



EWT/ Eco Web Town

On line Magazine of Sustainable Design

SCUT, University Chieti-Pescara

Registration Court of Pescara n° 9/2011 del 07/04/2011

ISSN 2039-2656

By editorial staff

Agropolis - from the Spoon to the City.

Jörg Schröder

What Max Bill proposed as comprehensive and social attitude of modern design, Agropolis reshapes in the dimensions of content (what's on the spoon) and approach (tasting the city). Urban agriculture therefore embraces flexible mobile gardening and new ways to conceive and form urban space as well as new economic dimensions in self supply and farming – and technological, operational and cultural innovations within urban food strategies, shaping the city of desired sustainable lifestyles.

Since the postwar struggle to feed Europe's populations, agriculture played a well hidden role within the urban expansion that now occupies almost all of the continent¹. Agricultural land and farms provoked at the most discussions² about immissions, accessibility for leisure uses, reservoirs for future settlement areas, distances to maintain predefined images of cities, suburban villages and touristic areas. Issues of ecology like balances, compensations and green and air corridors intensified the marginality of agriculture, framed by economic and social changes within the agriculture sector generally. At the same time the expanding cities included farmland without a clear vision of its role.

The increasing importance of food production is suggesting an evaluation of the role of agriculture³ and food supply within sustainable urbanism. In terms of food, regional production has become an essential topic for the goals of sustainability, energy saving, and transport impacts. Following global demands for agricultural land caused by growing populations and shortage of resources and energy, in response to climate change an increasing demand for agricultural land can be foreseen to strongly climate benefit areas like central Europe. Inner city areas tend to be some relevant degrees warmer and hence attractive cultivation areas, in turn alleviating and balancing the inner city climate. Third driving force are the cultural and market forces of healthy and economical lifestyles, not only regarding biological products but also demands for low cost individual and family self-sufficiency caused by demographical changes.

Therefore a coherent vision of future urban agriculture embraces urban farming, direct marketing, education

¹ Jörg SCHRÖDER, Kerstin WEIGERT (ed.): Landraum (Berlin, 2010)

² As evolved in: Frank LOHRBERG, Stadtnahe Landwirtschaft in der Stadt- und Freiraumplanung (Stuttgart, 2001)

³ For Agropolis the term "agriculture" is seen as combination of activities in crop- and greenland, forests and gardens with a multifunctional focus, opposed to more monofunctional trends of "farming". Cf. Alois HEISSENHUBER, "Künftige Agrarpolitik als Teil der Gesellschaftspolitik" in Agrarische Rundschau 6/2008, 8-10

and awareness-building of resource economy and healthiness and a renewed form of regional markets. Approaches in recent research target at specific aspects of urban agriculture⁴, not bridging urban-rural gaps within perception of space and planning approaches. This research shows that aimed at an overall food strategy⁵ new connections between different contexts like periurban, regional and intraurban areas approaches are to be combined and articulated. On a territorial level this approach refers to a conception of urbanlandscape⁶ (Stadtlandschaft), transcending traditional legal and imaginative borders between urban and rural worlds. In the Munich Metropolitan Area - an economically and spatially expanding region⁷ - some of the most innovative and successful initiatives in agriculture emerged in the last years. As one of the climate-favoured areas in central Europe Munich probably will undergo increasing demands of food production.

Intra- and periurban agriculture was an intensive and highly productive activity before mass-transportation of food appeared with 19th century's industrialisation. A now evolving discussion about self-sufficiency in food supply - connected further to a reevaluation of interior markets - has to take into consideration that in most food groups German agriculture is hypothetically more than self-sufficient, in many groups like for example milk it is exporting. Crucial fields for achieving autarchy would be only fruits (22% self-sufficiency) and vegetables (40% self-sufficiency)⁸. A more sustainable food supply for Munich thus has to be based on a relocation of food production within a regional focus, to minimise transport impacts, and should increase regional fruit and vegetable production.

Agropolis – Agriculture for the City of Tomorrow

The Agropolis project⁹ – winner of the 2009 Open Scale competition in Munich and since then developed by an interdisciplinary team of architects, urbanists and landscape architects – suggests to re-introduce urban agriculture into the metropolitan region, promoting regional green networks.¹⁰ Each inhabitant of Munich actually would need 2.040 m² of arable land and grassland for the annual food supply¹¹ - clearly not possible within city borders. Agropolis München therefore invites Munich to a metropolitan food strategy that articulates a sustainable food economy from production to meals, from farms and gardens to markets and restaurants, creating real place and real time experiences. Focussing on the promotion of self-supply and sustainable use of soil within the city, harvesting can become a renewed part of urban life.

⁴ Cf. the exhibition: The BUILDING CENTRE, "London Yields: Urban Agriculture. 9 April - 30 May 2009" <http://www.buildingcentre.co.uk/LondonYieldsUrbanAgriculture.pdf> (11.08.2009) and André VILJOEN (Ed.), Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities (Architectural Press: Oxford, 2005)

⁵ Referring to LONDON DEVELOPMENT AGENCY "Healthy and Sustainable Food for London. The Mayor's Food Strategy, May 2006" http://www.lda.gov.uk/upload/pdf/LDA_Food_strategy.pdf (11.08.2009)

⁶ Sophie WOLFRUM, Winfried NERDINGER, Multiple City (Berlin 2008)

⁷ This concept has a different focus compared to approaches in other contexts, as were discussed from Gerd AUFMKOLK, Von der Landschaft und der Stadt (Deutsche Akademie für Städtebau und Landesplanung, Jahrestagung 2004) <http://www.dasl.de/wordpress/wp-content/uploads/07%20Aufmkolk.pdf> (11.08.2009) and from Undine GISEKE, „Produktive Freiräume“ in Hille VON SEGGERN, Julia WERNER, Lucia GROSSE-BÄCHLE (Hrsg): Creating Knowledge. Innovationsstrategien im Entwerfen urbaner Landschaften (Jovis: Berlin, 2008) 266-275

⁸ Landesanstalt für Entwicklung der Landwirtschaft und der Ländlichen Räume (LEL), Bayerische Landesanstalt für Landwirtschaft (LfL), Agrarmärkte 2008 (München 2009)

⁹ Joerg SCHRÖDER, Tobias BALDAUF, Margot DEERENBERG, Florian OTTO, Kerstin WEIGERT: Agropolis München Magazin (München 2009)

¹⁰ Jörg SCHRÖDER: 2040 m². In: Die Walverwandtschaften, Cordula Rau, Eberhard Tröger, Ole W. Fischer (Hg.): *What Architects Desire*. German contribution to the 12th International Architecture Exhibition, La Biennale di Venezia (Wien 2010)

¹¹ Joerg SCHRÖDER et al.: Metro Food. In: Urbanism&Urbanization. Transcending the discipline. (Leuven, 2009)

Case study Freiham – Urban strategy and branding

The development area Freiham (for 20.000 future inhabitants) is suggested by Agropolis as case study for new approaches to rural-urban transformation processes. The period of 30 years puts the not yet built fallow lands inside Freiham development into consideration; temporary agricultural use - including a new form of urban farm - of the Freiham area, as well as persistent elements, can integrate urban agriculture into sustainable development. Public and private spaces would be preconfigured with 7000 fruit trees, vegetable production and self-supply are embedded into ongoing planning processes. Urban agriculture draws visitors and users and adds to the quality of life and recreational value for the already built housing estates and the whole city, implementing a persistent brand for the up until now marginal Freiham. Already conceived by Munich city planning as "sustainable city" regarding e.g. energetic issues, a further impressive layer of sustainable city development will be added with the Agropolis brand. The process of urbanisation then includes structures, perceptions and functions of rural as well as urban procedures. Different agricultural uses - crop rotation, grassland, pasture, allotment gardens, fruit and vegetables for self-harvesting - form a clear curve of intensities, effectively introducing agricultural production deeply into balconies, house gardens, communal gardens and parks, and establishing networks of local food supply.

Agricultural Park Freiham – a research and education centre

The temporary farm - as "research and education centre for metropolitan agriculture and ecology" of Munich's municipal farms - develops the multifunctional core of urban agriculture. Ecological aspects¹² are the cleaning of chemically polluted land and the re-introduction of biodiversity and wild animals. The value of a structured agricultural territory can also be evaluated for accessibility and leisure activities. Agricultural use can facilitate maintenance of further parklands. The farm operates in all three fields of urban agriculture: Recreation, education and production, the farm's economy is based on direct marketing, educational and leisure activities. The experimental agricultural park at Freiham – as part of Munich's science cluster – can provide knowledge transfer and communication of research projects, and evaluate the territorial impact and spatial use of European research like Agroforest¹³, micro-input¹⁴ and landmanagement¹⁵ projects.

Agropolis München

is developed and promoted by an interdisciplinary team of architects, urban planners and landscape architects, supported by sociologists, engineers and agronomists:

Jörg Schröder and Kerstin Hartig in cooperation with bauchplan).(

With spatial concepts for urban agriculture and metropolitan food strategies for Munich, Agropolis won in 2009 the first prize of the competition Open Scale launched by the City of Munich. In 2010, Agropolis

¹² cf. Jürgen HESS, Thorsten HASSE et al., Die Integration von Naturschutzzielen in den Ökologischen Landbau am Beispiel der Hessischen Staatsdomäne Frankenhausen, <http://www.uni-kassel.de/hrz/db4/extern/frankenhausen/?start> (11.08.2009)

¹³ e.g. Antonio RIGUEIRO-RODRÍGUEZ, Jim MCADAM, María Rosa MOSQUERA-LOSADA (Eds.), Agroforestry in Europe: Current Status and Future Prospects (Vienna 2009)

¹⁴ Improving quality and safety and reduction of costs in the European organic and low input supply chains (QLIF)

¹⁵ Peri-urban land use relationships – Strategies and sustainability assessment tools for urban-rural linkages (Plurel)

elaborated, for the City's department for urban planning and building regulation, an expert report on Agropolis elements for Freigham; and organized in the context of the fifth Week of Architecture Munich the Agropolis picnic Freigham including the laying of the first herb garden on the premises. Agropolis initiated the school garden on the roof of Montessorischule at Balanstraße in Munich. Agropolis Munich was presented at the German Centre for Architecture in Berlin, the European Convention Green City in Milan and the Festival *Comunità – Architettura* in Parma, Italy. With his drawing "2,040 m²", Jörg Schröder had been invited to the German Pavilion "Sehnsucht" at the occasion of the 10th International Architecture Exhibition of La Biennale di Venezia.

Prof. Dipl.-Ing. Jörg Schröder

architect and urban planner in Munich. With *Studiolandraum* in Munich he is conducting research concerning rural-urban interfaces, urban landscapes and rural areas, e.g. for *AlpHouse* within the *EU Alpine Space Programme* commissioned by the *Bavarian Chamber of Architects*. He is member of the scientific board of *Bavarian Academy of Rural Areas* since 2010. Jörg Schröder has been lecturer and researcher at *Technische Universität München*. Starting in 2012 he is full professor of urban design with the faculty of architecture and landscape of *Leibniz Universität Hannover*, conducting a research group for regional architecture and urban planning. www.studiolandraum.eu

Dipl.-Ing. Kerstin Hartig

architect and urban planner in Munich. Her office concentrates on urban agriculture and urban planning for suburban areas. Since 2010, she is a member of the *National Academy for Urbanism and Planning DASL* and the *Bavarian Academy of Rural Areas*. Kerstin Hartig has been lecturer and researcher at *Technische Universität München*, in 2010 she edited together with Jörg Schröder "*Landraum. Beyond Rural Design*" with *Jovis, Berlin*.

bauchplan).(landscape architecture and urbanism,

office in Vienna and Munich, represented by *Dipl.-Ing. Tobias Baldauf*, *Dipl.-Ing. Marie-Theres Okresek*, *Dipl.-Ing. Florian Otto*, *Dipl.-Ing. Rupert Halbartschlager*, establishes concepts for public spaces and implements projects in the urban context. www.bauchplan.net

www.agropolis-muenchen.de

Eco Web Town, N° 2 , December 2011