessia, Alimenter la résilience urbaine. Des nouvelles perspectives vers un Plan Territorial de la Nourriture pour la Ville de Turin, COST, Cahier n°5, Penser la fabrique de la ville en temps de crise(s). Rencontres franco-italiennes de sciences sociales, 2016, http://citeres.univ-tours.fr/spip.php?article2354.

Lhomme Serge, Evaluer les conséquences des politiques d'aménagement sur l'accessibilité spatiale des ressources territoriales, Mappemonde, 117, 2015, http://mappemonde-archive.mgm.fr/num45/articles/art15103.html.

Verzone Craig, Dind Jean-Philippe, De l'agriculture urbaine au Food Urbanism: état des lieux et perspectives pour la Suisse, Urbia, No.12, juin 2011, https://www.unil.ch/ouvdd/fr/home/menuinst/les-publications/urbia/numero-12--juin-2011.html.

Morgan, K., 2009. Feeding the City: the challenge of Urban Food Planning, International Planning Studies, vol.14, No.4, pp.341-348.

Pothukuchi, K. & Kaufman, J., 2000. The food system: A stranger to urban planning. Journal of the American Planning Association, 66(2), pp. 113-124.

Keywords: food landscape, metropolitan area, sustainability, territorial economics, urban fabric

Places, atmospheres and urban sustainability of bread: Explorations in the Grenoble metropolis

Jennifer Buyck, Théo Courroux

UMR Pacte, Université Grenoble Alpes, France

Institut d'Urbanisme de Grenoble, UMR Pacte, Université Grenoble Alpes, France,

jennifer.buyck@univ-grenoble-alpes.fr

At the age of globalization and urbanization of lifestyles, bread is still present in the daily life and imagination of the French. But the divorce between myth and reality has never been so flagrant. Bread is more meaningful than carrying knowledge. Its symbolic dimension and its cultural weight are such that its spatiality, urbanity and durability, are relatively poorly known and rarely questioned. Yet, as the rest of our diet, bread is a product of an industrial processing. It has profoundly modified it, as the territories of its factory, its marketing and its consumption. This communication offers to show these territories of bread both by their urban form, and potential. To understand these spatialities, an exploration of the metropolis of Grenoble will be put forward. Where and how can we buy bread? Where does the flour come from? What are the agricultural lands? Mapping, archival, spatial data processing, surveying and atmosphere analysis constitute the basis of our research.

The artisanal bakery, often in the city center, stands as a cliché, an idealized and stereotypical image. It is part of a disparate offer, where supermarkets which continuously have bread, industrial bakeries in peri-urban and commercial areas with bread always hot that hardly requires getting out of the car, and neighborhood bakeries doing exactly the same bread as in the neighboring towns, coexist in the same space without a common future. Revealing the food deserts - urban or rural - where bread is rare is also a way to account for spatial injustices. Furthermore, it will be shown that spatial fractures are coupled with cultural ones, which involve different conceptions of individual and collective life. From farmer-bakers to artisanal mills or communinty bread ovens, the new local bread economies will be presented and analyzed. There is indeed a social demand for sustainable food, namely viable in an economical and social way, more respectful of the environment, health and cultural diversity.

We hypothesize that a better understanding of contemporary urban forms is essential for the emergence, consolidation and structuring of sustainable food. In other words, from the example of bread in and around Grenoble, we will look at what urban and rural forms stands for a sustainable food.

References

ASTIER M., Quel pain voulons nous? Paris, Le Seuil, 2016, 124 p.

COLLECTIF, Au pays du blé-roi, les paysans se font rares", Pour/2010 (N° 205-206), P179-186.

GARCEZ C., MANGIN D. (dir.), Du Far West à la ville. L'urbanisme commercial en questions, Marseille, parenthì-ses, 2014, 240 p.

GNABA A., Anthropologie des mangeurs de pain, Paris, L'Harmattan, 2011, 194 p.

MANGIN D., La Ville franchisée. Formes et structures de la ville contemporaine, Paris, éditions de la Villette, 2004, 480 p.

MARECHAL G. (dir.), Les circuits-courts alimentaires, Bien manger dans les territoires, Dijon, Educagri, 2008, 213 p.

MONTETY C.,"société de consommation" dans le pétrin ? La machine à pain, objet emblématique de la consommation contemporaine Sociologies pratiques/2010 (n° 20), P97-106.

RAFFARD P., FUMEY G., JACKSON P. (dir.), Cultures alimentaires et territoires", Anthropology of Food, 11 / 2016, https://aof.revues.org/8044

RAZEMON O., Comment la France a tué ses villes, Paris, Rue de l'échiquier, 2016, 188 p.

WARNIER J.P. (dir.), Le Paradoxe de la marchandise authentique: imaginaire et consommation de masse, Paris, L'Harmattan, 1994, 192 p.

Keywords: Bread geography, food culture, food justice, new economics, urban bread.

Urban Farms, City Governments, and Land Ownerships: Dilemmas and Opportunities under the Chinese Collective Property Right Regime

Ren Cao

The American University of Rome, Urban futures and food production bolahe2007@gmail.com

Urban agriculture in China becomes increasingly relevant to understand the changing food demands of urban consumers and reactions of producers. Since Chinese cities are rapidly expanding and sprawling, urban agriculture supplies the enormous demands in urban food systems and provides an effective solution to food insecurity and trust issues. However, by growing food within city limits, urban agriculture raises questions about the Chinese land ownership regulation that specifies the urban lands as collectively owned properties. Through qualitative interviews and field observations, conversation with urban consumers, and consultation with national Land Law, this study unveils the existing institutional difficulties to incorporate urban agriculture into the urban food system and discusses the establishment of some existing urban farming projects, in which their profitability and success can hardly be replicated without external interventions. With little effort being made to amend the Land Administrative Law, urban farmers form joint-venture firms with city government-owned enterprises (GOEs), who in theory are the delegates of the collective, to rent abandoned or vacant urban land, start alternative food networks, and apply for Food Product Manufacturing License. On a similar note, studies on the Chinese township enterprises and the organizational features of rural communities find out that during the past economic transition, land policy ambiguity allowed the formation of township enterprise as a government intervention with local business incentive. Deviating from this perspective, this study stresses that in the context of land ownership ambiguity, the urban alternative agriculture joint business is a cooperative platform that reflects a consensus of city level governments and urban farmers on strengthening the credibility of domestic agricultural products and satisfying the demand of urban middle class. This study recommends to institutionalize urban agriculture in China by granting urban farmers legal status in land planning and encouraging purely private and independent farms' participation, which reflects the government's stance on harmonizing the urban-rural dichotomy and diversifying urban food system.

References

Heilmann, Sebastian. "Policy Experimentation In China's Economic Rise". SpringerLink. N.p., 2017. Web. 31 Mar. 2017.

Ho, Peter. "Who Owns China's Land? Policies, Property Rights And Deliberate Institutional Ambiguity". The China Quarterly 166 (2001): pp. 394-421. Web. 31 Mar. 2017.

Oi, Jean Chun. Rural China Takes Off. 1st ed. Berkeley: University of California Press, 1999. Print.

Paull, John (2008). China's Organic Revolution. In: Bhaskaran, S. and Mohanty, Suchitra (Eds.) Marketing of Organic Products: Global Experiences. The Icfai University Press, Hyderabad, India, chapter 17, pp. 260-275.

Pei, Xiaolin. "Township-Village Enterprises, Local Governments And Rural Communities: The Chinese Village As A Firm During Economic Transition". The Economics of Transition 4.1 (1996): 43-66. Web. 31 Mar. 2017.

Theresa Schumilas (2014). Alternative Food Networks with Chinese Characteristics. UWSpace. Web. 31 Mar. 2017. http://hdl.handle.net/10012/8817

Keywords: Urban Agriculture, Chinese City Level Government, Land Ownership, Alternative Food Networks

Urban futures and food production

Silvio Caputo

University of Portsmouth silvio.caputo@port.ac.uk

The resurgence of urban agriculture (UA) seems to be in full swing, with local policies embracing it through food charters and other initiatives (Hardman and Larkham, 2014), academic debate developing in-depth insights on its multi-functionality, and groups and social enterprises increasingly practicing it in diverse forms (Bell et al, 2016). Despite this growing interest, the entity of UA practices in the Global north remains unclear, with some studies suggesting that commercial UA is - in some areas and to an extent - quantitatively relevant (Pölling et al., 2016) and others suggesting that as a whole UA is still a niche practice (Colasanti et al., 2012). Concomitantly, beyond the seminal conceptualisation of urban productive landscapes as an integration of UA within urban development (Viljoen and Howe, 2005), advancements on this topic have been marginal. Academic debate seems to focus predominately on issues such as healthy lifestyles and food security, but much less on models of dense cities based on productivity (economic, of food, ideas and social relations) and a just access to resources. The article is a theoretical contribution in this direction. It builds on the thesis formulated by Srniceck and Williams (2015), which posits that 'localism' and community-based approaches (therein termed folk-politics) characterising many of the left wing movements over the last decade are the main cause for their failures to gain general consent. This is because such approaches lack a unifying, global vision that can be perceived as an alternative to the current neo-liberal regime. Hence, the essence of modernity is questioned in order to identify substantive issues and design a vision of the future that all can share. So, what are the substantive issues on which a vision of a productive and just city can be based? Capitalising on this view and evidence gathered during a COST cross-European project on the evolution of allotment gardens (www.urbanallotments.eu), the article proposes a set of principles for a new urban paradigm. Principles include diffused, self-generated and shared (green spaces) (Caputo et al, 2016) as well as urban food production (in-soil and soil-less) for job creation. This is an initial contribution to a novel stream of theoretical debate on substantive aims for a built environment embracing UA.

References

Bell, S., Fox-Kamper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S. and Voigt, A. (2016) Urban Allotment Gardens in Europe. Earthscan.

Caputo, S., Schwab, E. and Tsiambaos, K. (2016) Emergent approaches to urban gardening in Bell et al (eds) (2016) Urban Allotment Gardens in Europe. Earthscan.

Colasanti, K. J. A., Hamm, M. W. and Litjens, C. M. (2012) The City as an "Agricultural Powerhouse"? Perspectives on Expanding Urban Agriculture from Detroit, Michigan. Urban Geography, 33(3), pp 348-369,

Hardman, M and Larkham, PJ (2014) 'The rise of the 'food charter': A mechanism to increase urban agriculture'. Land Use Policy 39, pp 400-403

Pölling, B., Mergenthaler, M. and Lorleberg, W. (2016) Professional urban agriculture and its characteristic business modelsin Metropolis Ruhr, Germany. Land Use Policy 58, pp 366–379

Srniceck, N. and Williams, A. (2015) Inventing the Future: Postcapitalism and a World without Work. Verso.

Viljoen, A and Howe, J (eds.) (2005) Continuous Productive Urban Landscapes. Routledge.

Keywords: Urban models; Urban agriculture; Productivity

Political agroecology in Crete

Konstantinos Christodoulidis

Chania, Crete, Greece konstantinos.voltas@gmail.com

This abstract aims to research the existence of political agroecology in Crete, through two projects (with which the writer is personally engaged with): "O.K.", an agroecological producers' community-based food market network in the city of Chania and "Faux Paradis", an entrepreneurial/design/research project that establishes trade of processed goods from rural Greece to the European urban markets. The issues that this interaction brings forth are a. production and distribution of ecologically grown quality food with fair prices, for a few households selected on a basis of mutuality b. the collectivization of ecological and political discourse and action and c. the long-term project of autonomy as a "resourceful" ecosystem – habitat. In doing so, it will present the agenda of both group and tease out the essential opportunities, problems and debates over how to solve them. Then, it will propose a Participatory, Action-based Research framework that consists of, firstly, an empirical study regarding the documentation of the farming practices and activities and secondly, a theoretical study regarding the imaginary constitution of political agroecology in the environment of contemporary Crete, addressing a series of approximations like political ecology, food justice and quality, self-organization of peasant livelihood and autonomy. Finally, it will focus on specific issues that are considered "resourceful" in respect to the various, yet consistent criteria of rendering agroecology political: engaging a broader public (through on farm visits, markets and kitchens), bringing together more like-minded small farmers and (immigrant) land workers, ameliorating the agroecological practices and implementing self-built residences with an ecosystem-habitat design methodology, combines ecological architecture and agroecology.

It is believed that, what Gonzalez de Molina asserts, that political agroecology should scale up to engage the broader instead of remaining in "islands of success" of dispersed agroecosystems, is extremely far from the reality of Crete (and Greece), a place that may resound as compatible, but is actually quite hostile to what is hereby called "resourcefulness". And although such an urge, to radically regenerate food systems is deemed entirely valid, in such a case study it is only remotely expected, as neither are such insular examples available nor is their success a given.

References

DeLanda, Manuel, (1999). Markets, Antimarkets and the Fate of the Nutrient Cycles In: LifeScience, eds. G. Stocker and C. Schàpf. (Ars Electronica 99) Vienna, Austria: Springer.

Gonzalez de Molina, M. 2013. Agroecology and politics. How to get sustainability? About the necessity for a political agroecology. Agroecology and Sustainable Food Systems, 37(1): 45-59. http://www.uvm.edu/~agroecol/5_GonzalezdeMolina.pdf (Accessed April 6, 2017)

Méndez, V. E., C. M. Bacon, and R. Cohen. 2013. Agroecology as a transdisciplinary, participatory, and action-oriented approach. Agroecology and Sustainable Food Systems, 37(1): 3-18. http://www.uvm.edu/~agroecol/MendezVEEtAl_AgroecologyTransdis iplinaryPARApproach_13.pdf (Accessed April 6, 2017)

Swyngedouw, E. 2006. Metabolic urbanization: the making of cyborg cities. In: In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism, eds. N. Heynen, M. Kaika, and E. Swyngedouw. London, U.K.; New York: Routledge. pp. 201"39 (Chapter 2).

Luke, T. W. 1999. Eco-managerialism: environmental studies as a power/knowledge formation. In: Living with Nature: Environmental Politics as Cultural Discourse, eds. F. Fischer and M. Hajer. Oxford, U.K.; New York: Oxford University Press. pp. 103'"20 (Chapter 5). http://aurora.icaap.org/index.php/aurora/article/view/79/91 [extract] (Accessed April 6, 2017)

Guattari, F. 1989. Les trois écologies. Paris, France: Galilée. (translated by C. Turner). 1989b. The three ecologies. New Formations, 8(Summer): 131'''47. http://www.responsivelandscapes. com/readings/ecology/threeecologies.pdf (Accessed April 6, 2017)

Esteva, G. and M. S. Prakash. 1998. Grassroots Post-Modernism: Remaking the Soil of Cultures. New York: Zed Books.

Castoriadis, C. and D. Cohn-Bendit. 1981. De l'écologie à l'autonomie, [translation of Alkis Stavrou, Athens, Greece: Kedros/Rappas, 1992]

Lilley, S., D. McNally, Ed. Yuen, and J. Davis 2012. Catastrophism: The Apocalyptic Politics of Collapse and Rebirth Oakland USA: PM Press.

Keywords: political agroecology, market network, ecosystem habitat, autonomy, Crete

Access to land pivotal in the food system reconfiguration. The case of the Rome peri-urban area

Luca Colombo¹, Stefano Grando²

¹Fondazione Italiana per la Ricerca in Agricoltura Biolgica e Biodinamica

²Pisa University, Department of Agriculture, Dood & Environment (DAFE), Italy firab@firab.it

Peri-urban agriculture is receiving a growing attention in Italy, as elsewhere in Europe. The proliferation of new farming initiatives, combining economic returns with socio-environmental ambitions, is increasing demand for land nearby town areas by both farmers and 'neo-rural' people, aiming to tackle urban sprawl and heavy infrastructure expansion.

Following a mobilization advocating access to land in Rome, the city and regional administrations issued tenders to assign a number of land units held in public hands, setting priorities for young farmers adopting organic methods. A case study was carried out few months after the assignments procedure completion, to examine how this allocation of public land actually responds to the activist goals and is capable to trigger quality food provision, employment opportunities, peri-urban areas reconfiguration and local food system reorganisation. Moreover, to figure out how to ensure consistent and permanent results, a two-day scenario workshop was organized with key actors in the mobilization and relevant stakeholders, such as city administration representatives, enabling the identification of milestones and constraints in implementation and scaling up of the land assignments.

The case study showed that food sovereignty and agroecological farming played a central role in the mobilisation. As agroecological approaches can deliver ecological services in areas exposed to various types of environmental aggressions, they become pivotal in more thorough initiatives based on land access, short chains, territorialization and multifunctionality. In particular, organic farming was placed at the core of the technical motivations would-be farmers envisioned for their farm management and is seen by both activists and administrations as a way to gain citizens' consensus.

The paper reveals how, in times of ongoing dominance of agro-food industry, land assignments to young (would-be) farmers in the outskirts of Rome can play a decisive role in revitalizing the local food system, detached from the agro-industrial land and food price competition. These initiatives can thus represent outposts of a new way to approaching food production and consumption that may develop in the future towards a more diversified and resilient urban food system, or even towards a more radical social change in the relation between communities, territory and food.

References

CRAT (2011). Vertenza per la salvaguardia dell'Agro Romano - Terre pubbliche ai giovani agricoltori. http://www.aiab.it/images/stories/UfficioStampa/vertenzagroromano.pdf

Fonte M. (2013). Food consumption as social practice: Solidarity Purchasing Groups in Rome, Italy. Journal of Rural Studies 32: 230-239

Grando S., Ortolani L. (2015): Short Food Chains in Rome: context, experiences, policy implications, Urban Agriculture Magazine 29, June 2015. http://www.ruaf.org/sites/default/files/UAM%2029%20p57-59.pdf. Last accessed 21 October 2016.

Mok H-F., Williamson V.G., Grove J.R., Burry K., Barker S.F., Hamilton A.J. (2014): Strawberry fields forever? Urban agriculture in developed countries: a review. Agronomy for Sustainable Development 34(1): 21-43.

Monni S., Scarano G., Travaglini C. M. (2013) Il settore agroalimentare a Roma e nell'Agro Romano. Imprese e lavoro, Università degli Studi Roma Tre https://www.comune.roma.it/PCR/resources/cms/documents/settima_Inchiesta_settore_agroalimentare.pdf

Moore M-L., Riddel D., Vocisano D. (2015). Scaling Out, Scaling Up, Scaling Deep. Strategies of Non-profits in Advancing Systemic Social Innovation. The Journal of Corporate Citizenship Issue 58: 67-84.

Ploeg, J.D. van der, Jingzhong 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.

Key words: peri-urban agriculture, land access, social movements, organic farming

Collective Urban Food Gardens as Ecologies of Care: Engendering a Care-full Alternative Urbanism

Helen Coulson

Newcastle University

h.l.coulson@newcastle.ac.uk

Collective urban food gardens (CUFGs) have proliferated throughout the global North over the past decade, acting as material and discursive challenges to neoliberal urbanism, while simultaneously being vulnerable to neoliberal co-option. Drawing upon research conducted with diverse urban food growing projects in Edinburgh, Scotland, I argue for care, as a political concept, normative ethic and everyday practice, to be considered together with justice in engendering more equitable and progressive context-dependent approaches to not only growing food in the city, but also the effort to build a resourceful, care-full urbanism. I develop the concept of ecologies of care, which enables us to recognise the inherent tensions between the actually existing practices and implicit activisms enacted by communities which seek to foster progressive change and the structural challenges which persist to achieving more socially just futures. Given the multiple ways food and urbanism intersect, and the Scottish Government's ambition of becoming a Good Food Nation, I argue a care perspective provides productive ground to explore the role of urban food growing as a matter of social reproduction and a form of everyday environmentalism in which practical embodied experience and an ethic of care can inform quotidian resistances to prevailing (unjust and uncaring) socioecological relations and their concomitant inequalities. I demonstrate the generative potential of the ecology of care concept for informing and reimagining sustainable food planning and place-making, enabling us to re-think what cities can be based on the needs of citizens and the more-than-human (rather than profit), which are always entangled in webs of responsibility and power. In the context of Edinburgh, I explore how experimental urban food growing activities can both assist and impede alternative urbanism. The interlacement of embryotic commoning, skill-sharing, experiential learning and conviviality are interwoven with a politics of care, in which relations of trust, empathy, cooperation and creativity have the potential to strengthen urban gardeners' capacity to develop resourcefulness to counteract the capitalist logics that reproduce urban food injustice, and therefore, begin to reimagine a care-full alternative urbanism from below.

References

Classens, M. (2015) "The Nature of Urban Gardens: Toward a Political Ecology of Urban Agriculture", Agriculture and Human Values, 32(2): 229-239.

Gibson-Graham, J. K., Cameron, J. and Healy, S. (2013) Take Back the Economy: An Ethical Guide for Transforming Our Communities, Minnesota: University of Minnesota Press.

Heynen, N., Kaika, M. and Swyngedouw, E. (2006) In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism, Oxford: Routledge.

Loftus, A. (2012) Everyday Environmentalism: Creating an Urban Political Ecology, Minneapolis: University of Minnesota Press.

MacKinnon, D. and Derickson, K. (2013) "From Resilience to Resourcefulness: A Critique of Resilience Policy and Activism", Progress in Human Geography, 37(2): 253-270.

McClintock, N. (2014) "Radical, Reformist, and Garden-Variety Neoliberal: Coming to Terms with Urban Agriculture's Contradictions", Local Environment, 19(2): 147-171.

Puig de la Bellacasa, M. (2010) "Ethical Doings in Naturecultures", Ethics, Place and Environment: A Journal of Philosophy and Geography, 13(2): 151-169.

Tornaghi, C. (2014) "Critical Geography of Urban Agriculture", Progress in Human Geography, 38(4): 551-567.

Tronto, J. (1993) Moral Boundaries: A Political Argument for an Ethic of Care, New York: Routledge.

Williams, M. J. (2016) "Care-full Justice in the City", Antipode, 1-19, Early Online Version.

Keywords: Collective Urban Food Gardens, Care-full Justice, Ecologies of Care, Alternative Urbanism, Edinburgh

The Food Journey

Mama D

Community Centred Knowledge communitycentredknowledge@gmail.com

An experiential, immersive flow that reconsiders origins and destinations as constructs produced by a colonial imaginary which has as central to its narrative the dislocation and commodification of the 'other', all the better to validate its modus operandi in the natural world which has become reconfigured solely as 'resource' or capital. As 'resources', both 'the human' and 'nature' are put into service by the central authorities or arbiters of capital intensive development. As such these resources are placed at the peripheries; as marginal to the core demands and constructions of the master metropolis, from which all ideas of modernity flow.

The journey problematizes the relationship of the encounter of the new with the old and the process by which commodification of majority world populations also denatured the relationship the human could have with any other extension of nature. Many contradictions and blind-spots remain as we weave a tangled web of power relations, metered through trade, production and consumer activities.

To respond to the critical nature of the encounters, theories of decoloniality are based upon connectedness and conviviality between disparate parties connected in the diasporas of the cities or metropoles. Alternatively we can interrogate the disconnections and contradictions of the pluriverse: a global framing of equal dispossession and wound inflicted or superimposed by modernity upon jagged foundations. Although nature has suffered under the weight of the capitalist mode, it remains ally and a potential way of framing a resistance and offers a way of agency to the disenfranchised.

References

Franck Amalric and Tariq Banuri (1993) The Roots of Unsustainability: Colonisation in Space and Time. Working Paper Series # 9 1993 available at: https://www.sdpi.org/publications/files/W9-The%20Roots%200f%20Unsustainability.pdf

La Via Campesina (2015) Food Justice and Food Sovereignty in USA. Editorial in Nyeleni Newspaper. Number 23 available here: https://viacampesina.org/en/images/stories/pdf/2015-09-Nyeleni_Newsletter_Num_23_EN.pdf

Holt-Gimenez, E and Harper, B (2016). Food- Systems-Racism: From Mistreatment to Transformation in Dismantling Racism in the Food System. Winter-Spring, Number 1. Food First: Institute for Food and development Policy. Available as: http://www.foodfirst.org/wp-content/uploads/2016/03/DR1Final.pdf

Mignolo, W. (2013) On Pluriversality: Thoughts on modernity/coloniality, geopolitics of knowledge, border thinking, pluriversality, and the decolonial option. Available as: http://waltermignolo.com/on-pluriversality/

Smith B. Keithlyn and Smith C. Fernando (1986) To Shoot Hard Labour: The life and times of Samuel Smith, an Antiguan workingman 1877-1982. Karia Press, London

Nelson Maldonado-Torres, quoting Quijano in The Coloniality of Being: Contributions to the development of a concept. (2007) Cultural Studies 21 available at: http://www.decolonialtranslation.com/english/maldonado-on-the-coloniality-of-being.pdf.

Wilk, Richard, (2009). Home Cooking in the Global Village: Caribbean Food from Buccaneers to Ecotourists. Berg. Oxford.

Keywords: Decoloniality Local Food Journey, Sensory, Contradictions, Pluriverse, Remix, Resistance, Intersectionality, Activism, Academy

The potential impact of urban agriculture on food production, water management and energy consumption: the case of Padua.

Michele Dalla-Fontana, Denis Maragno, Giulia Lucertini, Sarah Stempfle , Malteda Reho, & Francesco Musco University IUAV of Venice, Venice, Itlay mdallafontana@iuav.it

Challenges such as resource scarcity, climate change and population growth must be addressed at different scales and in an integrated fashion across different sectors. In this context, cities have a central role since they concentrate population and economic activities. Among many key challenges, food issues have been receiving particular attention during the last years also in the spatial planning systems. Despite urban food policies are becoming more popular, they often fail to be connected and integrated with other issues such as energy consumptions, water management or climate change mitigation and adaptation. Urban agriculture practices might instead become an important tool for sustainable urban development, considering the wide variety of benefits that they can provide. In this paper, we develop a methodology for assessing the food production potential through urban agriculture activities and we test it at neighbourhood scale in the City of Padua in the Veneto Region (Italy). The work is conducted in three stages. The first consists in detecting suitable urban areas for food growing (roof tops, vacant areas, parks and permeable areas) through the analysis of land use and data originated by new technologies application for spatial analysis. The second stage consists in identifying suitable crops based on climatic conditions and territorial characteristics. In doing so, preference is given to fresh products from the fruit and vegetable sector. In the third stage, three scenarios are developed with different levels of urban agriculture implementation. The scenarios are evaluated on the basis of: i) fresh food supply and local demand satisfaction, ii) benefits in terms of energy consumption (e.g. reduced energy for transportation, mitigation of local microclimate), iii) improvement in urban water management (freshwater, storm water and wastewater). The main objective of this paper is to experiment a methodology for assessing and improving the productive potential in cities through urban agriculture initiatives able to generate relevant benefits in the energy and water management.

References

Berger, D. (2013). A GIS Suitability Analysis of The Potential for Rooftop Agriculture in New York City. Master Thesis. Columbia University.

Orsini, F., Gasperi, D., Marchetti, L., Piovene, C., Draghetti, S., Ramazzotti, S., Bazzocchi, G., Gianquinto, G., (2014). Exploring the production capacity of rooftop gardens (RTGs) in urban agriculture: the potential impact on food and nutrition security, biodiversity and other ecosystem services in the city of Bologna. Food Secur. 6: 781–792.

Proksch, G. (2011). Urban Rooftops as Productive Resources: Rooftop Farming versus Conventional Green Roofs, in: ARCC2011 - Considering Research: Reflecting upon Current Themes in Architecture Research: 497–509.

Reese, N.R. (2014). An Assessment of the Potential for Urban Roo op Agriculture in West Oakland, California. Master Thesis. University of San Francisco.

Sanyé-Mengual, E., Cerón-Palma, I., Oliver-Solà, J., Montero, J. I., & Rieradevall, J. (2013). Environmental analysis of the logistics of agricultural products from roof top greenhouses in Mediterranean urban areas. Journal of Science Food and Agriculture, 93: 100-109.

Stoudt, A.E. (2015). Redefining urban food systems to identify optimal rooftop community garden locations: a site sustainability analysis in Seattle, Washington. Master Thesis. University of Southern California

Keywords: rooftop gardens, urban agriculture, energy, water, food

Development of an urban agriculture project: "projection" and "revelation".

Anne-Cécile Daniel¹, Christine Aubry², Mélanie Colle¹, & A. Barbillon¹

¹Agroparistech/EXP'AU, France, ²INRA anne-cecile.daniel@agroparistech.fr

More than a passing trend, urban agriculture has become a necessary tool for creating more liveable and sustainable cities. It responds to many issues of the 21st century and its dynamism increasingly seduces councillors and urban developers. Yet the local authorities and developers are often helpless when faced with the development of an urban agriculture project. It is rare for municipal employees to possess agricultural skills and municipal architects still have little experience in the domain. For the past two years, our research team in agronomy has been interested in following different project-planning trajectories in professional urban farming projects. The data comes from the support and monitoring of eight projects that we have carried out with private and public partners. Depending on who is carrying out the project, there are three major types of projectdevelopment: projection, revelation, or a combination of the two (such as during the pre-feasibility study). 'Projection' is when councillors & promoteurs have a strong ambition or a specific objective (a specific form of urban farm or set of quantitative results). The project developer thus puts out calls for projects or restricted calls for proposals in order to speed up the process and find a project leader. The example of the vertical farm at Romainville and the city of Paris' call for projects are testament to this. 'Revelation' is when the project comes from an overall assessment or a people's initiative. This method requires mediation or even consultation that encourages direct contact between the town's inhabitants and project leaders. These examples today call into question classic agricultural installation and the temporality imposed by urban projects. The challenge is to implement a suitable project which can be easily reproduced, which raises doubts about the feasibility of certain projects due to their high costs.

References

Ackerman K and al. 2014. Sustainable Food Systems for Future Cities: The Potential of Urban Agriculture. The Economic and Social Review, Vol. 45, No. 2, Summer, 2014, pp. 189–20

Allen A. 2003. Environmental planning and management of the peri-urban interface: perspectives on an emerging field. Environmental planning and management. Environment&Urbanization Vol 15 No 1 April 2003

Aubry C, Pourias J, Daniel AC. 2015. Urban agriculture in France: renewal and innovations. Paru dans l'ouvrage: Agricultura, urbanan integral, ornemental y alimentara, Una vision global e internacional. E.T.S Agronomoa UPM, ciudad Universitaria. Madrid. 520p

Aubry, C., Daniel, A.-C., Nasr, J. 2017. Organizing the urban agriculture movement: actors and networks in and around Paris . In: Rob Roggema, dir., Agriculture in an urbanizing society Volume two. Proceedings of the Sixth AESOP Conference on Sustainable Food Planning (p. 1123-1140). Newcastle upon Tyne, GBR: Cambridge Scholars Publishing.

Aubry, C., Daniel, A-C. 2017. Innovative Commercial Urban Agriculture in the Paris metropolitan area. Urban Agriculture Book Series Toward sustainable agricultural-urban relations: innovation, integration, governance. Springer.

Daniel A. C. 2017. Fonctionnement et durabilité des micro-fermes urbaines, une observation participative sur le cas des fermes franciliennes. Rapport d'étude. Paris, Chaire ParisTech "Eco-conception des ensembles bâtis et des infrastructures"/Vinci., 77p.

Roggema R. 2017. Identification of Space for Urban Agriculture through Transformative Governance. Nordic Journal of architectural research.

Viljoen, A., Scchlesinger, J., Bohn, K., Drescher, A. Agriculture in urban design and spatial planning. Cities and Agriculture: Developing Resilient Urban Food Systems, publié par Henk de Zeeuw, Pay Drechsel. p 88-117

Keywords: urban farming projects ; agriculture policies ; urban agriculture stratégies ; urban agriculture trajectorie

Turin Food Atlas - Sharing knowledge towards urban food policies

Egidio Dansero¹, Franco Fassio², Paolo Tamborrini³, Davide Cirillo¹, Giacomo Pettenati¹, Nadia Tecco¹, Alessia Toldo¹, Guido Boella¹, & Cristiana Peano¹

¹University of Turin, ²University of Gastronomic Sciences, ³Politecnico di Torino egidio.dansero@unito.it

Among other cities, Turin is moving toward an urban food strategy, gathering in an integrated perspective many practices and policies from local authorities, market actors and food movements. Universities (University of Turin, Politecnico of Turin, University of Gastronomic Science) play various role in this perspective, both in promoting and supporting policies and practices, both producing, collecting (among the different food actors at the local level) and sharing knowledge about how the actual urban food system that nourish Turin works. That is necessary background to go further in defining goals and targets for a food policy at the local-metropolitan level.

In this perspective, the proposed contribution presents the theoretical background, the aims and the design of a research-action and the first results of Turin Food Atlas project. It is being implemented by an interdisciplinary group or research based in Turin (Italy), including geographers, planners, IT experts, agronomists, designers.

The core of the project is the development of a methodology of analysis of urban food systems based on the realization of a multimedia, interactive, participated Atlas of Food, centered on the metropolitan city of Turin. At the moment we have completed the first report of Turin food system, with a first version of Food Atlas web platform.

The general goal of the project is to develop and implement an interdisciplinary methodology of food system analysis and assessment, at the metropolitan scale, through traditional charts and maps, participatory mapping and a strict relationship with social networks, for field action.

The principal idea of the Atlas as space of representation, place of sharing knowledge and tool for policy is that knowledge about urban food systems is owned and produced by a huge amount of actor, active at the local scale, in particular activist, food movements and other actors of the civil society.

The Atlas, which aims at being considered as a box for the collection and the production of knowledge about food in Turin, is divided into three main sections: a) a review of already existing maps and representations about the food system (a map of maps), which are critically reviewed and organized, in order to produce a catalogue of the different existing representations; b) a collection of static maps, specifically produced for the atlas, representing data about the food system coming both from official archives (e.g. census) and from users and actors of the food system. The static maps will be open to updates and corrections, following the suggestions of users; c) a platform for users-generated, dynamic, interactive maps, based on crowdmapping and the integration with social networks.

References

Bottiglieri M., Pettenati G. and Toldo A. 2016. Toward the Turin Food Policy. Good Practices and vision. Milano: Franco Angeli (open access, free download).

Carey J. 2011, Who feeds Bristol?, Bristol, Bristol City Council – NHS Bristol

Dansero E., P. Bonavero, G. Pettenati, A. Toldo (2014). Towards a local food agenda in Turin. Mapping practices and processes through resilience. In: (a cura di): R. Roggema, G. Keeffe, Finding Spaces for Productive Cities. p. 849-862, Velp:VHL University of Applied Sciences, ISBN: 9789082245127, Leeuwarden, the Netherlands, 5 -7 November 2014

Dansero E., Pettenati G., Toldo A., (2015), The Atlas of Food. A space of representation, a place for policies, a methodology of territorial analysis, Meeting Urban Food Needs (MUFN) project, FAO,

 $http://www.fao.org/fileadmin/templates/ags/docs/MUFN/CALLS_FILES_EXPERT_2015_b.pdf$

Feagan, R. 2007. The place of food: mapping out the 'local' in local food systems, Progress in Human Geography, 31(1): 23-42

Gatrell, G.D., Reid, N., Ross, P. (2011), Local food systems, deserts, and maps: The spatial dynamics and policy implications of food geography, Applied Geography, 31: 1195-1196.

Messer, B. 2012. Mapping Local Food Webs Toolkit. London. Campaign to Protect Rural England

Millston, E. & Lang T. 2008. The Atlas of food, Brighton, Myriad Editions

Morgan, K. 2009. Feeding the City: The Challenge of Urban Food Planning. International Planning Studies 14 (4): 341–342

Keywords: Food Atlas, Turin, urban food system, urban food policy, crowd mapping

Hortus vs Ager, how edible backyards challenge the agrarian representation of urban sprawl impact on food production.

Segolene Darly¹, Stephana Boisrond¹, Ibrahima Konté¹, Camille Letellier¹, Isabel Plancqueel¹, Houssem Yahioui¹
¹Université Paris 8 Vincennes Saint-Denis, LADYSS, Saint-Denis, France
segolene.darly@univ-paris8.fr

For most agrarian scholars, urban sprawl enhances the negative impact of urbanization on food production by increasing the loss of arable land available for agriculture. In response to this statement, urban densification through backyards development is often claimed to be the best pragmatic solution to secure food production ressources.

From our point of view, this statement is nevertheless based on researches that focus on the share of cultivated lands which is called the "ager" (the latin word for "field"), neglecting to look at the other share of cultivated lands dedicated to food production and complementary to "ager": the "hortus" (the latin word for "garden"). From an agrarian perspective, "ager" and "hortus" are designating two very contrasted productive places: the fields composing the "ager" share of cultivated lands are permanents, with no trees, rectangular and adjacent in order to facilitate the production of two or three varieties of crop thanks to machine-tools, whereas the "hortus" share is a combination of small enclosed plots of land adjacent to the houses, where a more concentrated and diversifed range of vegetal varieties are produced thanks to manual and constant care. In the study we performed, productive backyards and urban gardens are taken as the modern figure of the "hortus". Thanks to visual interpretation of remote sensing images, we mapped them in five localities located in the northern part of the Greater Paris Region where the share of individual houses, taken as the signature of urban sprawl, is high. Dwellers and local representatives were also interviewed in order to detail their functions in the local food system of the locality.

These results allow us to fuel the current debate surrounding the "sustainable" low density urban model.

References

Barnes K., Morgan J., Roberge J., Lowe S. (2001), Sprawl development: its patterns, consequences, and measurement. Towson University

Darly S., Torre, A., (2013) 'Conflicts over farmland uses and the dynamics of 'agri-urban' localities in the Greater Paris Region' Land Use Policy, 33, 90-99.

Haberman D., Gillies L., Canter A., Rinner V., Pancrazi L., Martellozzo F. (2014), "The Potential of Urban Agriculture in Montréal: a Quantitative Assessment.". ISPRS Int. J. Geo-Inf., 2014, 3,

Mariolle B. & D. Delaville (2014), Les Pratiques et expérimentations de densification douce en France, Note pour le ministì¬re de l'Écologie, du développement durable et de l'énergie.

Mazoyer M, Roudart L., 2002 (1997), Histoire des agricultures du monde, du néolithique à la crise contemporaine, Points, Paris, 705 p.

Taylor, J.R., Lovell, S.T. (2014). 'Urban home food gardens in the Global North: Research traditions and future directions'. Agriculture and Human Values.

Taylor J. R., Taylor Lovell S. (2012) 'Mapping public and private spaces of urban agriculture in Chicago through the analysis of high-resolution aerial images in Google Earth'. Landscape and Urban planning,

Keywords: gardens, backyards, hortus, Greater Paris Region

The urban-rural relationships: a resource for informal food sector in the global city

Segolene Darly

Université Paris 8 Vincennes Saint-Denis, LADYSS, Saint-Denis, France segolene.darly@univ-paris8.fr

In most European cities, the latest economic crisis due to financial crash worsened social exclusion processes that unfold in the context of urban economy neoliberalization. This dynamics is often closely associated to the rise of informal sector as a more and more central figure of economic development in developed countries. Despite an abundant literature supporting these statements, urban agriculture or alternative food networks studies have been given little attention to the figures and processes of informality.

The objective of this communication is to contribute to this research agenda by exploring how urban-rural relationships can become a resource for informal activities in the urban food sector. Our work is based on the case study of informal fresh corncob supply networks, in the city of Paris.

In Europe, grilled or boiled corncob is a very popular street food product within the West African community. To meet the quality criteria required, corncobs have to be fresh and are sold immediately after being cooked. The selling spots are always in neighbourhoods traditionally frequented by the community and informally occupy places available on sidewalks or public places. Field observations and interviews were performed in order to map the spaces and social networks supporting the fresh corncorb supply chain.

The results revealed an extended informal trade network based on pre-existing community networks structured by formal institutions and other economic sectors. We also showed the co-existence between long- and short-supply chains, depending on various geographies of urban-rural relationships, from a long-distance supply chain based on the import of corn from Spain and even Morocco, to very short-distance supply chain where local corn is being harvested in the close fields of farmers form Greater Paris Region.

This example gives us empirical knowledge of the role of urban-rural relationships geography in shaping the informal food sector and its impact on economic resilience of vulnerable urban dwellers.

References

Aubry, Christine et Kebir, Leila. 2013. Shortening food supply chains: A means for maintaining agriculture close to urban areas? The case of the French metropolitan area of Paris. Food Policy, 41, 85-93.

Chiffoleau, Yuna. Circuits courts alimentaires, dynamiques relationnelles et lutte contre l'exclusion en agriculture, Économie rurale [En ligne], 332 | novembre-décembre.

Hochedez, Camille et Le Gall, Julie. 2011. Nord et Sud face aux crises. De nouveaux réseaux maraîchers métropolitains au service d'une agriculture de proximité : les cas de Buenos Aires et Stockholm, Norois, 221 | 2011, 25-38.

Jarosz, Lucy. 2008. The city in the country: Growing alternative food networks in Metropolitan areas. Journal of Rural Studies, 24 (2008) 231–244 5.

Labor & Society, Volume 3, Issue 6, March 2000, Pages 6–26

Leonard, Madeleine. 1998. Invisible Work, Invisible Workers: The Informal Economy in Europe and the United States. New York: St. Martin's Press.

Sassen, Saskia.2000. Informalization: Imported Through Immigration or a Feature of Advanced Economies? The Journal of

Keywords: Urban-rural relationships, informal work, Corncob market, Paris

Self-feeding city: the case of Rennes - Presenting the urban context and a project of extended urban fruit trees

Catherine Darrot¹, Gilles Maréchal²

¹ Agrocampus Ouest, Rennes, France, ²Terr'Alim catherine.darrot@agrocampus-ouest.fr

Rennes is the largest city of Brittany (West of France), where a long term land management policy preserved a green belt of farmland in the metropole area over the last 40 years. A prospective study carried between 2010 and 2013 ('Rennes self-feeding city') showed that the metropole could cover up to 40% of its own food needs thanks to those areas, including urban green ways. However, the current local productions are not oriented towards the local needs: animal productions dominate and represent up to 180% of the local need, whereas all vegetal productions (cereals, oils, vegetable and fruits) are unsufficient: local fruit productions are particularly low and cover only 3% of the local needs, though a historical tradition of apple productions (this study recently contributed to the justification of a local food plan aiming to cover the public food procurement in priority with local ressources). This calculation method has been transposed in various other cities since.

As a new step in this reflexion, in 2016, a second prospective study examined the potential of fruit production in a 400 ha farmland area in public property next to the city center of Rennes. This study was carried in close concertation with local decision-makers and stakeholders involved in this farmland area. It is based on the multi-dimensionnal analysis of two scenarios, one maximizing the fruit productivity of the area, the other one maximizing citizens participation. The following aspects of those two scenarios were detailed and will be summarized in the communication: agronomy, land and trees management, governance, public perceptions, legal aspects, economy and costs. Similar inspiring cases were also identified in France and other countries.

References

Darrot, C., Rennes, ville vivriere? Une prospective proposée par les étudiants de l'option "Agriculture Durable et Développement Territorial" d'Agrocampus Ouest Revue Pour 2014/4 (No. 224)

Viljoen, A. and Wiskerke (Ed.), J., Sustainable food planning: evolving theory and practice, hardback 2012, e-book (PDF) first published 2016

 $Marsden, T \ and \ Morley, A. \ (Ed.), Sustainable \ food \ systems, \ building \ a \ new \ paradigm, \ Earthscan \ Routledge$

Keywords: Prospective, scenarios, urban food autonomy, public participation

Planning food futures now. Possibilities for food forestry in the Dutch Metropolitan Region Rotterdam The Hague

Paul de Graaf

Paul De Graaf Research and Design (Ontwerp & Onderzoek), and Rotterdam Forest Garden Network info@pauldegraaf.eu

Forest gardening or food forestry is seen as a promising form of agro-ecology. However, it is not ready for wide application in West-European agriculture because of lack of practical localised experience and tried and tested livelihood or business models. As such it is an instance of an alternative food future. This means its value lies in its possible contribution to a sustainable future, rather than in a certain return on investment. Despite this uncertainty, it is an important agro-ecological pathway to a sustainable future food system, that needs to be be secured as such.

This research is a private party initiative by a coalition of independent social entrepreneurs, supported by a grant from the Creative Industries Fund. The research aims to identify physical, conceptual, legal, social and financial space for realisation of food forestry experiments. These experiments are part of keeping open the agroecological pathway, and contribute to its development. They can provide practice-based answers to the questions that policy makers, farmers and investors have about the viability of food forestry. They also make aspects of a possible agro-ecological future tangible and open to empirical debate. As such they are places of meeting and learning for a resourceful, agro-ecological society.

The paper will outline a methodology for identifying opportunities from four perspectives: landscape-ecological; legal/regulatory; socio-cultural; productive/economical. It will continue to show how these perspectives can be combined in an opportunity map and how this map can be used as a tool to realise food forestry experiments. The paper will give an outline of different food forms these experiments might take on spatially, socially, financially. These food forestry applications are informed by experiences from the pilot project Voedselbos Vlaardingen (initiated and realised by the Rotterdam Forest Garden Network) as well as input from interested farmers and other potential food foresters

References

Crawford, M., 2010, Creating a forest garden, Chelsea Green Bookks, Totnes, Devon

De Graaf, P.A.,2012, Room for urban agriculture in Rotterdam: defining the spatial opportunities for urban agriculture within the industrialised city, in: Viljoen, A. & J.S.C. Wiskerke, Sustainable food planning. Evolving theory and practice, Wageningen Academic Publishers

Dehaene, M., C. Tornaghi, C. Sage, 2016, Mending the metabolic rift: Placing the 'urban' in Urban Agriculture, in: Lohrberg et al., Urban Agriculture Europe, Jovis Verlag, Berlin

Schans, J.W. Van der, et al., 2016, It's a business! Business models in Urban Agriculture, in: Lohrberg et al., Urban Agriculture Europe, Jovis Verlag, Berlin

Shepard, M., 2013, Restoration Agriculture. Real world permaculture for farmers, Acres USA, Austin, Texas

Keywords: agro-ecology, food forestry, social entrepreneurship, opportunity mapping, livelihood/ business models

Planning urban food together. Theoretical approaches to urban food planning practice in a complex, pluralistic society

Paul de Graaf

Wageningen University paul.degraaf@wur.nl

Urban food initiatives and alternative ways of farming are recognised as valuable contributions to society and are considered by many to be relevant to the future of our food system. How to make place for and make use of this relevance and value in planning is still a question which governments at different levels struggle with. This positioning paper proposes a theoretical framework for the study of sustainable urban food planning, focusing on the interaction between governmental and societal actors in spatial planning of urban food initiatives, as well as a methodology to confront these theoretical assumptions with experiences from the urban food planning practice in a case study research. The paper aims to contribute to a better understanding of the practice of urban food planning, its strategies, the actors involved and their roles and relations. Learning more about how planning can play a role in supporting urban food initiatives and include their bottom-up perspectives, might help to improve planning and to manage expectations on both sides about what planning can and can not do. Planners face a combination of environmental and social challenges: planning in and for a pluralistic, participative society, and planning for sustainable goals related to an unknown future.

The paper investigates conceptualisations of planning relevant to these challenges, such as advocacy planning, complexity planning and self-organisation, and identifies possible strategies from these theoretical positions that are or could be applied in the practice of urban food planning. This planning-theoretical approach is augmented with concepts from social theory concerned with civic initiatives, self-governance and grassroots innovation movements. These concepts offer an understanding and practical methods of how planning can work with the multiple frames and perspectives of actors within the urban food movement. The underlying thesis is that this understanding will help to more effectively include the resourcefulness of these movements and initiatives in urban food planning in particular and in planning for a sustainable and equitable society in general.

References

Broekhof, S.M. & Valk, A. van der, 2012, Planning and the quest for sustainable food systems: explorations of unknown territory in planning research, in: Viljoen, A. & J.S.C. Wiskerke, Sustainable food planning. Evolving theory and practice, Wageningen Academic Publishers

Dehaene, M., C. Tornaghi, C. Sage, 2016, Mending the metabolic rift: Placing the 'urban' in Urban Agriculture, in: Lohrberg et al., Urban Agriculture Europe, Jovis Verlag, Berlin

Ilieva, R.T., 2016, Urban Food Planning: Seeds of Transition in the Global North,

Leach. M., Scoones, I. and Stirling, A., 2007, Pathways to Sustainability: an overview of the STEPS Centre approach, STEPS Approach Paper, Brighton: STEPS Centre

Schans, J.W. Van der, et al., 2016, It's a business! Business models in Urban Agriculture, in: Lohrberg et al., Urban Agriculture Europe, Jovis Verlag, Berlin

Rauws, W., 2016, Civic initiatives in urban development: self-governance versus self-organisation in planning practice, in: Town Planning Review 87(3): 339-361

Rauws, W., G. de Roo & S. Zhang, 2016, Self-organisation and spatial planning: an editorial introduction, in: Town Planning Review 87(3): 241-251

Smith A., M. Fressoli, H. Thomas, 2014, Grassroots innovation movements: challenges and contributions, in: Journal of Cleaner Production 63 (2014) p. 114-124

Tornaghi, C., 2012, Public space, urban agriculture and the grassroots creation of new commons: lessons and challenges for policymakers, in: Viljoen, A. & J.S.C. Wiskerke, Sustainable food planning. Evolving theory and practice, Wageningen Academic Publishers

Keywords: urban food planning; grassroots innovation; self-organisation; self-governance

Transformations and innovation in the Veneto region agro-food system

Marta De Marchi

Phd Student, University luav of Venice, Italy mardemarmdm@gmail.com

Food flow and food supply are emerging as urgent themes in urban context and inside the urban planning and territorial management tools, both in the metropolitan and in low density urban areas. On the one side, in the global market, small and medium enterprises are struggling to find their space in the economy; on the other side the existing conventional production of food is threatening the landscape and the environment. Several cities and regions around the world are experimenting new food strategies, in order to face the weaknesses of their urban food systems and to guarantee economical, social and environmental sustainability and resilience. The Veneto region, in the northern part of Italy, represents an emblematic case for its food system, still profitable and characterised by special and niche products; for a growing number of social innovation initiatives from the bottom; and for a urban and mobility structure, the so-called "città diffusa", that seems to facilitate the shortening of food supply chains. However, the intensive and industrial system of food production is damaging the natural set of resources and is putting under pressure farmers' activities and autonomy. In a country famous for its food heritage, the experimental approaches in food planning and food sensitive urban design are still rare, perhaps because the existing food system is not seen as a problem, but rather as a system that works. In order to develop site-specific strategies, a territorial and urban analysis of the food system is needed, from the phase of production, to the one of consumption.

The role of the urbanism should be to provide, with its tools, a complete view of the existing situation, and to collaborate with private and public stakeholders to design new strategies for a more resilient food system. The urban designer, in fact, has the skills to focus the complex matrix of the territory, made by the intersection among resources, spaces, infrastructures, actors, policies and practices. The research aims at exploring, through the visual description of some paradoxes of the Veneto food system, new ways to analyse and represent the territory through the lens of food.

References

Astengo G., Banchi M., Agricoltura e Urbanistica. Analisi e rappresentazione della situazione agricola dal punto di vista urbanistico", Viglongo editori, Torino 1945

Donadieu, P. "Campagne Urbane. Una nuova proposta di paesaggio della città", Donzelli editore, Roma 2013

Fischer-Kowalski M., "The Intellectual History of Materials Flow Analysis" in «Journal of Industrial Ecology», 1998, n. 2(1), pp. 61-78.

Ilieva R., "Urban Food Planning. Seeds of Transition in the Global North", Routledge, Oxford, 2016.

Lim CJ, "Food City", Routledge, New York, 2014.

Mininni M., "Approssimazioni alla città", Donzelli editore, Roma 2013

Potukuchi K., Kaufman L., "The food system: A stranger to planning field" in «Journal of the American Planning Association », 2000, n. 2, pp. 66

Secchi B., "A new urban question" in «Territorio », 2010, n. 53, pp. 8-18.

Steel C., "Hungry Cities. How Food Shapes Our Lives", Vintage Books, London 2008

Wiskerke, J.S.C., Viljoen, A.M., "Sustainable food planning: Evolving theory and practice". Wageningen Academic Pub., Wageningen 2012

Keywords: food system paradoxes, socio-environmental threat, food mapping, multi-scalar food system(s)

Impact assessment and agroecological reflexions on Microgardening experience in Dakar, Senegal

Pietro De Marinis

Department of Agrienvironmental Science of the University of Milan, Milan, Italy pietro.demarinis@unimi.it

Urban and Periurban Agriculture (UPA) is nowadays called to enhance metropolitan resilience in front of a more and more acute social, environmental and economic crisis of the global population. In fact UPA is reported in wide literature to be able to enhance urban food security and nutrition, local economic development, poverty alleviation and social inclusion and sustainable environmental management in the cities.

An important focus of International Cooperation is nowadays on UPA. International Cooperation strategies of more and more organizations are now aligning towards the effort of 'institutionalization' of UPA.

In this paper we focus on the evaluation of the impact of one particular UPA support program that has been implemented in Dakar, Senegal, highlighting the importance of 'integration' and 'institutionalization' in strengthening the impact.

This success story is called Microgardens Milan-Dakar and shows how to better implement future UA support strategies that should be based on agroecological approach to food systems, with the full involvement of all the stakeholders of UPA.

In order to assess the impact of Microgardens Program on the UA of Dakar we undertook an ex-post evaluation using both quantitative and qualitative data, gathered by structured interviews, filed surveys and participatory focus groups.

Three main fields of impact have been identified and assessed: food security, family economy, environment and social wellbeing.

Rapid Market Appraisal technique participatory evaluation was used as methodologies for running the evaluation. Main source of information have been: 191 functional production units and several key organizations: FAO Senegal, ACRA Foundation, Municipality of Dakar, Department of Agro-Environmental Science of the University of Milan.

The results of Microgardens programme in Dakar show how the implication of policy makers is important in order to transform simple initiatives in a coordinated action that is able to impact food security, household economy, environment, social and other welfare related issues in urban environment. Moreover our study allows us to affirm that agroecology can be taken as a valid model to involve all the needed stakeholders and to valorize existing functional synergies in each peculiar situation.

References

FAO (2012) Growing greener cities in Africa. First status report on urban and peri-urban horticulture in Africa. Rome, Food and Agriculture Organization of the United Nations.

Ursula Lang (2014) Cultivating the sustainable city: urban agriculture policies and gardening projects in Minneapolis, Minnesota, Urban Geography, 35:4, 477-485.

Sposito T. (2010) Agriculture urbaine et periurbaine pour la sécurité alimentaire en Afrique de l'ouest. Le cas des Micro-Jardins dans la Municipalité de Dakar. Doctoral Thesis, University of Milan, Agricultural Faculty.

Brenda B. Lin et al. (2015) The future of urban agriculture and biodiversity-ecosystem services: Challenges and next steps, Basic and Applied Ecology, Volume 16, Issue 3, Pages 189-201, ISSN 1439-1791.

Diop M.B. (2016) Analyse de l'impact du projet «micro-jardins dans la ville de Dakar» FAO GDCP/SEN/002/ITA «Projet micro-jardins dans la ville de Dakar»

De Marinis P. (2013), Project Microjardins Milan-Dakar technical report

Altieri, M.A. et al. (2012) Agroecologically efficient agricultural systems for smallholder farmers: contributions to food sovereignty, P. Agron. Sustain. Dev. 32: 1. doi:10.1007/s13593-011-0065-6

Keywords: Microgardening, Symplified Hydroponics, Agroecology, Food System, Urban Agriculture

Milano Bioregione: re-conceptualize the metropolitan area in relation to the Food-City system

Catherine Dezio¹ & Antonio Longo¹

¹Dipartimento di Architettura e Studi Urbani (DASTU), Politecnico di Milano, Italy catherine.dezio@gmail.com

Although considered a salvation factor for cities, the agricultural environment is in deep crisis, which is inevitably reflected on the urban systems themselves (Marino, Cicatiello, 2012).

Avoiding ideological approaches, it seems useful to reflect on the relationship between farming and urban phenomena, by integrating aspects that consider systemic relations with environment and landscape management.

In that direction arises "Bioregione": an Italian research project funded by Fondazione Cariplo in Milan and developed by the Department of Agriculture of University of Milan and by two Departments of Architecture of the Politecnico di Milano (DASTU and ABC). B. is an applied research that incorporates the concepts of the historic movement of Bioregionalism to promote local sustainable development in the Milan area, considering in particular the relationship between local production chain and the institutional consumer.

The Bioregionalism is not a new approach, but it's absolutely not consolidated. It is open to many interpretations and meanings and it is presented as a set of policies and projects which see local development opportunities in the reinforcement of the relationship between socio-economic systems with the original regional ecosystems (Berg, Desmann, 1978).

In that case, the choice of decline in a Bioregionalism way a set of investigative and experimental local actions was an opportunity to measure the public demand and the quality local offer. The added value of B. is its collocation in a local planning framework broader, consisting of land management experiences built by a common vision of the future oriented by ecology, geology and quality of life; some examples are the projects: Lambro-Seveso-Olona 2001, Città di città 2006, Rurbance 2014, ReLambro 2015 and the activities promoted for the River Contracts Management in Lombardy (Alì and Longo 2015).

The paper reports the contribution of DASTU Department, which set out three main objectives: (i) reconstructing a multidimensional definition of Bioregionalism; (ii) propose a re-stitching across different sectors and skills with a systemic and territorial approach; (iii) identify the spatial consequences of the Bioregionalism application to the metropolitan area of Milan.

The paper concludes by suggesting some ways of development of the theme, identifying the key factors that make the project a replicable territorial model.

References

"Fiumi e territorio nella metropoli Milanese. Il contesto progettuale dei Contratti di Fiume" progetto a cura di Alessandro Alì e Antonio Longo, con Valentina Brambilla e Maddalena Leanza (Ubistudio srl) nell'ambito dei contributi scientifici della Segreteria Tecnica Contratti di Fiume con ERSAF e Regione Lombardia (X Incontro del Tavolo Nazionale dei Contratti di Fiume | Milano, 15-16 Ottobre 2015. "La buona governance dell'acqua e del territorio")

a cura di Davide Marino, Clara Cicatiello "I Farmers' Market: La mano visibile del mercato. Aspetti economici, sociali e ambientali delle filiere corte" (2012).

a cura di Giorgio Ferraresi "Il progetto di territorio, oltre la città diffusa verso la Bioregione" (2014).

Magnaghi A., Fanfani D. "Patto città campagna: un progetto di bioregione urbana per la toscana centrale" (2010).

Norgaard R. "Coevolutionary Agricultural Development. Economic Development and Cultural Change" (1984).

Peter Berg "Alza la posta! Saggi storici sul bioregionalismo" (1978).

Robert Bailey "Identifying Ecoregion Bounderies" (2005) articolo in "Environmental Management" vol. 34

Robert Thayer "Sustainable City Regions: Re-localising Landscapes in a Globalising World" articolo in "Landscape review" Volume 9 (2)

Silvio Franco "Bioregionalismo tra etica individuale e sostenibilità locale" (2004) articolo in "Agribusiness Paesaggio & Ambiente" Vol. VIII

Tom Lynch, Cheryll Glotfelty, Karla Ambruster "The Bioregional Imagination" (2012).

Keywords: bioregionalism; localism; short chains; landscape; metropolitan area

Agricultural practices and local food initiatives. Which resilient processes in socio-ecological urban systems

Catherine Dezio¹ & Davide Marino²

- ¹ Dipartimento di Architettura e Studi Urbani (DASTU), Politecnico di Milano, Italy
- ² Dipartimento di Bioscienze e Territorio (DIBT), Università del Molise, Italy catherine.dezio@gmail.com

The relationship among agriculture, food and cities is today at the center of profound transformations that lead us to reflect on causes, effects, factors and processes (Marino, Cavallo, 2014). The framework of dynamics generates numerous questions on different issues related not only to the physical dimension of urban systems, but even on their role in relation to the use of natural resources, to the opportunity that they offer to the innovation and especially to their reaction capacity to pressures and fragilities (i.e. climate change, globalization of markets, the generation change of farmers, changes in dietary habits, changes in the relationship between places of production and consumption, etc.).

Could agriculture and food be instruments for resilience of urban systems? Could they be a link between management of ecosystem services, landscape protection, preservation of biodiversity, social inclusion and other issues of complex territorial systems? To answer to these questions is necessary recognize the agro-ecosystems not as antithetical entities than urban areas, but as integrated phenomena, able to play a key role in the development of urban systems (Marino, Cavallo, 2014).

On that regard, it can be interesting to investigate economic, social and environmental aspects of local-scale food initiatives, identifying the critical and the resilient factors. The approach into which it fits that analysis is the coevolutionary paradigm, recognized as the theoretical framework necessary to the understanding of the transformations in social-ecological systems (Norgard, 1984).

That paper aims to tell some experimental results of an analysis conducted over 52 local practices regarding food-city relationship, collected as part of the "Observatory of Resilience Practices": project funded by the Fondazione Cariplo and conducted by the Politecnico di Milano (Dezio, Colucci, Magoni, Radaelli, 2016). The paper concludes by proposing possible addresses and prospects for the structuring of an eventual replicable inductive analysis model: namely that, starting from the territorial practices and through the investigation of the dynamics of transformation in place, it can be able to suggest new ways and possible orientations for adaptive and resilient local governance systems.

References

a cura di Davide Marino "Agricoltura urbana e filiere corte. Un quadro della realtà italiana" (2016).

a cura di Davide Marino e Aurora Cavallo "Agricoltura, cibo e città. Verso sistemi socioecologici resilienti" (2014) Cursa (pas)SAGGI

Attila Toth, Stacy Rendall & Femke "Resilient food systems: a qualitative tool for measuring food resilience" (2015) articolo in "Urban Ecosystems"

Brenda B. Lin, Stacy M. Philpott, Shalene Jha "The future of urban agriculture and biodiversity-ecosystem services: challenges and next steps" (2015) articolo in "Basic and Applied Ecology"

Dezio C., A. Colucci, M. Magoni, G. Pesaro, R. Redaelli "Observatory of Resilience Practices: strategies and perspectives" (2016) in atti di convegno "Sustainability of Territories in the Context of Global Changes" 1st AMSR CONGRESS, 23rd APDR CONGRESS 2016

Henk de Zeeuw and Pay Drechsel "Cities and Agriculture. Developing resilient urban food systems" (2015).

Norgaard R. "Coevolutionary Agricultural Development. Economic Development and Cultural Change" (1984).

Resilient urban food systems: opportunities, challenges and solutions outcomes of Resilient Urban Food Systems Forum (2013)

Ronald Estoque, Yuji Murayama "Social-ecological status index: a preliminary study of its structural composition and application" (2014) articolo in "Ecological indicators"

Walker B., Holling C. S., Carpenter S., Kinzing A. (2004). Resilience adaptability and transformability in social ecological systems. Ecology and Society

Keywords: agriculture, urban systems, resilience, local practices, socio-ecological systems

Milano Bioregione: re-conceptualize the metropolitan area in relation to the Food-City system

Catherine Dezio¹, Antonio Longo

¹Dipartimento di Architettura e Studi Urbani (DASTU), Politecnico di Milano, Italy

Although considered a salvation factor for cities, the agricultural environment is in deep crisis, which is inevitably reflected on the urban systems themselves (Marino, Cicatiello, 2012).

Avoiding ideological approaches, it seems useful to reflect on the relationship between farming and urban phenomena, by integrating aspects that consider systemic relations with environment and landscape management.

In that direction arises "Bioregione": an Italian research project funded by Fondazione Cariplo in Milan and developed by the Department of Agriculture of University of Milan and by two Departments of Architecture of the Politecnico di Milano (DASTU and ABC). B. is an applied research that incorporates the concepts of the historic movement of Bioregionalism to promote local sustainable development in the Milan area, considering in particular the relationship between local production chain and the institutional consumer.

The Bioregionalism is not a new approach, but it's absolutely not consolidated. It is open to many interpretations and meanings and it is presented as a set of policies and projects which see local development opportunities in the reinforcement of the relationship between socio-economic systems with the original regional ecosystems (Berg, Desmann, 1978).

In that case, the choice of decline in a Bioregionalism way a set of investigative and experimental local actions was an opportunity to measure the public demand and the quality local offer. The added value of B. is its collocation in a local planning framework broader, consisting of land management experiences built by a common vision of the future oriented by ecology, geology and quality of life; some examples are the projects: Lambro-Seveso-Olona 2001, Città di città 2006, Rurbance 2014, ReLambro 2015 and the activities promoted for the River Contracts Management in Lombardy (Alì and Longo 2015).

The paper reports the contribution of DASTU Department, which set out three main objectives: (i) reconstructing a multidimensional definition of Bioregionalism; (ii) propose a re-stitching across different sectors and skills with a systemic and territorial approach; (iii) identify the spatial consequences of the Bioregionalism application to the metropolitan area of Milan.

The paper concludes by suggesting some ways of development of the theme, identifying the key factors that make the project a replicable territorial model.

References

Peter Berg 'Alza la posta! Saggi storici sul bioregionalismo' (1978).

Tom Lynch, Cheryll Glotfelty, Karla Ambruster 'The Bioregional Imagination' (2012).

Robert Bailey 'Identifying Ecoregion Bounderies' (2005) articolo in 'Environmental Management' vol. 34

Robert Thayer 'Sustainable City Regions: Re-localising Landscapes in a Globalising World' articolo in 'Landscape review' Volume 9 (2)

Silvio Franco 'Bioregionalismo tra etica individuale e sostenibilità locale' (2004) articolo in 'Agribusiness Paesaggio & Ambiente' Vol. VIII a cura di Giorgio Ferraresi 'Il progetto di territorio, oltre la città diffusa verso la Bioregione' (2014).

Magnaghi A., Fanfani D. 'Patto città campagna: un progetto di bioregione urbana per la toscana centrale' (2010).

a cura di Davide Marino, Clara Cicatiello 'I Farmers' Market: La mano visibile del mercato. Aspetti economici, sociali e ambientali delle filiere corte' (2012).

Norgaard R. 'Coevolutionary Agricultural Development. Economic Development and Cultural Change' (1984).

'Fiumi e territorio nella metropoli Milanese. Il contesto progettuale dei Contratti di Fiume' progetto a cura di Alessandro Alì e Antonio Longo, con Valentina Brambilla e Maddalena Leanza (Ubistudio srl) nell'ambito dei contributi scientifici della Segreteria Tecnica Contratti di Fiume con ERSAF e Regione Lombardia (X Incontro del Tavolo Nazionale dei Contratti di Fiume | Milano, 15-16 Ottobre 2015. 'La buona governance dell'acqua e del territorio').

Keywords: bioregionalism; localism; short chains; landscape; metropolitan area

Urban food policies in German city regions: An overview about actors and steering instruments

Alexandra Doernberg, Paula Voigt, Ingo Zasada, Annette Piorr Leibniz Centre for Agricultural Landscape Research doernberg@zalf.de

Although food represent an emerging topic on the municipal policy and planning agenda, structured scientific examination of political strategies and planning activities at local level is lacking. With the aim of gaining new insights into the origin and capacity of policy action, we investigated the existence of municipal strategic and planning approaches related to food issues in ten large German cities. We analysed the role of different actors as well as the application of policy and planning instruments. We employed different empirical methods such as document analysis and expert interviews. The findings reveal that food planning and policy activities are fragmented and are often based on individual initiative within the administration, and that integrated urban food policies and their implementation through urban food strategies are still an exception. Municipal actors follow mainly sectorial approaches, using a wide array of steering instruments, i.e. informational instruments and public procurement policies. Still, their capacities for policy implementation remain limited due to lacking financial and staffing resources. Therefore the potential of the multi-functionality of food addressing multiple sectors in sustainable urban development is still underexploited.

References

Mendes, W. (2008). Implementing Social and Environmental Policies in Cities: The Case of Food Policy in Vancouver, Canada. International Journal of Urban and Regional Research, 32(4): 942-967.

Moragues, A., Morgan, K., & Moschitz, H. (2013). Urban Food Strategies: the rough guide to sustainable food systems. Document developed in the framework of the FP7 project FOODLINKS.

Morgan, K. (2009). Feeding the City: The Challenge of Urban Food Planning. International Planning Studies, 14(4): 341-348.

Morgan, K., Murdoch, J., & Marsden, T. (2006). Worlds of food: Place, power, and provenance in the food chain. Oxford, New York: Oxford University Press.

Pothukuchi, K. (2009). Community and Regional Food Planning: Building Institutional Support in the United States. International Planning Studies, 14(4): 349-367.

Sonnino, R. (2009). Feeding the City: Towards a New Research and Planning Agenda. International Planning Studies, 14(4): 425-435.

Stierand, P. (2014). Speiseräume: Die Ernährungswende beginnt in der Stadt. München: oekom.

Wiskerke, J. (2009). On Places Lost and Places Regained: Reflections on the Alternative Food Geography and Sustainable Regional Development. International Planning Studies, 14(4): 369-387.

Keywords: food policy, policy instruments, case study

Civil society and the transformation of food systems towards sustainability and social justice: a UK case study

Rachel Durrant

University of Sussex, Brighton, United Kingdom r.durrant@sussex.ac.uk

The aim of this paper is to both challenge and improve upon the ways that civil society activism is conceptualised with respect to transformations towards sustainability and social justice in food systems. The paper argues that detailed explorations of the roles and contributions of organised groups within civil society have been few and far between in the fields of food studies and sustainability transitions. This is despite parallel calls to: conceptualise a 'resourceful agroecological urbanism' in which civil society is likely to play leading roles with respect to sustainable food planning; and, improve upon existing models for understanding the agency of civil society actors in transitions to sustainability. In contrast to much existing research - which tends to view these actors as playing either radical or reformist roles within overarching processes of change - this paper provides evidence of their multivalent strategies and highlights the synergies and systemic links forged between them. In doing so it facilitates a move away from dichotomies such as 'alternative/mainstream', 'niche/regime', 'radical/reforming', and so on, towards an understanding of reality that is more complex and dynamic.

Drawing on a mixture of field observations, documentary analysis and in-depth interviewing in connection with 20 UK-based CSOs working on food, this paper provides an overview of their activities and networks. It also compares and contrasts five particularly interesting cases, including (1) a biodynamic community-owned farm, (2) an urban food partnership organisation, (3) a regional consumer food network, (4) a national-level lobbying group and (5) an international (but UK-based) certifying organisation and campaigning charity. Hence, the paper contributes new evidence and a fresh perspective towards ongoing attempts to conceptualise civil society activism, and lessons to inform sustainable food policy and planning. It concludes by suggesting that we must try to be aware of and open minded to the full diversity of civil society activism; to both support it and enhance the potential for synergies to develop between diverse groups and approaches.

References

Goodman, D. (2003). "The quality 'turn' and alternative food practices: reflections and agenda." Journal of Rural Studies 19(1): 1-7.

Hess, David J. (2005) Technology-and Product-Oriented Movements: Approximating Social Movement Studies and Science and Technology Studies. Science, Technology & Human Values 30 (4):515-535.

Hinrichs, C (2014) Transitions to sustainability: a change in thinking about food systems change? Agriculture and Human Values 31 (1):143-155.

Kirwan, J et al. (2013) Grassroots social innovations and food localisation: An investigation of the Local Food programme in England. Global Environmental Change 23 (5):830-837.

Little, R et al. (2010). "Collective purchase: moving local and organic foods beyond the niche market." Environment and planning. A 42(8): 1797.

Renting, H et al. (2012). "Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship." International Journal of Sociology of Agriculture and Food 19(3 (Special Issue on Civic Food Networks)): 289-307.

Smith, A. (2006). "Green niches in sustainable development: the case of organic food in the United Kingdom." Environment and Planning C-Government and Policy 24(3): 439-458.

Smith, A et al. (2016) Grassroots Innovation Movements. Routledge.

Keywords: Civil Society; Activism; Alternative Food Networks; Sustainability Transitions; Reform; Case Study

Friend or Foe? Exploring the conflicts and compatibilities of rewilding and agroecology in the search for a 'resourceful agroecological urbanism'

Rachel Durrant, Chris Sandom, Adrian Ely

University of Sussex, Brighton, United Kingdom rachaeldurrant@gmail.com

If we give more land to wilder nature will this negatively impact food security and sustainability? Rewilding is gaining momentum as an exciting new initiative that seeks to restore nature to a more self-sustaining state. This is achieved by restoring ecological processes, such as grazing, and by returning appropriate wildlife, e.g. large herbivores, to nature reserves. By doing so, the need for human management to preserve wildlife is reduced. Concurrently, demand for locally and sustainably produced food has increased significantly in recent years, as has participation in agroecology initiatives, including city farms, community gardens and Community Supported Agriculture (CSA) schemes. Rewilding projects, on the one hand, and livestock-based agroecology initiatives, on the other, are linked by their use of large herbivores and their need for land. This presentation therefore explores commonalities and compromise between such projects and practices in the South-East of England, to determine how food security and nature can be supported in heavily populated regions. In holding open a space to consider the two sets of practices side-by-side (and one on top of the other) we hope to input into Sustainable Food Planning across the region and contribute towards attempts to conceptualise a 'resourceful agroecological urbanism' that has value for planning and policy more widely.

References

Foley, J. A. Global Consequences of Land Use. Science, 309, 570-574 (2005).

Martellozzo, F. et al. Urban agriculture: a global analysis of the space constraint to meet urban vegetable demand. Environ. Res. Lett. 9, (2014).

Ely, A., Wach, E. & Segal, R. ISSC concept note: Transformations to sustainable food systems in Brighton and Hove. (2015). at http://steps-centre.org/publication/issc-eu/

Kirwan, J., Ilbery, B., Maye, D. & Carey, J. Grassroots social innovations and food localisation: An investigation of the Local Food programme in England. Glob. Environ. Chang. 23, 830-837 (2013).

Little, R., Maye, D. & Ilbery, B. Collective purchase: moving local and organic foods beyond the niche market. Environ. Plan. 42, 1797 (2010).

Renting, H., Schermer, M. & Rossi, A. Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. Int. J. Sociol. Agric. Food 19, 289-307 (2012).

Sandom, C., Donlan, C. J., Svenning, J. & Hansen, D. in Key Topics in Conservation Biology 2 430-451 (2013).

Sandom, C. J., Ejrnæs, R., Hansen, M. D. D. & Svenning, J.-C. High herbivore density associated with vegetation diversity in interglacial ecosystems. Proc. Natl. Acad. Sci. U. S. A. 111, 4162-7 (2014).

Durrant, R. A. Civil society roles in transition: towards sustainable food? (University of Sussex, 2014).

Wallace, L., Lucieer, A., Malenovsky, Z., Turner, D. & Vopenka, P. Assessment of forest structure using two UAV techniques: A comparison of airborne laser scanning and structure from motion (SfM) point clouds. Forests 7, 1-16 (2016).

Keywords: Rewilding; agroecology; ecosystem services; food security; planning.

Re-dressing the Bread Balance: An Anthropological Perspective on the Decommodfication of a Staple Food.

Bee Farrell

Independent Consultant Researcher, Anciens bee@anciensfoodways.co

The de-commodification of bread, a global staple with a ten thousand year lineage, might offer a post capitalist economic model for food. Case study research of ten independent on-site British bakeries reveal challenges and opportunities that foster 'resourcefulness', animate food valorisations, enhance a spirit of community and increase ecological, human health and economic resilience (MacKinnon, D. and Driscoll Derickson, K. 2012, 21). Food providence, the use of heritage grain which has been grown organically, green energy to power milling, baking and transportation, the closing of energy loops, social reproduction of sustainable food skills and reducing waste are some typical features of the heterodox bakers studied since 2013. The case studies were later analysed using determinants from an urban planning and design sustainability framework, "Urban Communitas", which focuses on the inter-related domains of: Food and Water, Technology, Labour and Leisure, Health, Movement (of people and things) and Harmony (with nature and humans), to provide a convincing argument that bread is a catalyst for transformation to a value led food economy (Farrell, B, 2017).

There is compelling evidence that British bread is being re-imagined by resourceful bakers who are setting up mills at their bakeries, using closed loop energy loops to power their ovens, running community projects and training programmes and reducing their waste. These bakeries strive to work directly with organic farmers who grow culturally indigenous grains to displace the harmful dominance of wheat, bake with grains that are grown using agro-ecological methods, offer greater opportunities for livelihood economic models and utilise urban patchwork and city regional farms. The benefits are wide ranging, resourceful and value led. A solidarity of a virtual and physical community of bakers has grown from the 'bottom up' in many countries such as America, France and Denmark through social media and campaigns that value the social reproduction of sustainable food skills, a healthier population, greater carbon neutrality, closer knit communities, agroecology and less packaging and food waste

References

Blythman, J. (2015) "Swallow This: Serving Up the Food Industry's Darkest Secrets", Fourth Estate, London.

Diamond, J. (1997) "Guns, Germs and Steel: A Short History of Everybody For the Last 13,000 Years", Vintage Books, London.

Fraser, E. & Rimas, A. (2010) "Empires of Food: Feast, Famine and the Rise and Fall of Civilizations", Random House Books, Great Britain.

Gorgolewski, M., Komisar, J. & Nasr, J. (2011) "Carrot City", Monacelli Press, United States.

Piketty, T. (2013) "Capital in the Twenty-First Century", The Belknap Press of Harvard University Press, Cambridge Massachusetts.

Shiva, V. (2016) "Earth Democracy: Justice, Sustainability and Peace", Zed Books Ltd, London.

Steel, C. (2008) "Hungry City: How Food Shapes Our Lives", Chatto & Windus, Great Britain.

 $Thak ara, J.\ (2015)\ "How to Thrive in the Next Economy: Designing Tomorrow's World Today", Thames \& Hudson Ltd, London.$

Viljoen, A. & Bohn, K. (2014) (eds) "Second Nature Urban Agriculture: Designing Productive Cities", Routledge, New York.

Zeeuw, de H. & Drechsel, P. (2015) (eds) "Cities and Agriculture", Routledge, Oxon, England.

Keywords: Resourcefulness, de-commodification, agroecology, value led, sustainable food skills

Post-productive Ruralscape: The Role of the Food Market, Ter Brugent Case, Catalonia

Nadia Fava¹, Romà Garrido y Puig¹, Marta Carrasco Bonet¹
¹Universitat de Girona
nadia.fava@udg.edu

This paper would open a critical debate on the renewed popularity of the public food markets and "food urbanism", which has generated growing attention among policymakers and planners, urban and social science scholars. Meanwhile "food urbanism" has been improved in some European and Northern American cities, whereas in Spanish rural areas it is still in an experimental stage, in spite of the more than twenty years of experience in gastronomy and food tourism which this sector has experimented as a response to the post-productive rural landscape and even a form of mass tourism. Local food markets are living a new cycle in response to climate change concerns, as well as the social demand of returning to the immaterial and material culture of the "territory". But they seem to shift between the global and local economies, swinging between the effect of global tourism activity and local food commodity.

The role of public food market halls has been analyzed from several perspectives, but this paper would focus on their role as public services, as places where the urban-rural relationship can be articulated; as part of the food supply chain that could improve strategies on a more resourceful urbanism, implementing "local food production, selling and eating". Based on data from interviews and questionnaires, this communication concerns five food markets in the Ter Brugent rural area of Catalonia. The aim is to discuss the results of the ongoing study — conducted within the structure of the Group of Local Action, Adrinoc— on local food production and commercialization in the food market, as a key perspective for future development, considering not only the economic aspect but also social values such as proximity, social recognition and participation of this rural area, which is now suffering population decline and a diminishment of productive land.

References

Bessière, Jacinthe (1998), Local development and heritage: traditional food and cuisine as tourist attractions in rural areas, Sociologia Ruralis, 38, (1), 21-34

Casassas i Simó (1978), Lluís. Fires i mercats a Catalunya. Barcelona: Edicions 62.

Fava, Nadia; Guardia, Manuel; Oyón, José Luis (2016), Food retailing and the public market system: the Barcelona case, 1876-1936." Journal of Urban History, 43, 454-475.

Harrington Robert J. (2005) Defining Gastronomic Identity, Journal of Culinary Science & Technology, 4:2-3, 129-152

Horlings Lummina G. , Marsden Terry K. (2014), Exploring the 'New Rural Paradigm' in Europe: Eco-economic strategies as a counterforce to the global competitiveness agenda, European Urban and Regional Studies, Vol 21(1) 4 -20

MacKinnon Danny; Driscoll Derickson Kate (2012), From resilience to roursourfullness: A critique of resilience policy and activism, Progress in Human Geogrephy, 37 (2) 253-270.

Magnaghi, Alberto (2000). Il progetto locale, verso la coscienza del luogo. Torino: Bollati Boringhieri.

Mele Christopher (2015), Urban markets as a 'corrective' to advanced urbanism: The social space of wet markets in contemporary Singapore, Urban Studies, 2(1) 103–120

Keywords: Rural development, resourceful urbanism, food urbanism, food market, local food supply chain.

Food-producing commons in Europe (panel)

Tomaso Ferrando¹, Marina Chang², Priscilla Claeys², Dagmar Diesner², Robert Logan², Iain MacKinnon², Deirdre (Dee) Woods³

¹ University of Bristol, ²CAWR, Coventry University, ³Community specialist and Independent Researcher, Visiting Research Associate at CAWR, Coventry University

In Europe, despite centuries of encroachments, misappropriations and legal privatizations, more than 12 million hectares of common lands have survived. In addition, a multitude of initiatives are seeking to rehabilitate or preserve food as commons. This panel will discuss food producing commons in both urban and rural contexts in Europe. It will mix case studies portraying collective actions in the UK (London), Italy (Bologna) and Scotland, with theoretical approaches to food and food systems as a commons, as well as policy proposals and legal innovations to transit towards fairer and more resilient food systems. This panel will address one of the underlying causes of the failure of the industrial food system, that is the normative valuation of food as a commodity and the domination of the capitalist market as the most suitable mechanism to allocate food. It will bring to fore dimensions of food that cannot be monetized and valued in market terms, calling for food policies grounded in different valuations of food (i.e. by non-Western cultures, non-academic epistemologies, non-urban constituencies).

Keywords: indigenous knowledge, food system, commons, food justice, commoning, food commons

Trends in urban food strategies

Rosalia Filippini¹, Chiara Mazzocchi¹, Stefano Corsi¹

¹University of Milan, Department of Agriculture and Environmental Science rosalia.filippini@unimi.it

To drive the political concerns on food nutrition, local institutions are developing urban food strategies, which aim is to combine the provision of enough food to everyone with the limits of environmental, economic, and social sustainability (Blay-Palmer et al., 2016; Morgan, 2015; Pothukuchi and Kaufman, 1999; Sonnino, 2014). The overall purpose of this analysis is to perform a comparative analysis of the urban food policies' actions carried out around the world, in order to highlight the main trends of the urban food strategies. To do so, a community detection through network analysis has been performed, in which the cities' adjacency was defined by the number of actions cities have in common. Cities have been selected on the base of the Milan Urban Food Policy Pact signed in 2015 (MUFP), which is at the moment the unique formal platform grouping cities around the world. Their urban food policies' actions have been analysed and categorised according to the 'Framework for Action' of the Pact, which provides a detailed list of actions categorised in six main topics: Ensuring and enabling environment for effective action; Sustainable diets and nutrition; Social and economic equity; Food production; Food supply and distribution. The results was the definition of three clusters:

- 1) 'Local agriculture for food security', where the actions more implemented were: 'Promote and strengthen urban and peri-urban food production', 'Land use planning and management', 'Support short food chains'.
- 2) 'Urban policies for food access', where the actions more implemented were: 'Use cash and food transfers (i.e. food banks)', 'Encourage and support social and solidarity economy activities', 'Promote networks and support grassroots activities', 'Promote participatory education, training and research'.
- 3) 'Civic community participation and food distribution', the actions more implemented were: 'Reorienting school feeding programs', 'Support of education actions', but also in the distribution action 'Supporting improved food storage, processing, transport and distribution technologies and infrastructure'.

This study is important to highlight policies main leverages, as well as the best practices to be replicate elsewhere. At the same time it provides information about the current political gaps, in order to sustain future sustainable development.

References

Donald, B. and Blay-Palmer, A. (2006). The urban creative-food economy: Producing food for the urban elite or social inclusion opportunity? Environment and Planning, 38 (10):1910-1920.

MUFPP - Milan Urban Food Policy Pact (2015). http://www.milanurbanfoodpolicypact.org/

Morgan, K. (2015). Nourishing the city: The rise of the urban food question in the Global North. Urban Studies, 52 (8): 1379-1394.

Pothukuchi K., and Kaufman J.L. (1999). Placing the food system on the urban agenda: The role of municipal institutions in food systems planning. Agriculture and Human Values, 16 (2): 213-224.

Sonnino, R. (2014). The new geography of food security: exploring the potential of urban food strategies: The new geography of food security. The Geographical Journal. DOI: 10.1111/geoj.12129

Keywords: urban food system, policies analysis, two mode network analysis

Evaluating the role of 'food champions' as policy entrepreneurs in a comparative analysis of two cities.

Gloria Giambartolomei¹, Francesca Forno², Colin Sage³
¹Utrecht University, ²Trento University, ³University College Cork gloriagiambartolomei2013@gmail.com

Over the last decade, cities have increasingly become loci of experimentation for collaborative forms of food governance, aimed at tackling a variety of issues associated with the sustainability of the local food system. An interesting approach through which to explore this phenomenon is to examine the agency of key actors, so-called 'food champions' (Moragues-Faus and Morgan, 2015), who work to engage stakeholders and push the topic of food onto the policy agenda of municipal authorities. Our paper draws upon the policy entrepreneurship literature through which to establish theoretical concepts that underpin the comparative analysis of two case study cities: Bergamo (Northern Italy), and Cork (in the Republic of Ireland). Both are small-medium sized cities which have recently started developing their own urban food strategies. The paper draws upon research undertaken in both locations involving in-depth investigation of the agency of food champions as well as the levels of engagement and strategies implemented by various groups of actors and other stakeholders. The results show that policy entrepreneurship is often a collective phenomenon, based on the agency of actor groups, rather than on individuals. Moreover, the specific socio-cultural context strongly influences the framing of the food narratives of the two cities. Indeed, food can represent an important device through which to achieve a degree of innovation and reinvention of the urban landscape and to promote the safeguarding of cultural traditions as well as local biodiversity. Indeed, highlighting the significance of local circumstances and resources allows food champions to (re-)define problems and create visions that best fit interests and perspectives of stakeholders, as well as to reinforce trust and reputation, necessary for cooperation and collective action.

The paper concludes with some recommendations based on the insights and lesson learned from the two contexts, with the intention that it will inspire other cities to build their own path towards becoming more resourceful and sustainable communities.

References

Brouwer, S., & Biermann, F. (2011). Towards adaptive management: Examining the strategies of policy entrepreneurs in dutch water management. Ecology and Society, 16(4).

Dale, A., & Sparkes, J. (2011). The 'agency' of sustainable community development. Community Development Journal, 46(4), 476-492.

 $Marsden, T., \& Morley, A. (2014). \ Sustainable food systems: building a new paradigm. \ Routledge.$

Meijerink, S., & Huitema, D. (2010). Policy Entrepreneurs and Change Strategies: Lessons from Sixteen Case Studies of Water Transitions around the Globe. Ecology and Society, 15(2).

Moragues-Faus, A., & Morgan, K. (2015). Reframing the foodscape: the emergent world of urban food policy. Environment and Planning A, 47(7), 1558-1573.

Moragues-Faus, A., Morgan, K., Moschitz, H., Neimane, I., Nilsson, H., Pinto, M., Halliday, J. (2013). Urban Food Strategies - The Rough Guide to Sustainable Food Systems. (Document developed in the framework of the FP7 project FOODLINKS, Ed.).

Scholten, P., Keskitalo, E. C. H., & Meijerink, S. (2015). Bottom-up initiatives toward climate change adaptation in cases in the Netherlands and the UK: a complexity leadership perspective. Environment and Planning C: Government and Policy, 33(5), 1024-1038.

Westley, F., Tj, O., Schultz, L., Olsson, P., Folke, C., Bodin, I., & Crona, B. (2013). A Theory of Transformative Agency in Linked Social-Ecological Systems. Ecology and Society, 18(3).

Keywords: Urban Food Strategies, Policy Entrepreneurship, Collective Leadership, Food Champions, Stakeholder Engagement.

Shared urban gardens for transition towards democratic and ecological cities (France and Italy)

Sandrine Glatron¹, Victoria Sachsé², Beatrice Del Monte³

¹Dynamiques Européennes (Dyname, CNRS / Université de Strasbourg), ²ADEME/Dyname (Université de Strasbourg), ³NASP (Network for the Advancement of Social and Political Studies), Universities of Turin & Milano sandrine.glatron@misha.fr

Experiences of self-organization and urban-based land access movement that occur through collective urban gardens rise our interest as they constitute a growing political process that could be part of the social ecological transition towards a more sustainable society (Juan, 2011),. Through the collective gardening (in various forms we can meet in France and Italy), we study the political fabric those bottom initiatives are weaving. We wonder how the gardens are places where to experiment the "commons" (Eizenberg 2012), collaborative practices and innovative politics where new engagement forms are invented and practiced even without conceiving at first they are politically or theoretically embedded. The reflexion about "commons" is an important stake, mirrored by the slogan "neither private nor public, common" spread out by the urban citizen movements who claim the right to the city (Purcell 2002, Harvey 2008). It leads to consider the various links gardening initiatives are developing with local institutions (Camps-Calvet et al. 2016).

Through collective gardening initiatives in Strasbourg and Rome, we study how groups of citizens are running spaces in self-government forms to grow food, within new frames of productions and cultivation methods (such as those of organic approaches, permaculture or cross-cultural experiences).

More generally: how the common gardens, often connected with other citizens' initiatives related to food production and delivery in town(such as community supported agriculture, cooperatives, guerrilla gardening), can participate in the snowball effect that irrigate society to transform it, by renewing the production, sharing and knowledge of goods, and specially the agricultural ones? Can they be considered to be part of (or helping) the exercise of democracy (participative and collective management) (Zask, 2016)?

We will start our presentation defining the specificity of self-managed collective urban gardens we studied in Rome and Strasbourg and their particular agricultural experimentations. We will then focus on showing how these experiences can be understood as contemporary "commons" and as spaces of grassroots' political production, oriented to the collective management of local environments. Finally, our contribution will address how these places can constitute an important starting point in changing citizens' attitudes towards food and environment.

References

Camps-Calvet, M., Langemeyer, J., Calvet-Mir, L., & Gómez-Baggethun, E. (2016). Ecosystem services provided by urban gardens in Barcelona, Spain: insights for policy and planning. Environmental Science & Policy, 62, 14-23.

Certomà, C. (2016), A new season for plann ing': urban gardening as informal planning in Rome. Geografiska Annaler: Series B, Human Geography 98 (2): 109–126

Eizenberg, E. (2012), Actually Existing Commons: Three Moments of Space of Community Gardens in New York City. Antipode, 44: 764–782

Harvey, D., 2008. The Right to the City. New Left Review 53, 23-40

Heynen, N., Kaika, M., Swyngedouw E., 2006. In the nature of cities, Urban political ecology and the politics of urban metabolism (edited by). Routledge, London and New York.

Juan, S., La transition écologique, Toulouse, ERES, Sociologie économique, 2011, 288 pages.

Purcell, M., 2002. Excavating Lefebvre: The right to the city and its urban politics of the inhabitant. GeoJournal 58, 99-108.

Zask, J., 2016, La démocratie aux champs. Du jardin d'Éden aux jardins partagés, comment l'agriculture cultive les valeurs démocratiques. Ed. La découverte, Paris, 256p.

Keywords: urban agriculture, participation, citizen's initiatives, commons, collective management

Three Acres and A Cow - radicalising and empowering a movement for food sovereignty

Robin Grey

Three Acres and A Cow mail@robingrey.com

Professor Simon Critchley suggests that "The first step in resistance is a history lesson; not a lesson written for us, but one we write ourselves." and Professor Tom Devine concludes "History is the fundamental source of human memory. It affects everything in terms of attitudes, values and political decisions."

Over the last four years this project has explored these premises through multi-disciplinary action-research collaboration, weaving folk songs, stories, skits, comedy and poems into a mixed media performance piece based around a crowd-sourced and co-devised modular creative-commons and open-source performers kit.

The resulting show has been used by community food growing projects, housing campaigners, academics, faith-based groups and social justice activists as a tool for explaining the context and importance of their work to local communities and radicalising people with empowering and often forgotten historic narratives.

The project has unearthed primary source material which has never been published nor performed, inspired new projects and collaborations, reinvigorated existing work and led to the creation of spaces where diverse communities of interest have had critical discussions on important issues raised by the project including land rights, housing rights, food sovereignty, public space, planning, farming subsidies, climate change and the environment.

We have been undertaking qualitative data collection to evidence our findings and steer the project, and are keen to add a quantitative aspect soon.

My presentation will document and reflect on the project's evolution so far, drawing on conversations with fellow performers, reactions from audiences, host groups and thought leaders in the field of food sovereignty.

These reflections could then be the basis of exploring future possibilities, and I would value discussing these with other people at the conference.

References

Changing the story isn't enough in itself, but it has often been foundational to real changes. Making an injury visible and public is usually the first step in remedying it, and political change often follows culture, as what was long tolerated is seen to be intolerable, or what was overlooked becomes obvious. Which means that every conflict is in part a battle over the story we tell, or who tells and who is heard.' (Rebecca Solnit)

'Stories are the secret reservoir of values: change the stories individuals and nations live by and tell themselves and you change the individuals and nations. Nations and peoples are largely the stories they feed themselves. If they tell themselves stories that are lies, they will suffer the future consequences of those lies. If they tell themselves stories that face their own truths, they will free their histories for future flowerings.' (Ben Okri)

'History is the fundamental source of human memory. It affects everything in terms of attitudes, values and political decisions.' (Professor Tom Devine, University Of Edinburgh)

'The first step in resistance is a history lesson; not a lesson written for us, but one we write ourselves.' (Professor Simon Critchley, The New School, New York)

'He who controls the present controls the past. He who controls the past controls the future.' (George Orwell)

Keywords: folk music, history, action research, empowering narratives

From bits to bites: Advancing adaptive capacities in urban food security through information systems.

Issac Guzman Estrada

Mexico City, Mexico isaac.estrada@mespom.eu

The use of Information Systems for Food Security has been used as a tool to deliver information for the decision making. However, most of the information systems continue to be centralized because they are developed from central governments, top-down oriented. Hence, still exist a lack of understanding of the different insecurities and vulnerabilities at urban areas. In contrast, bottom-up Information and indicator systems approach have proven to be an essential tool to develop better inform decision.

Generally speaking, the food systems consists of not only the access to food, but all the stages before and after acquiring food. In addition, food is arguably a vital intrinsic part of our everyday life with tight links to economy, politics, culture and health. However, in a city context the belief of food security is an illusion, when big amounts of population are not able to fulfill the three stages for food security – access, availability and utilization – hence, the understanding of all the dimensions of urban food security can be reflected in an information/indicator system that can enhance the adaptive governance and management through social learning.

Community indicators can reflect in the development of 'urban food indicators' from a bottom-up approach involving the role of grass-root organizations and communities. Firstly, the thesis aims to point out the characteristics to achieve urban food security and denote the need for local government involvement. Secondly, it analyses and proposes the use of novel methods such as Community Informatics approach as a mean to collect bottom-up information for the analysis and decision-making at the local level.

The thesis drawn down in the experience of Guatemala City context. They have implemented a Food Security Information System; however, it is a centralize system. Through the analysis of government framework, technical capacities, participation process, and the use itself of the information, the thesis explore the potentials to incorporate a community information system. The use of a community indicator system feed from the citizens can deliver first hand information and can enhance the monitoring and evaluation, reflecting on information that can build social learning and impact the adaptive management and governance capacities.

References

Morgan, K. (2009). Feeding the city: the challenge of urban food planning. International Planning Studies 14 (4), 341-348.

Food and Agricultural Organization of the United Nations (FAO) (2008). An Introduction to the Basic Concepts of Food Security Food Security Information for Action. EC - FAO Food Security Programme, 1-3. Retrieved 03 28, 2016from http://www.fao.org/docrep/013/al936e/al936e00.pdf

Frinquelievich, S. (2000). ICT and local governance: A view from the South. In M. Gurstein, Community Informatics: Enabeling communities with information and communication technologies (pp. 232-250). London: Idea group publishing.

Freedman, D. A., & Bell, B. A. (2009). Access to healthful foods among an urban food insecure population: perceptions versus reality. Journal of Urban Health 86(6), 825-838.

Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. Global Environmental Change 19 (3), 354-365.

Keywords: Urban food security, community indicators, adaptive capacities

Urban Agroecology: The role of food citizenship and the geographic imagination

Sophia Hagolani-Albov¹, Megan Resler¹

¹University of Helsinki, Finland sophia.hagolani-albov@helsinki.fi

Recent trends in urbanization have contributed to re-defining urban demand and rural supply across the global agricultural landscape. These dynamic interactions occur within both formal agricultural economies, as well as within informal networks of non-commodity exchange. If we consider the development of food citizenship as one form of non-commodity exchange which exists as an embedded manifestation of these informal networks of knowledge sharing, then we are led to question the factors which shape network boundaries. How can exploration within the geographic imagination of what constitutes 'local' inform a wider discussion on the parameters of civic responsibility and individual influence in social discourse? Specifically, our research explores the question: are gendered spaces significant in these non-commodity exchanges, and if so, can these pathways be exposed to inform development strategies which strengthen and diversify agricultural economies?

Framed by the exploration of urban agroecology as both a science and a movement, this research probes gendered discourse pathways within Helsinki city-sponsored allotment gardens and the implications for the development of food citizenship in these urban spaces. As these gardens are embedded within the city development plan, these sites offer the distinct benefit of probing civic responsibility and active engagement within citizen food networks, outside of the discourse of food production for self as a political act. We employ an interdisciplinary research strategy, drawing on the disciplines of planning, human geography, and agroecology to form our theoretical framing. Our data is collected and analyzed utilizing primarily qualitative methods including interviews, surveys, participatory mapping, and participant observation. The identification of gendered information pathways within the geographic imagination of an individual food citizen's conceptualization of 'local' can be used to inform development policy, inclusive of informal non-commodity exchange networks within an agricultural context.

References

Delind, L. & Bingen, J. (2008) Place and civic culture: re-thinking the context for local agriculture, Journal of Agricultural and Environmental Ethics 21(2), pp. 127-151.

Gliessman, S. R. & Engles. E.W. (2015) Agroecology: The Ecology of Sustainable Food Systems; 3. ed. Boca Raton [u.a.]: CRC Press.

Hassanein, N. (2008) Locating Food Democracy: Theoretical and Practical Ingredients, Journal of Hunger & Environmental Nutrition 3(2-3), pp. 286-308.

Kloppenburg, J., Hendrickson, J., & Stevenson, G. W. (1996) Coming in to the foodshed, Agriculture and Human Values 13(3), pp. 33-42.

Ploeg, van der, J.D, et al. (2008) Towards a Framework for Understanding Regional Rural Development, In Unfolding Webs - The Dynamics of Regional Rural Development, pp. 3-28.

Renting, H., Schermer, M & Rossi, A. (2012) Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship, International Journal of Sociology of Agriculture and Food 19(3), pp. 289-307.

Rosset, P.M. & Martínez-Torres, M.E. (2012) Rural Social Movements and Agroecology: Context, Theory, and Process, Ecology and Society 17(3) pp. 17.

Tornaghi, C. (2014) Critical geography of urban agriculture, Progress in Human Geography 38(4), pp. 551-567.

von Oelreich, J. and Milestad, R. (2016) Sustainability transformations in the balance: exploring Swedish initiatives challenging the corporate food regime. European Planning Studies, pp.1-18.

WinklerPrins, A. M. G. A. & Perpetuo S. S. (2005) Surviving the City: Urban Home Gardens and the Economy of Affection in the Brazilian Amazon, Journal of Latin American Geography 4(1), pp. 107-126.

Keywords: Urban agriculture, agroecology, geographic imagination, gender, participatory mapping

Collective work in professional market gardening: a resource in suburban agroecological experiments in Brussels

Julie Hermesse¹, Maëlle van der Linden², Lou Plateau¹

¹Université catholique de Louvain, Belgium, ²Université libre de Bruxelles julie.hermesse@uclouvain.be

Part of choosing intensive agroecological practices involves a greater need for labor force per acre than conventional farming. One of the characteristics of urban agriculture is its proximity to various human resources. Population density and increased mobility facilitated by proximity to urban resources such as public transport make it easy to bring together multiple stakeholders to participate in urban agriculture projects.

This paper aims to expose the benefit of collective work that takes place in a specific sub-urban belgian Espaces test agricoles (Agricultural land test, ETA) during the first year of farming activities.

The data and analysis presented below are part of a transdisciplinary participatory action research project which started in December 2015 and were collected in a living lab: the ETA of Anderlecht (suburb of Brussels). For the socio-anthropological dimension of the project, which focuses on the social aspects of the research, we use conventional tools of ethnographic research as well as daily data collected by producers that documents several aspects of their market gardening activities. This agroecological experimental project was initiated in spring of 2016 in the area of Neerpede in Anderlecht and includes two market-oriented gardens that cover 60 acres each. The seven market gardeners of the ETA quickly felt the need to work in teams or to surround themselves with people willing to assist their new professional adventures. Our analysis shows that this human support can impact farmers' activities on two levels: hiring of labor force and, less expected, personal welfare. Despite the sometimes complicated nature of managing volunteer labor, collective work contributes to the mental and physical well-being of the individuals who engage in productive agricultural activities. Therefore, collective work provided by the presence of these volunteers appears to drive the welfare of market gardeners.

The strength of this research is its focus on the role played by human factors in an agroecological professional market gardening project. Our data attests that collective work is essential when starting a new agroecological activity. This being said, it must be emphasized that the character of urban agriculture ensures proximity between voluntary and market gardeners which stimulates collective dynamics.

References

Lester, R. (2006) Urban Agriculture: A Literature Review. Differing Phenomena in Differing Regions of the World. Accessed June 16, 2016. http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-lesher.pdf.

King, C. A. (2008) Community Resilience and Contemporary Agri-Ecological Systems: Reconnecting People and Food, and People with People. Systems Research and Behavioral Science 25 (1): 111–24.

Herbel, D., Rocchiagiani, M. and C. Ferrier, C. 2015. « The role of the social and organisational capital in agricultural cooperatives' development. Pratical lessons from the CUMA movement ». Journal of Co-operative Organization and Management 3, 24-31.

Hartigh, C. D. (2013) Jardins collectifs urbains: leviers vers la transition? Mouvements 75 (3): 13-20.

Fernandez, M. (2006) Cultivating community, food and empowerment: Urban gardens in Havana and New York. In Agroecology and the Struggle for Food Sovereignty in the Americas. A. Cohn, J. Cook, M. Fernández, R. Reider, and C. Steward (Eds.). New Haven, CT: IIED, IUCN-CEESP, and Yale F&ES Publication Series.

Keywords: Collective work; market gardening: suburban agroecological experiments; Brussels

Sharing the Harvest: Exploring public dialogue in food (sovereignty) research

Ella von der Haide¹, Barbara van Dyck²

¹University of Kassel, Germany

²Université Libre de Bruxelles, Unit of Landscape Ecology and Plant Production Systems // University of Sussex, Steps-Centre) ella.von.der.haide@gmail.com

Food is an entanglement of materiality and social practices, power relations, roles, communities, histories and utopian and futuristic ideas, inside and outside of the human body, in personal and urban metabolism, food is never Eurocentric and disciplinary. How then research food and food cultures, politics and practices without loosing this entanglement? How to grasp the subject, reflect on it, and communicate (with) it?

To enter into food knowledge dialogues ('~dialogo de saberes', Rosset), we are thinking with SF - String Figures or Scientific fabulations - of Donna Haraway (2016). She proposes that in embracing the metaphors of String Figures to describe phenomena's, situations, relationships in a scientific way, it is possible to include the ideas of different agents holding entangled strings before passing it on to other players of the game '| the process of passing it back an forth is the interesting moment and the curiosity for patterns.

New formats that aim at generating different science and society relations can not only facilitate vibrant dialogue about research, but also enhance the research process itself by accessing other knowledge bases (e.g. embodied learning) in opening to other forms of 'knowledge production' and 'the arts of noticing' (Tsing 2015). As much as this can empower, they also open up for new ways of neoliberal, the commodification of spheres of life and knowledges, and create new pressure on the single researcher to be performers. We hope that by opening this discussion, we encourage a reflection about the (hidden) tendencies of personal performance and situatedness in traditional formats of lectures and articles.

For this panel we are looking for experimental ways of food research/communication. Especially we encourage coming forward with collaborations between arts, sciences, media, cooking, growing, popular education, multisensory approaches or participatory processes.

References

Classen, C. (2010) Green Pleasures: Sustainable Cities and the Senses. Harvard Design Magazine 31, pp. 66-73.

Dyrssen, Catharina (2010) Navigating in Heterogeneity: Architectural Thinking and Art-Based Research. In M. Biggs & H. Karlsson, eds. The Routledge Companion to Research in the Arts. London UK. New York, NY: Routledge, pp. 223-239.

Freire, Paolo (1970 | 2005) Pedagogy of the oppressed. New York / London: Continuum.

Haraway, Donna (2016) Staying with the trouble. Making Kin in the Chthulucene, Durham: Duke University Press.

Heynen, Nik; Kaika, Maria; Swyngedouw, Eric (2006) In the Nature of Cities. Urban political ecology and the politics of urban metabolism. New York: Routledge.

Hooks, Bell (1994). Teaching to transgress. Education as the practice of freedom. New York: Routledge.

Illich, Ivan (1973) Tools for conviviality. Fontana/Collins

Parham, S. (2015) Introduction. In Food and Urbanism: The Convivial City and a Sustainable Future. London UK. New York, NY: Bloomsbury Academic. (just a few parts about the importance of using other tools)

Petrescu, D. (2012) Relationscapes: Mapping Agencies of Relational Practice in Architecture. City, Culture and Society, 3, pp. 135-0.

Stengers, Isabelle (2013) Une autre science est possible! Manifeste pour un ralentissement des sciences. Paris : Les Empêcheurs de penser en rond / la découverte.

Tsing, Anna Lowenhaupt (2015) The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton: Princeton University Press.

Keywords: scientific fabulations, string figures, knowledge dialogues, science communication, artistic and action research

Pathways for enabling local food policies: the role of people's participation.

Jess Halliday¹ & Corinna Hawkes²

¹Independent researcher, ²Centre for Food Policy, City, University of London jess@jesshalliday.com

A number of city governments -- in both the global North and the South -- have introduced food policies to address challenges they face, such as food insecurity, high obesity rates, economic decline, and food waste. A body of literature highlights the importance of participation by people who are most affected by these urban food policy initiatives. People's participation makes the policy more relevant and increases take-up (Halliday and Hawkes, forthcoming), provides creativity and specialist knowledge (Derkzen & Morgan, 2012; Wekerle, 2004), mobilizes resources and capacity (Schiff, 2008), and fosters shared ownership (de Zeeuw & Dubbeling, 2015).

However to date there has been little attention to *how* city governments can enable people's involvement, nor to how local people themselves can ensure their views are taken into account. This paper aims to help bridge this gap by identifying factors that enabled people's participation, and factors that impeded it, in five urban food policies: Belo Horizonte's approach to food security (Brazil); the Nairobi Urban Agriculture Promotion and Regulation Act (Kenya); Amsterdam Healthy Weight Programme (The Netherlands); the Golden Horseshoe Food and Farming Plan (Canada); and Detroit's urban agriculture ordinance (USA).

For each, the paper examines the political economy of the policy process: the origins of the policy; the actors and sectors that participated, their interests, and dynamics and power balances between them; governance structures; and distribution of policy powers between the city government and other policy levels.

While the experiences are different, they nonetheless provide insights that will prove useful to actors in other cities who wish to encourage full participation of people for whom the policy is intended. Enablers include:

- conducting an 'inventory' of key people and organizations to invite to participate in policy development; using actors' professional networks and contacts to invite relevant people and organizations to participate;
- adapting the policy process to enable the participation of people from all relevant sectors and community groups;
- developing governance models that enable meaningful, on-going participation, beyond one-off consultations;
- working through representative organizations of sectors or community groups, if direct participation is not possible.

References

De Zeeuw, H., & Dubbeling, M. (2015). Process and tools for multi-stakeholder planning of the urban agro-food system. In H. de Zeeuw & P. Drechsel (Eds.), Cities and Agriculture - Developing Resilient Urban Food Systems. Reuters.

Derkzen, P., & Morgan, K. (2012). Food and the city: the challenge of urban food governance. In A. Viljoen & J. S. C. Wiskerke (Eds.), Sustainable food planning: evolving theory and practice. Wageningen: Wageningen Academic Publishers.

Halliday, J. & Hawkes, C. (forthcoming). What makes urban food policy happen? Ingredients for change. Policy report 2017, International Panel of Experts on Sustainable Food.

Schiff, R. (2008). The Role of Food Policy Councils in Developing Sustainable Food Systems. Journal of Hunger and Environmental Nutrition, 3(2-3), 206–228.

Wekerle, G. R. (2004). Food Justice Movements: Policy, Planning, and Networks. Journal of Planning Education and Research, 23(4), 378–386.

Keywords: urban food policy; people's participation; political economy

What is alternative about alternative food networks?

Mustafa Hasanov

Faculty of Spatial Sciences, Dept. Spatial Planning & Environment, University of Groningen. m.h.hasanov@rug.nl

This article asks what makes (alternative food networks) AFN distinctive while considered from the lens of self-organization and climate change? AFN are rapidly mainstreaming spaces and are associated with the expansion of organing and specialty commodity foods. While AFNs are seen as a reaction to the market logic of prevailing market practices, standardization of food and anthropogenic impacts, they are often criticised regarding power and commitment to social justice. It appears that there is limited clarity on what makes AFN distinctive in the broader context of organizational forms used to describe food-provisioning activities that situate food in the wider context of community action, institutions, and food planning. One point of entry to gain such clarity is to highlight processes of self-organization as essential for understanding the multidimensional character of AFN. Drawing on Q-methodology study involving 30 participants, this paper explores how individuals involved in self-organized AFN construct an understanding of climate change and local collective action.

Results lead to the identification of three distinct perspectives. The first one concern aspects of procedural and distributive justice. The second one is in favoring local social capital, community building and partnership between relevant societal actors. The third one combines plea for direct action based on high environmental values coupled with a sharp critique of neo-liberal practices, political and economic structures. The three perspectives suggest that there is more to discover in the dichotomy between conventional and alternative nested in the conceptualisation of AFN. The article critically assesses the interdependencies between the three perspectives, their conceptual and pragmatic implication and the influence of broader socio-institutional content on them.

References

Renting, Henk, Terry, K., Marsden, and Banks, J. "Understanding alternative food networks: exploring the role of short food supply chains in rural development." Environment and planning A 35.3 (2003): 393-411.

Wilson, Amanda DiVito. "Beyond alternative: Exploring the potential for autonomous food spaces." Antipode 45.3 (2013): 719-737.

Purcell, Mark, and J. Christopher Brown, "Against the local trap: scale and the study of environment and development." Progress in Development Studies 5.4 (2005): 279-297.

Goodman D, Dupuis M and Goodman M (2012) Alternative Food Networks: Knowledge, Practice, and Politics. London: Routledge

Tornaghi, Chiara. "Urban Agriculture in the Food' Disabling City:(Re) defining Urban Food Justice, Reimagining a Politics of Empowerment." Antipode (2016).

Kirwan, James, et al. "Grassroots social innovations and food localisation: An investigation of the Local Food programme in England." Global Environmental Change 23.5 (2013): 830-837.M.

Hasanov, Mustafa and J. Beaumont, The value of collective intentionality for understanding urban self-organization, Urban Res. Pract. 9 (2016) 231-249. doi:10.1080/17535069.2016.1149978.

Atkinson, Rob, J. Beaumont, M. Hasanov and I. Smith, Self-organisation and climate change: the neglected dimension of collective social transformation, (2016). http://selfcity-project.com/wp-content/uploads/Working-Paper_SELFCITY_02_2016watermark.pdf (accessed February 17, 2017)

Keywords: alternative food networks, self-organization, food waste

Allocation of public land to farmers: a way for urban authorities to support a transition toward a nurturing agroecology?

Nabil Hasnaoui Amri¹ & Coline Perrin¹

¹INRA (UMR Innovation), Montpellier, France n.hasnaouiamri@montpellier3m.fr

This paper examines how cities progressively engage in the making of a multifunctional periurban agriculture. It relies on document analysis and interviews around Montpellier (France). This French Mediterranean coastal region has experienced a rapid demographic growth since 1960. The metropolitan authority, federating 31 municipalities, conducted recently two successive allocations of public land to farmers in very different ways, the first from 2010 to 2012 and the second from 2015 to 2016. It thus offers a unique opportunity to compare different procedures, while the surrounding urban and farming context remains the same.

The comparative approach highlights the changes in the political context, stakeholders and procedures between the two procedures, and their impact on the number and profiles of tenants chosen, and type of leases (short or long term; with or without social and ecological criteria).

The metropolis delegated the first allocation to agricultural organizations sustaining conventional agriculture. A former wine estate (192ha), that had been earlier acquired for urban development, was rented to 17 tenant farmers through a rapid but contested procedure. The metropolis then conducted itself the second allocation, taking lessons from the first experiment. Search for exemplarity and transparency led the process. Beyond the 14 ha of land allocated to 2 organic farms, the aims of this second allocation were i) to build a generic method and a toolbox for facilitating future public lands allocations and ii) to contribute to the transition of peri-urban agriculture toward more ecological farming and more local food supply chains, as the metropolis adopted in the meantime an ambitious policy for food and agroecology.

In the discussion, we analyse theses two allocation procedures in terms of innovation and social justice: do they foster a transition towards a "nurturing agroecology"? Our study highlights driving forces for change but reveals also tensions between contrasting farming styles and about economic viability of farms regarding the constraints imposed by the public owner. It questions the conditions for an improved dialogue between agriculture and the city.

References

Bryant, C.R. (2006). La place des espaces ruraux périurbains et de l'environnement dans le développement régional, in Mollard, A. et al., Territoires et enjeux du développement regional. Editions Quæ, Coll. Update Sciences & Technologies, p. 159-171.

Cohen, N. (2012). Planning for urban agriculture: problem recognition, policy formation, and politics. In Viljoen, A. and Wiskerke, J.S.C. (eds). Sustainable food planning: evolving theory and practice. Wageningen, Wageningen Academic Publishers, 103-114.

Giraut, F. (2009). Innovation et territoires. Les effets contradictoires de la marginalité. Revue de Géographie Alpine, 97(1): 6-10.

Kerselaers, E., Rogge, E., Vanempten, E., Lauwers, L., and Van Huylenbroeck, G. (2013). Changing Land Use in the Countryside: Stakeholders' Perception of the Ongoing Rural Planning. Processes in Flanders. Land

Use

Policy

32

197–206. doi:10.1016/j.landusepol.2012.10.016.

Muller, P. (2000). L'analyse cognitive des politiques publiques : vers une sociologie politique de l'action publique. Revue française de science politique, 50e année, 2: 189-208.

Perrin, C., Jarrige, F., Soulard, CT. (2013). L'espace et le temps des liens ville-agriculture : une présentation systémique du cas de Montpellier et sa région. Cahiers Agricultures, 22(6): 552-558.

Poulot, M. (2008). Le retour de l'agriculture dans la ville élargie : vers la durabilité des territoires périurbains. HDR géographie, Paris, Université Paris Ouest-Nanterre-La Défense, 372 p.

Sencébé, Y. (2012). La Safer. De l'outil de modernisation agricole à l'agent polyvalent du foncier : hybridation et fragmentation d'une institution. Terrains & travaux, 20(1): 105-120

Van der Ploeg J. D., Laurent C., Blondeau F., Bonnafous P. (2009). Farm diversity, classification schemes and multifunctionality. Journal of Environmental Management, 90(2): 124-131

Zasada, I. (2011). Multifunctional peri-urban agriculture – a review of societal demands and the provision of goods and services by farming. Land Use Policy, Vol. 28 (4): 639-648.

Keywords: farmland management, urban agriculture, land access, public policies, nurturing agroecology

Heterogeneity as means to resilient urban food systems? Identification of possibilities for scale-crossing

Aniek Hebinck^{1,2}, Joost Vervoort^{2,3}, Stephan Barthel¹ and Line Gordon¹

¹ Stockholm Resilience Centre, Stockholm University, Sweden, ² Environmental Change Institute, University of Oxford, United Kingdom, ³ Copernicus Institute of Sustainable development, Utrecht University, The Netherlands aniek.hebinck@su.se

This paper departs from the idea that the intertwined, yet fragmented nature of food systems and concentration of challenges in the urban area offer opportunities to address system failings locally and potentially globally. The urban food system consists of many activities, covering a wide range of food system actors. By mapping out these diverse urban food actors, and the different narratives and values they are shaped by, this paper provides important insights in the urban food system and possible leverage-points to further resilient urban food systems. Making food systems more sustainable and resilient remains one of today's "wicked problems". The ability of food systems to deliver its main objective of sustainable food and nutrition security is often failing and causing social and environmental vulnerabilities. Moreover, the failings that are produced by food systems especially concentrate in urban areas: over half of the world's population currently resides in cities, increasing the demand for food in these areas. There is growing consensus that multi-stakeholder governance is key to increasing sustainability; However, when zooming in on the actors that co-exist and sometimes collaborate within the urban food system, there is still a strong silo-ing in terms of practices, narratives of change and values. We demonstrate that maintaining, supporting and strengthening the heterogeneity of urban food systems, in terms of scale and narratives of change, allows for place-based approaches. On this basis, we present strategies for embracing diversity, rather than uniformity, within the food system as a key potential for urban food system resilience.

References

IPES Food From Uniformity to Diversity: A paradigm shift from industrial agriculture to diversified agroecological systems; International Panel of Experts on Sustainable Food systems, 2016.

Wiskerke, J. S. C. C. Urban food systems. In Cities and agriculture: developing resilient urban food systems; de Zeeuw, H.; Drechsel, P., Eds.; Routledge: London, 2015; pp. 1"25.

Ernstson, H., S. Barthel, E. Andersson, and S. T. B. Scale-Crossing Brokers and Network Governance of Urban Ecosystem Services: The Case of Stockholm. Ecol. Soc. 2010, 15.

Clapp, J. Food; 2nd ed.; Polity Press: Cambridge, 2016.

Stirling, A. From Sustainability, through Diversity to Transformation: Towards More Reflexive Governance of Vulnerability. In Vulnerability in Technological Cultures: New Directions in Research and Governance; Hommels, A.; Mesman, J.; Bijker, W., Eds.; MIT Press: Cambridge, 2014.

Keywords: urban food systems; multi-stakeholderism; heterogeneity; narratives; scale-crossing

About the role of citizens in participatory farming models - Participation with and for whom?

Zoe Heuschkel

University of Applied Sciences South Westfalia, Soest, Germany heuschkel.zoe@fh-swf.de

One of the most important connections between *the urban* and *the rural* is the production, distribution and consumption of food. In the last decades we experience the blurring of conceptual boundaries of *the urban and the rural*. The Stereotypes of producing rural dwellers and consuming urban citizens are in the process of transition, resulting sometimes in the creation of a new type, the *prosumer*. Progressive social milieus use their participation in the production process of their own food as a marker of social distinction comparable with certain sustainable consumption patterns. Further benefits for the prosumers can be the social experience, education, self-determination.

In our project we analyse participatory / co-productive types of agricultural production which gained momentum in the rise of more urbanized perspectives on food production (e.g. CSA, urban food gardens, self harvesting). It will be interesting to get a clearer view on the motivations and attitudes of people with a food-prosuming life style and the places and situations which enable them to do so. On the one hand, citizens acquire knowledge about the production of food and the responsible allocation of resources which helps them to make informed choices regarding their own food consumption. On the other, it is debatable in which sense participation really can take place and of whom.

We argue that the involvement of citizens in the production process of food lacks a clear participative attitude. First, we can see a very limited scope of decision making which might be systemic and can be traced back to a strong commodification of food and the application of industry-derived economic patterns for farms. These circumstances make a de facto participation in terms of a co-creative process in agriculture still questionable. Second, the involvement of citizens is still tailored for privileged classes who can afford to spend extra leisure hours on the field which again raises questions about social justice and participation.

We would like to encourage a lively debate on how a true participation in the co-productive process of food production can be tailored and which preconditions have to be fulfilled.

References

Toffler, A. (1980): The Third Wave;

Viljoen, A.; Howe, J. (2012): Continuous productive urban landscapes;

Viljoen, A.; Wiskerke, J. (2012): Sustainable food planning: evolving theory and practice

Keywords: participation, co-production, social justice, food sovereignty

The potential of community land trusts for the enhancement of urban food security

Boglárka Ivanegová¹, Ana Puhac²

¹Edible City Civic Association and Slovak Rural Platform, Bratislava, Slovakia, ²FAO, consultant ivanegova.boglarka@gmail.com

Rapid urbanization is a critical emerging and ongoing trend shaping food and nutrition security in 2017 and beyond, particularly in developing countries. The prevalence of food insecurity and malnutrition is shifting to urban populations in the poorest countries of the world where the rapid and uncoordinated urbanization is growing hand-in-hand with urban poverty.

Urban and peri-urban agriculture (UPA) has an increasing role in addressing urban food insecurity and urban poverty on many levels. UPA itself will not solve the issues of urban food insecurity. It needs to be accompanied by solutions that structurally tackle the unequal power relationships within the food system. Land tenure insecurity is the greatest challenge to the sustainability and food justice in the growing urban farming initiatives. Globally, more than 80% of land is owned by governments or private individuals, leaving little room for community-based tenure regimes (RRI, 2015).

There is a small, but accruing tide of research that has began to follow the vanguard community-led strategy which offers a way to effectively challenge the issue of (land) ownership. Community land trusts (CLTs) are increasingly forming as the 'third sector' of ownership in urban areas, besides the state and the market. A small number of organizations is exploring CLTs' role in non-residential development, particularly how to incorporate urban agriculture into their activities. This research paper will focus on the little-explored potential of CLTs for the enhancement of urban food security. Through a critical literature review of CLT models in an urban context, this paper will focus on the adaptation of CLTs to non-residential agricultural and commercial use. This involves exploration of case studies of urban agricultural community land trusts, particularly their financing mechanisms, which currently present one of the biggest obstacles to the sustainability of such CLTs. The authors briefly explore other models of community-based tenure regime and provide examples of existing urban land-use policies and by-laws across the globe that contribute to land tenure security for food system activities in urban areas. The authors conclude by acknowledging the benefits and challenges of CLTs models for sustainable urban food security and provide suggestions for further research.

References

IFPRI. 2017 Global Food Policy Report [Online]. Official IFPRI website. http://www.ifpri.org/publication/2017-global-food-policy-report.

Rights and Resources Initiative. 2015. Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights. Washington, DC: RRI.

Rosenberg, Greg and Jeffrey Yuen. 2012. Beyond Housing: Urban Agriculture and Commercial Development by Community Land Trusts. Lincoln Institute of Land Policy Working Paper.

Turnbull, Shann. 2017. 'Democratizing the Wealth of Cities.' Environment and Urbanization. http://journals.sagepub.com/doi/10.1177/0956247816685985

Moore, Tom and Kim McKee. 2013. 'The ownership of assets by place-based community organisations: Political rationales, geographies of social impact and future research agendas.' Social Policy & Society, 13(4)

Whittal, Jennifer. 2014. 'A New Conceptual Model for the Continuum of Land Rights.' South African Journal of Geomatics, 3(1)

Keywords: Urban food security; land tenure; community land trust

The planning of an Urban Food Scape through the lenses of Multi-Level Perspective on transition and Social Practice Theory: lessons of Almere Oosterwold (NL)

Jan Eelco Jansma¹ and Arnold van der Valk²

¹AERES university of Applied Sciences in Almere, Wageningen University and Research, The Netherlands.

²Wageningen University and Research, department of land use planning, The Netherlands. janeelco.jansma@wur.nl

Urban planning has no clear answer to how to anchor food productivity within the urban and peri-urban food (land) scape, despite the rise of urban interest in local food systems over de last decade. Oosterwold, potentially opens a new chapter in the planning of urban food (land)scapes. From 2015 onwards, Oosterwold is hoped to ensue as new city quarter of 15,000 homes at 4,300 ha land east of the Dutch city of Almere (200,000 residents). Local authorities have set ambition to transform the current open agricultural landscape to a genuine green, selfsustaining and small scale urban landscape. Urban agriculture plays a pivotal role as an integral and productive part of the future infrastructure of this area. This research attempts to unravel the mechanisms which shape or block the development of urban agriculture in the food scape in Oosterwold. It uses two lenses: (1) the Multi-Level Perspective on transition (MLP) and (2) Social Practice Theory (SPT). Both approaches look at changes and stability in socio-technical systems, each from a different perspective. Where MLP is more about niches and landscapes that form and change so-called regimes, i.e. sets of rules, institutions, and procedures we share; SPT explains the pathway of changes in our daily routines, the so-called practices. Both lenses share similarities; it is argued that a closer look at the critical points of intersection between practices and regimes could lead to a better understand how changes occur or disappear. For example, a potential critical point in the development of urban agriculture is land ownership, due to high cost to purchase land and uncertain prospects for urban farming. A possible route for planning is the enablement of new types of ownership of land. The use of the MLP and SPT approach to analyse the germination of an urban food scape possibly opens a window to flexible yet robust strategies to anchor food productivity in the (peri-) urban food scape.

References

De Roo G, Rauws, W S, (2012) 'Positioning planning in the world of order, chaos and complexity: On perspectives behaviour and interventions in a non-linear environment', in Complexity Theories of Cities Have Come of Age. Eds J Portugali, M Meyer, E Stolk, E Tan (Springer-Verlag Berlin Heidelberg) pp 207-220

Geels F W, (2011) 'The multi-level perspective on sustainability transitions: responses to seven criticisms', Environmental Innovation and Societal Tran-sitions, 1 (1): 24-40

Hargreaves T, Longhurst N, Seyfang G, (2013), 'Up, down, round and round: connecting regimes and practices in innovations for sustainability', Environ-ment and Planning A 45: 402-420

Ilieva, RT, (2016). 'Urban Food Planning: Seeds of transition in the Global North', (New York, Routledge)

Pothukuchi K, Kaufman J L, (2000), 'The Food System', Journal of the American Planning Association, 66: 113-124

Shove E, Pantzar M, Watson M, (2012) The Dynamics of Social Practice: Everyday Life and How it Changes (SAGE Publications Ltd, London)

Wiskerke J S C, (2015) 'Urban food systems', in Cities and Agriculture: Developing Resilient Urban Food Systems, eds H. De Zeeuw, P. Drechsel (Routledge, London) pp 1-25

Keywords: planning, urban food scape, urban agriculture

Using urban public space for edible gardens

June D. Komisar

Ryerson University, Toronto, Ontario, Canada jkomisar@ryerson.ca

How can urban public space be used to increase both access to food and food literacy? This paper discusses strategies for incorporating productive spaces within parks and gardens and overlooked public spaces. Discussed here are cases of gardens in municipalities that allowed or encouraged the transformation of parkland or future development properties into showcases for urban agriculture, resulting in the creation of gardens that foster food literacy, workshops, community engagement and children's education.

This talk focuses on an action research case in Toronto, Edible Allan Gardens, a demonstration garden created as a participatory design student research project. As it evolved, a number of questions arose, including: what can encourage attitudes that envision urban agriculture as a desirable part of a landscape strategy? How can designers make the garden inclusive and welcoming yet secure? What strategies enable good design while addressing the constraints of numerous regulations and client needs? This paper asserts that the involvement of both community and city groups (in this case, non-profits and the City's Department of Parks, Forestry & Recreation) throughout the design and implementation process was key to the project's success.

This paper concludes by considering what scaling up and replicating such projects would involve, from funding to public opinion to regulatory changes. It is clear that urban agriculture has become a strategy for community design and increasing food literacy, but what is not as obvious is how the public realm can be reimagined to accommodate such shifts in use through participatory design and other strategies

References

Barnes, M.L. & Sharpe, E.K., Looking Beyond Traditional Volunteer Management: A Case Study of an Alternative Approach to Volunteer Engagement in Parks and Recreation in VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations. (2009) 20: 169.

Grow TO: An Urban Agriculture Action Plan, Toronto: Toronto Food Policy Council, City of Toronto, (2012). Available from http://www.toronto.ca/legdocs/mmis/2012/pe/bgrd/backgroundfile-51558.pdf

Hou, J. Julie M. Johnson, J. M. and Laura J. Lawson, L. J. Greening Cities, Growing Communities, Landscape Architecture Foundation & University of Washington Press, (2009)

Nilsen, M., The Working Man's Green Space: Allotment Gardens in England, France, and Germany, 1870-1919. Charlottesville: University of Virginia Press, (2014).

Van der Schans, J. W., H. Renting and R. van Veenhutzen, "Innovations in Urban Agriculture" in UA Magazine, V. (28 Dec. 2016), pp. 3 – 12. Available from www.ruaf.org

Keywords: urban agriculture, community gardens, design strategies, design-build, participatory design

Can boundary objects be used for collaboration across timescales? Hope for grassroots sustainability initiatives with transient participants

Rebecca Laycock

Keele University

r.laycock@keele.ac.uk

Volunteer-run urban agriculture projects are grassroots sustainability initiatives that provide essential 'seeds of a good Anthropocene.' However, in an increasingly mobile world, these initiatives are faced with transient organisers/participants which can be detrimental to project continuity/efficiency/governance, knowledge retention, participant motivation, and participation levels. 'Boundary objects' are abstract or physical things (like common language, documents/maps/diagrams, and methods/routines) that are plastic enough to be interpreted differently, but robust enough to retain a common identity to enable groups of people from different 'social worlds' to create coherent understandings for collaboration on a common task. Boundary objects are usually used with groups that are operating over a common time period, but this paper explores if and how boundary objects are can be used to support initiatives with transient organisers and participants that are temporally asynchronous. The ideas presented emerged from a 2.5 year Action Research project with three student-led food-growing initiatives at English universities in which participants reported an 'existential crisis' caused by participant transience. Because participant recruitment threatened to become the initiative's main focus, they began to consider success merely existing, and therefore the initiative's purpose and value were drawn into question. The physical garden space, a common 'vision,' records of achievement, and putting the garden on a campus map were found to be operating as boundary objects between 'waves' of participants to cope with challenges associated with the transience.

The application and understanding of 'boundary objects' across timescales presents unique theoretical and practical challenges, such as how collaboration and communication can take place, as well as how and if consensus can be achieved given limited overlap between 'waves' of participants. These 'cross-temporal boundary objects' have the potential to contribute to the internal resilience of grassroots initiatives with transient participants, enabling them to be more fruitful seeds for larger-scale sustainable transformations.

References

Barthel, S., & Isendahl, C. (2013). Urban gardens, agriculture, and water management: Sources of resilience for long-term food security in cities. Ecological Economics, 86, 224-234.

Coghlan, D. and Brannick, T. (2005). Doing Action Research in Your Own Organization. London, UK: Sage Publications.

Guitart, D., Pickering, C., & Byrne, J. (2012). Past results and future directions in urban community gardens research. Urban Forestry & Urban Greening, 11(4), 364-373.

Macduff, N. (2005). Societal changes and the rise of the episodic volunteer. Emerging areas of volunteering, 1(2), 49-61.

McClintock, N. (2010). Why farm the city? Theorizing urban agriculture through a lens of metabolic rift. Cambridge Journal of Regions, Economy and Society, 3(2): 191-207.

Star, S., and Griesemer, J. (1989). Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. Social Studies of Science, 19(3), 387–420.

Keywords: community gardens, students, boundary objects, transience, episodic volunteering

The role of local actors in shaping Green Belt policies in Bristol City Region

Luca Lazzarini

Politecnico di Torino, Torino, Italy luca.lazzarini@polito.it

This paper aims at investigating the relationship between local cooperation and planning policies that deal with Green Belt preservation and development, analyzing the experience of the West of England Joint Spatial Plan. In the last few years in UK, a debate on contrasting approaches on Green Belt policies has emerged. Researchers, policy makers but also developers and investors have been arguing on which spatial strategy can achieve the more sustainable social and economic growth. Notably, this debate has been mostly focused on housing, being conceived as a major pressing social priority. In both academic and political arenas, discussions have been polarized around a more conservative approach opting for a Green Belt preservation "at any cost", and a more pragmatic approach aiming to ensure the best land-use management and to deliver the "needed" amount of housing in sustainable locations. Anyway, as recently reported, a consistent number of new dwellings was approved within Green Belt borders by local plans, demonstrating how decisive has been the local level in addressing contents and territorial impacts of national policies. Nevertheless, UK Government's Duty-to-Cooperate requires local authorities to work together to ensure that cross-boundary issues are addressed by reducing the discretionary power of local planning authorities and fostering cooperative patterns of decision making processes.

The case of Bristol City Region is of interest for the impacts that the move from the managerial to the entrepreneurial mode of urban governance has produced in planning making processes and in the management of Green Belt farmland.

This contribution investigates the role that local authorities and other private actors have played within the planning process to examine to which extent their positions affected the preservation of Bristol-Bath Green Belt. It is argued that making the Green Belt a farming resource more closely linked to city's uses and demands would result in preserving it more effectively when addressing housing development. Notwithstanding, a further discussion is needed to recognize Green Belt farmland contribution in building a more resourceful land management and in meeting the challenges of spatial development.

References

Bryant C.R., Chahine G. (2011), Local Development and Sustainable Periurban Agriculture: New Models and Approaches for Agricultural Land Conservation, European Regional Science Association, ERSA conference papers;

Campaign to Protect Rural England & Natural England, eds. (2010), Green Belts: A greener future (report available from: http://www.ruaf.org/ruaf_bieb/upload/3284.pdf);

Cloke P., ed. (2013), Rural Land-use Planning in Developed Nations, New York: Routledge;

Gallent N., Bianconi M., Andersson Johan (2006), Planning on the edge: England's rural-urban fringe and the spatial-planning agenda, Environment and Planning B: Planning and Design 2006, 33: 457-476;

Pugalis L. & Townsend A.R. (2012), Rebalancing England: Sub-National Development (Once Again) at the Crossroads, Urban Research & Practice, 5(1): 159-176;

Reed M., Keech D. (2015), Building a Bristol Food City Region from the Grass Roots up: Food strategies, action plans and food policy councils, Urban Agriculture magazine, n. 29: 26-29;

Smith L. (2016), Green Belt (briefing paper n. 00934, House of Commons library).

Tallon, A. (2013), Urban Regeneration in the UK, London & New York: Routledge.

Keywords: West of England, Bristol, city region, green belt, farmland preservation.

London's cooperative food-growing activities building community

Les Levidow

Open University
I.levidow@open.ac.uk

Cooperative forms of food-growing have gained interest for many aims, e.g. creating a more cohesive community, sharing skills, fulfilling various unmet needs, improving people's access to healthy food, and overcoming dependence on supermarket chains. The pervasive term 'community' denotes cooperative social relationships, regardless of whether an initiative simply grows food for its volunteers or runs an enterprise to provide stable livelihoods for staff. Indeed, 'community' often serves as an adjective for gardens, participation, development, capacities, cohesion, empowerment, resilience, enterprise, kitchen, asset, agent, ownership, inclusion, etc. Such phrases imply that 'community' already exists or is being built anew through food activities.

This paper focuses on urban cooperative activities in the broad sense including food-growing, communal meals, food distribution systems and their city-wide support networks. The specific site is London, whose market-competitive pressures on land and people's time potentially undermines cooperative relationships. How do such initiatives mobilise and build community? How do they give cooperative roles and meanings to food? To address those questions, this paper draws on several analytical perspectives, especially social innovation and social agency.

Urban food initiatives build community in several ways: promoting social inclusion, building collective capabilities through/for a food culture, outscaling initiatives which create territorial links and identities, etc. Participants are valued as assets whose capacities are enhanced by and for a community. London practitioners constantly proliferate food initiatives through multi-actor interdependencies which strengthen social agency. This expansion is done mainly through small-scale replication, e.g. in schools, community gardens and city farms. Some initiatives promote wider food-growing beyond their specific site, while the Community Food Growers Network provides mutual support.

For the Greater London Authority's London Plan, the Just Space network has proposed a Social Compact with land for growing food and facilities for distributing it. But this agenda encounters threats from land assetisation and the limitations of mere alternatives, so a transformative role depends on building communities of resistance. To be effective, practitioners have been learning to operate in several arenas at once — expert advisory bodies, funding sources, social enterprise, whole-system food chains, disadvantaged social groups, etc. By creating novel forms of social agency, these efforts potentially expand a food culture countering the dominant agro-food system.

References

Caraher, M. & Dowler, E. (2014) Food for poorer people: conventional and "alternative" transgressions, in M. Goodman & C. Sage (eds), Food Transgressions: Making Sense of Contemporary Food Politics, pp. 227-246. Farnham, Surrey: Ashgate.

Dowler, E., Caraher, M. and Lincoln, P. (2007) Inequalities in food and nutrition: challenging lifestyles, in Dowler, E. and Spencer, N., *Challenging Health Inequalities: From Acheson to 'Choosing Health'*, pp. 127-155. Bristol: The Policy Press.

Kirwan, J., Ilbery, B., Maye, D., Carey, J., 2013. Grassroots social innovations and food localisation: An investigation of the Local Food programme in England, *Global Environmental Change* 23: 830–37.

Moulaert, F., Martinelli, F., Swyngedouw, E., Gonzalez, S., 2005. Towards alternative model(s) of local innovation, *Urban Studies* 42(11): 1969–1990.

Tornaghi, C. (2014) Critical geography of urban agriculture, Progress in Human Geography 38(4): 551-567.

Tornaghi, C. (2017) Urban agriculture in the food-disabling city: (re)defining urban food justice, reimagining a politics of empowerment, *Antipode. A radical Journal of Geography*, 49, 3, pp. 781-801

Keywords: food localisation, community-building, urban development, outscaling, London

What is the role of urban agriculture in food justice in the UK? – Action research in London

Robert Logan

Centre for Agroecology Water and Resilience, Coventry University loganr2@uni.coventry.ac.uk

This contribution examines tensions in current urban agriculture practices in the UK and possible pathways for food justice and socially transformative food spaces in the city. Considering rising inequality in London, austerity economics, a missionary complex around community food, and affordability of fresh, natural foods, the poster suggests approaches that could respond to different contexts for effective urban agroecological practice.

With a lead case study of a new community food hub on public land in north-east London the poster outlines a collaborative research project to hear the food, education and social needs of the surrounding community as an initial stage of developing democratic structures and a cooperative vision to shape a new food commons.

The poster outlines the research enquiry into the necessity of social entrepreneurship for community food projects during austerity and how this form of income generation can enable a more equitable and diverse commons. The contribution also asks the question as to how social entrepreneurship will impact on the primary aim of facilitating transformative social space and meeting collective human needs.

The action research project covers the day to day running and development of an agroecological project in London with social justice aims in its start up stage. How can the project become financially resilient and provide dignity for the workers in an unlevel economic playing field and a city with rising living costs? How does the cooperative meet its social justice aims without overly distributing to a trendy organic food market predominately priced for middle and upper income earners?

Finally the poster frames the development of a new food commons on public land within a network of community food projects in London and how the case study can support mutual learning and lobbying for enabling policy change at a regional and local level.

References

Alkon, A. (2013) Food Sovereignty: A Critical Dialogue. Food Justice, Food Sovereignty, and the Challenge of Neoliberalism 1-25

Guthman, J. (2008) If They Only Knew: Color Blindness and Universalism in California Alternative Food Institutions. The Professional Geographer 60 (3), 387-397

Hardt, M. and Negri, A. (2009) Commonwealth.

Hassanein, N. (2003) Practicing Food Democracy: A Pragmatic Politics of Transformation. Journal of Rural Studies 19 (1), 77-86

Kato, Y. (2013) Not Just the Price of Food: Challenges of an Urban Agriculture Organization in Engaging Local Residents. Sociological Inquiry 83 (3), 369-391

Slocum, R. (2006) Anti-Racist Practice and the Work of Community Food Organizations. Antipode 38 (2), 327-349

Keywords: food justice, transformative commons, urban agroecology, action research

Using the urban metabolism approach for assessing the food system in a planning perspective: an analytical framework

Giulia Lucertini; Sarah Stempfle¹; Michele Dalla Fontana; Matilda Reho¹; Franceso Musco ¹University Iuav of Venice, Venice, Italy glucertini@iuav.it

Over the last years, food has been reframed as an urban system and infrastructure, which weaves strong ties with place-making processes. Recently introduced into local agendas and policies, it is increasingly becoming a strategic axis not only for bettering consumption and production patterns, but also for shaping more sustainable and resilient cities. At the basis of any effective strategy-building towards social and environmental responsible future lies the assessment of the current food system, as a starting point for supporting informed decision-making, for defining appropriate goals and actions and for measuring progresses and achievements. Putting the focus on sustainability, a synthetic accounting of the urban food systems can be addressed through the multi-disciplinary approach of Urban Metabolism (UM), which refers to the sum of total processes that occur in the cities, input and output flows. UM has stimulated an innovative thinking about how cities can become sustainable and which processes must be prioritized or marginalized. However, there are no many studies on UM and Urban Planning, and even less on the specific topic of food planning. This contribution means to offer some insights on the implementation of UM-based models in food system analysis from a planning perspective. In order to catch the multiple dimensions of food and to inquire in depth the functioning and performances of food-related processes, we suggest that UM analysis should be integrated with more place-based and spatial approaches. Starting from a review of UM approaches in planning, the paper shows the building of an analytical framework (considering the cities of Venice and Padua). The analysis is based on the collection and the examination of comparable sources and datasets regarding different phases of the food system: production, distribution, consumption and postconsumption. Some of the addressed methodological questions are: how to define analytical boundaries, how to deal with data lack and fragmentation, how to set significant indicators, how to identify relevant areas of intervention in a planning policy-oriented viewpoint.

References

APA (2007). American Planning Association Policy Guide on Community and Regional Food Planning.

Marsden, T. & Morley, A. (2014). Sustainable Food Systems. Building a New Paradigm. London and New York: Routledge.

Morgan, K. (2014). Nourishing the city: The rise of the urban food question in the Global North. Urban Studies.

Pothukuchi, K. & Kaufman, J.L. (2000). The Food System: a stranger to the Planning Field. Journal of American Planning Association, 66 (2): 113-124.

Sonnino, R. (2009). Feeding the city: towards a new research and planning agenda. International Planning Studies 14(4): 425-435.

Kennedy, C., Pincetl, S. & Bunje, P. (2011). The study of urban metabolism and its applications to urban planning and design. Environmental pollution, 159(8): 1965-1973.

Newman, P. (1999). Sustainability and cities: Extending the metabolism model. Landscape and Urban Planning, 44: 219-226.

Agudelo-Vera C.M., Mels A.R., Keesman K.J., Rijnaarts H.H.M. (2011). Resource management as a key factor for sustainable urban planning. Journal of Environmental Management 92, pp. 2295-2303.

Chrysoulakis N., de Castro E.A. and Moors E.J. (Ed) (2015). Understanding urban metabolism: a tool for urban planning.

New York, Routledge; Girardet, H., (2003). Cities, people planet. In: Vertovec, S., Posey, D.A. (Eds.), Globalization,

Globalism, Environment, and Environmentalism: Consciousness of Connections. Oxford University Press, New York.

Keywords: Urban Planning, Urban Metabolism, Food System, Analitical Framework

Challenging the enhancement of urban agriculture. Hybrid governance tensions in a multi case-study analysis.

Alessandra Manganelli

KULeuven/VUB, Leuven and Brussels, Belguim alessandra.manganelli@kuleuven.be

This paper adopts a hybrid governance perspective and provides a multi case-study analysis to cast light on the challenges of fostering urban agriculture. Food growing initiatives often struggle to access land and other resources, to acquire greater visibility, and, more generally, to find their space in the socio-spatial and political contexts of our cities. Fragmented and uneven is the type of support local authorities or city divisions provide. As a matter of fact, most of the food growing initiatives develop in a rather informal and case-by-case fashion. In what ways urban agriculture as a practice and as a movement negotiates a space in the socio-political arena of a city? How new actor's networks, organizations and governing practices diversely interact or conflict with established governance systems? What kind of organizational and institutional dynamics are triggered? Three city contexts of the global North – Brussels, Toronto and Detroit - will offer the setting to explore similar questions. A hybrid governance approach is used as a new and synthetic conceptual framework to develop a comparative analysis on the above challenges. This approach looks at the interactions among different kinds of governance tensions for the enhancement of urban agriculture: resource, organizational and institutional tensions. Resource governance tensions look at the challenges of providing land, spaces, funding and other material resources for urban agriculture. Organizational governance tensions refer to the organizational dynamics of civil society actors and interest groups as they push to access and enhance resources for urban agriculture. Institutional governance tensions look at the interactions of these organizations with institutional and political systems at the city and higher scales. Established or new institutions can exercise an enabling or, rather, a constraining role. Through this triple lens, the paper will focus on specific governance dynamics occurring in each of the three city contexts. This will allow to test and appreciate similarities and differences of fostering urban agriculture in diverse contextual situations as well as to develop general insights and learnings.

References

Cohen, N., & Reynolds, K., 2014, Urban Agriculture Policy Making in New York's 'New Political Spaces': Strategizing for a Participatory and Representative System. Journal of Planning Education and Research, 34(2), 221-234.

Colasanti, K. J. A., Michael W. Hamm & Charlotte M. Litjens (2012) The City as an "Agricultural Powerhouse"? Perspectives on Expanding Urban Agriculture from Detroit, Michigan, Urban Geography, 33:3, 348-369

MacRae, R., Gallant, E., Patel, S., Michalak, M., Bunch, M., & Schaffner, S. (2010, Fall). Could Toronto provide 10% of its fresh vegetable requirements from within its own boundaries? Matching consumption requirements with growing spaces. Journal of Agriculture, Food Systems, and Community Development, 1(2): 105-127.

Mansfield, B., & Mendes, W. (2013). Municipal Food Strategies and Integrated Approaches to Urban Agriculture: Exploring Three Cases from the Global North. International Planning Studies, 18(1), 37-60.

Pothukuchi, K., 2015, Five Decades of Community Food Planning in Detroit City and Grassroots, Growth and Equity, Journal of Planning Education and Research, Vol 35, Issue 4, pp. 1-16.

Tornaghi, C., 2012. Public space, urban agriculture and the grassroots creation of new commons: lessons and challenges for policy makers. In: A. Viljoen and J.S.C. Wiskerke, eds. Sustainable food planning: evolving theory and practice. Wageningen: Wageningen Academic Publishers, 349-364

Wekerle G. R. & Michael Classens, 2015, Food production in the city: (re)negotiating land, food and property, Local Environment, 20:10, 1175-1193

Keywords: Hybrid governance tensions, urban agriculture, resources, organizations, institutions.

Ecological transitions within agri-food systems: a Franco-Brazilian comparison

Gilles Maréchal¹, Claire Lamine² & Moacir Darolt³

¹CNRS – ESO Espaces et Sociétés, ²researcher INRA Avignon, ³Researcher instituto Agronômico do Paraná (IAPAR) & Professor Universidade Federal do Paraná – UFPR gilles.marechal@terralim.fr

The ecological transition of food systems raises expectations and generates actions, both from public authorities and the civil society. A socio-historical analysis of situated experiences, within a systemic and pragmatic focus, is needed to address the diversity of the transition strategies and understand the mechanisms of change and the conditions of such ecological transition. Four case studies have been selected to analyse and compare such transition processes in France and in Brazil: 2 from rural areas of Southern France (Ardèche and Biovallée) and 2 from urban regions in Brazil and France (Curitiba and Rennes). This compared analysis shows that the transformation of the food system is always the result of complex interactions between a wide range of initiatives and actions, held by diverse and sometimes unexpected players. Those actions can combine and strengthen each other or on the contrary generate conflicts. Appropriate modes of governance are thus needed inside the food system in order to make it desirable and feasible, under environmental, social cultural and economic aspects. The 4 different paths that have been investigated put in evidence two archetypical ways. They rely on differentiated relations between public authorities and the civil society. In all cases, the involvement of civil society has been key to awareness raising and stimulation for food initiatives. But the way this mobilization has been integrated and developed by public authorities deeply differ. In the Southern Ardèche case, the linkages between the farmers' initiatives and the local policies do not appear strong enough to include the diversity of agrifood actors within a territorial ecological transition path. In the Biovallée and in Rennes, trust and permeability have been built between diverse agricultural and food networks (of farmers, eaters, entrepreneurs) and the decision makers in order to let these different actors collectively take responsibility in the transition process. In the Curitiba case, public intervention has materialized in two ambitious and articulated programmes but it is not really linked to the creativity of social movements.

References

DAROLT, M.R. Conexao Ecologica: novas relacoes entre produtores e consumidores. Londrina: IAPAR, 2012. 162 p.

DENÉCHÈRE F., DURAND G., MARÉCHAL G. Systèmes alimentaires territorialisés: les circuits courts comme vecteur de développement territorial. In: G. Maréchal(dir.): Les circuits courts alimentaires: bien manger dans les territoires. Éducagri, Dijon, p. 161-171, 2008.

LAMINE, C. Changer de système : une analyse des transitions vers l'agriculture biologique à l'échelle des systèmes agrialimentaires territoriaux. Terrains & Travaux, vol. no. 20, no.1, p. 139-156, 2012.

SANTOS, E.D.; DAROLT, M.R. Circuitos de comercialização de produtos orgânicos em Curitiba-PR. Monografia de Conclusão de Curso de Agronomia. Departamento de Economia Rural e Extensão. Curitiba: Universidade Federal do Paraná-UFPR, 2016.

Lamine C., H. Renting, A. Rossi, H. Wiskerke, G. Brunori, 2012. Agri-food systems and territorial development: innovations, new dynamics and changing governance mechanisms, p. 229-256 in Darnhofer I., Gibbon D., Dedieu B., dir., The farming systems approaches into the 21st century: The new dynamics, Springer

Lamine C., 2015. Sustainability and resilience in agrifood systems: reconnecting agriculture, food and the environment, Sociologia Ruralis, 55 (1), 41-61

Lamine C., Darolt M., Brandenburg, A., 2012. The civic and social dimensions of food production and distribution in alternative food networks in France and Southern Brazil, International Journal of Sociology of Agriculture and Food, 19 (3), 383-401

Keywords: Ecological transition, France, Brazil, Food strategies, Local food systems

Public food procurement and diversity in short food chains

Gilles Marechal¹, Luc Bodiguel², Yuna Chiffoleau³

¹Terralim / CNRS-UMR6590 "ESO – Espaces et Sociétés"

²HDR, CNRS-UMR 6297« Droit et Changement social », Faculty of Law, Nantes

³INRA UMR Innovation, Montpellier, France gilles.marechal@terralim.fr

The diversity of short food chains (SFCs) in France has been documented by several projects linking academic research and the civil society. Nevertheless, many public authorities focus on public procurement, even treated by national authorities as the core of the "projets alimentaires territoriaux" (PAT – territorial food projects), a soft procedure launched by the French Ministry of Agriculture in 2014.

This contribution aims at providing a critical point of view on this focus. Why do authorities remain shy, or self-restricted, to implement other measures? Research in law and grassroots studies show that local decision-makers can safely activate many tools for local sustainable food: access to land, jobs policies, food justice, urban planning, implementation of open air markets, etc.

At the national level, emphasis has been awarded to public procurement both by the government, through the incentives of the Ministry of Agriculture, and political representation. A law proposed by a Member of Parliament aimed at "locally anchoring" the food. The indicators were 20% of organic and 40% of sustainable products in public purchase for catering units, thus focusing attention on this path.

At the local level, public authorities electorally consider the loud echoes in the newspapers to measures for local, organic, sustainable food in the catering of canteens. A study in Brittany assessed the policies on local food led by local development institutions ("pays") between 2012 and 2016. It shows that from an initial wide range of actions, 3 types (awareness raising, lists of local providers and public procurement) were mainly implemented, and only the latter kept continuity.

Another interpretation can be drawn from a multi-level perspective. The citizens' growing quest for short food chains must be taken in account by the regime. Between the many modalities of SFCs, some fit more easily in the regime's frame and procedures. The catering of large canteens (from 1000 meals / day) is one favourable niche to take part in the SFCs' expansion with a minimal change in existing practices. Rationales on economic effects, though poorly evidenced, keep decision-makers convinced that procurement is the easiest and best way to "do something".

References

Arnaud Saphore, Dans quelle mesure les Pays peuvent-ils contribuer à la structuration d'un Système Alimentaire Territorial? Analyse de quatre Pays bretons, mémoire de fin d'études, Agrocampus Ouest, 2016

Gilles Maréchal. Le ticket de cantine qui cache la forêt ?: ATLASS et les stratégies alimentaires territoriales. Transition sociale et environnementale : alternatives et communs, Mar 2017, Nanterre, France. 2017, http://www.mae.u-paris10.fr/transe-ac/. http://www.mae.u-paris10.fr/transe-ac/. https://www.mae.u-paris10.fr/transe-ac/. <a href="https://www.mae.u-paris

Julien Noel, Amandine Gatien, Frederic Fortunel, Christine Margetic. Dynamiques territoriales et jeux d'acteurs dans l'approvisionnement bio-local de la restauration collective ligérienne. Pour : enquêtes et témoignages, Groupe de recherche pour l'éducation et la prospective (France) (GREP), 2015, La bio à la croisée des chemins, 3 (227), http://www.revuepour.fr/. <10.3917/pour.227.0251 >. <halshs-01359479>

Keywords: procurement, public catering, short food chains, local food strategies

The challenge of (re)defining viability through agroecological practices: The case of urban market gardeners in Brussels.

Noémie Maughan¹, Nathalie Pippart², Lou Plateau², Marjolein Visser¹, Kevin Maréchal², Julie Hermesse³

The Brussels Capital Region – through a financing programme from the Brussels Research and Innovation Agency – is currently offering a secure participatory action research framework for 2 research teams including 3 groups of (peri-)urban market gardeners in order to test the viability of the latter "business models".

Viability is defined in this context as internal economic and social sustainability (Ba and Aubry 2011). Our so-called neo-farmers are all in the start-up phase of their professional development and broadly identify their economical sustainability as the first hurdle to overcome, to be able to explore other dimensions of resilience next.

The urban context forces them to be creative while dealing with very small areas (600-2000 m2) and to think on a relatively short-term basis given their particularly vulnerable status regarding access to land.

However, as partners of this research focused on sustainable food systems for Brussels, all of them (are expected to) embrace a longer term or agroecological scope as well.

Guided by their environmental aspirations and coping with the in vogue social representation of organic farming, better food for better health, etc., neofarmers find inspiration in natural farming (Fukuoka, 1992) or permaculture practices (Mollison and Holmgren, 1981), while the imperative financial viability requested by funders and professionalized support organisations tends to lower their environmental standards to those of the bio-intensive models (Coleman, 1995; Jeavons, 2001; Fortier, 2014).

Whilst launching their growing and marketing activities, our neofarmers are clearly confronted with ethical dilemmas forcing each one of them into various digressions and compromises (Morel et al., 2016 use the term "trade-offs").

On a more practical level, our projects seek to co-create adapted tools specifically in relation to the autonomous assessment of soil quality and health, energy autonomy and workload optimization.

In this paper, we consequently discuss the practicability of operationalizing the overall viability concept in an agroecological sense, through exploring with urban market gardeners the practices they design on the many different paths towards agroecology.

References

Altieri, M. A. 1989. Agroecology: A new research and development paradigm for world agriculture. Agriculture, Ecosystems & Environment 27(1–4):37–46. doi:10.1016/0167-8809(89)90070-4.

Ba, A., and C. Aubry. 2011. Diversité et durabilité de l'agriculture urbaine: Une nécessaire adaptation des concepts ? Norois 221(4):11–24. doi:10.4000/norois.3739.

Coleman, E. 1995. The new organic grower: A master's manual of tools and techniques for the home and market gardener. 2nd ed., rev, and expanded. White River Junction, VT: Chelsea Green.

Fortier, J. M. 2014. The market gardener: A successful grower's handbook for small-scale organic farming. Vancouver, ON: New Society.

Fukuoka, M. 1992. One-straw revolution: Introduction to natural farming. Mapusa, India: Other India Press.

McIntyre (2008). Participatory Action Research (PAR), Qualitative Research Methods Series, Sage.

Mollison, B., and D. Holmgren. 1981. Permaculture one: A perennial agriculture for human settlements. Davis, CA: International Tree Crops Institute.

Morel K. et Léger, F. (2016). « A conceptual framework for alternative farmers' strategic choices: the case of French organic market gardening microfarms » in *Agroecology and sustainable Food Systems* 40 (5): 466-492.

Jeavons, J. C. 2001. Biointensive sustainable mini-farming: II. Perspective, principles, techniques and history. Journal of Sustainable Agriculture 19(2):65–76. doi:10.1300/ J064v19n02_07.

Keywords: urban market gardening, agroecology, tradeoffs, viability, participatory action research

¹ Service d'Écologie du Paysage et Systèmes de Production Végétale (EPSPV), Université Libre de Bruxelles

²Centre d'Études Économique et Sociales de l'Environnement (CEESE), Université Libre de Bruxelles

³Laboratoire d'Anthropologie Prospective (LAAP), Université Catholique de Louvain

Participation in Alternative Food Networks (AFNs): a resource for territorial resilience. The Territorial Agricultural Resilience Index for planning

Chiara Mazzocchi¹, Rosalia Filippini¹, Stefano Corsi¹

¹University of Milan, Department of Agriculture and Enviornmental Science, Milano, Italy chiara.mazzocchi1@unimi.it

Although the modern industrial food system can feed 6 billion people (Tilman, et al, 2002) and has reduced the undernourishment at world level, global intensification practices aren't sustainable in terms of social and environmental perspective. Alternative Food Networks (AFNs) may represent alternative to global systems and their issues (Clancy & Ruhf, 2010; Renting et al, 2013). Fostering localism and alternative agricultural practices in urban agro-food systems may represent a strategy and an opportunity to achieve positive externalities in the territory (Monaco et al., 2017) as the resilience of agricultural land (Mazzocchi et al., 2016). That is, a shared participation both of consumers' and farmers' to AFNs is a resource for improving territory resilience. Moreover, this new perspective may lead to beneficial conditions for strengthening agricultural systems against various events, from food price surge to climate change effects, land use conflicts, and rapid urbanization. To date, there is a lack of analysis tool to define agricultural resilience of a territory, identifying the factors influencing this permanence. The paper proposes the Territorial Agricultural Resilience Index (TARI), which measures territorial agricultural permanence level, primarily based on participation level of consumers and farmers to AFNs. It is applied at a municipal scale adopting Lombardy Region in the Northern of Italy as case study, that is the most urbanized Italian region. TARI is based on territorial characteristics of the area, i.e. population density, on farms characteristics, i.e. farmer's age, and on level of consumers' and farmers' participation in AFNs, i.e. farms practicing direct sales. Since each variable acts in a positive or negative way on the agricultural resilience, the direction and intensity of their influence have been estimated through a participatory approach involving local stakeholders (farmers, institutions, consumers, associations) in the evaluation of variables influence degree on agricultural resilience. The measurement provided by TARI may be part of the urban and rural territorial planning, being a practical tool suited for the design of land use policies. The results show a very diversified intensity of TARI determined by territorial and agricultural features and in particular different participation pathways to AFNs.

References

Clancy, K., and Ruhf, K. (2010). Is local enough? Some arguments for regional food systems. Choices, 25(1).

Mazzocchi, C., Corsi, S. and Sali, G. (2017). Applied Spatial Analysis 10: 3-20.

Monaco F., Zasada I., Wascher D., Glavan M., Pintar M., Schmutz U., Mazzocchi C., Corsi S., and Sali G. (2017). Food Production and Consumption: City Regions between Localism, Agricultural Land Displacement, and Economic Competitiveness. *Sustainability*, *9* (1), 1096.

Renting, H., T.K. Marsden, and J. Banks (2003) Understanding Alternative Food Networks: Exploring the Role of Short Food Supply Chains in Rural Development. *Environment and Planning A*, 35(3): 393-411.

Tilman, D., Cassman, K. G., Matson, P. A., Naylor, R., and Polasky, S. (2002). Agricultural sustainability and intensive production practices. *Nature*, 418, 671–677.

Keywords: Alternative Food Networks, agricultural resilience, sustainability, participation, resourceful

Participatory design and planning for food production, shelter and cultural expression: Shared urban gardens in New York City

Carolin Mees

Parsons The New School for Design, New York City, NY, USA meesc@newschool.edu

Shared urban gardens within densely built-up low-income neighborhoods are a response to the basic need of human beings to design and organize their extended living space according to their individual preferences and in reflection of their collective needs. Consequently, community gardens are continuously developed in a participatory design, planning and building process. In cities of the Global North, the use of shared urban garden spaces for the construction of self-built structures, food production and cultural activities has varied since their first appearance at the beginning of the industrialization and urbanization, depending on the economic situation of the individual gardeners and the global economic situation, as well as the time and materials available. However, their use has primarily derived out of the will of low-income residents, often immigrants from the Global South, to improve their quality of life, which had previously been characterized by a lack of access to open spaces and adequate housing, as well as public urban open spaces for socializing and cultural expression. Despite the rejection and regulatory measurements introduced over the years, shared urban gardens containing self-built structures continued to exist until today due to the organizational efforts and the will of these resident groups to create and use informal, collective landscapes for food production and self-sustenance. In this paper, I will investigate and discuss this context at the example of the community gardens development in New York City since the 1970s with focus on the South Bronx and its Puerto Rican population. Until today, community gardens in the South Bronx are participatorily designed, planned and used for food production, shelter and cultural expression and are as such manifestations of the residents' endurance and a link to the informal self-built housing on shared urban land in other parts of the world. This expresses the people's commitment to the land use form of shared gardens and calls for anchoring a human right to gardening within legislation as well as for the inclusion of shared gardens as urban institutions in comprehensive land use plans for future sustainable urban development.

References

Gröning 1974

Sciorra 1996

Jonnes 1986

Linn 2007

Stone 2009

Keywords: Participatory design, participatory planning, shared urban gardens, urban agriculture, community gardens

Agroecological tactics of state evasion in the rapidly urbanising Ecuadorian Amazon?

Nina Moeller¹ & Martin Pedersen²

¹University of Oxford, Oxford, UK

² University of Coventry, Coventry, UK nina.isabella.moeller@gmail.com

As archaeological records increasingly reveal, much of what was hitherto considered virgin forest is actually anthropogenic: the Amazon forest is to quite some extent a horticultural artefact, sculptured for millennia through selection and promotion of some species and the containment of others.

The ancestral Kichwa chacra system is a network of polycultural forest gardens of (originally) great biological diversity. It used to be the basis for health, social relations, and transmission of knowledge and provided autonomy from states, empires and conquerors unable to identify these horticultural sites, camouflaged, as it were, in "virgin" forest. Today, however, the chacra system has almost disappeared entirely; thus adding to the degradation of the rain forest in a manner that is so far unaccounted for.

Numerous protected areas and conservation reserves have been established in Ecuador in recent decades to safeguard certain tracts of wild biodiversity against human interference, given the rapid rates of deforestation in the region. These conservation policies are adding to the enormous pressures on indigenous Kichwa culture which faces usurpation into the market economy: evicted from the forest they created and maintained, they are condemned to develop "the needs of the city", a term used to highlight the desires and necessities that, according to the Kichwa, "mysteriously" exude from the consumer culture of urban spaces.

Recently returned from the Ecuadorian Amazon, we report on a budding movement to rebuild ancestral chacras- to both make people less dependent on urban spaces and more able to navigate them (through marketising 'novel' chacra food products to the growing urban middle class). Observing the contradictions and messy realities of an urbanising Amazon, we look at the possibilities for reviving agroecological tactics of state evasion.

References

Heckenberger M. J. et al (2008) Pre-Columbian Urbanism, Anthropogenic landscapes, and the Future of the

Heckenberger, M. J. et al. (2009) Amazonian Archaeology. Annual Review of Anthropology Volume 38

Macdonald Jr., T. (1998) Ethnicity and Culture Amidst New "Neighbors": The Runa of Ecuador's Amazon Region. Pearson.

Medina J.T. and Heaton H.C. (2010) The Discovery of the Amazon: According to the Account of Friar Gaspar de Carvajal and Other Documents. Kessinger, Whitefish, Montana.

Moeller, N.I (2010) The Protection of Traditional Knowledge in the Ecuadorian Amazon: A Critical Ethnography of Capital Expansion. PhD thesis: goo.gi/ZSKiWC

Scott, J.C. (2009) The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia. Yale UP.

Tambiah, S. (1977) The Galactic Polity: The Structure Of Traditional Kingdoms In Southeast Asia. Ann. N.Y. Acad. Sci. 293, 69

Keywords: Amazon, horticulture, food sovereignty, state evasion

Amazon. Science 29: Vol. 321 no. 5893, pp. 1214-1217

What do local policies for food sovereignty look like?

Ana Moragues-Faus, 1 Emily Mattheisen2

¹ Cardiff University

² FIAN International

MoraguesFausA1@cardiff.ac.uk

Municipalities have come to the forefront of food policy innovation. We are witnessing the mushrooming of local food partnerships such as food policy councils alongside the creation of international urban food policy networks. Similarly, the food sovereignty movement has always been active at local. While the ongoing local processeswhether driven by local governments or civil society- are disparate in terms of their ultimate aims, they highlight the potential of local policies to drive transformations in the food system- but the ultimate questions is what kind of transformation are we seeking? In this paper we critically appraise two key challenges that are shaping current local food policies from a food sovereignty perspective. First, there urban bias in policy making and within the development paradigm that has configured urban areas as privileged power centres relegating many rural areas as mere service providers. At this stage, cities have erupted as new food policy actors and therefore, there is an urgent need to consider what type of food policies can be implemented that amend rather than build upon these unjust spatial relationships. The second challenge revolves around the integration of different stakeholders in policy making processes and a the need to problematize participative process to acknowledge how different actors are affected by food system dynamics in very different ways and that power differentials between actors, as well as conflicts of interest, must be recognized and addressed. We use the outcomes of two discussion groups held in the conference Local Public Policies for Food Sovereignty (Donostia, 2016) and the Critical Agrarian Conference (Vitoria, 2017) as well as specific case studies to discuss challenges and opportunities to design local food policies that contribute to food sovereignty.

References

Forster T., and Mattheisen E. (2016) Territorial Food Systems: Protecting The Rural and Localizing Human Rights Accountability. Right To Food And Nutrition Watch 4: 38-44

 $http://www.righttofood and nutrition.org/sites/www.righttofood and nutrition.org/files/Watch_2016_Article_4_eng_Territorial\%20 Food \%20 Systems.pdf$

Moragues-Faus A and Morgan K (2015) Reframing the foodscape: the emergent world of urban food policy. Environment and Planning A, SAGE Publications 47(7): 1558-1573. Available from: http://epn.sagepub.com/content/47/7/1558.abstract (accessed 9 October 2015).

Schiavoni CM (2016) The contested terrain of food sovereignty construction: toward a historical, relational and interactive approach. The Journal of Peasant Studies, Routledge: 1-32. Available from:

https://www.tandfonline.com/doi/full/10.1080/03066150.2016.1234455 (accessed 14 November 2016).

Swyngedouw E and Heynen NC (2003) Urban political ecology, justice and the politics of scale. Antipode 35(5): 898-918.

Swyngedouw E (2011) Interrogating post-democratization: reclaiming egalitarian political spaces. Political Geography 30(7): 370-380.

Wittman H (2011) Food Sovereignty: A New Rights Framework for Food and Nature? Environment and Society, Berghahn Journals 2(1): 87-105. Available from:

http://www.ingentaconnect.com/content/berghahn/ares/2011/0000002/0000001/art00006 (accessed 18 April 2016).

Keywords: local policies, food sovereignty, right to food, territorial approach, participation

Just Food Farm: Using urban agroecology on public land to challenge the measurement of 'value' in the social economy

Phil Mount¹, Alison Blay-Palmer¹

¹Wilfrid Laurier University, Waterloo, Canada pmount@wlu.ca

Public land is the primary battleground on which ideology will contest power in the 21st century. The employment of urban agroecological principles on public land will therefore be an important tool for systems transformation. The Just Food Farm is a 150-acre farm leased from the National Capital Commission (NCC), a crown corporation that manages the land expropriated over 50 years ago to create a Greenbelt around the city. The farm borders Green's Creek natural area, an ecologically sensitive corridor providing habitat for wildlife and valuable greenspace for residents. The farm was used for over 30 years as a nursery, and now has healthy tree cover across half of the site.

In 2017 the Just Food Farm will host 12 new farmer trainees and 8 education and demonstration projects, including apiary, foraging and food forest workshops, and environmental and permaculture programs for youth. The farm is a long-term host of the agrarian Karen refugee community garden, and this year will open a Syrian Refugee garden and plant-a-row, donate-a-row program.

By demanding of the practitioners scale-appropriate practices that enhance the soil and biodiversity of the site, while integrating food production seamlessly into existing natural spaces, urban agroecology challenges conventional agro- economic rationales—and accepted agronomic practices—that are stripping the region of bush-lots, tree-lines and hedgerows. Doing so within new social spaces on public land—created specifically to prioritize sharing and caring—challenges accepted wisdom that increasingly demands the primacy of economic value in public projects and spaces.

At a community demonstration and education farm, on ecologically sensitive public land, bordered by strip malls and a residential area with the highest concentration of Syrian refugees in the country, the market exchange rate of the food and services produced there does not begin to capture the value of the farm. While social economy models challenge the prioritization of market return or profit in food justice programming, the discourse does little to de-commodify public spaces and conversations. Urban agroecology can step into this breach, demanding 'common' public spaces that value nourishment of body, spirit and mind for all, equally, across the community.

References

Franklin, A., Kovách, I., & Csurgó, B. (2016). Governing Social Innovation: Exploring the Role of Discretionary Practice in the Negotiation of Shared Spaces of Community Food Growing. Sociologia Ruralis.

Bryden, J., & Geisler, C. (2007). Community-based land reform: Lessons from Scotland. Land Use Policy, 24(1), 24-34.

Elings, M. (2012). Effects of care farms: Scientific research on the benefits of care farms for clients. Plant Research International, Wageningen UR.

Conell, D. J., Bryant, C. R., Caldwell, W. J., Churchyard, A., Cameron, G., Johnston, T., Margulis, M., Ramsey D. & Marois, C. (2016). Food sovereignty and agricultural land use planning: The need to integrate public priorities across jurisdictions. Journal of Agriculture, Food Systems, and Community Development, 3(4), 117-124.

Miller, S. (2017). Belongings: The fight for land and food. Fernwood Publishing, Halifax. ISBN: 9781552668528

Moore, J. W. (2017). The Capitalocene, Part I: On the nature and origins of our ecological crisis. The Journal of Peasant Studies, 1-37.

Keywords: Just Food, community farm, urban agroecology, food justice, social economy

GrowTO revisited: From action plan to practice problems in Toronto's urban agriculture

Joe Nasr^{1,2}, Rhonda Teitel-Payne¹ and James Kuhns¹

¹Toronto Urban Growers, Toronto, Canada

² Ryerson University

joenasr@sympatico.ca

In 2012, the Toronto City Council endorsed unanimously the GrowTO Urban Agriculture Action Plan. This document sought to provide a road map for a wide range of "recommended actions and changes that will help Toronto's urban agriculture movement grow and flourish." GrowTO culminated a longer collaboration by a mix of actors, including City staff, civil society activists, researchers and design professionals. The document envisioned "further collaborative efforts to move urban agriculture forward" with "a significant and ongoing role for City government and City staff." The authors, who were part of the team that produced the Action Plan, are now coordinators of Toronto Urban Growers, the city's principal urban agriculture network.

This paper reflects first on the unusual collaboration that generated the plan and steered it through the municipal machine, resulting in endorsement by the City's leadership. Building on this analysis, the paper considers the ways that certain GrowTO recommendations were able to be implemented and others not. The city's reputation as a leader in urban agriculture belies a complicated relationship between the municipal bureaucracy and those seeking to move urban farming from a set of ideas to realizations in the ground, with a proliferation of very diverse projects across the city. As many actors have sought to design and implement projects, numerous challenges related to government policies and professionals have come to light. The paper concludes with an examination of how new collaborations are now seeking to address these challenges by revisiting GrowTO, focusing on the intricacies of practice.

References

France, R., K. Landman, and L. Mougeot, eds. Integrated Urban Agriculture: Precedents, Practices, Prospects. Vancouver: University of British Columbia Press, 2015.

Gorgolewski, M., J. Komisar, and J. Nasr. Carrot City: Creating Places for Urban Agriculture. New York: Monacelli Press, 2011.

GrowTO: An Urban Agriculture Action Plan for Toronto. Toronto: Toronto Food Policy Council, 2012. Available at http://www.toronto.ca/legdocs/mmis/2012/pe/bgrd/backgroundfile-51558.pdf.

MacRae, R., E. Gallant, S. Patel, M. Michalak, M. Bunch, and S. Schaffner. Could Toronto provide 10% of its fresh vegetable requirements from within its own boundaries? Matching consumption requirements with growing spaces. Journal of

Nasr, J., J. Komisar, and M. Gorgolewski. Urban agriculture as ordinary urban practice: Trends and lessons. In Second Nature Urban Agriculture – Designing Productive Cities, ed. K. Bohn and A. Viljoen. London: Routledge, 2014.

Nasr, J., R. MacRae, and J. Kuhns. Scaling up Urban Agriculture: Building the Infrastructure. Toronto: George Cedric Metcalf Charitable Foundation, 2010. Available at http://metcalffoundation.com/publications-resources/view/scaling-up-urbanagriculture-in-toronto-building-the-infrastructure/.

Viljoen, A., and H. Wiskerke. Sustainable Food Planning: Evolving Theory and Practice. Wageningen, the Neth.: Wageningen Academic Publishers, 2012.

Keywords: Urban agriculture, Toronto, action planning, regulations, municipal staff.

Informal Food Chains: Sustaining Rural and Urban Livelihoods in Chile

Pablo Navarrete-Hernandez

London School of Economics p.j.navarrete@lse.ac.uk

Fruits and vegetables markets are a major component of the informal sector around the world. At the local level, contrasting policies towards street markets (SMs), are currently implemented fundamentally based on four more approaches: (1)dualist, which proposes repressive policies against SMs, perceiving it as a means of preserving poverty and slowing economic growth; (2)structuralist, which argues for weak supporting policies aimed at reinforcing associations of vendors in SMs, in order to enhance their negotiating power and ultimately avoid capitalist exploitation; (3)neoliberal, which promotes SMs by way of its legalisation and exposure to the free market without government intervention, and (4)more recently, co-production, which promote strong support from local policies as a means of enhancing SMs productivity. This paper test the accuracy of these approaches and, more fundamentally, shows the key role played by street markets in sustaining the livelihoods of small farmers by offering an extensive informal market demand where to trade their products in a fair and sustainable way. Given the direct link between small farmers production and Street markets sales, higher local support of Street markets and their integration with small rural producers is advocated as the primary policy recommendation of this paper.

Keywords: Informal Economy, Food Chain, Santiago, Street Market, Small Production

Affective spaces, and urban gardening places. The role of food, body and place on mental health in the city

Richard Nunes¹, Senjuti Manna¹, Aileen Ho¹

¹University of Reading, Reading (UK)

r.j.nunes@reading.ac.uk

In recent years, there has been a growing realisation across health geography scholarship that place matters to health and health care; that where individuals live, work, socialize, and how they use and experience their environments, have far-reaching health implications. This has accompanied a long-standing attention to health, and urban planning and design practice, including but not limited to activated urban green spaces that encourage physical activity and social interaction. These are representational spaces that have been rationalised in policy terms and scientifically evidenced.

This increasing attention to healthy places encounters a number of stumbling blocks when accounting for causal mechanisms, including debates over the neighbourhood effects of quality urban environments on mental health. While the relevance of quality built environment and access to green spaces on mental health remains unclear and difficult to determine, in this paper we argue that affective spaces, of everyday emotions in, and perceptions of urban places are vastly under-explored in neighbourhood research.

Building on the work of Andrews et al (2014), we draw upon nonrepresentational theory and nonrepresentational geographies to explore the role of affective spaces on the mental health outcomes of urban gardening. We address a number of methodological challenges surrounding the interconnectedness of food, body and place on mental health in the city. Utilizing a case study from Reading, UK, this paper will discuss the use of a visual participatory method alongside other traditional methods, and its implications for the research nonrepresentational geographies of health.

References

Andrews, G.J., Chen, S. and Myers, S., 2014. The 'taking place' of health and wellbeing: Towards non-representational theory. Social Science & Medicine, 108, pp.210-222.

Cadman, L., 2009. Nonrepresentational theory/nonrepresentational geographies. International encyclopedia of human geography, 7, pp.456-63.

Harris, B., 1967. The limits of science and humanism in planning. Journal of the American Institute of Planners, 33(5), pp.324-335.

Krieger, N., 2001. Theories for social epidemiology in the 21st century: an ecosocial perspective. International journal of epidemiology, 30(4), pp.668-677.

Krieger, N., 1994. Epidemiology and the web of causation: has anyone seen the spider?. Social science & medicine, 39(7), pp.887-903.

Melis, G., Gelormino, E., Marra, G., Ferracin, E. and Costa, G., 2015. The effects of the urban built environment on mental health: A cohort study in a large northern Italian city. International journal of environmental research and public health, 12(11), pp.14898-14915.

Nightingale, A. 2011. Beyond Design Principles: Subjectivity, Emotion, and the (Ir)Rational Commons Society and Natural Resources, 24, 119-132.

Schofield, P. and Das-Munshi, J., 2017. New directions in neighbourhood research a commentary on Lovasi et al.(2016): Cause and context: place-based approaches to investigate how environments affect mental health. Social Psychiatry and Psychiatric Epidemiology, pp.1-3.

Seixas, S. and Nunes, R. J. (accepted). Subjectivity in a context of environmental change: opening new dialogues in mental health research. Subjectivity.

Keywords: mental health, urban gardening, non-representational geographies, affective spaces

Effects of Consumer-Producer-Interactions in Alternative Food Networks on Consumer's Learning about Food and Agriculture

Ina Opitz¹, Kathrin Specht, Annette Piorr, Rosemarie Siebert, Ingo Zasada¹

¹Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany ina.opitz@zalf.de

In Alternative Food Networks (AFN) like Community-Supported Agriculture (CSA), consumers and producers commonly decide about cultivations plans, share their knowledge and resources, or work together on the field or in distribution. Applying principles of sharing and solidarity, they shape a social and organizational system that is distinct from practices of the conventional food production and food chain with disconnected consumer-producer-relations. Therefore, consumer-producer-interactions (CPIs) are seen as the core of AFNs as a social innovation and contribute to form post-capitalist economies. What is lacking so far is empirical evidence how AFNs unfold benefits through these CPIs, such as appreciation of agriculture and food production, dietary and behavioural changes or the reduction of food waste.

Therefore, in our study, we applied an analytical framework that distinguishes six CPI domains: knowledge, labour, financing/contracting, produce, resources, and land. Learning effects on consumers in the fields of food and agriculture are explained with their interaction with producers in these domains.

Thus, we conducted 26 guided interviews with consumers and producers of the three most frequent AFN types in Germany: CSA, food coops and self-harvest gardens. Results of a content analysis of the interview transcripts revealed multiple learning fields regarding (i) farmers' economic and social needs, (ii) cultivation practices, (iii) seasonality, (iv) food preparation and nutrition, and (v) resources-reduced housekeeping. These learning fields are mainly related to the CPI domains of financing/contracting, produce, knowledge, and labour. Therewith, learning is shaped by the exchange of knowledge, the spirit of sharing and interaction. Learning processes in AFNs, that include producers and consumers, the intensity and scope of consumers' learning is widened, especially about farmers' related issues. Direct relations between producers from rural or peri-urban areas and consumers enable urban dwellers to access the farmer's knowledge resources and enables negotiations between consumers and producers in post-capitalist economies.

References

Brunori/Rossi/Guidi (2012): On the Social Relations around and beyond Food. Analysing Consumers Role and Action in Gruppi di Axquisto Solidale (Solidarity Purchase Groups). Sociologia Ruralis, 52(1), 1-30.

Forsell/Lankoski (2015): The sustainability promis of alternative food networks: an examination through "alternative" characteristics. Agriculture and Human Values, 32 (1), 63-75.

Jaeger-Erben/Rueckert-John/Schaefer (2015): Sustainable consumption through social innovation: a typology of innovations for sustainable consumption practices. Journal of Cleaner Production, 108, 784-798.

Jarosz (2008): The city in the country: Growing alternative food networks in Metropolitian areas. Journal of Rural Studies, 24(3), 231-244.

Renting/Marsden/Banks (2003): Understanding alternative food networks: exploring the role of short supply chains in rural development. Environment and Planning A, 35(3), 393-411.

Tregear (2011): Processing knowledge in alternative and local food networks: Critical reflections and a research agenda. Journal of Rural Studies, 27(4), 419-430.

Vogl/Axmann/Vogl-Lukasser (2004): Urban organic farming in Austria with the concept of Selbsternte (self-harvest): An agronomic and socio-economic analysis. Renewable Agriculture and Food Systems, 19. 67-79.

Keywords: analytical framework, community-supported agriculture, food coop, self-harvest garden, empirical study, urban-rural

Corporeal Encounters with Farmscapes: curating an embodied methodology for ecological urban-making

Anna Maria Orrù

Chalmers University of Technology, Gothenburg, Sweden orru@chalmers.se

The past decade has produced a thriving archive of urban farming examples and enthusiastic urban inhabitants implementing food gardening in the Global North. Despite all collected knowledge and skills, there still exists a distance between awareness and more extensive committed action. This slow uptake calls for furthering the boundary of alternate methods in urban-making in which artistic research can expand spatial imaginations that trigger experiential ecological awareness and becoming. This paper explores methods which aim to traverse this gap by employing the body as a main tool of inquiry. How can we enable and set up modes of curiosity-driven encounters that activate ecological awareness and imaginaries which transform into a methodology for exploring new delicious urban fictions to live by?

In using artistic research approaches, there is potential to encounter urban food issues by setting up different spatial relations with nature in the city that activate deeper commitments to the environment and go beyond local food movements and surface tactility. An underlying experiential 'thickness' exists in the corporeal-to-space relation that needs exploration as it can motivate an ecological place attachment to these farmscapes that flies under practice and theory radars. This paper presents the case study 'Organoleptic Interfaces' to exemplify three modes of inquiry. The first mode, 'Paperscapes', includes a making-knowledge workshop delving into Masanobu Fukuoka's natural farming theory. A second methodology utilizes performance to disseminate such knowledge to a wider unassuming audience. The third approach deepens the visceral practice with a Butoh choreography workshop exploring embodied understandings of ecological practice. The case is accompanied by a short film essay that is appended to this paper.

Results include an assortment of reformulated embodied methodologies for curating a corporeal politics and poetics in ecological urban-making around farmscapes, and an extended curiosity that has potential to reach wider urban audiences. Artistic research has the ability to stage surprises and an awareness that might not be found with normative practice and theory. We eat daily and the body is a fundamental untapped resource in the way that we live in and treat urban contexts.

References

Bennett, J., 2010. Vibrant Matter: A Political Ecology of Things, Durham and London: Duke University Press.

Haraway, D., 2016. Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene. E-Flux, 75 (September 2016). pp.1-17.

Carolan, MS., 2007. Introducing the Concept of Tactile Space: Creating Lasting Social and Environmental Commitments. Geoforum, (38), pp. 1264-1275.

Carolan, MS., 2009. 'I Do Therefore There is': Enlivening Socioenvironmental Theory. Environmental Politics, 18(1), pp. 1-17.

Delind, L.B., 2006. Of Bodies, Place, and Culture: Re-Situating Local Food. Journal of Agricultural and Environmental Ethics, 19(2), pp.121-146

Dyrssen, C., 2010. Navigating in Heterogeneity: Architectural Thinking and Art-Based Research. In M. Biggs & H. Karlsson, eds. The Routledge Companion to Research in the Arts. London UK. New York, NY: Routledge, pp. 223-239.

Lakoff, G., & Johnson, M., 1999. Philosophy in the Flesh: the Embodied Mind & its Challenge to Western Thought. In New York, NY: Basic Books.

Parham, S., 2015. Introduction. In Food and Urbanism: The Convivial City and a Sustainable Future. London UK. New York, NY: Bloomsbury Academic.

Scannell, L. & Gifford, R., 2010. The relations between natural and civic place attachment and pro-environmental behaviour. Journal of Environmental Psychology, 30, pp. 289-297.

Steel, C., 2008. Hungry City - How Food Shapes our Lives. London UK: Chatto & Windus, Random House.

Wiskerke, J.S.C. & Viljoen, A., 2012. Sustainable Urban Food Provisioning: Challenges for Scientists, Policymakers, Planners and Designers. In A. Viljoen & J. S. C. Wiskerke, eds. Sustainable Food Planning: Evolving Theory and Practice. Wageningen, NL: Wageningen Academic Publishers, pp. 19-35.

Keywords: embodied methodology, artistic research, farmscape, ecological urbanism, awareness

Creating edible cities: Participatory Guarantee Systems as planning tool for agroecological cultivation and knowledge hub

Nicole Paganini¹ & Anja Schelchen²

¹Albrecht Daniel Thaer-Institut for Agriculture and Horticulture Invalidenstr, ²Humboldt-Universitat zu Berlin, Germany paganini@hu-berlin.de

Sub-Saharan Africa is the most rapidly urbanized region in the world. Especially in the urban informal areas, Food Planning is one of the main challenges for policy makers, city planners, urban farmers and of course - the population itself. Urban Agriculture can contribute to Food Security and could be a solution for improving food and nutritional security, especially in disadvantaged urban communities.

The research contributing to this paper is focused on Food Planning for vulnerable population in Cape Town and Maputo, but raises also the question on safe and healthy food production in urban space according agroecological production principles to create edible urban landscape.

Comparative observation of production methods shows differences in food quality and show up the potential of Food Planning tool PGS certification on the example of Western Cape PGS movement in South Africa. The grass root movement allows producers to work on their own quality assurance standard, considering agroecological principles, and building up their production on trust, participation, and sovereignty from global and national food markets. The implementation of PGS in Western Cape region is observed, accompanied, analysed and in a next step with participatory action research methods transferred to urban space requirements – so called urbanGAP-as one main outcome of this research.

Results from the present research will show the understanding and practice of GAP in both cities — defining urbanGAP as collection of different, to urban circumstances adapted, agroecological production principles to cultivate in an organic and healthy way with the aim to support Food Security and Food Sovereignty to the producers. It is assumed, that GAPs in Cape Town is far beyond of Maputo. However, two cities — two realities. Good practices outlined in Cape Towns backyards and Maputos "organic machambas", verified with Participatory Guarantee Systems, could be the theoretical base for more sustainable Food Planning in both cities. Due to an additional analysis on local knowledge exchange and local capacity development systems, an adapted transfer model will be developed to contribute to the adoption of innovations on organic cultivation in the city.

References

André Viljoen, Johannes S. C. Wiskerke (eds. 2012): Sustainable Food Planning: Evolving Theory and Practice

Perrone C. (2009): Divercity

Bohn, Katrin (2016) La ciudad productiva: el gran momento de la agricultura urbana Nueva Sociedad

Batterspy Jane, Marshak, M. & Mngqibisi, N. (2017) Mapping the invisible: The informal food economy of Cape Town, South Africa

Crush, J. & Battersby, J. (Eds.) (2016) Rapid Urbanisation, Urban Food Deserts And Food Security In Africa

Keywords: Urban Agriculture, Participatory Guarantee System, edible city, Southern Africa, Agroecology

Sustainable Food Production in a Food Deficit Region: The case of Kudumbashree as a Community Self Organisation in Kerala, India

Christabell Paul Dhason Jessy

Department of Futures Studies, University of Kerala christabell1975@yahoo.co.in

Food production needs to be sustainable in nature in order to sustain the burgeoning global population. Kerala, the south Indian state is a lush green region which constitutes a long strip of land bounded by Arabian Sea in the west and by Western Ghats in the east. Even though the region enjoys a rich monsoon and a favourable agricultural climate, the production of various food grains, pulses, vegetables, fruits and other edible items has been under tremendous stress due to high density of population, commercialisation of agriculture, rapid urbanisation, increasing cost of cultivation, etc over the last decades and still it is continuing. The food deficit in the region is as chronic as it leads to shortages in the supply which in turn prompts hoarding, increase and fluctuations in prices of food items (GoK 2012b). It is in this broad backdrop Kudumbashree, the largest female collective in Asia which is a poverty alleviation mission initiated by the Government of Kerala in 1988 has entered into the field with female farmers as the focus to enhance food production by means of various programmes as early from 2004. As a result of this intervention, a total of 44,225 collectives of women farmers have come up across the state. These collectives lease fallow land, rejuvenate it, farm it and then either sell the produce or use it for consumption, depending on the needs of members. (Mukherjee 2012). It is claimed that nearly 44,000 hectares of land utilizing cultivable fallow land by the collectives comprising of 0.245 million women. (Kudumbashree 2012). The conscious emphasis on safe to eat concept and adoption of organic farming practices make the activity more socially meaningful too. Furthermore, the group dynamics of women help the activity to sustain and the income from the activity though it is not as high as it is not a so profitable business, it is enough to help the women to carry out the activity. The present paper tries to evaluate various dimensions of Kudumbashree's initiatives on sustainable food production as a Community Self Organisation in the specific context of a developing country.

References

GoK. 2012a. Ensuring Food Security through Group Farming in Paddy Cultivation: A Case Study of Nedumbassery Grama Panchayat in Ernakulam District. Working Paper Series 2, Evaluation Division. Kerala State Planning Board, Thiruvananthapuram.

GoK. 2012b. Report of Working Group on Food Security. Kerala State Planning Board, Thiruvananthapuram.

Haque, T. and Jaya Lekshmi Nair. 2014. Ensuring and Protecting the Land Leasing Right of Poor Women in India.Paper prepared for presentation at the "2014 World Bank Conference on Land and Poverty"The World Bank - Washington DC, March 24-27, 2014

Kudumbashree. 2012. Collective farming and Kudumbashree: Base line study of JLG and Agriculture practices

Kudumbashree. 2013. Performance of Kudumbashree in Agriculture sector. State Poverty Eradication Mission, Kerala.

MukherjeeAnanya. 2012. A Quarter of a Million Women in Kerala Earn Livelihoods With Dignity. Universitas Forum 3(1) February.

Praveen, K.V. and Suresh, A. 2015. Performance and Sustainability of Kudumbashree Neighbourhood Groups in Kerala: An Empirical AnalysisInd. Jn. of Agri. Econ. 70(3), July-Sept.

Sajesh V. K. 2013. Factors Discriminating the Effectiveness of Women's JointLiability Groups in Agriculture: Evidences from Kerala.Indian Res. J. Ext. Edu. 13 (3), September.

Keywords: Kudumbashree, Community Self Organisation, Women Collectives, Kerala, Group Farming

The Turin Food System Towards a Metropolitan Food Policy: An Actor's Perspective

Giacomo Pettenati¹, Egidio Dansero¹, Alessia Toldo²

 1 University of Turin, Department of Cultures, Politics and Society, 2University of Turin, Interuniversity Department of Regional and Urban Studies and Planning

giacomo.pettenati@unito.it

In the last five years, hundreds of actors of the metropolitan Turin food system have been involved in a multiple participatory processes aiming at laying the foundation for the institution of an Urban Food Policy (UFP), firstly by the identification of needs and priorities contributing to set the agenda of the food policy. The University of Turin took an active part in this process, as one of the actors of the food system and as the coordinator of participatory action -research projects specifically aiming at analysing and assessing the current state of the food system (project Atlas of Food). Moving from the privileged point of observation of our group of research, at the same embedded in the process and critically analysing it, this contribution proposes an analysis of the actors of the Turin food system at the metropolitan scale and of their role in the processes of definition of an UFP. The used theoretical framework comes from the theories concerning the role of actors in territorial dynamics and public policies (see as references Gumuchian et al, 2003; Dente, 2011; Raffestin, 2012), highlighting their networks, strategies, resources, interests, scale of actions, power and discourses about the food system. The adopted territorial-political perspective allows to understand the roles and strategies of the actors that are contributing to create the newly emerged food policy arena in the Turin metropolitan area.

References

Raffestin C. (2012), 'Space, territory and territoriality', Environment and Planning D: Society and Space, volume 30, pp. 121-141

Dente B. (2011), Decisioni di policy, Bologna: Il Mulino

Moragues-Faus, A. and K. Morgan, Reframing the foodscape: the emergent world of urban food policy, in Environment and Planning A, 2015, 47, pp. 1558-1573.

Morgan K. and R. Sonnino, The Urban Foodscape: World Cities and the New Food Equation, in Cambridge journal of Regions Economy and Society", 2010, 3, 2, pp. 209-224.

Gumuchian H. et al. (2003), Les acteurs, ces oubliés du territoire, Parigi: Anthropos

Dematteis G. (1995), Progetto implicito, Milano: Franco Angeli

Turco A. (1988), Verso una teoria geografica della complessità, Milano: Unicopli

Keywords: urban food system, urban food policies, actors, Turin

Towards viability of urban market gardening through innovative access to private properties and mutualisation of production means

Nathalie Pipart, Lou Plateau, Manon Bertha, Noémie Maughan¹, Kevin Maréchal ¹ULB, Brussels, Belgium npipart@ulb.ac.be

Throughout the multiple forms and functions of nowadays urban agriculture, urban market gardening seems to emerge as entry point for neo-farmers. However many uncertainties remain related to its potential for viability (economically, socially and ecologically speaking). Our participative action-research project, funded by the Brussel Capital Region as part of a specific program for sustainable food systems, gathers academic researchers, counsellors and urban farmers since the winter 2015. In this framework, our project SPINCOOP aims at co-creating knowledge and innovations bearing the potential to overcome the obstacles neo-farmers would encounter while establishing a sustainable urban market gardening activity. We will here discuss two strategies that are being experimented in our living lab, the Cycle Farm cooperative (two farmers cultivating approximatively 0,75 acre in 2016 in the South of Brussels) and share the primary results of our on-going analysis.

In order to get round the limitations due to high land pressure in urban contexts, an innovative strategy to access land through negotiation and one-to-one agreements with private landowners has been developed. While the relationships between farmers and landowners are context-specific, we have been able to identify several common threads and focus points. This multi-sites or patchwork farming strategy have profound organizational and logistical impacts that require anticipation of equipment needs, management by polarization of production sites, and transport optimization.

Moreover, to facilitate access to all production means (land, capital, labour force), Cycle Farm experiments innovative ways to mutualize them through the creation of a cooperative. Beside the challenges inherent to multisites farming, mutualisation of production means and strategies issues specific management challenges which our action research project tackles: 1) remuneration distribution among farmers, 2) governance with all cooperative's members, and 3) financial mechanisms tailored to the specificities of a production cooperative (farmers integrating and leaving the cooperative, flexibility and changing perspectives and expectations related to the profession). Cooperatives in market farming, at the level of production, are recently regaining interest and could have the potential to contribute to a more sustainable food market. Our project aims at drawing lessons from our living lab experiences, building guidelines and tools and, in doing so, contributing to transition and innovation in social and solidarity economy

References

Alexander Chayanov, (1991), Collective Farms or 'Total Agricultural Co-Operation', in "The Theory of Peasant Cooperatives", I.B.Tauris, 251 p.

Aubry, C. et Chiffoleau, Y. (2009). « Le développement des circuits courts et l'agriculture périurbaine: histoire, evolution encours et questions actuelles » in Innovations Agronomiques 5 : 53-67.

Aubry, C. (2015). « Les Agricultures urbaines et les questionnements de recherche » in Pour 224, pp. 37-49.

Mougeot L. (2000). « Urban Agriculture: definition, presence, potentials and risks » In N. Bakker et al. (eds.) Growing Cities, Growing Food, Urban Agriculture on the Policy Agenda, DSE/ETC, Allemagne

Sustainable Food Production in a Food Deficit Region: The case of Kudumbashree as a Community Self Organisation in Kerala, India

VIcIntyre (2008). Participatory Action Research (PAR), Qualitative Research Methods Series, Sage.

Vlorel K. et Léger, F. (2016). « A conceptual framework for alternative farmers' strategic choices: the case of French Organic market gardening microfarms » in Agroecology and sustainable Food Systems 40 (5): 466-492.

Keywords: urban market gardening, patchwork farm, social economy, cooperative.

Growing non-capitalist cultures of exchange: crafting a seedy economy?

Laura Pottinger

University of Manchester laura.pottinger@manchester.ac.uk

In recent years, the seeds of fruits and vegetables have emerged as a basis for diverse, non-capitalist economies that are initiated and maintained by 'seed savers': gardeners who grow their own food, save the seed and exchange it with others either informally or through organised sharing networks. Drawing on ethnographic research conducted in the UK with individuals involved in a national seed conservation network, The Heritage Seed Library (HSL) and a local seed swap event, Seedy Sunday, Brighton, the research presented here explores the processes of (de)commodification performed by gardeners as they craft and exchange seeds, food crops and other garden produce. Sharing organisations such as HSL and Seedy Sunday connect individual seed savers and frame their acts of making, mutuality and non-monetary exchange as a form of 'quiet activism' that works to galvanise communal responsibilities for environments, to conserve biodiversity and to challenge the corporate control of food and seed systems. While the example of seed saving elucidates the particular power of small, quiet acts of crafting and swapping to critique, subvert and rework dominant modes of production and consumption, tensions arise as home grown produce is extended, reframed and scaled-up. The diverse economies instigated around seeds are exposed as heterogeneous, at times contradictory and exhibiting a ready co-existence of handmade and mass-produced. This paper thus offers insight into the complex and contingent relationship between production, property, ownership and communality in alternative food networks, as seed savers negotiate the consumptive desires of seeking out, acquiring and keeping collections of unusual seeds with growing a collective responsibility to conserve plants, environments and non-capitalist cultures of exchange.

References

Arnould, E.J. and Rose, A.S. (2015). 'Mutuality: critique and substitute for Belk's 'sharing', Marketing Theory. Advance online publication. doi: 10.1177/1470593115572669.

Belk, R. (2010). 'Sharing', Journal of Consumer Research, 36(5), pp.715-734.

Blomley, N. (2005). Flowers in the bathtub: boundary crossings at the public-private divide. Geoforum, 36(3), 281-296.

Campbell, C. (2005). 'The craft consumer: culture, craft and consumption in a postmodern society', Journal of Consumer Culture, 5(1), pp.23-42.

Gibson-Graham, J.K. (1996). The end of capitalism (as we knew it): a feminist critique of political economy. Oxford: Blackwell.

Phillips, C. (2013). Saving more than seeds: practices and politics of seed saving. Surrey: Ashgate Publishing, Ltd.

Smith, J. and Jehli€ ka, P. (2013). 'Quiet sustainability: fertile lessons from Europe's productive gardeners', Journal of Rural Studies, 32, pp.148-157.

Trauger, A. (2014). Toward a political geography of food sovereignty: transforming territory, exchange and power in the liberal sovereign state. Journal of Peasant Studies, 41(6), 1131-1152.

Van Holstein, E. (2016). Transplanting, plotting, fencing: relational property practices in community gardens. Environment and Planning A, 48(11), 2239-2255.

Wilson, A.D. (2012). Beyond alternative: exploring the potential for autonomous food spaces, Antipode, 45(3), pp.719-737.

Keywords: sharing, decommodification, seeds, ethnography, UK

Re-configuring the Food-Hub Model: De-stigmatising Food Poverty?

Katerina Psarikidou^{1,} Christian Reynolds², Amy Fielden³, Harris Kaloudis¹

¹Lancaster University, ²University of Sheffield, ³University of Newcastle³ a.psarikidou@lancaster.ac.uk

There is an increasing number of alternative agro-food networks (AAFNs) that aim to prefigure alternatives to the conventional agrifood system. 'Food hubs' constitute a relocalised distribution channel that aims to reconnect producers and consumers, thus providing an alternative to supermarkets that can bypass intermediaries and secure fairer prices for producers (Le Blanc et al,2013; Cleveland et al, 2014). Despite its North American prevalence, 'Local Food Hubs' also gain momentum in the UK, with Open Food Network being a central at facilitating such reconnections through the use of an open access online software system (https://openfoodnetwork.org.uk//). In this way, 'Local Food Hubs' manifest aspects of a moral economy, evident through expressions of care for proximal and distant others (e.g. 'fair price'), a peer-to-peer economy of sharing (open access software), alternative labour processes (voluntary labour; co-operative structures) (see Psarikidou and Szerszynski, 2012; Psarikidou, 2015). However, as they currently stand, they constitute an elite practice, mainly operating in affluent areas and involving affluent consumers.

Our research aims to open up the moral economic potential of 'local food hubs' by exploring their potential of to address issues of food poverty in deprived areas in cities. It is estimated that 4.7 million people in the UK live in food poverty (CEBR, 2013), with over 500,000 people being reliant on food aid (Cooper and Dumpleton, 2013). Currently food banks constitute the main avenue for food access, with significant implication of social stigmatisation for their users (Garthwaite, 2016; Purdam et al 2016). In collaboration with the Open Food Network and three third sector organisations, we are developing a pilot study that aims to assess the conditions under which 'local food hubs' could provide an alternative model through which low-income households can have access to healthy affordable food. Through such analysis, we aim to unpack the multiple 'moral economic' aspects of this 'local food hub' model, that are attached to their potential to constitute 'an alternative' not only to supermarkets, but also to food banks. In doing so, we will debate the potential of food hubs to de-stigmatise processes of food access in conditions of food poverty.

References

CEBR (Centre for Economics and Business Research) (2013) *Hard to Swallow: The Facts about Food Poverty*. Manchester: Kelloggs.

Cleveland, D.A., Müller, N., Tranovich, A. Mazaroli, D.N., Hinson, K. (2014) Local food hubs for alternative food systems: A case study from Santa Barbara County, California, *Journal of Rural Studies*, 35:26-36.

Cooper, N. and Dumpleton, S. (2013) Walking the Breadline. The Scandal of Poverty in the 21st

Century Britain. London: Church Action on Poverty and Oxfam.

Garthwaite, K. (2016) Stigma, shame and 'people like us': an ethnographic study of foodbank use in the UK, *Journal of Poverty and Social Justice*, 24(3): 277–289.

LeBlanc, J. R., Conner, D., McRae, G., & Darby, H. (2014). Building resilience in nonprofit

food hubs. *Journal of Agriculture, Food Systems, and Community Development*. Advance online publication: http://dx.doi.org/10.5304/jafscd.2014.043.005

Psarikidou, K. and Szerszynski, B. (2012) The moral economy of civic food networks in Manchester, *International Journal of Sociology of Agriculture and Food*, 19(3): 309-327.

Psarikidou, K. (2015) Re-thinking Innovation through a moral economy lens: the case of alternative ahro-food and mobility practices, *Ephemera : Theory and Politics in Organization*, 15(1): 67-93.

Purdam, K. Garrat, E., and Esmail, A. (2016) Hungry? Food Insecurity, Social Stigma and Embarrassment in the UK, *Sociology*, 50(6) 1072–1088

Keywords: local food hubs, alternative agro-food networks, moral economy, food poverty, stigma

The Henry Doubleday Research Association's Members' Experiment Scheme: A case study in the practical application of citizen science.

Rayns F.1, Lennartsson M.2 and Davies G.2

¹Centre for Agroecology, Water and Resilience, Coventry University and ²Garden Organic Research Associates.

The Henry Doubleday Research Association (HDRA), now known as Garden Organic, was established as a UK charity in 1958 by Lawrence Hills - a key pioneer of the organic movement (Conford, 2011). With very limited funds the idea was that simple experiments would be conducted by the members in their own gardens and the results sent back to be collated and published in the quarterly Newsletter of the association (Hills, 1989). Hills was strongly motivated to challenge what he perceived as 'orthodoxy' or 'authority' by using experimentation to challenge the type of industrialised food production that was being developed after World War II. The Garden Organic Members' Experiment scheme is now a well-established citizen science programme that has been running for 60 years and conducted more than 500 experiments. Continuing themes have included the use of comfrey, pest and disease control, composting, green manures and novel crops. The combined results and achievements of the participants have provided a firm base for organic gardening practice as we see it today and this is of particular relevance to urban agroecology. In addition to generating new knowledge, this pioneering approach facilitates active engagement and promotes interactive and experiential learning.

In this presentation we will describe the outcomes of the programme and discuss the benefits it has brought to the participants and its wider role within the organic movement, on organic horticulture and food production more generally.

References:

Conford P (2011). The development of the organic network. Linking people and themes, 1945-95. Floris Books, Edinburgh LJK.

Hills LD (1989). Fighting like the flowers. Green Books, Cambridge, UK.

Keywords: Citizen science, horticulture, experimentation

Alternative Paths towards Sustainable Localized Food Sovereignty. Convergence between Prosumers and Ethical Entrepreneurs over Time.

Rachel Reckinger

University of Luxembourg, Esch-sur-Alzette, Luxembourg rachel.reckinger@uni.lu

Recently, a number of resourceful community-driven initiatives for local food production and retail have arisen in Luxembourg, in a context of particularly low organic agricultural rates paradoxically paired with high consumer demands for organic produce, leading to a specific market of largely imported organic goods. As an encompassing reaction to this situation, a niche of social innovators are combining agro-ecological land use and food production with locavoracity and circular economy.

Based on qualitative in-depth interviews and participant observation, we would like to expand on four micro-case studies of circular-economy-type fruit and vegetable production as well as unpackaged and/or socially responsible food retail in today's Luxembourg. One has been established since the 1980s with over 150 employees, partly in social insertion measures, producing and importing organic fruits and vegetables, delivered via a classical box scheme system. Additionally, over the last three years three significantly smaller initiatives with higher citizen and/or community involvement have emerged. They are characterized by a cooperative governance structure, a claimed community-supported agricultural outlook, a more dynamic presence on social media and regular handson workshops and activities. These more recent initiatives are also more radical in their agro-ecological and/or permaculture practices, focusing on local production without relying on imports, as a politicized step further than mere (possibly industrialized) organic production, which is an altogether renewed enacting of circular economy precepts. Yet their position on the market is for the moment more fragile and marginal. Particularly, the retailers among them have to build creative consensus – according to specific priorities and stances – between their standards and the adjustment to consumers who, albeit sensitized, are in search for a certain variety and convenience.

By focusing on heterodox experiences of more or less established alternative actors in diverse yet complementary food production and retail niches, we will explore topics such as emotional collective commitment and consensus-building, ethical entrepreneurship in relation to possibly reframed standards over time, governmentality, political enabling or disabling structures and regulations, as well as commodification and upscaling issues. Therefore, this paper touches on political processes and strategies, urban agro-ecological practices as well as post-capitalist economics.

References

Brunner, Karl-Michael/Schönberger, Gesa (2005): Nachhaltigkeit und Ernährung. Prodution – Handel – Konsum. Frankfurt/N§ew York, Campus.

Foucault, Michel (1978): La gouvernementalité. Séminaire au Collège de France en 1977 et 1978: Sécurité, territoire et population. Aut-Aut, n° 167-168. Paris: Gallimard (p. 12-29).

Hischfelder, Gunther/Ploeger, Angelika/Rückert-John, Jana/ Schönberger, Gesa (2015): Was der mensch essen darf. Ökonomischer Zwang, ökologisches Gewissen und gobale Konflikte. Springer VS.

MacKinnon, Danny/Derickson, Kate (2013). From resilience to resourcefulness: A critique of resilience policy and activism. Progress in Human Geography, 37/2 (p. 253-270).

Spaargaaren, Gert/Oosterveer, Peter/Loeber, Anne (2012): Food Practices in Transition. Changing Food Consumption, Retail and Consumption in the Age of Reflexive Modernity. New York/London, Routledge.

Keywords: Organic local fruit and vegetable production, ethical entrepreneurship, heterodox food production and retail niches, circular economy innovations

Edible ecosystems: the missing piece in the urban food sovereignty jigsaw?

Tomas Remiarz

Permaculture Association tomas.remiarz@yahoo.co.uk

The combination of new urban landscape design approaches such as Continuous productive urban landscapes (Viljoen, Bohn and Howe, 2005) or Agricultural urbanism (de la Salle and Holland, 2008) and land-access provided by a network of urban Commons (Bollier and Helfrich, 2015) have the potential to create conditions for urban food sovereignty. However the competing demands on urban open space as places for recreation, leisure and aesthetic functions as well as for production is often seen as a limitation to extending food production in urban areas. The edible ecosystem approach pioneered by Dave Jacke (Jacke and Zaltzberg, 2011) offers a new way of developing multifunctional urban greenspace with an eye on food production and biodiversity that is compatible with other uses. It is an extension of the forest garden concept developed by Robert Hart in the 1980s and inspired by the home gardens of Kerala, India (Hart, 1996). Since then, practitioners throughout the temperate world have applied the concept in a variety of settings including home and neighbourhood gardens, public spaces and commercial enterprises. (Remiarz, 2017). paralleled and foreshadowed by public forest garden practice in places such as Seattle and Davis (US), Manchester (UK and Kassel (Germany) This presentation demonstrates the potential of edible ecosystems for providing accessible food in urban spaces, and highlights some of the challenges that need to be addressed if the practice is to become more widespread and fulfil its promise. These challenges include questions of land access, continuity of care and long-term shared management structures.

References

Bollier, David and Helfrich, Silke (2015); Patterns of Commoning; Amherst, MA: Off the Common

de la Salle, Janine and Holland, Mark (2010); Agrarian Urbanism, A handbook for building sustainable food and agriculture systems in 21 century cities; Libri Publishing

Hart, Robert AJ de (1996) Forest Gardening, Totnes: Green Books

Jacke, D and Zaltzberg, K (2011); The Edible Ecosystem Teaching Garden, Wellesley College Botanic Gardens; Montague, MA: self-published

Remiarz. Tomas (2017); Forest Gardening in Practice; East Meon: Permanent Publications

Keywords: food production, urban landscape, food sovereignty

Creating the "Healing City": Lessons learned from care farms in three European countries

Magda Rich¹, Andre Viljoen¹, Helen Smith²

¹University of Brighton

²Helen Smith (Nanyang Technological University)

M.Rich@brighton.ac.uk

A growing interest in de-institutionalised, nature-based therapeutic care in the past two decades has led to the development of a large number of facilities offering green care (a variety of nature-based therapies) to people with a large variety of health and social problems. However, while the percentage of the population living in urban areas is growing, most green care facilities are located in the countryside, limiting access to vulnerable groups who could benefit from these services.

This paper discusses the prospects of establishing an urban alternative of care farms to serve potential urbanbased clients. It elaborates on data gained through a detailed online survey targeting care farm practitioners in three European countries (United Kingdom, Netherlands, and Norway). The survey aimed at providing an evidence base on whether it is meaningful to provide green care in urban environments and pinpointing elements of green care practice that can be transferred to an urban setting.

The data revealed that there are major differences between the three countries in the formal establishment of care farms, their legal status, integration within the broader social and healthcare system, and the major client groups they serve. However, therapeutic practices and conditions are very comparable throughout all the countries. In each of the study countries, care farms are generally small-scale facilities with very low numbers of staff members. Therapeutic care is mostly provided as day-care without lodging services and a majority of clients live in the same municipality as where the care farm is located or within a radius of fifty kilometers.

The results of the survey further suggest that while differences exist in the formal establishment of care farms and the client groups they serve, these do not influence service delivery of care provided. Care farms thus represent very flexible therapeutic entities capable of adjusting to location and context. While future research is necessary to investigate the compatibility of care farming within an urban fabric, urban land use, and planning strategies, the survey indicates that incorporating green care into an urban structure could represent a new, socially-focused, element in sustainable urban food systems planning.

References

Bragg, R., Egginton-Metters, I., Elsey, H., & Wood, C. (2014). Care farming: defining the 'offer'in England. Natural England Commissioned Reports, NECR, 155.

Hassink, J., Hulsink, W., & Grin, J. (2012). Care Farms in the Netherlands: An Underexplored Example of Multifunctional Agriculture—Toward an Empirically Grounded, Organization-Theory-Based Typology. Rural Sociology, 77(4), 569-600.

Haugan, L., Nyland, R., Fjeldavi, E., Meistad, T., & Braastad, B. O. (2006). Green care in Norway. Farms as a resource for the educational, health and social sector. Farming for Health. Green-Care Farming Across Europe and the United States of America. J. Hassink and M. van Dijk. Dordrecht, Wageningen UR Frontis Series, Spriinger, 13, 109-126.

Van den Berg, A. E., Hartig, T., & Staats, H. (2007). Preference for nature in urbanized societies: Stress, restoration, and the pursuit of sustainability. Journal of social issues, 63(1), 79-96.

Viljoen, A., & Howe, J. (Eds.). (2012). Continuous productive urban landscapes. Routledge.

Keywords: green care, care farms, urban planning, food systems

Building resourcefulness in periurban areas: agroecological initiatives in two towns near Montpellier and Nîmes (France)

Annabel Rixen¹, Pascale Scheromm¹, Lucette Laurens¹, Nabil Hasnaoui Amri¹, Christophe Soulard¹ ¹INRA Montpellier, France annabel.rixen@inra.fr

The "agroecological transition" implies a societal shift toward sustainable agricultural practices and a relocalisation of the food system (Stassart et al., 2012), an objective that demands considerable insitutional coordination at local and regional scales (Duru et al., 2014). Its implementation is a particular challenge in periurban areas, which struggle to preserve local farmland in a context of rapid urbanization (Bonnet, 2016; Cavailhès, 2011). The action-research projet ABEILLE accompanies agroecological initiatives in periurban areas surrounding Montpellier and Nîmes (France). By "agroecological initiative" we mean a local project initiated by institutional actors, embodying three principles: sustainable food production, consumption and territorial development.

We present two case studies. In Saint-Dionisy (1000 residents) near Nîmes, the municipal team opposes the sale of a farm property to a second-hand trader and has developed an alternative plan: settle organic farmers on the site, build storage spaces and operate a farm shop. In Fabrègues (7000 residents) near Montpellier, citizens mobilization against a land fill project on a local wine estate inspired the muncipal council to buy the property to develop a "pole of agro-ecological excellence": organic food production, public education and professional development.

Both agroecological initiatives emerge in opposition to the sale of a farm property. Local citizen associations create a demand for and contribute to the initiatives. However, their feasibility ultimately depends upon municipal actors who intervene in land use dynamics. They mobilise new tools (land use planning tools, CAP funding, property owner associations) and create links with environmental and regional planners. However, an active dialogue between municipal actors and farmers is little developed in the projects' planning stages.

We reflect upon strategies that might strengthen the capacity of periurban communities to develop agroecological initiative and reinforce the resilience of their food system, or "resourcefulness" (MacKinnon & Derickson, 2013). First, existing resources on farmland preservation must be adapted for municipal elected members who lack familiarity with available tools. Second, the integration of farmers into the early planning processes could improve social sustainability. Action-research and experience exchanges between municipal actors promise to facilitate these advancements.

References

Bonnet, F.(2016). Aménager les territoires ruraux et périurbains. Paris : Ministre du Logement, de l'Égalité des Territoires et de la Ruralité.

Cavailhès, J., Hilal, M., & Wavresky, P. (2011). L'influence urbaine sur le prix des terres agricoles et ses conséquences pour l'agriculture. Économie et Statistiques, 444-445, 99–126.

Duru, M., Fares, M. & Therond, O. (2014). Un cadre conceptuel pour penser maintenant (et organiser demain) la transition agroécologique de l'agriculture dans les territoires. Cahiers Agricultures 23 : 84-95. doi : 10.1684/agr.2014.0691

MacKinnon, D., & Derickson, K. D. (2013). From resilience to resourcefulness: A critique of resilience policy and activism. Progress in Human Geography, 37(2), 253-270.

Stassart, P. M., Baret, P., Grégoire, J.-C., Hance, T., Mormont, M., Reheul, D., Visser, M. (2012). L'agroécologie : trajectoire et potentiel pour une transition vers des systèmes alimentaires durables. In D. Van Dam, J. Nizet, M. Streith, & P. M. Stassart (Eds.), Agroécologie entre pratiques et sciences sociales. Dijon: Educardi.

Key words: agrocology, periurban agriculture, land use planning, farmland preservation

Framing the analysis of food derivatives: A preliminary attempt to connect urban financialization and food-commodity trade

Nelson Rodriguez

University of Manchester xnelsonrodriguezx@yahoo.com

This presentation suggests some elements to build an theoretical framework for the socio-environmental analysis of food derivatives. I use Eric Wolf's (1990) concept of Structural Power to frame financialization and urbanisation as systematically interdependent processes that allow us to assess socio-spatial transformations of the financialization of food. How the financialization of agriculture changes are embodied in urban processes? Moreover, what are the socio-spatial conflicts brought by the expansion of food derivatives? The hypothesis is that the flow of food derivatives reflects transformations within agro-food systems, such as the blurred character of spheres of production and circulation as well as radical changes in farmland-rent relationships. This argument questions some theoretical aspects within the financialization of the ecomy, also allow us a better understanding of the socio-environmental conflicts brought by commodity markets. Although the financialization of the economy represents changes for the sources of profits that gradually transformed industrial relations (Lapavtisas, 2013), it does not mean that relations of production are not a vital aspect to understand the rise of these processes. This paper is a preliminary conversation between financial geography and two fields of financialization research, urban geography and agro-food studies, by bridging elements to unpack the structural power of food derivatives flows. The conclusion, finally, envisions an empirical path for the socio-spatial analysis of food derivatives, linking urban financial centres, large-scale farms, food processors, ports, spaces that can reveal socioenvironmental issues brought by food derivatives trade. This presentation shows how urban processes became the 'fieldwork' for the financial expansion (actors, products and motivations) to other fields such as agriculture.

References

Arrighi, G. (2010). The long twentieth century. 3rd ed. London: Verso

Cronon, W. (1991). Nature's metropolis. 1st ed. New York: W.W. Norton.

Lapavitsas, C. (2013). Profiting without producing. 1st ed. London: Verso.

Borras, S., Franco, J., Isakson, S., Levidow, L. and Vervest, P. (2015). The rise of flex crops and commodities: implications for research. The Journal of Peasant Studies, 43(1), pp.93-115.

Burch, D. and Lawrence, G. (2013). Financialization in agri-food supply chains: private equity and the transformation of the retail sector. Agriculture and Human Values, 30(2), pp.247-258.

Clapp, J., Isakson, S. and Visser, O. (2016). The complex dynamics of agriculture as a financial asset: introduction to symposium. Agriculture and Human Values, 34(1), pp.179-183.

Wolf, E. (1990). Distinguished Lecture: Facing Power - Old Insights, New Questions. American Anthropologist, 92(3), pp.586-596.

Keywords: Urbanization, Financialization of food, derivatives, Structural Power, Agro-food conflicts

Bread and Roses: Stronger communities and healthier food systems from the inside out

Theo Rutherford

University of Manitoba, Winnipeg, Canada rutherfk@myumanitoba.ca

This interior design practicum project — a paper accompanied by a design proposal - examines the long-standing association between the domestic realm and gendered space as well as issues that have emerged in urban areas, such as poor access to healthy food options in food deserts. Referencing utopian and feminist proposals for the design of communities that have challenged conventional forms of residential development and the organization of domestic functions and spaces, it proposes the adaptive reuse of the Royal Albert Arms Hotel in downtown Winnipeg, Canada. Situated in a historically designated neighbourhood with a building stock comprised primarily of early-twentieth century warehouses, many of which have recently been converted into condominiums, this project explores the possibility to diversify housing choices while also addressing a lack of basic infrastructure to sustain the day-to-day needs of residents.

Concerned with the design of a model of housing that features a communal kitchen and dining facility as well as a rooftop greenhouse and garden, among other shared spaces, this project investigates the potential of such common elements as a means to foster a sense of community within the building. In doing so, it explores how interior design can reimagine domestic space for twelve households under one roof in a more proactive and socially conscious manner, improving the quality of life for inhabitants in the context of their homes, and more broadly, the city. This project takes an interdisciplinary approach to interior design practice by drawing on discourse from various fields, historic and contemporary design precedents, and photography for documentation.

References

Sherry Ahrentzen, Dolores Hayden, Mona Domosh and Joni Seager, Inge Daniels, Tim Cresswell, Melanie Bedore, Jino Distasio, Dorit Fromm, Ernest J. Green

Keywords: adaptive reuse, interior design, collective housing, alternative food systems

Towards a regenerative city: rewiring urban metabolism flows in Singapore

Arnout Sabbe

University of Antwerp (Belgium), Future Cities Laboratory (Singapore) sabbearnout@gmail.com

This research explores the urban foodscapes of Antwerp, the second busiest European port city, and Singapore, the busiest port in Asia (in terms of TEUs). Both cities are currently on the verge of major urban infrastructural transformation: Antwerp will redefine its ring road by covering the Southern part and implementing a new port link, while Singapore is developing an underground mover system to alleviate urban congestion issues, inflicted by its port.

Drawing from previous studies on the urban metabolism of both cities, this research will chart the journey of food: from farm till city, through port and truck. Antwerp can rely on a large agricultural hinterland that produces food for urban and export purposes; whereas Singapore has only 0.87% of its total land area assigned to farming and imports 90% of its food supply.

The dual analysis of these food-networks and the aforementioned infrastructural transformations, will lead to the design and proposal of a new typology: 'The urban factory': a new major economic and sustainable hub for each city. A space that converges and aggregates all incoming foodflows, and redirects and redistributes them by means of sustainable transport. A space that pre-empts innovative synergies with other systemic flows, by providing food waste-reducing solutions and food waste to energy alternatives. A space that institutionalizes short-chain food supplies, creating joint ventures for urban-rural networks of local production and consumption. Finally, this research by design will contextualize the spatial proposal of the 'Turban factory' within the new infrastructural developments in Antwerp and Singapore. It also aims to provide several policy recommendations on how the substantial application of food planning, and its close correlations with urban distribution, energy, waste and water flows can be a major incentivize for sustainable urban living.

References:

Fernàndez, J E. 2014. 'Urban Metabolism City

Typologies.http://ilp.mit.edu/images/conferences/2014/brussels/presentations/Fernandez.2014.Brussels.pdf

International Architecture Bienale Rotterdam. 2014. Urban Metabolism. Rotterdam. http://iabr.nl/media/document/original/urban_metabolism_rotterdam.pdf (April 1, 2017).

Steel, Carolyn. 2009. Hungry City: How Food Shapes Our Lives. Vintage Books.

Keywords: Antwerp; Singapore; Urban metabolism; Food planning; Sustainable urban design

Individuals cultivating edible plants on buildings in England

Mina Samangooei

Oxford Brookes University, Oxford, UK minasaman@gmail.com

Food production, particularly *local* production, is a key component of sustainable urban environments, given the resilience of the supply and disposal of food are major concerns in cities worldwide. Due to the lack of land for food production in dense urban areas, people have explored possibilities for food production on walls, rooftops, balconies, windowsills and inside buildings. The technology for the integration of food production on buildings is continuously being developed, where plant and building technology have been the main focus. But at present there is a lack of understanding about the users of such technology and how they relate to systems for cultivating edible plants on buildings. This work attempts to fill this gap in understanding, examining a primary research question: "What affects individuals to cultivate edible plants on buildings in England?"

To this end, this research utilizes a two-phase sequential mixed method. In phase 1, a questionnaire was formed to test hypotheses based on the Behaviour Change Wheel (BCW), behaviour theory. In phase 2, semi-structured interviews were undertaken in order to further explore the findings of phase 1. Primary data were collected from 65 participants who completed Surveys in phase 1 of the research, and in phase 2 from 30 interviewees from England who have varying levels of experience of cultivating edible plants and/or cultivating edible plants on buildings.

Findings identified forty-one parameters that affect the behaviour to cultivate edible plants on buildings. These parameters offer a comprehensive framework for understanding what affects users to cultivate edible plants on buildings. They highlight that the following are important for an individual to cultivate edible plants on buildings; cognitive capacity available to implement and maintain the system, knowledge of how and why to cultivate edible plants on buildings, motivation to cultivate edible plants on a building, the outcomes obtained from undertaking the behaviour and the individual's community.

References

Astee, L. Y., & Kishnani, N. T. (2010). Building Integrated Agriculture, Utilising Rooftops for Sustainable Food Crop Cultivation Singapore. Journal of Green Building, 5(2), 105-113.

Benton, T.~(2014). The Food Challenge: What is it and where does urban agriculture fit in? Retrieved from http://vfua.org/wp-content/uploads/2014/12/Tim-Benton.pdf

Denny, G. (2014). Economies of scale: Urban Agriculture and densification. In A. Viljoen & K. Bohn (Eds.), Second Nature Urban Agriculture, Designing productive cities, 10 years on from the Continuous Productive Landscape (CPUL city) concept.

Dunnett, N., Nagase, A., & Hallam, A. (2008). The dynamics of planted and colonising species on a green roof over six growing seasons 2001-2006: influence of substrate depth. Urban Ecosystem, 11, 373-384.

Elkington, J. (1994). Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development. California Management Review, 36, 90-100.

FLP. (2010). What is food culture? Why does it matter? Retrieved from http://www.foodforlife.org.uk/Whygetinvolved/Whatisfoodculture.aspx

Lovell, S. T. (2010). Multifunctional Urban Agriculture for Sustainable Land Use Planning in the United States. Sustainability, 2(8), 2499-2522.

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation science, 6(42).

Ulrich, R. S. (1984). View through a window may influence recovery from surgery. Science, 224(4647), 420-421.

Viljoen, A. (2005). Continuous Productive Urban Landscapes, Designing Urban Agriculture for Sustainable Cities. Oxford: Architectural Press and Elsevier.

Keywords: Buildings, Urban agriculture, Building integrated agriculture

The use of vacant spaces for urban horticulture in the city of Bologna (Italy)

Esther Sanyé-Mengual^{1,} Daniela Gasperi,¹ Giuseppina Pennisi,¹ Niccolò Rizzati¹, Giovanni Bazzocchi,¹ Francesca Magrefi², Umberto Mezzacapo¹, Monique Centrone Stefani³, Francesco Orsini¹, Giorgio Gianquinto¹

¹University of Bologna, Bologna, Italy, ²STePS s.r.l., Via Ettore Bidone, Bologna, Italy, ³University of Trento, Trento, Italy esther.sanye@unibo.it

Urban agriculture (UA) has recently being re-invented in cities of developed countries by integrating food production into the urban fabric. UA has led to new forms of supply-chain, producer-consumer relationships and it has been the focus of food movements and contestation. Even the small-scale of urban agriculture, UA contributes to food security, urban resilience, economic development and community and social mobility. In the context of a constrained land availability in cities, UA has become a tool to gain access to abandoned spaces of urban areas and re-appropriate them as a form of commonization of both land and food.

The goal of this contribution is to evaluate how UA is employed as a requalification practice in the re-appropriation of vacant areas. Due to their relevance in the development of UA in Italy, the city of Bologna was used as study area. The study followed a three-step evaluation process: (a) identification of the types of vacant areas as potential UA spaces in the study area, (b) selection of case studies of UA in the defined types of vacant areas; and (c) evaluation of case studies through SWOT analysis. Case studies were identified through previous knowledge of UA in Bologna and snowball sampling during field work. Data was collected from primary sources (i.e., interviews and participant observation during field work).

In Bologna, there are four types of vacant areas where UA may be implemented: flowerbeds along streets and squares, balconies and rooftops, abandoned buildings and abandoned neighbourhoods. Six case studies represented such spaces: I colori dell'orto, Orto della fornace and Aiuola Donata (flowerbeds); Green Housing (rooftop); Labàs (buildings) and Orto Circuito (neighbourhoods). The general trends observed highlighted the role of UA in requalifying the vacant areas through image improvement. The project contributed to enhance the life quality, the food security and the social interaction of the involved inhabitants. The implementation process of an UA project strongly affects its evolution and a bottom-up design is preferred to ensure the engagement of the citizenship. Therefore, policy-making might promote participatory and transparent UA planning for guaranteeing a long-term viability.

References

Bowman, A.O.; Pagano, M.A. Terra Incognita: Vacant Land and Urban Strategies; Georgetown University Press: Washington, DC, USA, 2004; Volume 103.

Accordino, J.; Johnson, G.T. Addressing the Vacant and Abandoned Property Problem. J. Urban Aff. 2002, 22, 301-315.

Cohen, N.; Reynolds, K. Resource needs for a socially just and sustainable urban agriculture system: Lessons from New York City. Renew. Agric. Food Syst. 2015, 30, 103-114.

Neef, A.; Neubert, D. Stakeholder participation in agricultural research projects: A conceptual framework for reflection and decision-making. Agric. Hum. Values 2011, 28, 179-194.

Rupprecht, C.D.D.; Byrne, J.A.; Lo, A.Y. Memories of vacant lots: How and why residents used informal urban green space as children and teenagers in Brisbane, Australia, and Sapporo, Japan. Child. Geogr. 2015, 14, 1-16.

Colding, J.; Barthel, S.; Bendt, P.; Snep, R.; van der Knaap, W.; Ernstson, H. Urban green commons: Insights on urban common property systems. Glob. Environ. Chang. 2013, 23, 1039-1051.

Pearsall, H. Vacant land: The new urban green? Cities 2014, 40, 121-123.

Mok, H.F.; Williamson, V.G.; Grove, J.R.; Burry, K.; Barker, S.F.; Hamilton, A.J. Strawberry fields forever? Urban agriculture in developed countries: A review. Agron. Sustain. Dev. 2014, 24, 21-43.

Teig, E.; Amulya, J.; Bardwell, L.; Buchenau, M.; Marshall, J.A.; Litt, J.S. Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens. Health Place 2009, 15, 115-1122.

Keywords: Urban agriculture, vacant areas, re-qualification, food sovereignty, public engagement

Operational modelling of peri-urban farmland for food planning in Mediterranean region

Esther Sanz Sanz¹, Davide Martinetti¹ Claude Napoleone¹

¹Institut National de la Recherche Agronomique (INRA). Unité de recherche Ecodéveloppement esther.sanz-sanz@inra.fr

In the current context of awareness of Mediterranean agricultural multifunctionality and social concerns about food security and quality, the role of urban-rural linkages for the management of landscapes across multiple geographical contexts (local, regional) need to be specified. Actually, agriculture and food production should play a key role in urban and regional planning. There has been a growing literature on peri-urban farming to characterise its dynamics and to quantify urban pressure and farmland consumption by urban sprawl. However, these works require expensive surveys and comprehensive databases that $are \ usually \ inaccessible \ to \ planners \ and \ public-policy \ analysts. \ Furthermore, there \ exist \ no \ integrated \ tools \ usable \ at \ the \ public$ policy scale that account for these interactions of the agricultural models at the farm/local (e.g. yields, agricultural plot patterns, stakeholders' activities...) and regional level (e.g. food security, energy flows...). In a planning perspective, the issue at stake is the integration of two approaches aiming to provide significant levels of precision in a tool usable at the policy level. This communication presents an analytic framework of peri-urban farmland that is operational for public action in the Mediterranean region. Based on a comprehensive analysis of a local case study, including in-depth survey, on-site landscape reading, remote sensing analysis and interviews, we have classed peri-urban farming by means of spatial units of peri-urban agriculture (USAPU). Then, we have extracted all useful information from the classification on the seven municipalities of the study area and related it with available data at the municipal and provincial level (similar to NUTS-3), in order to train a fractional regression model. The model is then tested on the rest of the province in order to predict the presence and actual proportion of each USAPU out of the total agricultural lands of each municipality. This work is the starting point for the development of a methodology characterizing complex Mediterranean peri-urban areas, simple to handle and hence operational for policy-makers and planners. This methodology might be an instrument for decision support concerning food planning. This finding is a real novelty in regional science and it is relevant beyond the scope of the case study presented.

References

Bousbaine, A.D., Nguendo-Yongsi, B., Bryant, C., 2015. Les agricultures urbaines (y compris les agricultures périurbaines) des villes du Nord et du Sud: une conceptualisation des dynamiques et des défis. Presented at the Colloque international Villes et campagnes en relations: regards croisés Nords-Suds, le 9-11 juin 2015, Paris, France.

Chanel, O., Delattre, L., Napoléone, C., 2014. Determinants of Local Public Policies for Farmland Preservation and Urban Expansion: a French Illustration. Land Econ. 90, 411–433.

Condon, P.M., Mullinix, K., Fallick, A., Harcourt, M., 2010. Agriculture on the edge: strategies to abate urban encroachment onto agricultural lands by promoting viable human-scale agriculture as an integral element of urbanization. Int. J. Agric. Sustain. 8, 104–115. doi:10.3763/ijas.2009.0465

Connell, D., Bryant, C., Caldwell, W., Churchyard, A., Cameron, G., Johnston, T., Margulis, M., Ramsey, D., Marois, C., 2013. Food Sovereignty and Agricultural Land Use Planning: The Need to Integrate Public Priorities across Jurisdictions. J. Agric. Food Syst. Community Dev. 1–8. doi:10.5304/jafscd.2013.034.01

Heimlich, R.E., Anderson, W.D., 2001. Development at the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land (No. AER-803). U.S. Dept. of Agriculture, Economic Research Service

Moragues-Faus, A., 2016. Revisiting Food Studies from a Political Ecology Perspective: Lessons from Mediterranean Agri-Food Systems, in: Ioris, A.A.. (Ed.), Agriculture, Environment and Development. Springer International Publishing, Cham, pp. 59–90.

Morgan, K., Sonnino, R., 2010. The urban foodscape: world cities and the new food equation. Camb. J. Reg. Econ. Soc. 3, 209–224.

Rizzo, D., Marraccini, E., Lardon, S., Rapey, H., Debolini, M., Benoît, M., Thenail, C., 2013. Farming systems designing landscapes: land management units at the interface between agronomy and geography. Geogr. Tidsskr.-Dan. J. Geogr. 113, 71–86. doi:10.1080/00167223.2013.849391

Sanz Sanz, E., 2016. Planification urbaine et agriculture. Méthodologie systémique de caractérisation de l'agriculture périurbaine à partir d'une recherche empirique en France et en Espagne (PhD thesis for doctoral degree in geography (UAM) and in urban studies (EHESS)). EHESS/UAM.

Watts, D., Ilbery, B.W., Maye, D., 2005. Making reconnections in agro-food geography: alternative systems of food provision. Prog. Hum. Geogr. 29, 22-40. doi:10.1191/0309132505ph526oa

Keywords: Peri-urban farmland, methodology, USAPU, food planning, public policy

Rus in Urbe? A historical perspective on food cultures as drivers of urban cultivated landscapes.

Ingrid Sarlöv Herlin

Department of Landscape Architcture, Planning and Management, SLU, Alnarp, Sweden ingrid.sarlov-herlin@slu.se

Cultivation of crops and raising and keeping of animals have been carried out in and near cities and towns around the world during the course of history. Increased pressure and price on land for development, and a range of costs, risks and constraints for food production in urban locations (Licka et al., 2015; Mok et al. 2014) has weakened the feasibility for modern urban and peri-urban farming, compared to farming in rural areas. While a major driving force for rural agriculture is maximal yields for minimal costs; the return and excessive boom of urban agriculture over the recent decades has been driven by other motives in the global north. Commercial urban agriculture is now undergoing a renaissance in for example Sweden; but little has been written about the relation between ideas linked to food and the impact on different types of urban cultivation. Tornaghi (2014) suggests that urban agriculture today has multi- layered meanings which reconnect urban-gardening and agriculture, but that more work is needed to investigate the drivers. There is a growing recognition on the interactions between people, food and places and landscapes; the effects of food cultures on the landscape, as well as the impact from landscape on food (Hauck-Lawson and Dutsch (2008); Steel (2009); Roe et al. (2016). The term 'foodscape' is used in this context (e.g. Soloman, 2012), as referring to food environments and the geographies of food (Goodman et al., 2010; Roe et al 2016). This paper depicts the evolution of urban farming from medieval time until today, with an emphasis on how food culture is shaping urban foodscapes. Sweden is used as an example, as a country which has undergone a radical urbanization during the last centuries. The changes of motives for growing (or not growing) food in urban situations reflect this advance from 1) a rural society, to 2) a society characterized by the transition to modernity, 3) a modern welfare state and 4) a postmodern urbanised and globalised society.

References

Goodman, M.H.K., Maye, D., & Holloway, L. (2010). Ethical Foodscapes? Premises, Promises and Possibilities. Environment Politics and Development Working Paper Series. Department of Geography,. Kings Colleague London. Paper no. 29.

Hauck-Lawson, A. and Deutsch, J. (2010). Gastropolis: Food and New York City. New York: Columbia University press.

Lohrberg, F., Lička; L., Scazzosi L, and Timpe, A. (eds.) (2015) Urban Agriculture Europe. 232 p. Jovis Verlag, Berlin.

Mok, HF., Williamson, V.G., Grove, J.R. et al. Agron. Sustain. Dev. (2014) 34: 21. doi:10.1007/s13593-013-0156-7

Roe, M., Sarlov-Herlin, I., & Speak, S. (2016). Identity, food and landscape character in the urban context. Landscape Research, Vol, 41. No 7,757-772.

Steel, C. (2009). Hungry City: How Food Shapes Our Lives. London: Vintage.

Soloman, D., (2012). Urbaniahoeve: expanded urban agriculture, in Viljoen, A. & Wiskerke, J.S.C. (eds) Sustainable food planning: evolving theory and practice. (pp. 365-392) Netherlands: Wageningen Academics.

Tornaghi, C. (2014) 'Critical geography of urban agriculture'. Progress in Human Geography, 38 (4), 551-567.

Keywords: Urban agriculture, urban farming, food culture, urban foodscapes, planning history

"This is what we want to share with the world": Peasant Participatory Videos on Agroecology and Traditional Knowledge in Senegal

Carla Sarrouy Kay

Centre for Agroecology, Water and Resilience (Coventry University, UK) and Institute of Sociology (Université Libre de Bruxelles, Belgium)

Since colonisation and like several other former colonies, Senegal's coastal landscape has been severely damaged by agricultural specialisation for global trade. Peanut monoculture – sold to purchase what has since become the country's main staple food, broken rice – has led to large-scale deforestation and the expansion of export-oriented and input-dependent farming systems. Communities feeling marginalised and exploited by this system register high rates of rural exodus, with the young and fit looking for better opportunities in the fishing and tourism industries or in international migration.

This research stems from a call from the Senegalese Association of Peasant Seed Producers, an umbrella organisation of smallholder farmers, whose aim is to (re)build resilient food systems that enable viable and appealing rural livelihoods. Via peasant-to-peasant exchanges and Peasant Seed Fairs, the organisation strives for the preservation of indigenous knowledge and peasant seeds, the regeneration of landscapes, and the promotion of agroecology. The organisation was looking for a way to expand dialogue between peasants, and hear the voices of those most marginalised such as women, youngsters and those living in remote areas. Four sessions of Participatory Video training were organised for four peasant groups, comprising three ethnic groups and regions. Technical training was provided by the author and two local co-facilitors so that peasants themselves could make their own films, share their livelihoods and experiences, learn from other peasants, and gather momentum in their call to rebuild resilient food systems and policy change. The outcome of this research is the first ever series of participatory videos made by Senegalese female peasants for the expression of the matters that truly concern them: the promotion of agroecology, and the importance and preservation of their traditional knowledge.

Keywords: Agroecology; Participatory Methods; Peasant; Resilient Food Systems; Senega

The Weekend Food Odyssey: Perceptions of Transportation to Food Retail Sites

Christian Kelly Scott¹, Kathryn Colasanti, Courtney Pinard ¹Pennsyvania State University cks8@psu.edu

Much attention has been given to the impact of the built environment on access to healthy, affordable and culturally appropriate food. Yet the interrelationships between a myriad of factors impacting individuals' food acquisition patterns, as well as individuals' level of satisfaction with those patterns, remain insufficiently understood. In this paper, we argue there is a fundamental mismatch between a neo-liberal concept of limited food access, which embeds the assumption – often imposed by external actors – that the lack of proximity to food retail sites makes acquiring food unreasonably difficult, and the perceptions low-income individuals hold of their own lived experience. Drawing on in-depth interviews, we compare responses to closed-ended questions about transportation-related food access barriers with open-ended descriptions of individuals' actual transportation patterns. We find that while the vast majority of interviewees stated that transportation is 'never' a problem, their described experiences reveal long travel times to reach grocery stores. Our findings shed light on the power imbalance in the framing of food access and the complexity of utilizing planning and design for more equitable food access and have important implications for food access measurement and interventions as well as the theoretical underpinnings of city and regional food systems and, more generally, built environment.

References

Alkon, Alison, Block, Daniel, Moore, Kelly, Gillis, Catherine, DiNuccio, Nicole, and Chavez, Noel (2013) Foodways of the urban poor. Geoforum, 48, pp. 126-135.

Caspi, Caitlin E., Kawachi, Ichiro, Subramanian, S.V., Adamkiewicz, Gary, and Sorensen, Glorian (2012) The relationship between diet and perceived and objective access to supermarkets among low-income housing residents. Social Science & Medicine, 75(7), pp. 1254-1262.

Cummins, Steven, Findlay, Anne, Petticrew, Mark, and Sparks, Leigh (2005) Healthy Cities: The Impact of Food Retail-led Regeneration on Food Access, Choice and Retail Structure. Built Environment, 31(4), pp. 288-301.

Odoms-Young, A.M., Zenk, S., and Mason, M. (2009). Measuring food availability and access in African-American communities: Implications for intervention and policy. American Journal of Preventive Medicine, 36(4S), pp. S145-S150.

Sharkey, J.R. and Horel, S. (2008) Neighborhood socioeconomic deprivation and minority composition are associated with better potential spatial access to the ground-truthed food environment in a large rural area. The Journal of Nutrition, 138, pp. 620-627.

Usher, Kareem (2015) Valuing all knowledges through an expanded definition of access. Journal of Agriculture, Food Systems, and Community Development, 5(4), pp. 109-114.

Keywords: Transportation, lived experience, built environment, food access, food systems planning

The Edible District Policy: challenges and successes of implementation

Arlinda Shegiri

Politecnico di Milano, Milano, Italy; Fondazione Fratelli Confalonieri, Milano, Italy arlinda.sheqiri@polimi.it

The assessment of urban open space can enhance diversity and indigenous edible plants in parks and other urban green spaces. New presence of edible plants in urban open spaces leave much to be anticipated. This new perspective can have a significant impact on halting the loss of biodiversity, food security, food legacy and other crucial components that can assist to overcome the challenges we face today on a local and global scale. Also, it will increase the environmental awareness of city dwellers and instill a sense of stewardship and community. The availability of information testifying to the benefits of populating urban open spaces with edible plants puts decision makers in a bind. Faced with a paucity of research investigating how best to integrate edible plants, many decision-makers question whether or not they should support the movement to make public space edible. Cities have changed over the time. However, new demands on city plans and the way we live are emerging.

This paper elaborates the Edible District Policy (Der Essbare Bezirk Friedrichshain -Kreuzberg) from drafted principles to actions in enhancing integration of edible plants in urban green spaces. It investigates challenges and successful cases of implementation from the district of Friedrichshain-Kreuzberg, Berlin.

The study depicts that despite the challenges cities pose, when local administrative authorities support the idea of creating a greener cityscape, it is possible and beneficial to accommodate edible plants in public spaces.

Keywords: Edible plants, policy, urban food production, urban biodiversity, open space

Food sovereignty movements in urban food strategies. Lessons from Spanish cities

Marian Simon Rojo¹, Ines Morales Bernardos², Jon Sanz Landaluze³

¹Surcos Urbanos, Madrid, Spain, ²Institute of Sociology and Peasant Studies UCO, Spain, ³Analytical Chemistry, Universidad Complutense, Spain

m.simon@surcosurbanos.es

2015: Activists come to power in several Spanish cities, and in some of them, like Madrid, Barcelona or Valencia, a space of dialogue between social movements and local government was opened in the wake of the Milan Urban Food Policy Pact, signed by city Councils. Food sovereignty movements that gathered rural and urban social diverse actors, were faced to a theoretical opportunity to explore a new path of co-production of public policies permeated by agroecological principles. This opportunity poses in turn a serious risk of co-optation and weakening them, a phenomenon that is well known and was experienced in Spain in the late 70s with the arrival of the democracy. Some social initiatives decided to maintain their autonomous character, whereas most of them preferred to move 'from protest to program'. In order to understand how these movements are re-positioning themselves, we have analyzed four cases in Spain: Madrid, Barcelona, Valencia and Valladolid. Each one is following a different model of governance and leadership, with strong local government's engagement launching a Food Council and technicians leading the process in Valencia, a narrow dialogue between 'historical' activists from the food movement and the local government in Barcelona, a determinant external technical assistance in Valladolid and social movements pushing to enter in the arena of co-producing public policies in Madrid. Food sovereignty movements realize that preserving their autonomy, depends on their own ability to mobilize resources, seizing their networks and the power of collective intelligence, and identifying synergies between actors and proposals that enables them to be one step ahead of the institutions.

References

P. Allen, M. FitzSimmons, M. Goodman, K. Warner. 2003. Shifting plates in the agrifood landscape: the tectonics of alternative agrifood initiatives in California. Journal of rural studies 19.1: 61-75.

M.A. Altieri, and V.M. Toledo. 2011. The agroecological revolution in Latin America: rescuing nature, ensuring food sovereignty and empowering peasants. The Journal of Peasant Studies 38: 587-612.

A.C. Dinerstein. 2015 The Politics of Autonomy in Latin America. The Art of Organising Hope. Palgrave Macmillan, UK.

L. Levidow, M. Pimbert, G. Vanloqueren. 2014. Agroecological research: conforming or transforming the dominant agro-food regime? Agroecology and Sustainable Food Systems, 38 (10): 1127-1155.

E. Sevilla Guzmán, G. Woodgate. 2013. Agroecology: Foundations in Agrarian Social Thought and Sociological Theory, Agroecology and Sustainable Food Systems, 37:1,32-44.

Keywords: Agroecology, co-production public policies, food sovereignty, globalization, urban food policies

Contesting the paradigm: Decentralizing, re-localizing, reconnecting and closing nutrient loops in the city of Madrid

Marian Simon Rojo¹, Barbora Dužì²

¹Surcos Urbanos & Universidad Politécnica de Madrid, Spain, ²Institute of Geonics of the CAS, Brno, Czech Republic m.simon@surcosurbanos.es

The urban metabolism approach warns us against the prevailing linear processes that move from production to consumption generating huge amounts of waste, which are not reintegrated back into the system. A transition towards a circular urban metabolism is a fundamental issue. In the case of the food system, the goal of returning organic matter and nutrients to the soil and closing nutrient cycles poses an important societal challenge. We explore the potential of addressing simultaneously the issues of food production and organic waste and their reconnection, so that the transition to a more re-localized urban food system is complemented by a revisited model of local organic waste management.

We present an empirical case study of the city of Madrid (Spain), an experience that reintegrates organic waste into regional Alternative Food Networks. It was initiated as a bottom up approach by the civic platform Madrid Agroecologico, which demanded new public policies and the definition of a sustainable urban food strategy. Local farmers became responsible for composting organic waste from selected schools, residential areas and municipal markets within a pilot project called MadridAgrocomposta, financed by the local municipality. The project was instrumental to raise awareness of the issue concerning waste and its potential re-use as compost to amend soils. We explore also the potential and the implications for public policies to accommodate a fundamental shift towards recycling organic solid waste into compost for urban agriculture or green areas. They would result in the integration of different waste management systems and introducing new players into a sector dominated by large companies willing to retain a tight control of the urban waste management business.

References

Dulac, N. (2001) The Organic Waste Flow in Integrated Sustainable Waste Management Tools for Decision-makers. Experiences from the Urban Waste Expertise Programme (1995-2001). 49 pp.

FAO (2015) International year of Soils. available at http://www.fao.org/soils-2015/en/, accessed 1 June 2016

Kirwan, J., Ilbery, B., Naye, D. and Carey, J. (2013). Grassroots social innovations and food localisation: An investigation of the Local Food programme in England. Global Environmental Change, 23,5, p. 830-837.

Kneafsey, M., Venn, L., Schmutz, U., Balázs, B., Trenchard, L., Eyden-Wood, T. & Blackett, M. (2013). Short food supply chains and local food systems in the EU. A state of play of their socio-economic characteristics. JRC Scientific and Policy Reports. Joint Research Centre Institute for Prospective Technological Studies, European Commission.

Tornaghi, C., Sage, C. and Dehaene, M. (2015). Metabolism: Introduction. In: Lohrberg, F., Lička, L., Scazzosi, L and Timpe, A. (eds.). Urban Agriculture Europe. Berlin, Jovis, p. 166-169.

Keywords: urban metabolism, organic waste, closing nutrient cycles, urban waste management, local food farm

New' micro agrofood initiatives in crisis-hit Greece: a promising alternative or business as usual?

Sophia Skordili

Harokopio University, Athens, Greece skordili@hua.gr

In the midst of the crisis, big numbers of new micro agrofood businesses are emerging all over Greece. Too often, it is taken for granted that a big part of these new ventures can act instantly as an antidote to the mounting socio-economic problems associated with the corporate-led food production and consumption. Still, there is an urgent need to construct a sharper notion about their actual characteristics and development potential. The pressing issues of massive unemployment, around 24%, and persistent recession, the question is whether these new ventures can provide a valuable source of income and employment to weak actors of supply chains and give a boost to local economies.

The chapter, making use of material from a recently implemented research project, explores their actual capacity and profile, as well as, their impact on people and places.

Research results show mixed signals. New ventures have overcome various longstanding drawbacks of the typical traditional small firm operating in the country. However, they still suffer from certain inherent complications that put their survival to risk. The fieldwork survey revealed weak ties between the firms and the local economies and societies. Despite their small size they were rather unable to form synergies and co-operations with other actors of the supply chains and other small firms. Also, the persistent recession has added a series of new challenges and magnifies the existing ones.

There is no doubt that localised micro agrofood systems should play a pivotal role in the way-out of the persistent deep recession on Greece. Micro agrofood firms should lead to a food system that is better aligned with goals of inclusive development, equality, social justice and ecological integrity. Hence, their long-term viability and success is questioned unless they will be supported by appropriate state policies.

References

Allen, P. (2010) 'Realizing justice in local food systems' Cambridge Journal of Regions, Economy and Society, 3, 295-308.

Brunori, G., Galli, F., Barjolle, D., van Broekhuizen, R., Colombo, L., Giampietro, M., Kirwan, J., Lang, T., Mathijs, E., Maye, D., de Roest, K., Rougoor, C., Schwarz, J., Schmitt, E., Smith, J., Stojanovic. Z., Tisenkopfs, T. and Touzard, J. M. (2016) 'Are Local Food Chains More Sustainable than Global Food Chains? Considerations for Assessment', Sustainability, 8, 1-27.

Clapp, J. (2012), Food, Cambridge: Polity Press.

Heinrichs, C. (2003). 'The practice and politics of food systems localization', Journal of Rural Studies, (9): 33-45.

Kneafsey, M., Schmutz, U., Balasz, B. and Trenschard, L. (2013) 'Short Food Supply Chains and Local Food Systems in the EU.

State of Play of their Socio-Economic Characteristics', JRC Scientific and Policy Reports, 06/2013.

Labrianidis, L., Skordili, S. & Kalogeresis, A. (2004) 'Entrepreneurship in Rural Greece: Kilkis and Lesvos', in L. Labrianidis (ed.) The Future of Europe's Rural Periphery, London: Ashgate, 223-246.

Morgan, K., Marsden, T., & Murdoch, J. (2006) Worlds of food: Place, power and provenance in the food chain, Oxford: Oxford University Press.

Mundler, P. and Laughrea, S. (2016) 'The contributions of short food supply chains to territorial development: A study of three Quebec territories', Journal of Rural Studies, 45: 218-229.

Sage, C. (2014) 'The transition movement and food sovereignty: From local resilience to global engagement in food system transformation, Journal of Consumer Culture, 14(2): 254-275.

Skordili, S. (2013) The sojourn of Aldi in Greece, Journal of Business and Retail Management Research, v.8 (1): 68-80.

Keywords: micro agrofood firms, Greece, crisis, sustainable local development

Alleviating tourist pressure on city centres by fostering alternative food experiences away from tourist hotspots

Helen Solman¹, Arnold van der Valk¹, Bas Pedroli

¹Wageningen Univeristy, Wagingen, The Netherlands

helena.solman@wur.nl

Planning for sustainability in cities is a complex task in times of neoliberal economies pursuing ever-lasting growth rather than sustainable levels of developments. Tourism is one of the fastest growing industries in the world, but it is to a large extent a self-organized activity controlled by tourist demand. As a result of the boom in city tourism, cities around the globe are faced with problems caused by the large amounts of visitors that diminish the quality of life in a city. Consequently, already ten years ago the WTO discussed that managing the increasing number of tourists arriving to cities in a sustainable and responsible way should be that the number one issue in tourism planning. Given this call, it is surprising that there has been little research carried out on planning measures that address the problem of carrying capacity for tourism. Therefore, there is a need for identifying alternatives to mass tourism in cities that can serve as examples of good practice and inspiration. This paper aims to partly fill this gap by exploring whether alternative food is a theme that fosters dispersion of tourists in cities. This study offers a counter-hegemonic and imaginative way of addressing the problem of tourism pressure in cities, exemplified by Amsterdam and Rome. It takes as a starting point the various possibilities and benefits of multifunctional urban agriculture and the popularity of alternative food networks and the slow food movement in cities. Alternative food increasingly attracts the interest of tourists and provides an opportunity to distract tourists away from the city centre. This finding points to the potential of using alternative food as an incentive for tourism dispersion strategies. Moreover, with alternative food tourism, a whole range of sustainability-oriented goals can be achieved in relation to healthy society, green cities, strong local economy and community empowerment.

References

Celata, F. (2012). Suburban hotels and the atomization of tourist space in large cities: the case of Rome. Working Paper del Dipartimento di Metodi e Modelli per l'Economia il Territorio e la Finanza, (102), 1-19.

Laing, J., & Frost, W. (2015). The new food explorer: beyond the experience economy. In Yeoman, I., McMahon-Beattie, U., Fields, K., Meethan, K., & Albrecht, J. (Eds.). (2015). The Future of Food Tourism: Foodies, Experiences, Exclusivity, Visions and Political Capital (Vol. 71). Channel View Publications.

Lovell, S. T. (2010). Multifunctional urban agriculture for sustainable land use planning in the United States. Sustainability, 2(8), 2499-2522.

Mason, R., & O'Mahony, B. (2007). On the Trail of Food and Wine: The tourist search for meaningful experience. Annals of Leisure Research, 10(3-4), 498-517.

McDonald, J. R. (2009). Complexity science: an alternative world view for understanding sustainable tourism development. Journal of Sustainable Tourism, 17(4), 455-471.

Zhang, S., de Roo, G., & van Dijk, T. (2015). Urban land changes as the interaction between self-organization and institutions. Planning Practice and Research, 30(2), 160-178.

Warner, K. D. (2007). The quality of sustainability: Agroecological partnerships and the geographic branding of California winegrapes. Journal of Rural Studies, 23(2), 142-155.

Westerink, J., Kempenaar, A., van Lierop, M., Groot, S., van der Valk, A., & van den Brink, A. (2017). The participating government: Shifting boundaries in collaborative spatial planning of urban regions. Environment and Planning C: Government and Policy, Vol. 35, Issue 1, pp. 147-168

Keywords: alternative food, tourism planning, insurgent planning, self-organization, urban agriculture

Soil Portraits, the 'real' Big Data

Debra Solomon

Urbaniahoeve Design Lab for Urban Agriculture / Waag Society Fellow debsign@urbaniahoeve.nl

The Soil Portraits (80 in total) are a few of the large format soil chromatographs that I produced during the Amsterdam Graphic Studio (AGA Lab) and Waag Open Wet Lab (OWL) residency in June-July 2016. Though I shall refrain from speaking of the scientific value of the data shown here; what these chromatographs communicate about each particular soil within my array of experiments, suffice it to say, this is the 'real' Big Data. Briefly put, chromatography is a collection of scientific techniques used to display the separation of mixtures. Though applied widely in DNA research, within the culture of some disciplines such as soil science, its (analytical) value is contested.

Because I work with soil and other natural materials, primarily top soils that I have generated myself in collaboration with a diverse animal, fungal, plant, and protist community (not naturally occurring) the most important part of this experiment was to innovate a technique for enlarging soil chromatography to magnify the images 16x. The contestation of scientific legitimacy of this technique as a method of soil analysis plays a role in this oeuvre, which is of course a provocation. I was keen to innovate a graphic technique for applying chromatography that would show pure (soil fertility) data as an expressive visual medium, comprehensible to a wider audience than computational soil analysis generally is. More interesting to me than the scientific data that I managed to preserve, are the results of these chemical separations which provided information beyond the computational analysis about these specific soils, as they had been studied in a 'traditional' computation analysis carried out by soil scientists.

The soil organism as a whole, and particularly these self-made soils, features prominently in my work as an utopian tool - grounds for Commons, as a biotope provocation - in all its baroque fertility, technically capable of changing the effects and course of our Climate Crisis, signifying to varying degrees our ability to nurture and repair our city's ecosystem.

References

The Rhizosphere: An Ecological Perspective, Zoe G. Cardon and Juli L. Whitbeck, 2007, Elsevier Academic Publishers European Atlas of Soil Biodiversity Jones, Arwyn lead editor, 2015, EU publishers

Keywords: artistic research, soil chromatography, visual data, resources, soil organism

Urban soils as a biological hotspot, with new roles for all ecosystem actors

Debra Solomon¹ & Dr. Caroline Nevejan¹

¹Urbaniahoeve Design Lab for Urban Agriculture / Waag Society Fellow debra@urbaniahoeve.nl

In cities, large swathes of soil organism are situated within public space landscaping and 'green zones', places more regulated than the soils of conventional farmland and mainstream agriculture. With more than 50% of the world's population living in urban areas, the urban soil organism is a logical starting point to initiate a change in perception of human's role in the natural world at large, and towards equitable use for a wide gamut of soil and ecosystem actors, and services. In cities, large swathes of soil organism are situated within public space landscaping and 'green zones'. These public places are more regulated than the soils of conventional farmland and mainstream agriculture. Increasing awareness about this 'ecosystem within an ecosystem' and maximising soil's capabilities and implies new roles and rules for humans within these ecologies.

Though urban soils isare traditionally regarded by municipal and infrastructure bodies as a technical material with mechanical properties, awareness as to how to nurture and make use of soil's climate adaptation capacities in terms of carbon and water sequestration as well as providing ample foodshed for urban productive landscapes, has the potential to fundamentally change the way we effectively adapt our urban climates to the weather dynamics of the ongoing global climate crisis. When we choose distinct plant and animal combinations, we are choosing the notional sum of their survival strategies. This statement equally applies to the soil organism.

Increasing basic knowledge about the biological landscape that the urban soil organism represents, has implications with regard to human agency in urban ecologies. NBut new perspectives might ultimately require a counter-intuitive shift away from the anthropocentrism-as-usual that underlies regarding urban soils as having merely mechanical and technical locations qualities towards yielding a new potential towards of non-anthropocentric forms of good governance to which- across the diversity of species that rely on a thriving soil organism as a resource and habitat is core.

This paper analyses how different approaches to the soil organisms frame different perceptions of the human role towards the ecosystem as a whole and the soil organism in particular.

The paper builds on different discussing case studiess from the praxis of artist/researcher Debra Solomon and Urbaniahoeve Design Lab for Urban Agriculture realised in the transdisciplinary field of urban agriculture (UA) and include activities ranging from urban forest garden implementation and related in situ topsoil production and remediation, to art production and dissemination. Drawing upon contemporary art traditions such as land art and conceptual art several methodologies were developed and tested within Solomon's praxis of art production and as related dissemination and visualisation techniques. One of the applied methodologies is Radical Observation, which is a methodology for increasing human observation and awareness of natural dynamics in intervention landscapes. Another methodology that is developed in the artistic praxis of Solomon is building on soil chromatography innovating its magnification and manipulating its expressive format. Specific methods of valorisation of the artistic praxis are discussedcases including asuch as scientific soil study conducted by/with the Wageningen University and Research (WUR) of the DemoTuinNoord (DTN) and a more explorative method topsoil building on with visual methods of observation, , data production and analysis of topsoil conducted by/with soil expert Ruben Borge, both commissioned by Solomon/Urbaniahoeve are included in the survey of case studies and requisite analyses. of the DemoTuinNoord (DTN).

References

A Green Strategy for BLUE: Food and ecological security through 'Deeply Green Urban Agriculture'. - Debra Solomon, as part of BLUE: Architecture of UN Peacekeeping Missions, Malkit Shoshan 2016, Dutch contribution to Venice Architecture Biennial 2016.

Edible Forest Gardens: Ecological Vision and Theory for Temperate Climate Permaculture, Dave Jacke and Eric Toensmeier, 2005

Staying with the Trouble, Making Kin in the Chthulucene, Donna J. Haraway, 2016, ISBN: 978-0-8223-6214-2

To Mulch or not to mulch: betekenis van stadslandbouw voor bodemkwaliteit the significance of urban agriculture for soil quality [in Dutch], article by Paul Rimkens WUR (Wageningen Universiteit en Research) and Debra Solomon (Urbaniahoeve) on Urbaniahoeve's situated soil building practice and the results of a recent scientific study on these soils. http://www.eetbaarrotterdam.nl/2016/10/to-mulch-or-not-to-mulch-betekenis-van-stadslandbouw-voor-bodemkwaliteit/ (last read 01.i.2017)

From resilience to resourcefulness, Danny MacKinnon and Kate Driscoll Derickson, 2013, Progress in Human Geography, Vol 37 (2) ISSN: 0309-1325

Keywords: governance, ecosystem, non-anthropocentric, urban ecologies, soil organism

Closing the Loop: A Social Innovation Approach to Tackling Food Waste in Canada

Tammara Soma

Ph.D Candidate, Department of Geography and Planning, University of Toronto tammara.soma@gmail.com

Food waste is a complex, multi-scalar problem with far reaching negative environmental, social, and economic impacts. In Canada, it is estimated that \$31 billion worth of food is wasted annually (Gooch et al, 2014). This paper presents findings from the Food Systems Lab, a one-year social innovation lab to address the issue of food waste and food insecurity piloted in the City of Toronto. Thirty participants attended each Lab (a total of three labs in one year) representing various sectors across the food system including retail, farming, food processing, food business, indigenous leaders, faith leaders, chef, civil society, policy makers and more. The participants engaged in mapping exercises, exploratory "research missions" as well as intersectoral group projects. In addition, semi-structured key informant interviews were conducted with 42 stakeholders across the Greater Toronto Area to better understand the root causes of food waste. Findings from the lab demonstrate that a social innovation lab can assist planners on how to better engage with a complex food system problem such as food waste. Furthermore, the paper explores the question of how food is wasted in the different sectors, and identify barriers and opportunities faced by diverse stakeholders to reduce food waste. The paper concludes that a social innovation lab is a useful tool to promote intersectoral collaboration based on systems thinking.

References

Evans-Cowley, J., & Arroyo-Rodriguez, A. (2013). Integrating Food Waste Diversion into Food Systems Planning: The Mississippi Gulf Coast's Newfound Love for Food Waste, Journal of Agriculture, Food System and Community Development, 3(3). Advance online publication: http://dx.doi.org/10.5304/jafscd.2013.033.003

Raja, S., Born, B and J Kozlowski Russel. 2008. A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating, American Planning Association Chicago: Illinois.

Pothukuchi, K., & Kaufman, J.L. (1999). Placing the food system on the urban agenda: The role of municipal institutions in food systems planning. Agriculture and Human Values, 16, 213-224.

Soma, T., & Wakefield, S. (2011). The emerging role of a food system planner: Integrating food considerations into planning, Journal of Agriculture Food Systems and Community Development, 2 (1): 53-64.

Biggs, R., Westley, F., & Carpenter, S. (2010). Navigating the back loop: fostering social innovation and transformation in ecosystem management. Ecology and society, 15(2).

Keywords: social innovation, food waste, Canada, food system, methodology, food systems planning

Municipal Goats: Exploring Agroecological Place-Shaping and Multiple Ruralities in Sierra de Guadarrama (Spain)

Flora Sonkin¹

MSc International Development Studies, Rural Sociology Chair Group - Wageningen University flora.sonkin@wur.nl

A theoretical shift towards a reconceptualization of place as a relational social construction which is plural and open allows us to move beyond an essentialist notion of space as bounded, being part of a movement to rethink how we live in relation to each other and our environments. Seeing (rural) space as a sphere of multiplicity (Massey, 2004, 2005) opens the possibility of recognizing multiple and contested trajectories in place. In the Mediterranean ecoregion, rural social-ecological systems are facing particularly contrasting trends, namely abandonment of mountainous and less productive areas, and land-use intensification of fertile areas. However, in previous moments of economic crisis as in the current, a "back to the countryside" or "neo-rural" movement takes place in Spain. Initiatives aiming at the revitalization of unproductive land or abandoned towns have been appearing all over Spain, particularly in mountainous regions. Most recently, such kind of initiatives are also being developed and fostered by what could be called agroecological municipalism. Through this article I dive into the mountainous socio-ecological territory of El Boalo and Mataelpino (Sierra de Guadarrama, Comunidad Autonoma de Madrid) with relational lens, looking into discourses, social practices and spatial materialities that are shaping and transforming place in an attempt to promote sustainable rural development and agroecology. Responding to a movement of re-peasantisation in the region, the municipality of El Boalo and Mataelpino is developing a series of projects which aim to revitalize agrarian traditions such as pastoralism and extensive grazing, promoting environmental and agricultural education to school children, creating new relations between food production and consumption, community development and public management of waste and natural-resources. Through ethnographic research, I explored human and non-human assemblages related to the Municipal Goatherd project, giving attention to the power relations and politics that come together in the contested interplay between local livestock farming practices and its actors, and agroecological practices stemming from Red Terrae (Intermunicipal Network of Agroecological Territories) and "neo-rural" dwellers coming from Madrid. This paper thus strives to open up space for further understanding how rural places are being shaped and transformed by rural-urban interconnections, contested social practices, and more generally, new forms of 'being-in-common'.

References

Cresswell, T. (2004). Place: A Short Introduction. Blackwell.

Cucco, I. and Fonte, M. (2015) Local food and civic food networks as a real utopias project. SOCIO.HU, 2015 (No. 3). pp. 22-36

Escobar, A. (2001). Culture sits in places: reflections on globalism and subaltern strategies of localization, Political Geography, 20: 139-174.

Gibson-Graham, J.K. (2006). A Post-Capitalist Politics, Minneapolis: University of Minnesota Press

Gibson-Graham J.K. (2008) Diverse economies; Performative Practices for 'Other Worlds'. Human Geography, 32: 613-632.

Gibson-Graham, JK, Cameron J & Healy, S (2016), 'Commoning as postcapitalist politics', in A Amin & P Howell (eds), Releasing the commons: rethinking the futures of the commons, Routledge, London, pp. 192-212.

Massey, D. (1994). A Global Sense of Place, originally published in Marxism Today (June): 24-9; Reprinted in D. Massey Space, Place and Gender, Cambridge: 146-56. Polity Press.

Ploeg, J.D. van der., Wiskerke, J.S.C., (2004). Seeds of Transition: Essays on Novelty Production, Niches and Regimes in Agriculture. European perspectives on rural development, ISSN 2352-5614

Ploeg, J.D. van der. (2007). Resistance of the third kind and the construction of sustainabillity.

Wittman, H., Reframing agrarian citizenship: Land, life and power in Brazil. Journal of Rural Studies 25, 2009, pp.120-130.

Keywords: agroecology, municipalism, networks, practices, politics, sustainable rural development

Liberty or Lunacy? Exploring Framings of Self-reliance in Foodscapes

Stephanie Nuria Spijker

FWO/KU Leuven, Leuven, Belgium nuria.spijker@kuleuven.be

Foodscapes, the ways and places in which individuals interact with food, contain a myriad of practices. This paper focuses on those practices related to growing food, such as urban farming, community supported agriculture, permaculture and so on. Some of these practices have a goal to be more self-reliant and thus stray from the conventional. Self-reliant practices – and at times the notions of self-reliance overall – are variably framed as anything from innovative and eco-friendly, to insane and subversive. This paper asks: while popular framings, particularly those presented through the media, seek to present these practices as distinct entities, with some being "better" or "worse", is there some frame alignment among the different practices? To answer this I explore how different practices are popularly framed, and contrast that with frames from people actually involved in the practices, to see where frames are incongruous and where they align. Top media search results on practices such as permaculture, community gardening, transitioning and prepping are compared to empirical evidence gathered from in-depth interviews with individuals involved in these practices. I argue that there are several frame alignments between practices that, on the surface, appear to be totally different and yet have shared features in terms of underlying values, motivations and goals. It is therefore necessary to consider looking beyond popular framings when examining self-reliance, foodscapes and the practices that shape them.

References

Schatzki, T. R. (2012). A primer on practices. In Practice-based education (pp. 13-26). Sense Publishers.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. Advances in experimental social psychology, 25(1), 1-65.

Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., ... & Dirilen-Gumus, O. (2012). Refining the theory of basic individual values. Journal of personality and social psychology, 103(4), 663.

Crivits, M., & Paredis, E. (2013). Designing an explanatory practice framework: Local food systems as a case. Journal of consumer culture, 13(3), 306-336.

D'Angelo, P., & Kuypers, J. A. (Eds.). (2010). Doing news framing analysis: Empirical and theoretical perspectives. Routledge.

Hertog, J. K., & McLeod, D. M. (2001). A multiperspectival approach to framing analysis: A field guide. Framing public life: Perspectives on media and our understanding of the social world, 139-161.

Keywords: Self-reliance, foodscapes, framings, self-reliant practices

Roof Water-Farm - From the pilot plant to large scale implementation

Anja Steglich¹, Angela Million¹, Vivien Franck¹, Grit Bürgow¹

¹ Berlin Institute of Technology – TU Berlin

a.steglich@isr.tu-berlin.de

Water-farming technologies such as aqua- and hydroponics are resource- and space-efficient, while at the same displaying great productivity. This makes it suitable for roof top farms in urban settings. The ROOF WATER-FARM (RWF) research project builds on the benefits of water-farming techniques and takes this practice one step further. The interdisciplinary research association explores ways of combining building-integrated wastewater recycling with water-farming via aqua- and hydroponics.

The results from the first three years of research confirmed the general feasibility of both RWF technology and transferability. RWF is now in the second research phase which focuses on the transition of the pilot plant to large scale implementation. Questions at the heart of the research are:

- Which factors are needed for a successful implementation?
- What are the objectives of the construction industry and its investors?
- How do future implementations influence neighbourhoods and stakeholder networks?

The RWF concept implies the embedding of different industries such as the water recycling and treatment industry and the food marketing and distribution industry with urban development. Consequently, institutional and legal frameworks must be adapted accordingly to this innovative technology.

RWF faces several challenges in creating structural change towards more sustainable food systems. These include the development of operator contracts with building owners, operational models for food distributors and official permits and licenses for the distribution of products, as well as and labelling and certification.

Reaching the next innovation phase from pilot plant towards regular operation requires a series of actions. The formation of a RWF competence centre promises great potential in this case. It can serve as the single point of contact for all inquiries and aggregate all relevant RWF knowledge. In addition, the competence centre can pro- mote the dissemination of ROOF WATER FARMs through lobbying and permit activities, thereby attracting potential investors and operators.

References

BMBF Federal Ministry of Education and Research

Keywords: urban farming, aquaponics, wastewater recycling, integrative infrastructure development, urban design

The role of the foodservice sector in tracing a possible pathway for food strategy-building in Venice. An explorative assessment.

Sarah Stempfle¹, Matelda Reho¹

¹University luav of Venice stempfle@iuav.it

The paper explores a theme rather neglected by literature: the role of the foodservice sector in shaping the local foodscape, and its possible contribution for rebuilding more sustainable land-to-table chains, both in terms of providing good and healthy locally-produced food, and of enhancing a responsible and resourceful territorial management. The foodservice sector, which acts as a bridge between food demand, supply and distribution, intercepting many vertical and horizontal dimensions of the food system, gains a particularly relevant influence in the urban environment of Venice (Italy). In fact, it is called to feed the massive tourism flow that daily runs over the city, significantly participating in the food demand and supply building.

Adopting place-based and policy-oriented approaches, the paper discusses a possible pathway for steering strategies towards a more sustainable urban food system for the City of Venice, which has not yet initialized any initiative in this sense, despite having signed the *Milan Urban Food Policy Pact* in 2015. To provide some initial elements of analysis and evaluation, Venice's urban food system is read through the lens of the foodservice sector, identified as the most problematic, but at the same time strategical area for addressing food-related issues.

The research focuses on the historical center of Venice and its islands – where the ties between the tourism and the foodservice are stronger – and implements a multi-method study. The work is organized in three stages. The first stage consists in a rapid and explorative analysis of the Venetian foodservice sector, both in quantitative and qualitative terms, underpinned by existing data and documents, web research and informal discussions with stakeholders. The second stage proceeds with a deeper inquiry guided by an issue-based approach: new information on key-topics are collected through a survey and in-depth interviews. The third stage aims to turn the results in usable knowledge for informed decision-making, individuating relevant areas of policy and action, achievable objectives, possible indicators, and best practices (both local and foreign) to be fostered, enhanced or scaled-up

References

Blay-Palmer, A., Renting, H., & Dubbleing, M. (2015). City-Region Food Systems: A Literature Review. RUAF Foundation.

FAO (2011). Food, Agriculture and Cities: Challenges of Food and Nutrition Security, Agriculture and Ecosystem Management in an Urbanizing World. Rome: FAO Food for the Cities Multidisciplinary Initiative Position Paper.

Fipe (2016). Ristorazione 2016. Rapporto Annuale. Centro Studi Fipe – Confcommercio.

Marsden, T.K. (2013). Sustainable place-making for sustainable science: the contested case of agri-food and urban-rural relations. *Journal of Sustainability Science*, 8(2): 213-226.

Marsden, T.K. & Morley, A. (2014). Sustainable Food Systems. Building a New Paradigm. New York: Routledge.

Matopoulos, A., Vlachopoulou, M., Manthou, V. & Manos, B. (2007). A conceptual framework for supply chain collaboration: empirical evidence from the agri-food industry. *Supply Chain Management: An International Journal*, 12(3): 177-186.

Moragues, A., Morgan, K., Moschitz, H., Neimane, I., Nilsson, H., Pinto, M., Rohracher, H., Ruiz, R., Thuswald, M., Tisenkopfs, T. & Halliday, J. (2013). *Urban Food Strategies: the rough guide to sustainable food systems*. Document developed in the framework of the FP7 project FOODLINKS.

Morgan, K.J. & Sonnino R. (2010). The urban foodscape: world cities and the new food equation. *Cambridge Journal of Regions, Economy and Society,* 3: 209-224.

Prosperi, P., Moragues, A., Sonnino, R. & Devereux, C. (2015). *Measuring progress towards sustainable food cities: Sustainability and food security indicators*. Report of the ESRC financed Project "Enhancing the Impact of Sustainable Urban Food Strategies". Watts, D.C.H., Ilibery, B. & Maye, D. (2005). Making reconnections in agro-food geography: alternative systems of food provision. *Progress in Human Geography*, 29(1): 22-40.

Keywords: Local foodscape, Foodservice sector, Mass tourism, Sustainable land-to-table chains, Urban food strategy

Political Ecology, as Theory and Praxis, for Livelihood Sovereignty

Mark Tilzey

Centre for Agroecology, Water and Resilience, Coventry University, UK mark.tilzey@coventry.ac.uk

This paper deploys a strategic perspective on possible elements of a path towards de- or no-growth solidarity. Here the centrality of the state-capital nexus – modern sovereignty – as both the major obstacle but also, through transformation, the means to secure livelihood sovereignty, is emphasized. Counter-hegemony will not be secured 'top down'; but neither will it be secured merely from the 'bottom up', 'without taking power'. Rather, a dual or double power strategy seems to be required, in which material autonomy from the state-capital nexus is expanded in the form of the solidarity economy and the commons, while, concurrently, the modern state is transformed by counter-hegemonic forces, its powers dispersed downwards, and its jurisdictional authority exercised in implementing the social relational changes – land redistribution, agroecological production, etc. – necessary for livelihood sovereignty.

The paper proposes political ecology as the key theoretical frame for understanding the dialectically related dynamics of the 'political' and the 'ecological', and the contradictions that arise in both these domains as the result of exploitative social-property relations. Political ecology is also proposed as a normative resolution to these crises of and for capital, the latter meaning that the limits of reformism, as variegated capitalism, are rapidly approaching as an epochal crisis for this mode of domination. This normative political ecology, as praxis, one that reflexively brings into alignment, for sustainability and resilience, the 'political' and the 'ecological', accords with new and radical mobilizations of the subaltern majority in the South, particularly. These mobilizations consider capitalist social relations themselves, as market dependence, to be a poor satisfier of the socio-natural foundations of life, generating unneeded affluence for a minority, whilst undermining the bases of sustainable need satisfaction for the great majority. The antidote to this condition, one arising from the suffocating stranglehold of the core-periphery dialectic as imperialism, lies in the fracturing of market dependence through new mobilizations for egalitarian and ecological 'development', involving the key issues of land and national sovereignty. I suggest that the requirement for thoroughgoing transformation of capitalist social-property relations, towards democratic and devolved common stewardship of the means of livelihood, should be termed livelihood sovereignty.

References

Bhaskar, Roy 1986 Scientific Realism and Human Emancipation. London: Verso

Brenner, Robert 1985 The Agrarian Roots of European Capitalism. Cambridge: Cambridge University Press

Burkett, Paul 1999 Marx and Nature. New York: Macmillan

de Janvry, Alain 1981 The Agrarian Question and Reformism in Latin America. Baltimore: Johns Hopkins University Press.

Poulantzas, Nicos 1974 Classes in Contemporary Capitalism. London: Verso

Keywords: Political Ecology, State-Capital Nexus, Praxis, Livelihood Sovereignty

Redesigning food systems for economic, social, and ecological benefit in Chiapas, Mexico

Emilio Travieso

Department of International Development, University of Oxford emilio.travieso@qeh.ox.ac.uk

After regaining their ancestral lands in Chiapas, Mexico, from plantation owners in the 1990s, the Mayan Tseltal people, accompanied by Jesuits and other collaborators in the Misión de Bachajón, have continued to build their full sovereignty. This paper, based on seven months of ethnographic research and ongoing participatory action research, explores how the wider project of sovereignty is made viable through a "re-booted" food system design - a sophisticated, post-capitalist "middle peasant" model that combines agroecology, solidarity economy and social economy. On the one hand, the things that are essential for the community's reproduction – land, food, natural resources and community service work - are withdrawn from the sphere of market commodification. At the same time, though, the Misión's group of cooperatives and social businesses, Yomol A'tel, creatively engages national and global markets to sell coffee and honey from a position of strength. Full vertical integration (through a roasting plant and a chain of gourmet urban cafés) not only gives access to significant profits (which are reinvested as social property), but also allows Yomol A'tel to circumvent the stock market's financial speculation, and thereby determine a stable (not just higher) price for green coffee. The model goes well beyond "fair trade" to achieve very significant economic upgrading, in a way that not only translates into benefits for people (in terms of wealth, capabilities, equity and social-cultural reproduction) and services to and from ecosystems, but creates a positive feedback loop whereby the three dimensions reinforce each other. Thus, the model creates environmental sustainability by building social power. At the same time that the model is designed to foster Tseltal "resourcefulness," it also contributes to Mexican food sovereignty (by supplying domestically roasted coffee) and to worldwide food security (through the protection of maize biodiversity and other ecosystem services). While it required significant multi-sector collaboration to get started, the model is showing signs of success, and is currently being replicated in other parts of Latin America. While the model is fundamentally rural, understanding its logic and its implications can contribute to the search for new possibilities in sustainable food planning more broadly.

References

Gudeman (2008) Economy's Tension;

Li (2015) "Is Food Sovereignty Possible Here?";

Borras et al (2015) "Land and food sovereignty";

Barrientos et al (2011) "Economic and social upgrading in global production networks";

Altieri and Toledo (2011) "The agroecological revolution in Latin America";

Haxeltine et al (2011) "Transformative Social Innovation"

Keywords: food sovereignty; social and solidarity economy; agroecology; transformative social innovation; Chiapas, Mexico

Ghana's Urban Change effect on urban agriculture: Farmers' Adaptation Strategies in Accra

Michael Tuffour

Institute of Statistical, Social and Economic Research, University of Ghana mktdate@gmail.com

Several studies have suggested and proven that urban change or urbanization comes with scarcity and high cost of land. This makes it very difficult to have enough or available agricultural lands for farming in the cities. When there is an urban change, urban farmers are "crowded out" into the peri – urban centres and rural areas since urban lands for agriculture competes with housing, infrastructure and others for its usage. The situation is more intense in most of part of Africa and Ghana in particular where there is no comprehensive policy for urban agriculture for its cities, including its capital, Accra. Notwithstanding the effect of increase in the pace of urbanization in the city of Accra, urban farmers continue to remain in the city and even increase in number. The study therefore examines adaptation measures urban farmers use to respond to the urban change in the city which affect their on-farm decisions. This is conducted through a mixed method approach. It first employs an exploratory research approach which initially collects data from urban farmers, and second an explanatory approach to provide an improved understanding of the various factors which influence farmers' adaptation to the urban change. Initial analysis from qualitative data collected indicate that Accra has gone through tremendous changes between the past 5 and 30 years which affects urban agriculture, with economic and social transformation dominating the changes. These changes are in the form of land use, water use, infrastructural development and growth in demand for urban agriculture produce. The changes have resulted in farmers' employing different strategies in their production, marketing and financial in order to minimize challenges and enhance their benefits.

References

Obeng-Odoom, F. (2009). Globalizing City. The Urban and Economic Transformation of Accra, Ghana. Regional Studies, 43(7), 997-998. doi:10.1080/00343400903132635

Mougeot, L. J. (2000). Urban agriculture: definition, presence, potentials and risks. In N. Bakker, M. Dubbeling, S. Guendel, U. Sabel Koschella, H. de Zeeuw (Ed.), Growing Cities, Growing Food, Urban Agriculture on the Policy Agenda. (pp. 1-42). Feldafing, Germany DSE.

McGranahan, G., & Satterthwaite, D. (2014). Urbanisation concepts and trends. Retrieved from London

Zezza, A., & Tasciotti, L. (2010). Urban agriculture, poverty, and food security: empirical Evidence from a sample of developing countries. Food Policy, 35(4), 265 - 273.

Van Ginkel, H. (2008). Urban Future Pressure Point (pp. 32 - 33). London: MacMillan

Van Veenhuizen, R. (2006). Introduction to urban agriculture Cities farming for future, Urban Agriculture for green and productive cities (pp. 2 - 17). Leusden, The Netherlands: RUAF Foundation, IDRC, Canada and IIRR publishers, the Philippines.

Arku, G., Mkandawire, P., Aguda, N., & Kuuire, V. (2012). Africa's Quest for food security: what is the role of urban agriculture? Retrieved from Harare:

Keywords: Ghana's urban change, urban agriculture, Farmer's Adaptation

Local collectives, community economy and autonomous food systems: the case of the Free Café (Groningen, NL)

Ciska Ulug¹, Elen-Maarja Trell

¹Faculty of Spatial Sciences, University of Groningen, Groningen, the Netherlands ciskaulug@gmail.com

This paper explores the intersections between the ideas of the community economy and autonomous food systems in the context of emerging local collectives. By applying Gibson-Graham's community economy framework to a citizens collective engaged in reducing food waste and providing free meals, the relevance of sustainable and responsible action along all steps of the food chain is emphasized. The paper discusses an example of the Free Café, a citizen-driven initiative in Groningen, the Netherlands, that collects and cooks food that would otherwise be thrown out to create and serve a free meal twice a week. By removing all monetary transactions from café procedures, the café not only attempts to create a space where the pressure of money and social status is lifted, but also raise awareness about environmental and societal impacts of food. Through participant observation and in-depth interviews, this research investigates the practices and governance arrangements of this collective, in relation to four points stressed in Gibson-Graham's community economy: what is necessary for survival; appropriation and distribution of social surplus; production and consumption of social surplus; and how the commons is sustained. Results indicate that the "free" elements of the Free Café – not using money and an inclusive and non-hierarchical environment – are essential in its contribution to the community economy and, though food is not the main motivating factor of involved actors, it is instrumental in the Free Café's goals and impacts. These conclusions lead to a further discussion of the potential of such community-led initiatives for micro-transitions towards more responsible and sustainable communities.

References

Dixon, J. (2010). Diverse food economies, multivariant capitalism, and the community dynamic shaping contemporary food systems. Community Development Journal, 46(S1), i20-i35.

Gibson-Graham, J. K. (2006). A Post-Capitalist Politics, Minneapolis: University of Minnesota Press.

Hill, A. (2014). Growing community food economies in the Philippines, PhD thesis, The Australian National University.

Larder, N., Lyons, K, Woolcock, G. (2014). Enacting food sovereignty: values and meanings in the act of domestic food production in urban Australia. Local Environment, 19(1), 56-76.

Wilson, A. D. (2013). Beyond Alternative: Exploring the Potential for Autonomous Food Spaces. Antipode, 45(3), 719-737. doi:10.1111/j.1467-8330.2012.01020.x

Keywords: Community Economy, Local collective, Micro-transitions, Autonomous Food Systems

Planning Resourceful Ways of Living with Sustainable Development Goals

Justyna Urbanczyk

University of Central Lancashire jkurbanczyk@uclan.ac.uk

Contemporary trends in food production and consumption are far from sustainable. Globalisation and industrialisation of agriculture, food processing, overconsumption and large quantities of food waste (Reisch et al. 2013) diminish and decelerate further development. In response to the modern food systems, sustainable everyday living emphasises a resourceful way of living that positively contributes to social, economic and environmental development. Resourcefulness (Derickson and MacKinnon 2013) is characterised by three elements: community engagement in the public dialogue that promotes social equality, equity and distribution of resources; forms of learning and implementation of local priorities; and, a united approach to planning that considers both the local and global implications. Everyday choices affect the health and well-being of individuals and the social systems around them. Health improvement is thus a major goal because of its effect on mental and physical well-being, quality of life and social development. Sustainable Development Goals (SDGs) (UN 2015) are a united global effort to promote well-being and quality of life, accelerate social development and environmental protection while promoting equality, equity, justice and global collaboration. Food consumption affects health and well-being and contributes to further socio-economic development. Patterns in food consumption vary across the globe based on socio-cultural, economic and environmental aspects, such as values and beliefs, wealth and the availability of resources based on location (Vermeir, Verbeke 2006). Although attitudes and behaviours are complex (Bandura 1998), both aspects of consumption are directed by the self-interests of individuals (Ajzen 1985). Thus, individual choices, and their motives, can be a means of enhancing social development and introducing sustainable consumption patterns. As a way forward, resourcefulness redirects the focus from impulsive to thoughtful food consumption. Resourcefulness requires planning but no fundamental changes to behaviours or attitudes; it encourages active involvement in the local and global development through achievable and applicable goals. Resourceful food consumption encourages socio-economic development by supporting local producers while also lowering the environmental impact by reducing the carbon footprint. Therefore, sustainable, or resourceful, living is a way of applying SDGs through everyday choices to achieve a sustainable society.

References

Ajzen, I., 1985. From intentions to actions: A theory of planned behavior. In Action control (pp. 11-39). Springer Berlin Heidelberg.

Bandura, A., 1998. Personal and collective efficacy in human adaptation and change. Advances in psychological science, 1, pp.51-71.

Derickson, K.D. and MacKinnon, D., 2013. From resilience to resourcefulness: A critique of resilience policy and activism. Progress in Human Geography, 37(2), pp.253-270.

Reisch, L., Eberle, U. and Lorek, S., 2013. Sustainable food consumption: an overview of contemporary issues and policies. Sustainability: Science, Practice, & Policy, 9(2).

United Nations, General Assembly, 2015. Transforming our world: the 2030 agenda for sustainable development. A/RES/70/1 (21 October 2015), available from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

Vermeir, I. and Verbeke, W., 2006. Sustainable food consumption: Exploring the consumer "attitude-behavioral intention" gap. Journal of Agricultural and Environmental ethics, 19(2), pp.169-194.

Keywords: sustainable living, resourcefulness, food consumption and production, SDGs, planning

Food forest - promising emerging practice for sustainable urban food systems?

Noël Van Dooren¹, Dick van Dorp¹
¹Van Hall Larenstein Velp NL
noel.vandooren@hvhl.nl

In the Netherlands, a growing number of initiatives can be noted that address themselves as 'voedselbos' or food forest, or more general as agroforestry. Such initiatives generally orient themselves on the nearby city, as their legitimaticy relates to changed perceptions of food and agriculture within the urban culture. In the Netherlands with its high land value and strong competition on every square metre, such legitimacy is essential.

In the context of our professorship studying sustainable foodscapes, we tend to take these initiatives seriously, and to carefully search for how these initiatives can become a steady part of the landscape in terms of economy and planning.

In our experience, many of these new initiatives rely on idealism, or even the strong belief that the road as proposed simply is good. This enshrouds what we think is important, and that is a debate on how such food forests would function in a regional food system, and in what way they can be designed to fit in regional landscapes. That requires to rethink such food forests and to describe them as rather regular farming systems, to be compared with other ways of farming and producing food. That does not throw away the innovation and wider services they bring for nature and society, but enables to understand them as firms with an economic rationale. It also requires to look at such food forests as components of a bigger landscape, more than the very small experiments we see today. From the perspective of landscape planning, landscape architecture and urbanism such food forests become to be very relevant, if they can be multiplied to systems of hundreds of hectares, and convincingly can show to be a serious alternative for traditional farming on a regional scale. If yes, they may propose an entirely new agriculturural landscape, and in terms of a food system, entirely new chains of food towards the nearby city. The paper presents insights from literature combined with conclusions from our debate with a set of initiators, and first steps towards design and planning on the regional scale.

References

Richard Heinberg and Michael Bomford (2009) The Food and Farming Transition: Toward a Post Carbon Food System Santa Rosa: Post Carbon Institute

Erisman J.W. e.a., 2016. Agriculture and biodiversity: a better balance benefits both. AIMS Agriculture and Food, 1(2): 157-174.

Manifest Natuurinclusieve Landbouw. Op weg naar Nederland als Levend Lab. januari 2017.

PBL, 2010. Wat natuur de mens biedt: Ecosysteemdiensten in Nederland. Rapport | 09-03-2010 Den Haag.

Shepard, M., 2013. Restoration Agriculture. Real world permaculture for farmers. Acres U.S.A., Inc. 344 pp.

Smits M.J. en Linderhof V., 2014. Circulaire economie in de landbouw. Een overzicht van concrete voorbeelden in Nederland. LEI Rapport LEI 14-119. Wageningen.

Keywords: food system, regional, design, agroforestry, city

A food perspective on urban green space

Noël Van Dooren¹, Marianne Schulhoff¹

¹Van Hall Larenstein Velp NL noel.vandooren@hvhl.nl

Future regional food systems will have to build upon several strategies. They will certainly need the engagement of more traditional agricultural practices, transformed towards a more sustainable character, and this will have to be combined with innovative practices such as urban agriculture. Apart from that, in recent years a do-it-yourself practice of collecting food emerged, or revived.

In our Vruchtgebruik project (the name being a Dutch term for both usufruct and profiting from fruit harvest) we research a relatively blank spot within the discourse on regional food systems, which addresses a substantial reservoir: the potential role of fruit in public green space. This starts by investigating ways to intensify the use of existing fruit as present in public space, but quickly moves on towards looking at public green space as what is in fact an agroforestry area, expected to deliver a substantial food production, here defined in terms of fruit, nuts and berries. Together with 6 Dutch local administrations, this action research project documents existing capacity, designs new productivity, and studies successful organisation strategies that contribute to sustainable management and harvest.

In theoretical terms, this project reflects on the notion of the common, and introduces challenging new questions towards the design of public space: to what extent producing food in public space comes with privatization of space, or is it the other way around: expanded fruit production invites more people into public green space?

The project proposes a fundamental new perception of public green space, in which all current values and expectations are to be continued, but a new 'task' must be integrated: food production. The project will run until 2018. The paper will reflect on the in between results, and will be used as a way to discuss the project in an international perspective, by that setting the agenda for the second half.

References

Richard Heinberg and Michael Bomford (2009) The Food and Farming Transition: Toward a Post Carbon Food System Santa Rosa: Post Carbon Institute

Simon Franken, 'Maak de publieke ruimte wat meer privaat' in Sociale Vraagstukken (april 2013)

Bomenstichting Inventarisatie buurtboomgaarden 2011

Darrin Nordahl (2014) Public produce. Cultivating our parks, plazas and streets for healthier cities Washinton DC: Island Press

Bonnie Bartlett (2012) 'Revealing the hidden harvest. Prospects and challenges for urban fruit trees projects' In: Current Issues Papers

Mundraub.org (2012) 'Sharing our common fruit' in: David Bolletier (Ed.) The Wealth of the commons. A world beyond market and state Amherst, Levellers Press

Napoli, Lisa-Marie (2015) "Public Deliberation as a Tool for Managing the Commons: A Case Study of the Bloomington Community Orchard," Journal of Public Deliberation: Vol. 11: Iss. 2, Article 8.

Keywords: food system, design, commons, fruit, city

Pathways towards regenerative food systems: small-scale farmers at the centre of the transitions

Elise Wach¹, Santiago Ripoll², Rachael Taylor²

¹Institute of Development Studies at the University of Sussex; Centre for Agroecology, Water and Resilience, Coventry University; Whitehawk Community Food Project, ² University of Sussex, elisew@ids.ac.uk

Now more than ever, evidence overwhelmingly concludes that our food systems are not currently working to nourish our populations, ecosystems, economies, or social connections. Agroecological approaches have been shown as having potential to address many of these problems in the mainstream food system, particularly when combined with concepts of food sovereignty, which localise control, and place producers and consumers at the centre of decision-making. However, knowing the principles and the end goals, while invaluable, is not enough. We need to transition from the food systems we currently have to the food systems we envision for future generations. In line with principles of food sovereignty, that transition needs to be led and owned not by outside experts or researchers but by small- and medium-scale farmers and consumers. It must also respond to the current level of globalisation of our food systems. For example, a decision to localise consumption in one country can greatly effect export-focused producers in another. In order to address these challenges, a consortium of farmer-led organisations in Nicaragua (Programa Campesino a Campesino), Senegal (Forum for an endogenous rural development) and the UK (the Land Workers Alliance) along with the Institute of Development Studies at the University of Sussex are engaging in participatory farmer-led research. Based on their own knowledge and experiences as producers, a group of small and medium scale farmers in each country is engaging in an analysis of their food systems, identifying areas of research, analysing findings and, in collaboration with other relevant actors, are developing actionable strategies to transition to more regenerative and just food systems. They are also learning from the similar and contrasting challenges and opportunities experienced by farmers in the other country contexts, and reflecting on the interconnectedness between food systems. Research and deliberation topics to date have included access to land for small-scale producers, alternative economic systems, the role of local governments in contributing to transitions, indigenous knowledge sharing approaches and intergenerational differences in motivations and perspectives, amongst others. The project draws on principles of complex systems and participatory research and decision-making approaches including deliberative processes, complex systems mapping and principles of food sovereignty and agroecology. In the proposed paper and session, we will share our experiences in implementing this unique combination of methods and approaches and the specific steps that farmers plan to take in each of the three countries to practically move towards more regenerative and just food systems. Alternatively, we could share in detail the research and deliberations related to access to land for small-scale farmers in the UK.

References

Burns, D. and Worsley, S. 2015 Navigating complexity in international development. Practical Action Publishing

Carpini, M.; Cook, F. and Jacobs, L. (2004) "Public Deliberation, Discursive Participation, and Citizen Engagement: A Review of the Empirical Literature, Annual Review of Political Science 7: 315-344

Holt-Gimenez, E.; Bunch, R.; Vasquez, J.I.; Wilson, J.; Pimbert, M.P.; Boukary, B. and Kneen, C. (2010) '~Linking Farmers' Movements for Advocacy and Practice', Journal of Peasant Studies 37.1: 203-36

Leach, M.; Scoones, I. and Stirling, A. (2007) Pathways to Sustainability: An overview of the STEPS Centre approach, STEPS Approach Paper, Brighton: STEPS Center at IDS

Pimbert, M. (2007) Transforming Knowledge and Ways of Knowledge for Food Sovereignty. IIED: London. http://pubs.iied.org/14535IIED.html

Pretty, J., Noble, A., Bossio, D., Dixon, J., Hine, R., Penning de Vries, F. and Morison, J. (2006) "Resource-Conserving Agriculture Increases Yields in Developing Countries", Environmental Science and Technology, 40.4: 1114-1119

White, B., Saturnino, Borras M., Hall, R., Scoones, I. & Wolford, W. (2012) The new enclosures: critical perspectives on corporate land deals, Journal of Peasant Studies, 39:3-4, 619-647.

Keywords: Agroecology, Food Sovereignty, Participatory Research, Deliberative Process, Land Access, Transitions

Evidence-based Food System Design: Site-specific Planning for Linking Urban Food Consumption with Metropolitan Production

Dirk Wascher¹, Melika Levelt², Herman Agricola¹, Jessica van Bossum², L. Jeurissen & Lisa ten Brug³

¹Wageningen Environmental Research, Wageningen UR, ²Hogeschool van Amsterdam, ³Veldacademie/Aeres Hogeschool Almere

While food is yet a major political priority in the Metropolitan Region Amsterdam (MRA), the food sector faces a number of growing challenges. From an economic viewpoint, the farmers are not anymore able to sustain current business models and employment, there are growing pressures on agricultural lands and on the mobility infrastructure due to expanding urban development. At the same time there are new trends towards on-line shopping and the supply with ready-made food. Obesity has become the number one public health challenge in the region, and access to affordable healthy and nutritious food is unequally divided. Finally, the MRA food system places enormous burdens on local and global ecosystems, and is a major contributor to climate change.

Presenting initial results from the research project 'evidence-based Food System Design', this paper focuses on building up 'the evidence' for developing future scenarios and design proposals at the level of 'Smart Food Districts'. Relying on a string of tools, most notably those developed in the EU Project "FOODMETRES", we compile a set of six data layers: Food streams (production – consumer – waste – new values), Food actors (business locations, hospitals, restaurants), Food logistic network, Circular Economy hotspots, and Ecological footprint & ecosystem services

In view of the need to focus, specific locations within the MRA will be identified which offer potential for designing Smart Food Districts.

References

Fader, M., D. Gerten, M. Thammer, J. Heinke, H. Lotze-Campen, W. Lucht, and W. Cramer, 2011. Internal and external greenblue agricultural water footprints of nations, and related water and land savings. Hydrology and Earth Systems Science 15:1641–60. doi:10.5194/hess-15-1641-2011.

Gerbens-Leenes, P. W., and S. Nonhebel. 2002. Consumption patterns and their effects on land required for food. Ecological Economics 42:185–99. doi:10.1016/S0921-8009(02)00049-6.

JRC (Joint Research Centre). 2012. Life cycle indicators framework. Development of life cycle based macro-level monitoring indicators for resources, products and waste for the EU-27. European Commission, Joint Research Centre, Institute for Environment and Sustainability.

Lang, T. 2010. Crisis? What crisis? The normality of the current food crisis. Journal of Agrarian Change 10:87–97. doi:10.1111/joac.2010.10.issue-1.

Morgan, K. 2013. The rise of urban food planning. International Planning Studies 18 (1):1–4. Routledge, 5. doi: 10.1080/13563475.2012.752189

Steel, C. 2008. Hungry city—How food shapes our lives. London: Chatto & Windus.

Wascher, D., I. Zasada, and G. Sali. 2015b. Tools for Metropolitan food planning: A new view on the food security of cities. In The governance of city food, eds. M. Deakin, D. Diamantini, and N. Borelli, 68–100. Utopie 35–Globalizzazione.

Wascher, D. M., M. Kneafsey, and M. Pintar, eds. 2015a. FoodMetres—Food planning and innovation for sustainable Metropolitan regions. Synthesis report 2015, Wageningen, The Netherlands.

Keywords: food chain, innovation, logistics, footprint, scenarios

Cooking up Revolution: Recipes for Food Democracy

Deirdre (Dee) Woods

Community Practitioner and Food Actionist Board Member, London Food Board BBC Cook of the Year 2016 London Slow Food Ambassador 2016 UK Food Sovereignty Movement

urbansustainablefood@gmail.com

Just as there is no cookbook that can train a good cook. There is also no single recipe that can produce a meal that meets the needs of everyone. In so many cultures hot sauce, that in itself is as varied as its ingredients and how it is made, compliments and makes a good meal. The food revolution will be achieved as a coming together of various food movements and social movements, in many different ways.

There are fundamental questions for food and social movements. How do we realise the right to adequate and culturally appropriate food for everyone? How do we create an active food citizenship, from consumers whose food choices are dictated by price, and accessibility over its health and sustainability qualities? How do we create a food system that values diversity as its resourcefulness? How do we go about co-producing an inclusive food system where the poor, the hungry and oppressed are participants in the strategies and policy development that impacts on their lives?

An interactive cooking class using a combination of vegetables, spices and herbs and multicultural approaches to food preservation through fermentation and pickling; will form the basis for an exploration into food democracy. Seeking answers to these fundamental questions it will look at some of the ingredients, processes and catalysts for transformation to create an active food citizenship. It will draw on the experiences of community led food policy development and lobbying in London. Looking at UK food movements within an urban context and asking what next, the session will be shaking up race, class, gender and other flavours into the mix of what has been so far in the UK, largely white, middle class and privileged cooking pots and tables.

Keywords: Grassroots, Practitioner, Community, Hands On, Intersectional

Rural Urban Nexus: Sustainable land use through integrated, city region food strategies

Stephanie Wunder

Ecologic Institute, Berlin, Germany stephanie.wunder@ecologic.eu

This presentation will show how the development of integrated city region food strategies can serve as an innovative tool to (re-)build a sustainable nexus between rural and urban areas.

The results are based on the ongoing research project "Rural Urban Nexus - Global sustainable land use and urbanisation" that aims to develop approaches and policy recommendations for an integrated rural and urban development and sustainable land use. The project is funded by the German Federal Environment Agency (UBA) and the German Federal Ministry for the Environment (BMUB) and carried out by ICLEI, TU Berlin and Öko-Institut under the lead of the Ecologic Institute.

The project developed an approach called "NEXUS2", which argues that in order to achieve sustainable land use it needs not only a nexus approach between different sectors (such as the water-land-energy-food nexus), but also needs a regional nexus perspective connecting urban and rural areas.

We argue that the development of city-region food strategies that aim to increase the share of regional food production and consumption is a particularly suitable way of implementing this approach i.e. due to two reasons:

- 1. Creating a city-region food strategy brings together relevant stakeholders within the municipality that usually do not closely cooperate with each other (environment, health, urban and land use planning, public procurement, food waste reduction etc). This also enhances the overall integrated thinking and can be a door opener for other processes that require close rural and urban collaboration (see e.g. UN Sustainable Development Goals 11, 12, 2 and 15)
- 2. Regional food production and food supply is high on the public agenda. Developing regional food strategies is hence a good opportunity to achieve broad involvement of the public an important element for sustainable development. Reconnecting people to their food production is at the same time also essential to solve environmental and social problems in the food system (closing nutrient cycles, preventing land degradation, fighting obesity, food waste, unsustainable and resource intense global land use etc.).

To show how the concept can be used in practice the project analyzed what policy instruments as well as planning approaches cities and regions can use (e.g. including city region food systems, integrated regional development strategies, green infrastructure strategies, landscape approach etc.). We also analyzed international best practice case studies in order to gain insights in favourable governance approaches and other success factors. The results will be presented at this presentation.

References

Political documents (SDGs, New Urban Agenda, Milan Urban Food Policy Pact etc.) as well as academic development concepts and theories and according literature (continuous productive urban landscapes, city region food systems, landscape approach etc.)

Keywords: rural urban nexus, sustainability, land use, city region food strategies, SDGs

Performing collaborative consumption: A case-study of food sharing app Olio

Orlena Yee

OAS, London, UK omyee@hotmail.com

With much of the literature focusing on sharing economy and collaborative consumption as technology enabled non-ownership models of resource circulation standing as potential alternatives to market economy models of exchange, this paper aims to contribute to a more ethnographic understanding of collaborative consumption emerging from everyday acts of food sharing. Grounded in performance theory, a case study approach is employed, using Olio, a food sharing app, as a case of collaborative consumption. With the fundamental underlying assumption that understandings of the world in which we live are jointly constructed through social interaction, a performance approach enables an understanding of collaborative consumption based on the actions, motivations and intentions of the actors involved as well as the structure and context as the event takes place. The following questions are addressed in this paper. How is collaborative consumption via food sharing app Olio performed? More specifically, what is the relationship between non-ownership and ownership and how are these tensions negotiated in collaborative consumption? What can it tell us about collaborative consumption? Using autoethnography, semi-structured interviews and participant observation, performances of ownership and non-ownership were identified. Based on these performances, I argue that new understandings of what non-ownership and ownership mean to the performers have been co-created through the social interactions that emerged during the performances.

Applying the findings from the case-study contributes to an understanding of collaborative consumption in which the relationship between non-ownership and ownership are not mutually exclusive and in fact, both may be required in order for a successful exchange to take place. Furthermore, the tensions between non-ownership and ownership are negotiated through performance, highlighting the importance of meaningful and potentially transformative social interactions in collaborative consumption. As such, these findings challenge literature that positions collaborative consumption as a non-ownership alternative to ownership models of market exchange and questions analyses of collaborative consumption that do not give sufficient weight to the social relations created.

References

Arnould, E. J. & A. S. Rose 2016. Mutuality Critique and substitute for Belk's 'sharing'. Marketing Theory 16, 75-99.

Bauman, R. & C. L. Briggs 1990. Poetics and Performance as Critical Perspectives on Language and Social Life. Annual Review of Anthropology, 59.

Belk, R. 2007. Why Not Share Rather Than Own? The A of the American Academy of Political and Social Science 611, 126-140.

Hine, C. 2015. Ethnography for the internet'ø: embedded, embodied and everyday. London, England: Bloomsbury Academic.

Kennedy, J. 2016. Conceptual boundaries of sharing. Information, Communication & Society 19, 461-474.

Richardson, L. 2015. Performing the sharing economy. Geoforum 67, 121-129.

Scaraboto, D. 2015. Selling, Sharing, and Everything In Between: The Hybrid Economies of Collaborative Networks. Journal of Consumer Research 42, 152-176.

Schor, J. B., C. Fitzmaurice, L. B. Carfagna, W. Attwood-Charles & E. D. Poteat 2016. Paradoxes of openness and distinction in the sharing economy. Poetics 54, 66-81.

Keywords: sharing economy, food sharing app, collaborative consumption, mobile app ethnography

Analysing and mapping food systems: How to make the approaches and tools operational and applicable for food governance and planning

Ingo Zasada¹, Alexandra Doernberg¹, Ulrich Schmutz²

¹Leibniz Center for Agricultural Landscape Research (ZALF)

²Centre for Agroecology Water & Resilience (CAWR)

ingo.zasada@zalf.de

As any other field of the policy and planning practice, effective governance and planning of food systems depend on a broad, insightful and reliable knowledge base. Therefore, the session should explore the potentials to make use of analytical approaches, quantified assessments, spatial mapping and modelling exercises for the planning, policy and governance of food systems. It can cover different scales from individual food system actors or commodities, food chains and networks to the (local) food system as the whole and their external interlinkages. Contributions should shed light on the question how quantitative and qualitative data and spatial analyses and maps can serve as knowledge base to inform the policy and planning processes, incl. awareness-rising and agenda setting, policy formulation and target setting, implementation and evaluation.

Following a number of individual contributions, we would like to discuss in working group key aspects and success factors for effective support of food policy and planning. Individual contributions specifically focus on following aspects of data and map use:

- Case study examples, success and failure stories how analyses, data and maps can informs food planning and governance processes
- Insights and specifications of varying practitioner's demands and requirements for robust, decisionrelevant and targeted knowledge and data
- Interplay and trade-offs between comprehension and simplicity of information on the one side and academic rigour and complexity on the other
- Potentials and limitations of information and data bases to encourage democratisation of the food planning process, including aspects of procedural and distributive justice to improve of legitimation, transparency, trust and acceptance of food policies
- Emerging analytical frameworks, novel information and data sources

References

Deakin, M., Diamantini, D. & Borrelli, N. (2015). The Governance of City Food Systems, Fondazione Giangiacomo Feltrinelli, Milan.

Peters, C.J., Bills, N.L., Lembo, A.J., Wilkins, J.L. & Fick, G.W. (2009). Mapping potential foodsheds in New York State: A spatial model for evaluating the capacity to localize food production. Renewable Agriculture and Food Systems 24, 72-84.

Tregear, A. (2011). Progressing knowledge in alternative and local food networks: Critical reflections and a research agenda. Journal of Rural Studies 27, 1-12.

Viljoen, A. & Wiskerke, J.S.C. (2012). Sustainable Food Planning: Evolving Theory and Practice. Wageningen Academic Publishers, Wageningen.

Wascher, D., Kneafsey, M., Pintar, M. & Piorr, A. (2015). Food Planning and Innovation for Sustainable Metropolitan Regions. FOODMETRES Synthesis Report.

Zasada, I., Schmutz, U., Wascher, D., Kneafsey, M., Corsi, S., Mazzocchi, C., Monaco, F., Boyce, P., Doernberg, A., Sali, G. & Piorr, A. (forthcoming). Food beyond the City – Analysing Foodsheds and self-sufficiency for different Food System Scenarios in European Metropolitan Regions. City, Culture and Society.

Keywords: Food system, Food Planning, Measurement, Indicators, Data, Knowledge

From urban greening via urban agriculture to urban agritecture - a comparative study between Shanghai and New York

Hemeng Zhou

CMS, Berlin, Germany zhouhemeng@hotmail.com

With the urbanization, urban greening as well as urban agriculture has played an increasingly important role in big and mega-cities, especially in urban centers. Nowadays, limited by land resources, urban greening and urban agriculture have the trend to develop vertically, to fill the gap of the huge demand from citizens directly in city centers.

This paper aims to research the development from urban greening via urban agriculture to today's urban agritecture (agriculture + architecture); to explore the interrelation and interaction among the increasingly diverse and multi-functional urban greening infrastructure combined with landscape function and food production; and to analyze the feasibility and challenges of urban agritecture in the future - not only for urban agricultural but also for architectural development.

Taking Shanghai and New York as a comparative study, advantages and obstacles during the development process in both cities are analyzed under cultural, social, planning, political backgrounds through literature review and case studies. By interviewing experts and farmers from both cities, the development condition as well as potentials of urban greening, urban agriculture and urban agritecture will be analyzed.

By analyzing this development process, this paper argues that the combination of landscape and food production function will be a future trend for the development of mega-cities that will also construct a new urban food network. Urban greening, urban agriculture and urban agritecture haven't developed linear - they have existed in different time but are developing nowadays at the same time for different purposes and functions. They don't replace but keep supplementing each other, because they have different geographical distributions and functions. So with a sustainable and systematic development planning, they will bring not only greening back into urban centers, but also fresh food network to metropolises!

References

CHEN, D. 2016. How has Shanghai's Future been planned in 1946? Oriental Morning Post.

DENG, C., XIE, B., WU, Y., LI, X. & FU, L. 2010. The Quantitative and Comprehensive Appraisal of Urban Agricultural Sustainable Development in Shanghai. Journal of Natural Resources, 25, 1577-1588.

LING, Y. 2003. Thought and Policy of Urban Agriculture Development. Social Science, 4.

LIU, B., WEN, Q. & LIU, S. 2007. Planning Analysis and Optimization Strategies of Shanghai Green Space System. Urban Planning Forum, 4, 108-112.

WU, J. 2010. Analysis of Optimizing Urban Spatial Structure and its Effects on Environment in Shanghai. China Populaion, Resources and Environment, 20, 345-348.

Keywords: urban greening, urban agriculture, urban agritecture, Shanghai, New York

List of Participants

Alegado, Joseph Edward Anderson, Colin Anderson, Heather Barbillon, Anne Barchiesi, Valeria Baysse-lainé, Adrien Bonati, Sara Bouwman, Laura Brand, Caroline Brandt, Juliane Brem-Wilson, Josh Brisebois, Éliane Buchanan, Christabel Burgos, Sebastian Butterly, Dee Buyck, Jennifer Cao, Ren Caputo, Silvio Chang, Marina Chappell, Jahi Christodoulidis, Konstantinos Claeys, Priscilla Clément, Chantal Colombo, Luca Coulson, Helen D. Mama Dalla Fontana, Michele Daniel, Anne-Cécile Dansero, Egidio Darly, Segolene Darrot, Catherine Dehaene, Michiel de Graaf, Paul De Marchi, Marta de Vries, Jeroen del monte, Beatrice Dezio, Catherine Diesner, Dagmar Doernberg, Alexandra Durrant, Rachael Farrell, Bee Fava, Nadia Ferrando, Tomaso Filippini, Rosalia Forno, Francesca Franklin, Alex Fried, Jana Giambartolomei, Gloria Giordano, Simona Glatron, Sandrine Grey, Robin Guo, Yao Guzman Estrada, Isaac Hagolani-Albov, Sophia Halliday, Jess Hasanov, Mustafa Hasnaoui Amri, Nabil Hebinck, Aniek Heuschkel, Zoe Hilmi, Angela Hopkinson, Alex Hynynen, Ari Ivanegova, Boglarka Jansma, Jan Eelco Kiss, Csilla Kneafsey, Moya Komisar, June Larsson, Marie Laycock, Rebecca Lazzarini, Luca Lemke, Stefanie Levidow, Les Logan, Robert MacKinnon, lain Manganelli, Alessandra Marechal, Gilles

Mattheisen, Emily

jed.alegado@gmail.com colinrayanderson@gmail.com heather@whitmuir.scot anne.barbillon@agroparistech.fr valeria.barchiesi@mail.polimi.it abl@posteo.eu sara.bonati@gmail.com laura.bouwman@wur.nl carolinebrand@hotmail.fr juliane.brandt@tu-berlin.de ab9313@coventry.ac.uk brisebois.eliane@courrier.ugam.c buchanac@coventry.ac.uk s.burgosguerrero@gmail.com dee@landworkersalliance.org.uk jennifer.buyck@univ-grenoblebolahe2007@gmail.com silvio.caputo@port.ac.uk jenmarinachang@gmail.com jahi.chappell@coventry.ac.uk konstantinos.voltas@gmail.com ac4203@coventry.ac.uk chantal.clement@ipes-food.org lucombio@gmail.com CoulsonH1@cardiff.ac.uk communitycentredknowledge@g mdallafontana@iuav.it anne.cecile.daniel@gmail.com egidio.dansero@unito.it segolene.darly@univ-paris8.fr catherine.darrot@agrocampusmichiel.dehaene@UGent.be info@pauldegraaf.eu mardemarmdm@gmail.com geronimo@introweb.nl beatricedlm@libero.it catherine.dezio@gmail.com dagmardiesner@gmail.com doernberg@zalf.de r.durrant@sussex.ac.uk bee@anciensfoodways.co nadia.fava@udg.edu tomaso.ferrando@bristol.ac.uk rosalia.filippini@unimi.it francesca.forno@unitn.it alex.franklin@coventry.ac.uk jana.fried@coventry.ac.uk giambarg@uni.coventry.ac.uk simo giordano@yahoo.it sandrine.glatron@unistra.fr mail@robingrey.com cmarkey@glos.ac.uk isaac.estrada@mespom.eu Sophia.hagolani-albov@helsinki.fi jess@jesshalliday.com m.h.hasanov@rug.nl nabil.hasnaoui@supagro.inra.fr Aniek.hebinck@su.se heuschkel.zoe@fh-swf.de angela.hilmi@coventry.ac.uk ahopkinson@ruralcc.org.uk ari.hynynen@tut.fi ivanegova.boglarka@gmail.com janeelco.jansma@wur.nl magicmoononskye@gmail.com m.kneafsey@coventry.ac.uk jkomisar@ryerson.ca marie.larsson@slu.se r.laycock@keele.ac.uk luca.lazzarini@polito.it Stefanie.lemke@coventry.ac.uk L.Levidow@open.ac.uk loganr2@uni.coventry.ac.uk ab9315@coventry.ac.uk alessandra.manganelli@kuleuven gilles.marechal@agrocampus-

mattheisen@fian.org

Maughan, Chris Maughan, Noémie Mazzocchi, Chiara Mees, Carolin Million, Angela Moeller, Nina Isabella Morgan, Kevin Mount, Phil Nasr, Joe Navarrete, Pablo Nunes, Richard Orrù, Ánna Maria Owen, Luke P J, Christabell Paganini, Nicole Palrecha, Alka Pedersen, Martin Perrin, Coline Pettenati, Giacomo Pimbert, Michel Pipart, Nathalie Plateau, Lou Pottinger, Laura Psarikidou, Katerina Puhac, Ana Reckinger, Rachel Reho, Matelda Remiarz, Tomas Resler, Megan Rich, Magda Rixen, Annabel Ruetgers, Lisa Rutherford, Theo Sabbe, Arnout Sachse, Victoria Samangooei, Mina Sanyé-Mengual, Esther Sanz Sanz, Esther Sarlöv Herlin, Ingrid Sarrouy Kay, Carla Saxena, Lopamudra Schelchen, Anja Scheromm, Pascale Schmutz, Úlrich Schreiber, Kerstin Schuerhoff, Marianne Scott, Christian Sheqiri, Arlinda Simon Rojo, Marian Skordili, Sophia Solman, Helena Solomon, Debra Soma, Tammara Sonkin, Flora Spijker, Stephanie Nuria Steglich, Anja Stempfle, Sarah Tilzey, Mark Tornaghi, Chiara Travieso, Emilio Tuffour, Michael Ulug, Ciska Urbanczyk, Justyna van der Valk, Arnold van dooren, Noël Van Dyck, Barbara Viljoen, Andre von der Haide, Ella Wach, Elise Wascher, Dirk Weichold, Ivonne Whiddon, Katieanne Woods, Deirdre Wunder, Stephanie Yee, Orlena

chris.j.maughan@gmail.com noemie.maughan@ulb.ac.be chiara.mazzocchi1@unimi.it mees.carolin@gmail.com a.million@isr.tu-berlin.de nina.isabella.moeller@gmail.com morgankj@cardiff.ac.uk pmount@wlu.ca inasr@ryerson.ca p.j.navarrete@lse.ac.uk r.j.nunes@reading.ac.uk orru@chalmers.se ab2943@coventry.ac.uk christabell@keralauniversity.ac.in paganini@hu-berlin.de alka.palrecha.phd15@cept.ac.in j.martin.pedersen@gmail.com coline.perrin@inra.fr giacomo.pettenati@unito.it joanne.noone@coventry.ac.uk npipart@ulb.ac.be Iplateau@ulb.ac.be laura.pottinger@manchester.ac.u a.psarikidou@lancaster.ac.uk puhacana@gmail.com rachel.reckinger@uni.lu matelda@iuav.it tomas.remiarz@yahoo.co.uk megan.resler@helsinki.fi m.rich@brighton.ac.uk annabel.rixen@inra.fr ruetgerl@uni.coventry.ac.uk rutherfk@myumanitoba.ca sabbearnout@gmail.com victoria.sachse@yahoo.fr minasaman@gmail.com esther.sanye@unibo.it esther.sanz-sanz@inra.fr ingrid.sarlov-herlin@slu.se carla.s.kay@gmail.com lopa.saxena@coventry.ac.uk anja.schelchen@hu-berlin.de pascale.sheromm@inra.fr ulrich.schmutz@btclick.com kerstinschreiber@me.com marianne.schuerhoff@hvhl.nl cks8@psu.edu arlinda.sheqiri@polimi.it marianhaya@gmail.com skordili@hua.gr solmanhelena@gmail.com debra@urbaniahoeve.nl tammara.soma@gmail.com flora sonkin@wur nl nuria.spijker@kuleuven.be a.steglich@isr.tu-berlin.de stempfle@gmail.com mark.tilzey@coventry.ac.uk chiara.tornaghi@gmail.com emilio.travieso@qeh.ox.ac.uk mktdate@gmail.com ciskaulug@gmail.com jkurbanczyk@uclan.ac.uk a.vdvalk@chello.nl noel.vandooren@hvhl.nl barbaravdyck@gmail.com a.viljoen@brighton.ac.uk ella@uni-kassel.de e.wach@ids.ac.uk dirk.wascher@wur.nl Ivonne.weichold@uni.lu ktwhiddon@yahoo.com urbansustainablefood@gmail.co stephanie.wunder@ecologic.eu omyee@hotmail.com ingo.zasada@zalf.de zhouhemeng@hotmail.com

Zasada, Ingo

Zhou, Hemeng

Notes

Notes



Research Centre Agroecology, Water and Resilience

Ryton Organic Gardens

Wolston Lane

Ryton on Dunsmore

Coventry

CV8 3LG

T: +44 (0) 24 7765 7688



@CoventryCAWR