



Growing in Cities

Interdisciplinary Perspectives on Urban Gardening

COST-Action 1201
Urban Allotment Gardens in European Cities

Conference, Basel 10-11.9.2016

Full Papers

Institute Social Planning,
Organisational Change and Urban Development

n|w University of Applied Sciences and Arts Northwestern Switzerland
School of Social Work

ILS - Research Institute for
Regional and Urban Development gGmbH



cost
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

COST is supported by the EU Framework
Programme Horizon 2020

Content

Organizers / Scientific Committee / Sponsors / Conference theme	3
Kitchen Gardens -	
A photographic project by Francesco Sinni	5
Full papers	
Parallel Sessions 1	7
A1 - Can urban gardens change our cities?	9
B1 - The question of spatial justice and governance	32
C1 - Quantifying the sustainability of urban agriculture	80
D1 - From theory to practice (I)	105
Parallel Sessions 2	133
A2 - Understanding the gardeners	136
B2 - Urban planning instruments for implementing gardens	166
C2 - Enhancing resilience and ecosystem of cities	221
D2 - Quality of soils, groundwater and vegetables	
Parallel Sessions 3	266
A3 - Community gardens as spaces for knowledge	268
B3 - Between bottom up and top-down	304
C3 - Motivations for environmental behaviour	346
D3 - Models and scenarios for scaling up	364
Parallel Sessions 4	411
A4 - Evidence-based therapeutic gardening	
B4 - Public space - contested space?	413
C4 - The role of urban gardening research	439
D4 - From theory to practice (II)	45
Poster Session	485

Organizers

The COST Action TU1201 Urban Allotment Gardens in European Cities and the University of Applied Sciences and Arts Northwestern Switzerland (FHNW) welcome participants to GROWING IN CITIES: Interdisciplinary Perspectives on Urban Gardening International Conference, 9 - 10 September 2016, in Basel, Switzerland. The conference is hosted by the FHNW School of Social Work, Institute for Social Planning, Organisational Change and Urban Development ISOS in partnership with ILS - Research Institute for Regional and Urban Development, Germany.

We expect two days of scientific discussions and exchange of innovative ideas presented by internationally renowned keynote speakers and contributors from diverse disciplines, in the plenary and parallel sessions, discussion roundtables, and poster presentations. The conference also marks the conclusion of the 4-year EU COST Action Urban Allotment Gardens in European Cities (pre-conference for Action members on 8th September).

Scientific Committee

Johan Barstad, Norwegian University College for Agriculture & Rural Development, Stavanger (NO)

Simon Bell, Estonian University of Life Science, Tartu (EE)

Vikram Bhatt, McGill University, Montreal (CA)

Silvio Caputo, University of Portsmouth (UK)

Sandra Costa Baptista, Birmingham City University (UK), CITAB Research Centre (UTAD), Vila Real (PT)

Matthias Drilling, University of Applied Sciences, Northwestern Switzerland, Basel (CH)

Runrid Fox-Kämper, ILS – Research Institute for Regional and Urban Development, Aachen (DE)

Nazila Kesharvaz, ILS – Research Institute for Regional and Urban Development, Aachen (DE)

Andrzej Mizgajski, Adam Mickiewicz University, Poznan (PL)

Joe Nasr, Ryerson University, Toronto (CA)

Susan Noori, Birmingham City University (UK)

Annette Voigt, University of Klagenfurt (AT)



Sponsors





Kanton Basel-Stadt



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs
Education and Research EAER
State Secretariat for Education,
Research and Innovation SERI



GARTENJAHR 2016 RAUM FÜR BEGEGNUNGEN
ANNÉE DU JARDIN ESPACE DE RENCONTRES
ANNO DEL GIARDINO SPAZIO PER INCONTRI
ONN DAL CURTIN SPAZI PER INSCUNTERS



Conference theme

The conference aims to explore the dynamics of existing and emerging forms of urban gardening in Europe and beyond.

This is timely in the wake of the contemporary and projected social, economic and environmental changes and challenges faced by cities. Urban gardens, particularly traditional allotments, have been part of the city; however, with the emergence of community and modern pop-up to rooftop gardens, they are becoming permanent and prominent part of the urban and suburban landscape.

Creating healthy and inclusive cities, which are environmentally sustainable and economically affordable in an ever more urbanizing world, are vital challenges for scientists, policy-makers, and CITIZENS alike. This, along with a global commitment to the implementation of the 'New Urban Agenda', focusing on policies and strategies that can result in effectively harnessing the power and forces behind urbanisation, will help urban gardens enter into a new era.

Urban gardens create growing places for PEOPLE, but also act as catalyst in building viable and equitable communities, enhance quality of life, and help create safe and prosperous neighborhoods. The conference aims to further critical dialogue and advance knowledge on the subject.

Impressum

Edited by: Simone Tappert

Layout: Matthias Drilling

Photos: Francesco Sinni

ISBN: 978-3-033-05757-9

cite as:

Tappert, Simone (ed.) (2016): Growing in Cities. Interdisciplinary Perspectives on Urban Gardening. Conference Proceedings. Basel: University of Applied Sciences.

Parallel Sessions 1

* = full paper

A1 Can urban gardens change our cities? Critical perspective on urban gardening as a practice and strategy of urban social work

Chairs: Tanja Klöti, Simone Tappert & Matthias Drilling

*** Allotment Gardens in Switzerland - the challenges of self-governing communities in transforming cities**

Authors: Nicola Thomas / Patrick Oehler / Timo Huber; all: University of Applied Sciences Northwestern Switzerland

Urban gardening and the right for centrality. Critical considerations from a disciplinary social work perspective

Author: Christoph Stoik, FH Campus Vienna

*** Greening Cityscapes and Well-Being: Theory and Practice in Urban Social Work**

Author: Lena Dominelli, Durham University, United Kingdom

Tomatoes, yes! But how to grow them? And for whom? A critical analysis of non-commercial urban agriculture projects in the neoliberal city

Author: Sarah Kumnig, University of Vienna, Austria

B1 The question of spatial justice and governance

Chair: Maria Partalidou

*** Urban Gardening in Vienna between emancipation & institutionalisation**

Authors: Eva Schwab, University of Natural Resources and Life Sciences Vienna, Austria / Philipp Rode, OPK Offenes PlanerInnen Kollektiv, Austria

*** Spatial justice and heritage enhancement in the urban gardening**

Authors: Paola Branduini, Politecnico of Milan, Italy / Coline Perrin, INRA UMR Innovation Montpellier, France / Raul Puente Asuero, Universidad Pablo de Olavide, Spain

*** Public policy and community gardening in Rome: progress and contradiction**

Authors: Filippo Celata, University La Sapienza, Italy / Raffaella Coletti, University La Sapienza, Italy

*** Urban gardening in Lisbon & Leipzig: a comparative study on governance**

Authors: Ines Cabral, German Centre for Integrative Biodiversity Research, Germany / Ulrike Weiland, University of Leipzig, Germany

C1 Quantifying the sustainability of urban agriculture

Chairs: Francesco Orsini, Esther Sanyé-Mengual

Urban gardening: available tools for quantifying sustainability benefits

Authors: Daniela Gasperi, University of Bologna, Italy / Giorgio Ponchia, University of Padova, Italy / Giorgio Gianquinto, University of Bologna, Italy

Stewardship of Urban Ecosystem Services - Understanding the value(s) of urban gardens

Authors: Johannes Langemeyer, Autonomous University of Barcelona, Spain / Marta Camps-Calvet, Autonomous University of Barcelona, Spain / Laura Calvet-Mir, Universitat Oberta de Catalunya, Spain / Erik Gómez-Baggethun, Norwegian Institute for Nature Research & Norwegian Institute for Nature Research, Norway / Stephan Barthel, Stockholm University, Sweden

*** Integrating geographic, social and environmental tools for urban agriculture sustainability in Barcelona**

Authors: Susana Toboso, Autonomous University of Barcelona, Spain/ Joan Aynès, Autonomous University of Barcelona, Spain / Roger Liarte, Autonomous University of Barcelona, Spain / Carlos Torres, Autonomous University of Barcelona, Spain / Iván Muñiz, Autonomous University of Barcelona, Spain/ Joan Rieradevall, Autonomous University of Barcelona, Spain / Anna Petit-Boix, Sostenipra (ICTA), Spain

*** A methodological approach to evaluate the links between access to a garden plot and household food insecurity in deprived neighbourhoods of Paris and Sevilla**

Authors: Jeanne Pourias, AgroParisTech, France/ Raul Puente Asuero, Universidad Pablo de Olavide, Spain / Christine Aubry, AgroParisTech, France / Thomas Ducrocq, AgroParisTech, France

D1 From theory to practice (I). Exploring innovative initiatives all over Europe

Chair: Annette Voigt

*** Community Gardens in Poland - Impulse, Assistance, Expansion**

Authors: Donata Kaluzna, Green Cross Poland, Poland/ Andrzej Mizgajski, Adam Mickiewicz University in Poznan & Green Cross Poland, Poland

*** Urban gardens in Istanbul, Turkey: Forms, uses and challenges**

Author: Basak Tanulku, independent scholar, Turkey

Cooperative Kalkbreite - green transition. From parking lot to collective gardening (2009 -2016)

Author: Yvonne Christ, ZHAW, Switzerland

Floating garden demonstrating the future prospects of a new district

Authors: Krista Willman, University of Tampere, Finland

Spatial justice and heritage enhancement in the urban gardening

Authors: Paola Branduini, Politecnico of Milan, Italy
(paola.branduini@polimi.it)

Coline Perrin, INRA UMR Innovation Montpellier, France
(coline.perrin@supagro.inra.fr)

Raul Puente Asuero, Universidad Pablo de Olavide, Spain
(rpueasu@upo.es)

Keywords: Rural Heritage, Social Justice, Urban Agriculture, Urban Gardens

Abstract

Urban agriculture activities can enhance rural heritage by taking care of the tangible heritage and by supporting intangible heritage transmission, re-interpreting the agricultural function through the needs of contemporary city (Branduini 2015). Urban gardens hold a multiplicity of actors that use the space in different ways and share knowledge, tools and skills, not only agronomic, but also social, relational and economic: they can have different feeling of justice. Comparing different typologies of urban gardening (family, allotments, squatter, community, educational, therapeutical) recognized by the COST Action UAE (Simon-Rojo *et al.* 2015) in three Mediterranean metropolis (Seville, Marseille, Milan), the investigation identifies how social justice (investigated in the ongoing JASMINN project funding by the French National Research Agency) is expressed and translated in a spatial form. Results evidence that transmission of tangible heritage is incisive if deliberately chased by the main aims of the association managing the garden, thus the dissemination of intangible heritage is mainly an intergenerational and intragenerational transmission. The procedural justice is a shared tool: once a rule is a priori defined, the participants accept and follow it, no matter if it concerns the maintenance of heritage, the quality of space, the technique and philosophy of cultivation. The commitments are shared and planned in the meetings and are rarely defined by the garden rules. The specific design of the urban garden

has also an impact on its inclusiveness. External partnership and educational purposes are fundamental when the gardeners ask for legitimation of the space. Finally, the three metropolis are pursuing similar actions but with different agendas.

Introduction

The city expansion has reduced the extent, the structure and crop variety of agricultural land at the city borders, decreasing traditional landscape features. In this context, urban food gardening and urban farming can both perform cultural services for society, maintaining traditional cultural landscapes and their components, crop varieties and cultivation techniques, and transmitting customs and traditions. Tangible heritage pertains to the material elements of the agricultural landscape, to their historical authenticity and their physical permanence through time; intangible heritage pertains to the significance attributed by people to places, to techniques and skills that have enabled the creation of landscapes and to features dictated by economic and behavioural factors (Branduini 2015). All these values enhance people's lives and benefit society because they contribute to a sense of place (ICOMOS Australia 1999; UNESCO 1972). Cultural heritage is linked to outstanding landscape as well as to daily landscapes and even to abandoned areas (ELC 2000).

Multiple users use urban gardens in different ways, taking advantages of available resources (e.g. water, soil), asking for new resources (e.g. electricity) and interacting with the rural heritage: they can respect it, re-utilize or modify it. In this regard, the urban gardens are authentic schools of training for people and groups. The path along an urban garden grants knowledge, tools and skills, not only agronomic, but also social, relational and economic. In an urban garden, new intergenerational relations (from children to old people) and intragenerational relations (exchange of competence) can take place; the management of all the actors entailed can be organized by internal forces (self-organisation) or external input (partnership). In an agronomic social view, a multi-product space (balanced agro system with a variety of vegetables) is composed by a "multi-social" space, where different types of people (age, social and work conditions, nationalities, race and religion) live together.

Talking about social equity in agricultural land protection, Jacobs considers an effective farmland protection as an intergenerational equity issue (Jacobs 1989). In a similar way, the transmission of the rural heritage to future generations may be considered not only as an issue of public interest but also of intergenerational equity and more generally of social justice. It questions the possibility of a fair policy to address the needs of humanity, present and future. There are very diverse philosophical positions about "justice", with sometimes contradictory planning policy implications (Fainstein 2010). In this paper, we consider two fundamentals of social justice: 1) distributive justice, that refers to the perceived fairness of policies' outcomes with a special focus on the (re)distribution of resources (of goods, of services etc.) among diverse people or social groups, and 2) procedural justice, that insists not only on an equal treatment of all individuals, but also on the need for a wide public participation and for the recognition/inclusion of various social groups (Fraser 2009) in the process of policy elaboration and during implementation. Finally, space matters. Soja (2010) has shown that justice and injustice are embedded in spatiality, in the multi-scalar geographies in which we live. He uses the concept of spatial justice to put an intentional and focused emphasis on the spatial or geographical aspects of justice. This approach is a way of looking at justice from a critical spatial perspective, revealing spatial injustices and explaining the underlying processes producing them.

In this paper, we thus propose to shed a new light on the enhancement and transmission of rural heritage through the lens of spatial justice (investigated in the ongoing JASMINN project funded by the French National Research Agency). We compare four different types of urban gardens (allotments, squatter, community, educational) from the types recognized by the COST Action UAE (Simon-Rojo *et al.* 2015) in three Mediterranean metropolises (Seville, Marseille, Milan)¹ in order to identify how social justice is expressed and translated in spatial forms. We analyse the relationship between the sense of respect and a sense of equity in the community of gardeners and the duty of taking care of tangible heritage and the transmission of intangible heritage (cultural and historical value). We present the first results of the

¹ The gardens analyzed are 11: allotment gardens (Milan, Marseille, Seville) community gardens (Milan, Marseille, Seville), squatted gardens (Milan, Seville), educational gardens (Milan, Marseille, Seville).

investigation, carried out through web documentation and the authors personal knowledge of the case studied.

The work aims to answer the following groups of questions in the case study analysed:

1. Do the present policies take into account citizens' requests?
2. What is the tangible and intangible heritage and how is it transmitted?
3. How is justice carried out in the urban food gardening, what are the rules established and by whom (distributive justice)?
4. What are the forms of public participation and how are they planned, do the garden rules include the heritage maintenance and transmission and how (procedural justice)?
5. Does the taking care of heritage influence/effect the legitimation of garden space?

In order to answer these questions, we consider the following factors: the tangible and intangible heritage, the types of heritage transmission (education) (Table 1), the resources' distribution (access to land, duration and maintenance rules), the recognition of actors' specificity (stakeholders) and the participation tools (methodological framework in Fig. 1).

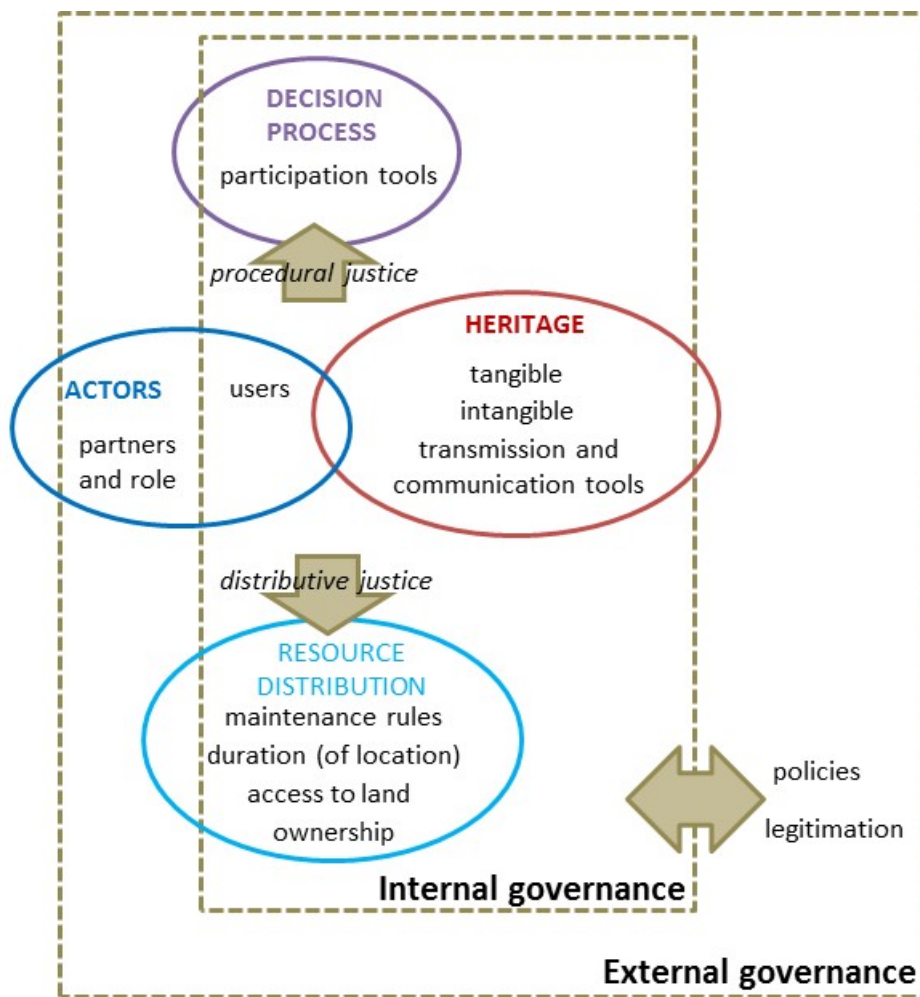


Figure 1: The methodological framework: the heritage and the actors are put in relation with the resource distribution and the decision process in order to identify distributive and procedural justice. Legitimation and policies are input and output of the process (implemented by the authors from Provè 2015:66)

MAIN TYPOLOGY	GARDEN NAME	TANGIBLE HERITAGE	INTANGIBLE HERITAGE	HERITAGE TRANSMISSION
ALLOTMENT GARDEN	Miraflores huertos	former agricultural buildings, roads, olive oil mill, spring and well, tobacco dry kiln	technique: olive press process, water catching and irrigation; events: celebration of olive, potatoes and tomatoes harvest, Belen celebration	building restoration courses (1991-2013); adults guide visits; teenager and children workshops
	Orti Cascina Albana	former agricultural buildings, well, lavatory; old cherry trees	gardeners' knowledge and traditions; courtyard celebration	from gardener to gardener
	Jardins de Mazargues	historical gardens (beginning of XX c.); pine grove	selection of traditional vegetables	horticultural workshop for families, school visits
COMMUNITY GARDEN	CEPER Polígono Sur			horticultural workshop for families, school visits
	Terra chiama Milano	former agricultural buildings (XIII c.), vegetable producers' hedgerow	techniques latest vegetable producer	building restoration courses; adults workshops for permaculture
	Jardins de Font Obscure			horticultural workshop
SQUATTER GARDEN	Huerto Rey Moro	historical residence and garden, archaeological ruins		agro ecological workshops
	Cascina Torchiera	former agricultural buildings		shared knowledge from gardener to gardener
EDUCATIONAL GARDEN	Jardin d'Adam	previous gymnasium	agrobiodiversity	horticultural workshop with an expert gardener
	IES Joaquín Romero Murube		techniques from old generation to new generation	horticultural workshop
	Orti a scuola		techniques from old generation to new generation	horticultural workshop

Table 1: Heritage types and their transmission in the urban gardens analysed (yellow, Sevilla; red, Milan; green, Marseille)

First results and discussion

Policies in the three urban contexts

In Marseille, urban gardens have been a long tradition since the industrial revolution, but most of them disappeared with urban sprawl. The remaining gardens are managed by the *Federation Nationale des Jardins Familiaux et Collectifs*, a national network. The municipality has reserved open spaces for gardens in its new Local Development plan and has promoted them with the *Charte des jardins partagés*.

Urban gardening in Milan dates back to 1942 with the "war gardens". In the sixties, squatted gardens started to spread over the outskirts of suburbia. In the early '80s, the municipality began to assign plots of public land, mostly in the periurban parks, to the elder people. In the last five years, the municipality has recognized squatted gardens and their social value, through new negotiation tools and programs like *ColtivaMI* and *Giardini Condivisi* (Lavisio, Scazzosi & Branduini 2015).

In Spain, workers' urban gardens were not widespread and most of them had disappeared with urban sprawl. However, from 2008, urban gardens have proliferated in the context of economic crisis and growing unemployment rates (around 27%). In Andalucia (Southern Spain), the number of gardens has raised from 10 to over 100. This incredible explosion is not supported by regional or national policies. Only in 2016, the municipality of Sevilla created the *Oficina de Gestión de los Huertos Urbanos*, a network aimed at unifying the management of urban gardens.

The transmission of tangible and intangible heritage

Groups of people deliberately seek after transmission of *tangible* heritage by when they include the duty of taking care of the heritage as the main aim of the association, in the case of community gardens and squatter gardens (Terra chiama Milano, Fig. 1), or when the impulse comes from the citizens in the allotment gardens (Miraflores gardens, Fig. 2-4). The recognition and valorisation of historical material permanencies, more or less visible (from entire old agricultural buildings to few hidden ruins), is part of the process that federates the group of people: consequently, many actions are planned for its transmission.

In squatter gardens, the preservation of heritage and its maintenance relies exclusively on the resources present on the site, like energy and water, because the sites are not connected to urban services (Branduini 2015). In allotment gardens, the maintenance relies only on a rule in the contract signed between gardeners and the municipality or the organisation (Italia Nostra, Legambiente).

Transmission of *intangible* heritage in allotment gardens concerns mainly the horticultural knowledge, cultivation technics and appropriate tools, acquired during adolescence or from their parents or grandparents and it is transmitted individually. It can also concern the general historical value of the garden (Jardin de Mazargues, Fig. 5-6). In the community gardens, specific courses (ortotherapy, healing herbs) are provided to members and to the public including the common technical courses. In some recent community gardens (*Huerto del Rey Moro* in Seville, *Jardin d'Adam* in Marsella, *Terra chiama Milano* at Cascina S. Ambrogio in Milan fund in 2013), sharing the permaculture philosophy is part of the initiation process for obtaining a parcel and it is also a way to check the ability of new citizens to become a gardener and take care of a common space (Fig. 7).



Figure 1: Communication panels describe restoration phases of a fresco rediscovered in the ice keeper (former apse of S.Ambrogio church) in the *Terra chiama Milano* community garden (source: Branduini).



Figures 2, 3: The farm in the Miraflores gardens of Seville (on the left) is listed as cultural heritage and was restored from an initiative of the urban gardeners (on the right) (source: Puente Asuero).



Figure 4: A gardener explains the water mill mode of operation in Miraflores gardens, Seville (source: Puente Asuero).



Figure 5: Dated from 1930, Jardin de Mazargues allotment gardens has a high historical and environment value in the Marseille city (source: Puente Asuero).



Figure 6: Memorial to Abbe Lemire and Joseph Aiguier, founders of Federation National des Jardins Familiaux et Collectifs en France, Marseille (source: Puente Asuero).



Figure 7: Gardeners participate at the preparatory course in permaculture in the *Terra chiama Milano* community garden at Cascina S.Ambrogio (source: Branduini).

Transmission of heritage and resources distribution (distributive justice)

The procedure of plot assignment (chosen at random, age criteria, waiting list etc.) and the duration of assignment (only one or more than one year) are not apparently discriminant factors in the transmission of heritage. Once a rule is *a priori* defined, the participants accept and follow it, no matter if it concerns the maintenance of land (no pesticide), the quality of space (no boundaries, low division), the technique and philosophy of cultivation (ecological agriculture, permaculture). This is true in any kind of gardens, single or shared, allotment or community. What is important is the initial sharing of the aim of the garden. In allotment gardens, the aim is often fixed by a written rule, defined by an association or

by the municipality (French Federation of *Jardins Familiaux* in Marseille, Municipality of Milan). In community and squatted gardens, the aim is explicitly imparted or explained in sharing discourses. The distributive justice of the allocation of parcels can thus only be assessed considering the shared aim of each garden.

In terms of spatial justice, the squatted gardens reproduce existing forms of socio-spatial segregation between the city-centre and the periphery. On the urban outskirts, squatted gardens may be seen as a just compensation for low-income social groups, whereas in the city-centre, where they involve more wealthy members, they are valued for social cohesion but they also contribute to green gentrification.

The specific design of the urban garden has also an impact on its inclusiveness. If urban gardens are closed, they benefit exclusively to the gardeners and exclude the neighbours and other citizens. They reinforce urban segregation by privatization of urban public space. In Seville, this happens in some gardens (Polígono Sur), due to the lack of the municipal legitimation and control. On the contrary, in Milan, the design rules of community gardens are shared between the community and the municipality in the first phase of project (from ColtivaMi to Giardini Condivisi program). Community gardens are public space, open to all the public, and without fences between plots. Urban agricultural initiatives have thus very distinct social impacts and may reinforce rather than reduce social and spatial inequalities (Tornaghi 2014).

Transmission of heritage and decision process (procedural justice)

Periodic meetings *in situ* are the usual way to guarantee sharing of ideas, of duties, of actions. They are planned monthly or yearly and they take place in every kind of gardens. Other ways of communication include web blogs and social networks, frequently in the gardens populated by mid-age people and families (community, squatted and educational gardens). The commitment, both, of taking care of tangible heritage and in organizing courses for the transmission of knowledge and traditions, is shared and planned in the meetings. It is rarely defined in the garden rules (only in allotment gardens of Milan), because it is conceived as a joint commitment of the gardeners' community. Besides guaranteeing meetings, the presence of a leader or a group of leaders, with specific management skills, is recognized as a help and a guide (Terra chiama Milano, Miraflores). Furthermore,

planning and management skills are also required when an entire garden area is offered to an association: in the "ColtivaMI" program, promoted by the Municipality of Milan, small associations were *de facto* excluded because they weren't able to produce sufficient planning documentation in a very short time.

In terms of procedural justice, the periodic meetings, that are planned and announced in advance, guarantee the possibility of a wide participation to the decision making process in most of the already running gardens. However, publicity and extensive participation do not guarantee the inclusion and the recognition of the special needs of the various social groups. It depends on the capacity of each group to make its voice heard. The example of the ColtivaMI call for projects shows a case of exclusion. Public authority should be aware of such issues and adapt their procedures in order to improve the social equity of the program. They could for example invite candidates to present their projects themselves, and then give some more time to a selection of candidates to develop their full project in agreement with the various stakeholders involved. Such a two-step procedure would be more inclusive than a one-step selection.

Transmission of heritage and legitimation

Proponents are heterogeneous groups of neighbours that occupy vacant plots (community and some squatted gardens) or families inside or outside the school area. External partnership (associations for environment preservation, institutions for social insertion, cultural foundations) becomes fundamental when the gardeners ask for the security of land tenure, in name of the social benefit provided to the city. The recognition occurs slowly for most of the actions launched (Miraflores garden, Jardin d'Adam) but it can be accelerated with the creation of a strong partnership (Terra chiama Milano)². Municipal rules that legitimate the initiatives help to improve the management, but are not necessary: in Milan, some gardens before the "Giardini condivisi" resolution show the best practices of tangible and intangible care and transmission of heritage. In squatter gardens, knowledge and heritage transmission is a shared output of the collective work without any internal or external rule. Some squatted

² Cascinet association has obtained in four year a 30-year contract with the municipality of Milan (after a 2-year contract) due to the large communication to the public of their initiatives of heritage maintenance and meeting for young people.

garden are not even looking for a legitimation (Cascina Torchiera in Milan), because they claim the freedom of self-organisation. The failed gardens' initiatives (evacuation), as Parque Alcosa (Seville) e orti di cascina Albana (Milan), show the need of a diversified external partnership and a connection to gardens network in order to enlarge the critical mass of people concerned and to demonstrate the role of gardens' initiatives in heritage transmission to the Municipality or private stakeholders. Among the garden users, a social, age and profession diversity fosters inter- and intra-generational knowledge transmission and generates internal cohesion in the face of external threats.

Conclusion

In the three Mediterranean cities, the small agricultural heritage is rich and can enhance landscape quality and reconnect people to its local identity. Facing the same economic crisis, the three metropolis are pursuing similar actions but with different agendas. Milan has developed a varied policy in the last five years, thanks to the Expo 2015, and has promoted the recovery of rural heritage. Gardeners have raised issues of social justice related to plot assignment criteria, and they have obtained new more fair policy tools. In Marseille, citizens recognize the role of urban gardens and the need to recover rural heritage partially cancelled by urbanisation, but municipal policy is still insufficient. Seville, finally, shows a lack of legitimation and public recognition of the role of urban gardens.

Among the gardens types, the community gardens show the greatest potential for social justice and heritage transmission: they gather people from the same neighbourhood sharing the aim to take care of a neglected place, through self-organization of the activities and of the management of the garden. Successful urban gardens, both formal community gardens and informal squatter gardens, show the involvement and recognition of a diversity of local stakeholders. These results confirm the relation between procedural justice and intergenerational equity: open participatory governance is a key factor for the successful enhancement and transmission of rural heritage. Furthermore urban food gardening initiatives are most suitable for recognizing, taking care, protecting heritage and transmitting it: they represent an important opportunity for Municipalities not only for neglected spaces but also for acknowledged public heritage, because they provide

human resources and save money in the maintenance and dissemination of heritage values. Lastly, urban gardens can foster the intergenerational transmission of the Mediterranean Diet, recognized as a wealthy diet and a UNESCO intangible heritage. Beyond heritage transmission, urban gardens also provide knowledge to groups of people who want to dedicate themselves to social and business activities.

Acknowledgement

The authors acknowledge the European funding COST Action "Urban Agriculture Europe" and the French National Research Agency (ANR) funding via the JASMINN project n° ANR-14-CE18-0001

References

Branduini, P., Laviscio, R., Scazzosi, L., Supuka, J. & Toth, A. 2015, 'Urban agriculture and cultural heritage: an historical and spatial relationship', in F. Lohrberg, L. Licka, L. Scazzosi & A. Timpe (eds.), *Urban Agriculture Europe*, pp. 138-148, Jovis, Berlin.

COE Council of Europe, 2000, *European Landscape Convention*, from <http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm>

Fainstein, S.S., 2010, *The Just City*, Cornell University Press, Ithaca & New York.

Fraser, N., 2009, *Scales of justice: reimagining political space in a globalizing world*, Columbia University Press, New York.

ICOMOS Australia, 1999, *The Burra Charter*.

Jacobs, H.M., 1989, 'Social equity in agricultural land protection', *Landscape and Urban Planning* 17(1), 21-33.

Laviscio, R., Scazzosi, L. & Branduini P., 2015, 'Milan, an agricultural metropolis: top-down and bottom-up initiatives', in F. Lohrberg, L. Licka, L. Scazzosi & A. Timpe (eds.), *Urban Agriculture Europe*, pp. 107-115, Jovis, Berlin.

Prové, C., Kemper, D., Loudiyi, S., Mumenthaler, C. & Nilolaidou S., 2015, 'Governance of Urban Agriculture Initiatives: Insights drawn from European case studies', in F. Lohrberg, L. Licka, L. Scazzosi & A. Timpe A. (eds.), *Urban Agriculture Europe*, pp. 64-79, Jovis, Berlin.

Simon-Rojo, M., Recasens, X., Callau, S., Duži, B., Eiter, S., Hernández-Jiménez, V., Kettle, P., Laviscio, R., Lohrberg, F.,

Pickard, D., Scazzosi & L., Vejre, H. 2015, 'From urban food gardening to urban farming', F. Lohrberg, L. Licka, L. Scazzosi & A. Timpe A. (eds.), *Urban Agriculture Europe*, pp. 22-29 , Jovis, Berlin.

Soja, E.W., 2010, *Seeking spatial justice*, University of Minnesota Press, Minneapolis.

Tornaghi, C., 2014, 'Critical geography of urban agriculture', *Progress in Human Geography* 38(4), 1-17.

UNESCO, 1972, *Convention concerning the protection of the world cultural and natural heritage*, Paris.