

Proceedings

2015 AESOP

7th Sustainable Food Planning Conference

Torino, 7-9 October 2015

LOCALIZING URBAN FOOD STRATEGIES **Farming cities and performing rurality**

Edited by: Giuseppe Cinà and Egidio Dansero

LOCALIZING URBAN FOOD STRATEGIES
FARMING CITIES AND PERFORMING RURALITY
7TH INTERNATIONAL AESOP SUSTAINABLE FOOD PLANNING CONFERENCE PROCEEDINGS
TURIN, ITALY 7-9 OCTOBER 2015
Edited by Giuseppe Cinà and Egidio Dansero

Editorial coordination by Stefania Guarini, Franco Fassio, Alessia Toldo and Giacomo Pettenati

Cover image : Archivio fotografico della Città metropolitana di Torino "Andrea Vettoretti"

Published in Torino, Italy by

Politecnico di Torino

Corso Duca degli Abruzzi, 24, 10129, Torino - ITALY
December 2015

Conference email: info@aesoptorino2015.it
Conference website: www.aesoptorino2015.it

ISBN 978-88-8202-060-6

UNIVERSITIES PROMOTERS

Politecnico di Torino (DIST)
University of Turin (Dept. CPS, DISAFA)
University of Gastronomic Sciences of Pollenzo



POLITECNICO
DI TORINO



UNIVERSITÀ
DEGLI STUDI
DI TORINO



University of Gastronomic Sciences
Università degli Studi
di Scienze Gastronomiche

WITH

Consorzio Risteco Eating City International Platform 2015-2020



IN COLLABORATION WITH

EU- Polis *and* Unesco Chair



eu-polis



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair in
Sustainable Development
and Territory Management

WITH THE SUPPORT OF

AESOP *and* Compagnia di San Paolo



AESOP
ASSOCIATION OF EUROPEAN
SCHOOLS OF PLANNING

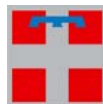


Compagnia
di San Paolo

INSTITUTIONSAL PATRONAGE



Città metropolitana di Torino



REGIONE
PIEMONTE



CITTA' DI TORINO



CAMERA DI COMMERCIO
INDUSTRIA ARTIGIANATO E AGRICOLTURA
DI TORINO

CONFERENCE ORGANISATION

CO-CHAIRMAN

Giuseppe Cinà and Egidio Dansero

AESOP SUSTAINABLE FOOD PLANNING GROUP

Andre Viljoen (Chairperson)
Arnold van der Valk (Secretary)
Coline Perrin (Phd and new researchers group)

COORDINATORS FOR THE PROMOTING INSTITUTIONS AND ORGANISATIONS

Giuseppe Cinà (Politecnico di Torino - DIST)
Egidio Dansero (University of Turin - CPS)
Franco Fassio (University of Gastronomic Sciences of Pollenzo)
Maurizio Mariani (Consorzio Risteco, Eating City)

KEYNOTE SPEAKERS

Serge Bonnefoy, Terres en Villes, Grenoble, France
Gilles Novarina, Université Pierre Mendès, Grenoble, France
Wayne Roberts, Toronto, Canada
Jan-Willem van der Schans, Wageningen University, the Netherlands

INTERNATIONAL SCIENTIFIC COMMITTEE

Gianluca Brunori (University of Pisa, Italy); Giuseppe Cinà (Politecnico di Torino, Italy); Katrin Bohn (Bohn&Viljoen Architects and University of Brighton), Andrea Calori (ESta' - Economia e Sostenibilità, Milano, Italy); Damien Conaré (Unesco Chair 'Alimentations du monde', Montpellier, France); Egidio Dansero (University of Turin, Italy); Piercarlo Grimaldi (University of Gastronomic Sciences, Pollenzo, Italy); Jan-Eelco Jansma (Wageningen University, the Netherlands); Alberto Magnaghi (University of Florence, Italy); Maurizio Mariani, (Eating City, France); Davide Marino (University of Molise, Italy); Mariavaleria Mininni (University of Basilicata, Italy); Gilles Novarina (Université Pierre Mendès, France); Anna Palazzo (University of Rome 3, Italy); Coline Perrin (Institut National de la Recherche Agronomique, SAD, France); Guido Santini (FAO, Rome, Italy); Arnold van der Valk (Wageningen University, the Netherlands); Andre Viljoen (University of Brighton, UK).

LOCAL SCIENTIFIC COMMITTEE

Franco Ajmone (DISAFA, University of Turin); Mario Artuso (DIST, Politecnico di Torino) Filippo Barbera (Dept. CPS, University of Turin); Giancarlo Cotella (DIST, Politecnico di Torino); Francesca De Filippi (DAD, Politecnico di Torino); Marco De Vecchi (DISAFA, University of Turin); Elena Di Bella (Città Metropolitana di Torino); Franco Fassio (University of Gastronomic Science, Pollenzo); Federica Larcher (DISAFA, University of Turin); Dario Padovan (Dept. CPS, University of Turin); Cristiana Peano (DISAFA, University of Turin); Marco Santangelo (DIST, Politecnico di Torino); Angioletta Voghera (DIST, Politecnico di Torino).

SECRETARY

Gabriela Cavaglià (Unesco Chair, University of Turin); Stefania Guarini (DIST, Politecnico di Torino); Giacomo Pettenati (Dept. CPS, University of Turin); Nadia Tecco (DISAFA, University of Turin); Alessia Toldo (DIST, University of Turin)

ACADEMIC AND SCIENTIFIC SOCIETIES, NETWORKS

Associazione dei Geografi Italiani - AGel, Bologna
Istvap, Istituto per la tutela e la valorizzazione dell'agricoltura periurbana, Milan
Rete Ricercatori AU Agricoltura Urbana e periurbana e della pianificazione alimentare, Italy
SdT, Società dei territorialisti, Florence
Società Geografica Italiana, Rome
Società di Studi Geografici, Florence
Terres en Villes, Grenoble

ASSOCIATIONS AND FOOD MOVEMENTS

Federazione Provinciale Coldiretti Torino
Slow Food Piemonte e Valle d'Aosta

CONTENTS

THE 7TH AESOP SUSTAINABLE FOOD PLANNING CONFERENCE	VIII
THE AESOP SUSTAINABLE FOOD PLANNING GROUP	X
THE EATING CITY INTERNATIONAL PLATFORM	XI
SHORT SUMMARIES OF THE CONFERENCE SESSIONS	XII
TRACK 1. SPATIAL PLANNING AND URBAN DESIGN	1
Andrea Oyuela, Arnold van der Valk	2
<i>Collaborative planning via urban agriculture: the case of Tegucigalpa (Honduras)</i>	
Magda Rich, Andre Viljoen, Karl Rich	22
<i>The 'Healing City' – social and therapeutic horticulture as a new dimension of urban agriculture?</i>	
Mario Artuso	36
<i>Urban agriculture, food production and city planning in a medium sized city of Turin metropolitan area: a preliminary note which compares geography and local policies</i>	
Christoph Kasper, Juliane Brandt, Katharina Lindschulte, Undine Giseke	42
<i>Food as an infrastructure in urbanizing regions</i>	
Giuseppe Cinà	57
<i>Somewhere the city slows down and the country comes back. Figures of a starting change of course in many Italian urban fringes</i>	
Megan Heckert, Joseph Schilling, Fanny Carlet	67
<i>Greening us legacy cities—a typology and research synthesis of local strategies for reclaiming vacant land</i>	
Daniela Poli	83
<i>Sustainable food, spatial planning and agro-urban public space in bioregional city</i>	
Andre Viljoen, Katrin Bohn	98
<i>Pathways from Practice to Policy for Productive Urban Landscapes</i>	
Jacques Abelman	107
<i>Cultivating the city: infrastructures of abundance in urban Brazil</i>	
Susan Parham	118
<i>The productive periphery: food space and urbanism on the edge</i>	
Matthew Pottleiger	131
<i>Eating Ecologies: Integrating productive ecologies and foraging at the landscape scale</i>	
David Fanfani, Sara Iacopini, Michela Pasquali, Massimo Tofanelli	146
<i>Sustain-edible city: Challenges in designing agri-urban landscape for the 'proximity' city. The case of Prato, Tuscany</i>	
Radu Mircea Giurgiu, Fritz-Gerald Schröder, Nico Domurath, Daniel Brohm	156
<i>Vertical farms as sustainable food production in urban areas. Addressing the context of developed and developing countries. Case study: brick born farming, Dresden, Germany</i>	
Dirk Wascher, Leonne Jeurissen	171
<i>Metropolitan Footprint Tools for Spatial Planning. At the Example of Food Safety and Security in the Rotterdam Region</i>	
Bruno Monardo, Anna Laura Palazzo	185
<i>Healthy Works. Food System and Land Use Planning in San Diego Region</i>	
TRACK 2. GOVERNANCE AND PRIVATE ENTREPRENEURSHIP	199
Lisa V. Betty	200
<i>The historic and current use of social enterprise in food system and agricultural markets to dismantle the systemic weakening of african descended communities</i>	
Jane Midgley	215
<i>Making food valued or the value(s) of food: a study of local food governance arrangements in Newcastle, England</i>	

Melika Levelt	226
<i>Creating space for urban farming: the role of the planning professional</i>	
Nadia Tecco, Federico Coppola, Francesco Sottile, Cristiana Peano	238
<i>Adaptive governance or adjustment for planning and management the urban green spaces? The case of communal and community gardens in Turin</i>	
Gaston Remmers	246
<i>Cracking codes between the health care and the agrofood system: the development of a food supplement for prostate cancer in the Netherlands</i>	
Andrea Calori	261
<i>Do an urban food policy needs new institutions? Lesson learned from the Food Policy of Milan toward food policy councils</i>	
Alessia Toldo, Giacomo Pettenati, Egidio Dansero	270
<i>Exploring urban food strategies: four analytical perspectives and a case study (Turin)</i>	
TRACK 3. RELEVANT EXPERIENCES AND PRACTICES	283
Esther Sanyé-Mengual, Jordi Oliver-Solà, Juan Ignacio Montero, Joan Rieradevall	284
<i>Using a multidisciplinary approach for assessing the sustainability of urban rooftop farming</i>	
Jeroen de Vries, Ruth Fleuren	297
<i>A spatial typology for designing a local food system</i>	
Kathrin Specht, Esther Sanyé-Mengual	307
<i>Urban rooftop farming in Berlin and Barcelona: which risks and uncertainties do key stakeholders perceive?</i>	
Erica Giorda, Gloria Lowe	314
<i>Restoring houses and restoring lives: experiments in livability in the Detroit East Side</i>	
Rosalba D'Onofrio, Decio Rigatti, Massimo Sargolini, Elio Trusiani	324
<i>Vineyard Landscapes: a common denominator in Italian and Brazilian landscapes</i>	
Sergi Garriga Bosch, Josep-Maria Garcia-Fuentes	336
<i>The idealization of a "Barcelona model" for markets renovation</i>	
Patricia Bon	343
<i>Participatory planning for community gardens: practices that foster community engagement</i>	
Aurora Cavallo, D. Pellegrino, Benedetta Di Donato, Davide Marino	355
<i>Values, roles and actors as drivers to build a local food strategy: the case of Agricultural Park of "Casal del marmo"</i>	
Emanuela Saporito	365
<i>Roof-top orchards as urban regeneration devices. OrtiAlti case study</i>	
Joe Nasr, June Komisar	374
<i>Rooftops as productive spaces: planning and design lessons from Toronto</i>	
H.C. Lee, R. Childs, W. Hughes	381
<i>Sustainable Food Planning for Maidstone, Kent, UK</i>	
Katrin Bohn, André Viljoen	391
<i>Second nature and urban agriculture: a cultural framework for emerging food policies</i>	
Biancamaria Torquati, Giulia Giacchè, Chiara Paffarini	399
<i>Panorama of urban agriculture within the city of Perugia (Italy)</i>	
Ana Maria Viegas Firmino	414
<i>Learning and Tips for more Sustainable Urban Allotments in Portugal</i>	
Melika Levelt, Aleid van der Schrier	427
<i>Logistics drivers and barriers in urban agriculture</i>	
TRACK 4. TRAINING AND JOBS	440
Charles Taze Fulford III, Sadik Artunc	441
<i>Service-learning and Urban Agriculture in Design Studios</i>	

Anna Grichting	453
<i>A productive permaculture campus in the desert. Visions for Qatar University</i>	
Jan Richtr, Matthew Potteiger	463
<i>Farming as a Tool of urban rebirth? Urban agriculture in Detroit 2015: A Case Study</i>	
TRACK 5. FLOWS AND NETWORKS	478
Simon Maurano, Francesca Forno	479
<i>Food, territory and sustainability: alternative food networks. Development opportunities between economic crisis and new consumption practices</i>	
Jean-Baptiste Geissler	490
<i>Short food supply chain and environmental "foodprint": why consumption pattern changes could matter more than production and distribution and why it is relevant for planning</i>	
Rosanne Wielemaker, Ingo Leusbrock, Jan Weijma and Grietje Zeeman	501
<i>Harvest to harvest: recovering nitrogen, phosphorus and organic matter via new sanitation systems for reuse in urban agriculture</i>	
Silvia Barbero, Paolo Tamborrini	517
<i>Systemic Design goes between disciplines for the sustainability in food processes and cultures</i>	
Gianni Scudo, Matteo Clementi	526
<i>Local productive systems planning tools for bioregional development</i>	
Fanqi Liu	540
<i>Eating as a planned activity: an ongoing study of food choice and the built environment in Sydney</i>	
Egidio Dansero, Giacomo Pettenati	552
<i>Alternative Food Networks as spaces for the re-territorialisation of food. The case of Turin</i>	
Franco Fassio	566
<i>Cultural events as "complex system" in their territorial relationships: the case study of the Salone Internazionale del Gusto and Terra Madre</i>	
Michael Andrew Robinson Clark, Jason Gilliland	574
<i>Mapping and analyzing the connections and supply chains of an Alternative Food Network in London, Canada</i>	
Salvatore Pinna	591
<i>Agricultural landscape protection and organic farming ethics: the role of Alternative Food Networks in spatial planning. A case study from Spain</i>	
UNESCO CHAIR SPECIAL SESSION	605
YOUNG RESEARCHERS AND PHD WORKSHOP	607
POSTER SESSION	611

The 7th AESOP SUSTAINABLE FOOD PLANNING CONFERENCE

One of the main goals of the Association of European Schools of Planning (AESOP) (www.aesop-planning.eu/) is to acquire “a leading role and entering its expertise into ongoing debates and initiatives regarding planning education and planning qualifications of future professionals”. In this frame, the AESOP thematic group “Sustainable Food Planning” (www.aesop-planning.eu/blogs/en_GB/sustainable-food-planning) find its rationale recognizing that “Fashioning a sustainable food system is one of the most compelling challenges of the 21st Century. Because of its multi-functional character, food is an ideal medium through which to design sustainable places, be they urban, rural or peri-urban places. For all these reasons, food planning is now bringing people together from a wide range of backgrounds, including planners, policy-makers, politicians, designers, health professionals, environmentalists, farmers, food businesses, gastronomists and civil society activists among many others”.

In 2015, after having been hosted in England, Wales, Germany, France and the Netherlands through out this time providing a unique forum for cross disciplinary and interdisciplinary exchanges, the 7th Annual Conference of the AESOP thematic group SFP has been held in Torino, Italy (October, 7-9).

The Torino Conference (*Localizing urban food strategies. Farming cities and performing rurality*) aimed at exploring new frontiers of education and research, drawing inspiration by policies and practices already implemented or still in progress, and in the meantime bringing advancement over some key issues already tackled during previous SFP conferences.

To this end, *Localizing urban food strategies* implied to relate education and research as well as policies and practices, to the national, regional and local levels, not only as administrative scales but as physical and cultural contexts in which food discourses have a deep influence on urban and regional planning agendas.

In this light *Localizing* meant:

- to connect scales of discourse and action: how we can promote, co-produce, analyze and compare urban food strategies in different places, linked together by common goals of SFP that valorise the role of local territories and policies, but also by global food networks that have a strong geopolitical power on local contexts.
- to better understand the possible contribution of the different places in building a *glocal* discourse on food planning, in line with the general debate brought forward by United Nations agencies (i.e. UNCHS and other agencies and networks) on the localization of Sustainable Development Goals after 2015;
- to stress the role of the local dimension, remaining conscious, on the one hand, of the risk of “local traps” and, on the other hand, of the isomorphism of a flat world in which “local” is mostly a rhetoric behind the so-called “green washing” process;
- to build a local insight in which the different disciplines and knowledge are re-connected by re-considering food systems: scholars and practitioners are called to apply their theoretical and operational perspectives in order to frame and perform in local terms their idea on urban food strategies.

In general terms, the Conference focused on the following goals:

- to reinforce the struggle for food safety and the environmental protection in the Global North and South;
- to provide a proper insight on how current training and research programs meet the new challenges of food planning in different countries and cultural contexts;
- to shape the key perspectives which food planning must deal with: governance, disciplinary innovation, social inclusion, environmental sustainability;
- to consolidate the network of planning practitioners, policymakers, scholars and experts dealing with SFP in Europe and beyond.

More in detail the following issues have been addressed:

- how to develop a social and spatial strategy aimed at the achievement of a SFP and to answer to the specific conditions of different urban/metropolitan contexts;
- how to provide a thorough technological innovation able not only to orient global responses towards food security but also to enable locally appropriate solutions that take into account ecosystem cycles;
- how to develop food planning policies able to connect in a multilevel governance approach the different scales from micro (urban districts) to city-region and to national and international food policies;
- how to secure a more important role for farmers as basic stakeholders of food planning;
- how to sustain a broader inclusion of food planning issues in the research and the educational system, connecting knowledge and disciplines from urban, rural and food studies in building a new planning domain.

The conference in numbers

The papers presented in these proceedings have been selected by a group of experts being part of the scientific committee. We received 118 abstract proposals of which the scientific committee selected 84 while 65 of them were presented at the Conference. Moreover, the poster Session included 24 contributions. The present proceedings include 49 full papers.

Transcriptions of key-note presentations (by Serge Bonnefoy, Gilles Novarina, Wayne Roberts, Jan-Willem van der Schans), the special guest speech (by Carlo Petrini) and the opening remarks are not included in the following proceedings. However, video recording of these interventions and of the overall Conference are available on the Conference website

(http://www.aesoptorino2015.it/the_videos) and on the AesopTorino2015 YouTube channel.

Our heartfelt thanks go to all those who have contributed in making the 7th AESOP conference on Sustainable Food Planning a success.

We are thankful to all the students and the volunteers that supported us before, during and after the conference and in particular to: Francesca Basile, Silvia Borra, Alessandra Michi, Ginevra Sacchetti, Stefania Mancuso, Valeria Squadrito, Sara Muzzarelli, Simone Pirruccio, Alberto Keller, Elisa Gemello, Chiara Marchetto, Chiara Fratucello, Giulia Franchello, Rossella Bianco, Tatiana Altavilla, Alessandra Rauccio, Matteo Faltieri, Lorenzo Bottiglieri, Filippo Bolognesi, Roberta Garnerone, Alberto Cena, Silvia Zucchermaglia, Andrea Aimar, Andrea Coletta, Yaiza Di Biase, Alessandro Ventura e Ramona Manisi.

The Editors
Giuseppe Cinà and Egidio Dansero

THE AESOP SUSTAINABLE FOOD PLANNING GROUP

Since establishing the Sustainable Food Planning Group in 2009, we have been interested in building cross disciplinary dialogues between practitioners, academics and activists concerned with developing equitable, sustainable, healthy and enriching food systems.

Giuseppe Cinà and Egidio Dansero, who have planned and designed this 7th AESOP sustainable food planning conference, continue to pursue this aim, so that once again we see an expanding and dynamic community of practice.

Turin, with its close connections to the Slow Food Moment, the Milan South Agricultural Park and the Milan EXOP 2015 *"Feeding the Planet, Energy for Life"* resonates with our interests in real world issues, for example how to translate individual practices into policy.

Alongside our strong multidisciplinary focus we have a particular strength in the age and gender profile of our participants, presenting a unique opportunity for building future capacity. To that end the Sustainable Food Planning Group wishes to consolidate our network by putting in place a more clearly defined framework for electing committee members and, as a priority, expanding our "new and emerging researchers' group". This process has been initiated during the conference.

I would like to thank our secretary Arnold van der Valk and our new and emerging researchers' group co-coordinator Coline Perrin for their invaluable and reliable input.

And we look forward to the 8th Sustainable Food planning Conference, being co-ordinated and hosted by Michael Roth at Nuertingen-Geislingen University, in Germany, between the 21st and 24th of September 2016. Finally to see live keynote presentations go to: http://www.aesop-planning.eu/blogs/en_GB/sustainable-food-planning and to access the Sustainable Food Planning Group's website which includes information about earlier conferences go to: http://www.aesop-planning.eu/blogs/en_GB/sustainable-food-planning.

Chair of the AESOP Sustainable Food Planning Group

Andre Viljoen

December 2015

THE EATING CITY INTERNATIONAL PLATFORM

Who is Risteco

Risteco was born as the environmental department of the Italian SME Sotral S.r.l., a company specialized in food transport and logistic services for public catering. Risteco has then become a no-profit consortium in 2005, which gathers actors working in support services to catering industry.

Aware that economical development is compatible with suitable environmental quality, Risteco has assumed the following mission: the formulation of public catering development strategies based on the improvement of communication between stakeholders and on the results of technical and scientific innovation, land aiming at the integration between environment, social responsibility and Human Work.

The main objective of Risteco is "to promote the sustainable development in Public catering". Risteco especially aims, evidencing economical returns, to share its own conviction that it is possible and advantageous to work according to ethics and sustainable development principles.

Risteco pursues its goals by creating a meeting platform "Eating City" with other professional sectors such as scientific communities, institutions, associations etc. to promote sustainable development within food services according to Life Cycle Thinking approach.

The ideal place where Food, Health and Environment meet Business

Our Vision

To handle Food issues, Cities must revise their usual competences. To do so, they need to build up a vision in which feeding people shifts from its mere definition to a more systemic understanding.

Indeed, food is not only a sum of calories and nutrients necessary to make our body working, but it is embedded in a whole system that influences our quality of life and includes all activities and actors necessary to grow, harvest, process, package, transport, market, consume, and dispose food and all food-related items.

This life-cycle thinking approach allows to build a model of food lifespan from origin to plate that makes possible to identify all food-related activities and infrastructures in and out the city and to design an organization chart that connects all stakeholders and infrastructures involved in the food supply chain, giving them a role and a responsibility.

Through a deep cultural change, Cities Food Policies may turn food into a thread to connect all the main competences of the cities related to economic development, education, health, environment, solidarity, culture and leisure, governance, but it can also give consistency to a synergic osmosis between cities and adjacent territories.

Our Process

Deeply convinced that all activities related to food production and consumption are essential for the sustainable development of cities, Risteco aims, with the project "Eating city", to carry on the dialogue, in order to foster long term vision of public & and private decision makers on the future of sustainable urban food supply chains worldwide.

In short, Eating City platform designs a road map to contribute to the construction of a new economic paradigm that aims to place again human labor at the center of economy and to consider the environment among the entrepreneurial decision variables, in order to develop a new culture of doing Business.

Eating City process moves forward through the summer campus, thematic workshops and conferences.

www.eatingcity.org

Wwinfoon 3 main pillars : Food Production, Food Consumption and Human Labour.

Maurizio Mariani

SHORT SUMMARIES OF THE CONFERENCE SESSIONS

TRACK 1 / SESSION B

Cristoph Kasper spoke about 'Food as an infrastructure in Urbanizing Regions', the sequel to a comprehensive research project exploring the genesis and promotion of urban agriculture conducted in the city of Casablanca. The proposed research design met with approval in the audience. Urban agricultural in a regional perspective is an emerging topic which attracts much attention from organisations such as FAO and RUAF. In the second presentation Giuseppe Cinà focused on the blurring of the traditional rural-urban nexus. Only too often agriculture is considered to be the left-over in a process of deliberation about the future prospects of metropolitan regions. Some observers in the audience provided illustrations of the need to consider the interests of agriculture in the context of urban planning in other European countries such as the Netherlands and the UK. The ongoing conference opens windows on an issue which merits attention of the EU. One obstacle is the isolation of different aspects in separate policy sectors such as agriculture, environment, transportation and economics. Fanny Carlet, the third speaker in this slot, presented the results of her research of urban agriculture as an element of greening strategies in American cities which have to cope with industrial brownfields, so-called Legacy Cities. Urban agriculture is perceived as an effective strategy to reclaim vacant lots in the inner city. Well known examples are the city of Detroit and the city of Buffalo.

The last speaker was Daniela Poli who presented the results of her research on Sustainable Food and Spatial Planning in the context of agro-urban public space in Italy. She focuses on the bio-regional dimension of regional urban development. In this session disparate perspectives on urban agriculture were discussed. The common thread was the shared conviction that agriculture is an emerging field of study and planning in the context of regional spatial planning.

Arnold van der Valk

TRACK 1 / SESSION C

During the session different visions, policies and practices concerning the design and the planning of urban and peri-urban agriculture have been discussed.

The two first presentations addressed some distinct but convergent experiences. That of Andre Viljoen and Katrin Bohn, based on a set of various interventions spread out in the porosity of the contemporary city (brown field, vacant areas, unused areas etc.) was related to the line of research developed around the concept of 'continuous productive landscape', today fostered by an international network. In particular, the speakers gave a short account on how policies and practices at various levels have impacted and still are influencing on the implementation of six European urban agriculture projects, led mainly by architects, artists and researcher activists, and how these experiences can help to identify future pathways to enhance a productive urban landscape infrastructure.

Differently, in her presentation Susan Parham specially focused on some issues of urban periphery of burgeoning conurbations, arguing that in order to support 'gastronomic landscapes' as well as to remake the edge of conurbation space, a new range of design-based tools is now available. These new tools, also based on retrofitting techniques, can address food-centred sprawl repair and give an upgraded role to spatial design in supporting productive peripheries.

The following two contributions introduced two additional approaches to productive urban landscapes. In the presentation of Matthew Potteiger what mattered was not so much about activating a productivity starting from scratch, but rather to 'use' the existing one by integrating 'productive ecologies and foraging' at the landscape scale. To this end the findings of an ethnographic research on urban foraging in Syracuse, NY, were presented and some proper strategies responding to the opportunities for urban foraging and productive ecologies were discussed.

Also Jaques Abelman addressed its research toward the use of the resources of local ecology (or 'infrastructures of abundance') in urban Brasil, but in this case he clearly adopted a design strategy by proposing a network of urban agriculture typologies consistent with the nature of Puerto Alegre. In this frame, by emphasizing the fruitful connections between agro-forestry and native species, a basis for dialogue among potential stakeholders as catalysts for future projects is created; as a result the landscape architecture project become a mediator in processes aiming at envisioning just and sustainable urban and peri-urban agriculture.

In the final presentation, by adopting a point of view focused on both food issues and land use planning, Bruno Monardo and Anna Laura Palazzo proposed a further insight on a territorial based approach. In this frame the authors discussed the case study of San Diego Region (CA), showing how the goals of a sustainable food system are addressed by a set of instruments ranging from food policies to land use tools and zoning codes, mobilizing from the very beginning the community at large: producers, brokers, consumers. So doing, the case study is discussed looking at some effective tools and operational aspects but also prompting for new meanings and uses for vacant land.

Summing up, the presented experiences showed on the one hand the increasing set of policies and practises underway in several countries, and on the other hand the work in progress of research in drawing attention to the big potentialities of urban and territorial resources for a sustainable agriculture.

Giuseppe Cinà

TRACK 1 / SESSION D

Over the last decades the urban and the rural have become increasingly difficult to differentiate. Yet, both the powerful cultural resonance of such distinction and the traditional separation between human and natural sciences have led, even when tackling matters such as urban growth and open space strategies, to the supremacy of the “standpoint of the City”, providing unvarying interpretations of the urban fringe as a mere receptacle for sprawl.

Empirical evidence shows that these transformations can less and less be interpreted as transitions from low-density patterns towards an overall urban condition in the sense we are used to think of.

Open space proves the main asset in sustainable food policies, while remaining crucial for biodiversity enhancement, protection of natural and spatial values, soil protection, promotion of open-air facilities for leisure time.

Thus, urban farming is going to play a role that goes far beyond that of supplying essential food products, while counteracting rural unemployment. A common denominator is social integration, which is a fundamental element in any regeneration process. Relevant work from this point of view was done by the Italian “Territorialist” School that, for some time now, has been working on community-building processes through an active participation in decision-making related to sustainability issues of our living environments.

In this session, along with local healthy food concerns, the point is to come to grips with an idea of resilience embedding spatial coherence and landscape connectivity both at the local and territorial scale.

The first paper, “Sustain-edible city: Challenges in designing agri-urban landscape for the ‘proximity’ city” by David Fanfani, Sara Iacopini, Michela Pasquali, Massimo Tofanelli, explores residual farmland in the urban fringe of Prato and stresses its effectiveness both in giving shape to rural areas and in providing commodities to the Italian and Chinese communities settled in the City.

The second paper, “A Metropolitan Footprint Tool for Spatial Planning”, by D.M. Wascher and Leonne Jeurissen, explores the ecological footprint in the Rotterdam Region. The contribution stresses that food production and consumption is not only linked via one-directional food chains in terms of processing and logistic pathways, but also part of cross-sectoral and hence multidirectional value chains associated with bio-economy.

The third paper, “Vertical farms as sustainable food production in urban areas”, by Radu Mircea Giurgiu, Fritz-Gerald Schröder, Nico Domurath, introduces to Vertical Farming, which allows for high construction and operating costs, in exchange for high quality and quantity of fresh food all year round.

The fourth paper, “The potential of peri-urban and ecotonal areas in resilience strategies design. Milano metropolitan panorama and perspectives”, by Angela Colucci, intercepts a wide range of initiatives tackling resilience and challenging collective perceptions, planning standards and rules regarding food management strategies.

What new insights can we draw from this review?

Conceptually speaking, the core problem is to bridge the privileges of the urban condition - the sharing of social and civic value - with the benefits of the countryside - a better living environment, a healthier lifestyle, and also a level of “naturalness” on the outskirts of the city. In practical terms, the “shape-giving” potential of the ongoing experiences is still to be explored and assessed, along with the different rural patterns. Beyond the consideration that a “good form” is a vehicle for a healthy ecological system, these experiences offer a “case-

by-case” set of arguments against the “individualistic” centrifugal impulse related to urban sprawl and convey all-pervasive practices of re-appropriation.

Anna Laura Palazzo

TRACK 2 / SESSION A

Positioning within the broader sphere of sustainable food governance, the session aimed at reflecting upon the role of food policies in addressing social, cultural and economic dynamics. The contributions presented during the session focused on various issues, as the conditions of Afro-American community in the United States, the actual political implications of New York City’s food policy and the configuration and self-reproduction of food governance regimes in Newcastle (UK).

More in detail, in her analysis of the historic and current use of social enterprise in food system and agricultural markets in the North-East of the United States, Lisa V. Betty focused on the role of the latter as a potential antidote to the systemic weakening of African descended communities. The author did this by exploring the historical relevance and current necessity for grassroots social enterprise and entrepreneurship, from the base of underserved communities overwhelmed by hyper-incarceration and underemployment, to support the production of community empowering capital with prospects for economic growth in food system and agricultural markets. She analyzed various organizations that are at the forefront of supporting and advocating for employment training and entrepreneurship support, policy changes, community development, and empowerment for correctional controlled individuals and underserved communities of African descent through the alignment of solutions for individual and community development with food system advocacy.

On his hand, Nevin Cohen proposed a thorough analysis of New York food policy under mayor De Blasio as a way to promote social equity in the city. He argues that, whereas an increasing number of US mayors have responded to widening economic disparities and increasing attention to racial discrimination by adopting populist political agendas, an important question for food planners is whether and to what extent this political shift has affected the urban food systems. As the proposed case illustrates, food policy appears to be shaped by governance networks including stakeholders who have interests in maintaining the status quo, and therefore contribute to hinder policy change together with other factors as budget scarcity, established laws and programs, entrenched agency conventions, competing political priorities and existing state and federal regulations. As a result, food policies and programs developed by the Bloomberg administration continue largely unaltered, demonstrating the complexities of redesigning food policy to fit different political priorities.

A third contribution by Jane Midgley focused on local food governance arrangements in Newcastle, paying particular attention to recent changes regarding different actors’ perceptions and involvement with the potential creation of a holistic food policy for the city. The paper highlights the important role played by external elements as funding bodies, government targets, evaluation mechanisms etc. in stimulating local food-related policy initiatives. Even though external conditions may change over time, the appropriateness and awareness of food may be more continuous than at first appears. The linkages to existing policy areas and associated support (i.e. public health) appear to be initial facilitators of food policy debates within existing policymaking structures but also potential framework constraints due to their association with other more powerful discourses (e.g.: obesity and the associated food-based policy measures). Towards the end of the session, an intense debate took place, surrounded by the general willingness to examine in depth both individual players’ and municipalities’ responsibility, in order to strengthen those beneficial effects for the civil society that could potentially come from sustainable food policies and initiatives.

Giancarlo Cotella

TRACK 2 / SESSION B

The session featured two presentations analyzing the social interaction between citizens, the food production and food policies’ development and implementation, based on well documented case studies. The first one presented two examples of urban farms in Amsterdam, as an entry point to discuss citizen participation in urban planning and the role of planners and local authorities in business or community initiatives. The second one presented the FAO-RUAF programme on assessing City Region Food Systems (CRFS), currently

implemented in seven city regions. After having described the conceptual framework and assessment methods, the authors underlined the key role of information exchange, political will and multi-actors participation in order to build a more inclusive multilevel food governance.

Coline Perrin

TRACK 2 / SESSION D

To face the new challenges, food-systems need innovation. To foster innovation, food-systems need to combine different orders of worth or “quality conventions”. In this regard, search for the optimal solutions through more information it is not enough. Search means above all interpretation, not just finding a solution for a well-defined problem. In other words, innovation in food-systems means to accept the idea that the fundamental challenge is the kind of search during which you do not know what you are looking for but will recognize it when you find it. As David Stark (*The Sense of Dissonance. Accounts of Worth in Economic Life*, Princeton, Princeton University Press, 2009) reminds us, John Dewey called this process inquiry. Inquiry, differently from problem solving, involves the management of “perplexing situations” or a disagreement about what counts. Innovation is precisely the ability to keep multiple principles of evaluation in play and to benefit from that productive friction. Systems of food need thus to be arranged as forms of distributed intelligence, where units are laterally accountable according to different principles of evaluation, that makes entrepreneurship and innovation possible. The environment of modern economy resembles a “rugged” fitness landscape with a jagged and irregular topography, with many peaks and many optimal solutions. In such an environment, the most innovative solutions are those able to promote radical decentralization in which virtually every unit becomes engaged in innovation. In all the papers, it is clear that orders of worth different from market and prices provide an account of “what matters” in the world and how the “world works”, so they also serve as a blueprint for regulatory experiments. In cases such as those, new social technology of judgment emerge as something more than market mechanisms that mimic competition through regulatory devices, This is the *fil-rouge* of the papers presented in the session: innovation needs hybridization and new forms of governance. For instance, both the agrofood system and the health care system are known for their sector specific rules and routines. These routines in general do not favour innovations that transgress the borders of the sector. Change makers, who cross borders without hesitation, linking the health care and agrofood sector in new organizational arrangements. But also urban gardens take on different forms and meanings, combining different governance principles and organizational solutions.

Furthermore, sustainable food planning assumes an 'unbridgeable gap' between the conventional agribusiness complex of industrial food production and the alternative urban localecological food movement, with the latter having grasped the attention and imagination of recent planning scholarship. Finally, if food is the most essential component for human life, it is still unclear how this right could become a priority within institutional policies, when choices related to food and nutrition are mainly sectorial and only rarely characterized by a strategic, coordinated and coherent approach.

Filippo Barbera

TRACK 3/ SESSION A

Over the past ten years a lot of technical tools have been developed for supporting both analytical as well as planning activities in the context of urban and periurban agriculture and horticulture.

Some of the main fields of development of such tools can be synthesized in the following points:

- rules and knowledges concerning access to land, facilities and infrastructure to give farmers, distributors, and food entrepreneurs a chance to become established;
- policies and standards to encourage local food operations and to reduce the cost and uncertainty of urban farming in the more comprehensive context of food systems;
- policies and regulations for local food procurement for schools as well as other public canteens and hunger assistance programs, as a part of welfare policies and for encouraging new markets, innovations, businesses, and entrepreneurs.

In the context of these fields of technical assistance to actions, plans and policies, there are some emerging areas of investigation that are consolidating some specific roles for researchers in relation to the existing and diffused actions that are carried on by activists, non-profit associations, private initiatives or business entrepreneurs for social as well as commercial purposes. One area of investigation is about the creation and the implementation of technical tools to support analysis and evaluations of urban agriculture and horticulture, with a focus on the evaluation of sustainability.

In this direction some recent experiences that have been developed in Berlin and in Barcelona are trying to combine life cycle assessment (LCA), to quantify the environmental impacts of Urban Rooftop Farming (URF) forms; and life cycle costing (LCC), to quantify the economic costs of URF forms. This combination is a technical base to support the implementation of different kind of existing tools in the context of urban horticulture, taking advantage of the fact that rooftop farming can provide a kind of living laboratory with less analytical variables than other farming activities.

The different life cycle analysis qualitative research can be used to support and counterproof the evaluation of the perceptions of different stakeholders and, beside this, can feed a geographic information systems (GIS), to quantify the availability and the localization of potential roofs for implementing URF. These kind of tools have a potential in supporting the quantification and comparison of the environmental and economic aspects of different URF types and practices to inform stakeholders in decision-making processes.

More in general and not only for rooftop gardening, for planning, designing and evaluating a sustainable, local food system for urban areas a spatial typology of urban agriculture is required. An example of this kind of definition and classification have been studied and applied in the Netherlands by combining spatial analysis, property analysis, and the classification of the kind of food production, in order to define a tool that can support decision makers to evaluate the capability of each farming initiative to contribute to a more general plan for urban farming at a city level.

What is emerging in these experiences of definition of analytical tools for evaluation and planning, is the need of breaking the limits of land use planning that are mainly based on real estate values or on the combination of traditional urban functions. Urban agriculture and horticulture implies a lot of different values, objective, activities and interests: so we do need different point of views, planning principles, expertise and, finally, tools. In this directions, the papers of this section are a good combination of a re-orientation of existing tools for evaluating the sustainability of a system, and the proposal of new tools for taking into consideration new issues to combine food and urban contexts.

Andrea Calori

TRACK 3/ SESSION B

Urban agriculture is the term used to define agricultural production (crops and livestock) in urban and peri-urban areas for food and other uses, the related transport, processing and marketing of the agricultural produce and non-agricultural services provided by the urban farmers (www.hortis-europe.net). The session discussed methods and approaches for linking urban agriculture and food planning through some applicative research projects and practical experiences moving from USA to Europe. In particular, the papers were focused on two elements of the urban food system: the community gardens and the local markets. Community gardens are plots of land managed by volunteers for the purpose of open space, food production, self consumption, or many other educational and recreational functions. Local markets are in Europe related to specific architectures and an old selling system (most of vegetables and fresh products).

The first contribution by Giorda E. reported the case of Detroit (USA), post-industrial city similar with Turin, in which the approach in urban renewal is based on taking care of people providing home and food to homeless. Then we moved to the Spanish research (Garcia-Fuentes J.M. and Garriga Bosch S.) on the restoration of local markets and their role in the local food chain in Barcelona.

The case of a participatory project for the realization of a community garden in Chicago (USA) reported by Bon P. pointed out how the stakeholder involvement guarantee the success of the process and the future use of the place by citizens overcoming conflicts of interests.

The last experience (Cavallo A. and Di Donato B.) described an ongoing process in the metropolitan area of Rome based on the construction of a local food strategy in the context of the big sprawl of the city.

Some common elements emerged from the discussions:

- The importance of a bottom-up approach for the success of the food planning strategy, which must be participatory based.
- The need to quantify the ecosystem services provided by rural areas with the aim to recognize them in terms of farmers income.
- The idea that in the cities the presence of 'public food places' (like community gardens or local markets) is important not only in terms of food provisioning but also in terms of social aggregation and multicultural integration.
- The fact that a 'good' urban food chain is short, local and democratic.

In conclusion further researches for defining the real potentials of urban and peri-urban agriculture in providing food and services to citizens are required. Furthermore mapping the ecosystem services in the urban ecosystem can be the first point for a more sustainable urban planning strategy.

Federica Larcher

TRACK 3/ SESSION D

This session saw a refreshing mix of presentations highlighting the specific local contexts of aspects of urban agriculture – practical and theoretical - that have emerged / are emerging in different European countries. Urban agriculture was in the centre of all presentations, but investigations ranged from the studies of urban farms (Switzerland) and of urban allotments (Portugal) to the exploration of appropriate logistical systems for food stuffs (The Netherlands) to the emergence of community gardens (Italy) to the study of cultural frameworks for urban food production (Germany/UK).

What kept the papers together and served as the basis for vivid discussion amongst the 25 or so session participants were the relationships of particular local urban agriculture practices to their equally particular local cultures and customs. So was it very important to understand the emergence of a community garden culture in Perugia, Italy, in the light of recent economic changes or the development of planning typologies in tandem with the study of existing food production practice on the example of urban farms in Switzerland. The historical dimension of urban agriculture practice was related to current social conditions, as in the example of long-established versus spontaneous allotment gardens in Lisbon, Portugal, or the dramatic increase of community gardens in Perugia originating from victory garden predecessors.

Whilst 3 of the papers took a very practice-based approach, one paper aimed to discuss a concept that may provide an overarching cultural framework to urban agriculture practice and food-related lifestyles. Introducing the concept of Second Nature in relation to urban agriculture, the paper triggered discussions in the audience about other philosophical/cultural concepts, such as the one of biophilia, which were then applied to all papers presented.

Finally, it was a pleasure to integrate a relocated paper that dealt with logistical and managerial aspects of urban food growing focussing on The Netherlands. This paper on how to fine-tune transport and delivery of food products gave the session a "reality check" on the practical transformations that food-productive cities will have to undergo in the future.

Katrin Bohn

TRACK 4/ SESSION A

The presentations report various experiences through which educational and training programs deal with sustainable urban food planning.

Taze Fullford and Artunc (Mississippi State University) are identifying local opportunities for service learning projects and the opportunities to lessen the effects of food deserts in rural areas. They discuss advantages and disadvantages of using a service-learning pedagogy in classrooms for planning and designing ecologically sensitive sites. Service-learning combines service objectives with learning objectives, with the intent that the activity changes both the recipient and the provider of the service. This constructive and inspiring process

allows students to actively engage and gain real experience with communicating conceptual ideas to communities that otherwise would not be able to afford consultation.

Grichting (Qatar University) is presenting research and projects on edible landscape at the campus of Qatar University to contribute to food supply. Permaculture is used as the philosophy and framework for all the interventions proposed (transforming decorative landscapes into productive landscapes, creating productive green roofs, etc.). Its maximum resource efficiency is experienced through water recycling and treatment, organic waste recycling, clean and renewable energy producing, etc. Projects exposed are also based on the concepts of regenerative cities, and circular metabolism.

Verdini (Xi'an Jiaotong-Liverpool University) is exposing achievements and limitations of 3-years training and action-research for sustainable rural fringe development in urban China. He wants to show how the research titled "When local meets global: urban fringe planning, and institutional arrangement" has informed the development of an innovative training module that equips students with tools for dealing with sustainable food planning, from an institutional perspective. Verdini also shows how this teaching experience has resulted in extra-curricular activities, in forms of intensive workshops in rural villages with the involvement of local stakeholders and governments.

Richtr (Czech Technical University in Prague) is showing that the case study of Detroit reveals the value of urban agriculture in reimagining urban landscapes and food systems of shrinking cities and the importance of a systemic network in this process, with the descriptions of Greening of Detroit (plant trees to replace those lost to Dutch elm disease); Detroit Black Community Food Security Network (address issues of food quality, availability and security especially for the African American community); Earthworks Urban Farms (one of the most well-established urban ag projects); Michigan Urban Farming Initiative (a students' non-profit organization). Richtr underlines that this kind of approach could be transferable to the European cities rather than individual projects and strategies that have to be always carefully contextualized.

Damien Conaré

TRACK 5/ SESSIONS A+C

The Session, moving from the assumption that food is one central element of *flows and networks* that contribute to cities' survival, continuation and well-being, focused on *flows* declined in diverse forms and ways, such as environmental flows, food flows, flows of materials, energy, water, nutrients and waste. The Session was also intended to cover networks that influence the urban food metabolism, going from food production to food consumption and food waste management.

Attendance to the Session was fairly high and the discussion that followed the talks of presenters was lively and enriching. The Session provided insights and points of reflection for the audience as well as good opportunities for networking, given that also other authors present in the Session were interested in discussing more in depth specific cross-cutting issues.

The first contribution to the Session dealt with alternative food networks to examine to what extent such economic practices maintain or enhance resilience and resistance, while taking into account main constraints and opportunities that foster/limit their spread. The investigation focused on mapping grassroots organizations promoting sustainable practices and groups that are contriving an alternative food system in Bergamo, a medium sized town in northern Italy.

The re-territorialization of the food system was an interesting point that stemmed out of the discussion, as this reflection brought forth the 'question of scale' for the food system, more specifically the connection of the food system with its territory, as the local scale appear to be the basis for organizations of 'critical consumption'. Moreover, discussion from the floor was also oriented on alternative food networks as possible driving forces of territorial development.

Are short food supply chains (SFSCs) a major potential contributor to food's environmental footprint or a shift to consumption patterns could have a greater impact? This was one central question posed by the second distribution at the Session which argued positively towards the second hypothesis while proposing SFSCs as major contributors to sustainable consumption patterns through the reconnection to the agricultural territory, the routinization of sustainable behaviors and educational processes.

The discussion and questions that followed posed an interesting discussion on how participation in SFSCs, sustainable consumption practices and local sustainability policy and planning are linked.

The third contribution focused on food flows analysis and mapping, arguing that the urban demand for local food is quite discussed in recent literature, however it appears that mapping precisely those farmlands supplying this demand for local food is not yet explored sufficiently. This contribution offered a critical analysis of the relocalization process of urban food supply by focusing on spatial configuration, surface and location of agricultural areas in Millau, a small town in south France.

From the discussion that followed it appeared that the subject has generated interest, especially as to what extend the methodology followed for mapping the flows of food can be applied in vast areas as well as to what commodities and their number is to be taken into consideration for a comprehensive assessment of a local food system.

Guido Santini e Panayota Nicolarea

TRACK 5/ SESSION D

This session presented four case studies on Alternative Food Networks drawn from 4 different geographical contexts. The countries of reference were Greece, Canada, Spain and China. The panelists presented the evolution of food networks in different social, cultural, economic and environmental contexts. From the discussion that followed the presentations emerged that rather than viewing alternative and conventional food networks as alternatives, they should be considered in relation to one another. Moreover the discussion highlight the need to explore how these new ventures can constitute a viable solution for a more equal and sustainable agro-food system and rewrite the the geography of periurban agriculture with significant implications for spatial policies.

Dario Padovan