

Cities, Design&Sustainability. The New Series / 12

This Series seeks to present some new conceptions concerning the today and future cities' role in supporting sustainable communities. The Series will discuss the latest issues in planning, designing and building a better future achieving sustainability through urban and architecture design. CITIES, DESIGN&SUSTAINABILITY. THE NEW SERIES is attempting to better understand some factors and principles that should stimulate everyone and condition a range of choices about the future of urban life. It will address issues on new ways of managing our cities and responding to the key current matters of urban change. The need to bring new values to the regeneration and development of urban areas has long been accepted. However, the management of natural resources and ecological issues occurring in cities can be for urban designers and architects a basis for sustainable design. The making of real sustainable cities has to be considered as a cultural issue concerning the reconciliation between community living, urban environment and nature. Evolving themes on urban and architecture design and climate change will be further explored in order to share insights for a more integrative urban environment. The discussion on how to create a sustainable future should be focused towards implementing the sustainable city.

The Series Editor: Dimitra Babalis

Scientific Committee

Dimitra Babalis (The Series Editor)
University of Florence, Italy
Irene Curulli
Eindhoven University of Technology, The Netherlands
David Grierson
University of Strathclyde, Glasgow, UK
Helen Maistrou
National Technical University of Athens, Greece
Chéhrazade Nafa
Ecole de Chaillot, Paris, France
John Pendlebury
Newcastle University, Uk
Ana Pereira Roders
Eindhoven University of Technology, The Netherlands
Tim G. Townshend
Newcastle University, Uk
Zeynep Uludag
Gazi University Ankara, Turkey
Lubica Vitkova
Slovak University of Technology, Bratislava, Slovakia

SERIES PROLEGOMENON

Because the cities evolved in response to complex urban and architectural influences and climate change, planners, architects and designers seek to put some *fixed points* in preserving, regenerating and developing the built environment in evolution.

Consequently, evolving themes would explore the values of ecological and sustainable design in all its aspects and implementation. Evolving themes that may be seen as advice in order to share insights of a more extended understanding of urban environment.

This New Edition within *Cities, Design&Sustainability The New Series* has to be seen as an added opportunity to go deeper onto current scientific research issues such as:

- *The Sustainable City* (ecological and sustainable design both from conceptual and application point of view)
- *The City in Transformation* (urban preservation, regeneration and development)
- *The Integrative City* (new urban concepts and design principles)
- *The Cultural City* (sustainable management of cultural heritage, tangible and intangible heritage in historic environment, industrial heritage, waterfronts etc.)
- *The Smart City* (contemporary needs and technology trends).

Additionally, contributions within the *Cities, Design&Sustainability.The New Series* have to cover the following main *topic areas*:

- Historic environment: Tangible and intangible heritage and sustainability
- Place making and greening infrastructures and wellbeing
- Waterfronts and widening ecological and sustainable design
- Industrial heritage and innovative design value
- Sustainable communities to meet people's need
- Creative architecture, technology and smartness.

With CD&S.The New Series, we aimed to add quality to the wider research community with peer-reviewed scientific volumes. We like to undertake work with an International Scientific Committee that each member acts with competence and integrity. We seek to generate recommendations to a Scientific Committee that should exercise independent reviewing in order to set out a good approach to scientific research.

As the Editor of CD&S.The New Series, I have the benefit to cooperate with a Scientific Committee with high standards of advice. I have the opportunity to enjoy the process of supporting and encouraging a common vision on sustainable and ecological urban and architecture design.

Dimitra Babalis
The Series Editor

CONTENTS

Preface – Dimitra Babalis	6
Introduction – Dimitra Babalis Emerging Topics on Transforming Urban Places and Spaces	8
PART 1 – Cultural Heritage and Innovative Design Value	15
Chapter 1 – Dimitra Babalis Capturing the Change of Urban Space in Historic Environment	16
Chapter 2 – Dimitra Babalis Added Heritage Value in Making New Urban Landscapes. Sustainability and Accessibility in Regenerating Old Barracks in Florence	24
Chapter 3 – Helen Maistrou Upgrading Public Space as a Tool for the Promotion and Sustainable Development of the Historic Urban Landscape	32
PART 2 – Place making and Widening Sustainable Design	41
Chapter 4 – Lubica Vitkova The Public Spaces as Cultural and Social Factor of Sustainability	42
Chapter 5 – Chéhrazade Nafa The Metamorphosis of Public Space as a Basis for Social and Urban Revitalisation	54
PART 3 – Waterfronts, Greening and Wellbeing	61
Chapter 6 – Irene Curulli Industrial Waterfront Ecologies: Integrating City, Heritage and Nature through Public Spaces	62
Chapter 7 – Tim G. Townshend My Haven, My Sanctuary: Learning from Garden Allotments	72
Contributors	80

PREFACE

This book is the expression of scientific findings built within the First International Meeting on *ECOPOLIS. Approaching the Integrative City*, held at the University of Florence in May 2015.

The main goal of the First International Meeting was to re-confirm the international debate for knowledge on City in Transformation including ecological and sustainable design issues, started ten years ago within the European funded Programme on *ECOPOLIS. Sustainable Planning and Design Principles* planned and coordinated by Dimitra Babalis.

Along this First International Meeting, a European University Partnership is formed including the following Universities: University of Florence, Technical University of Athens, Eindhoven University of Technology, University of Newcastle, Slovak University of Technology in Bratislava and School of Chaillot-Paris.

Accordingly, the institution of an International Group on Urban and Architecture Design, (INTEGRO&UAD) is established by Dimitra Babalis and formed within the Department of Architecture (DiDA) at the University of Florence.

Clearly, the intention is to give an identity to the research had been done in the previous ten years and to continue it into the future. The main goal of the research group is to reveal importance on further investigation and cooperation on common vision between the above European University Partnership.

The INTEGRO&UAD aims to work collaboratively with research activities and contributions to the evolving main topics areas on sustainable and ecological design, in emphasising urban change.

The INTEGRO&UAD requires its members only to undertake interdisciplinary teamwork and partnership, ensuring and covering relevant research developments.

In detail, the main goals of the international research group are as follows:

- *To better explore the values* of urban environment and sustainability issues
- *To put some fixed points* in preserving, regenerating and developing tangible and intangible cultural heritage
- *To go deeper* into urban and architecture design and the design of sustainable urban spaces and places
- *To reach an interdisciplinary approach* on complexity of urban environment to play a role in shaping change.

Combining with the New Edition of the *Cities, Design&Sustainability. The New Series*, the book on *Approaching the Integrative City. The dynamics of Urban Space* has to be seen as a further opportunity to analyse significant topic areas and to define innovative research in partnership, activated since the First Edition of the *Cities, Design&Sustainability Series* published in 2005.

Tentatively, all contributions included in this special book cover the following main topic areas such as:

- Cultural Heritage and Innovative Design Value
- Place making and Widening Sustainable Design
- Waterfronts, Greening and Wellbeing.

All the viewpoint sections are dealing with sustainable urban change, which emphasises and combines urban redevelopment, creativity, architecture and social interaction, connectivity, accessibility, greening and landscape while underlining positively integrative ecological and social concerns.

Further, a contemporary understanding of the vital role that public spaces can play is stressed offering new insights into ways for both human needs and cultural values. Through this approach a common vision to provide consistent high standards of planning and design is developed.

As a field of activity, sustainable design of urban spaces has been the subject of much recent attention and has been recognised as an important area of practice. Moreover, it has been incorporated more fully into the planning action, addressing interdisciplinary concerns.

This book in its structure tries to present some evolving ways of urban space transformation in different European contexts for an overall quality of urban environment that affects wellbeing, social interaction and quality of life.

The planning and creation of responsive urban spaces should adopt appropriate tools in design in order to deliver maximum benefits.

This book will contribute to develop innovative concepts and knowledge bringing together the various dynamics of urban space and design skills.

Finally, it is becoming clear that well designed spaces and places have profound influence on people's lives.

Dimitra Babalis
Editor in Chief

INTRODUCTION

Emerging Topics on Transforming Urban Places and Spaces

Dimitra Babalis

The new conception of the city is currently under the reflection and experiment on regeneration debate and its physical, social and economic dimension. Thus, transformation and protection of urban environment through a good design has to be based on heritage value, diversity and sustainability issues. On the other hand, the ecological dimension of design has to be based on balance and availability of natural resources, new people's needs and resilience in order to better manage sustainability.

Urban change requires a new urban spatial planning and design especially in areas of great priority such as former industrial areas, waterfronts, brownfields, open public spaces in inner and outer areas with a lack of environmental and social and cultural conditions.

In this sense, the different emerging topics have to be considered such as a new relationship between urban areas, services and urban resilience for communities and infrastructures in order to react and maintain their stability. Urban change is characterised by uncertainty opening in an interdisciplinary line and deals mainly with small or large urban spaces with no identity and with a clear evidence of degradation. Surely, urban spaces under investigation are waiting for an opportunity and future transformation. The most of such spaces have their own vocation due mainly to their location, micro climate conditions and social dynamics, often interrelated within them.

At understanding and investigating on future planning of urban spaces is important to undertake research intends and proper design decisions in order to enhance environment from functional, social and environmental point of view and designing in a dialogue with the surroundings. Accordingly, with design decisions public spaces can take a different meaning and identity based on different objectives to be achieved within their boundary conditions, use and functions and physical dimension.

A tool of cities to raise urban resilience, mostly, open spaces should be transformed into recreational areas, creative activities, workshops of creativity and social inclusion. Sustainable management should be based on a regeneration process of spaces of huge characterisation within the urban fabric of inner and outer urban areas.

In particular, re-thinking and re-vitalising urban spaces some questions should be taken under consideration:

- How can we face regeneration of a public space according to the current

people's needs and within a methodology of understanding / participating / designing?

- How can we place new functions that re-create the new condition of an urban space of historical character according to social and cultural consideration?
- How can we design the new features and green elements in a way to preserve the cultural value and at the same time to generate the spatial, environmental quality and wellbeing?

Certainly, to identify and regenerate open spaces is intended in terms of sustainable urban transformation and is likely to return them into new life while re-creating urban quality, accessibility and permeability.

A number of open spaces such as courtyards, abandoned micro open areas, inner open spaces within urban blocks or between them can be considered as potential spaces for regeneration.

Therefore, urban spaces should be regenerated according to micro climate benefits and to low energy impact by planting trees, insertion of green and re-designing path and cycle ways.

In addition, seems essential to investigate on existing ecological networks that indicates how to transform a new and well-coordinated links with ecological and sustainable criteria. This aspect seems to be the most important as the identification of micro open areas should be part of an integrative environmental system in transformation. The urban spaces should be coordinated within the city in order to satisfy purposes on environmental, functional and aesthetic improvements.

However, the last decade has seen many examples of good urban design and sensitive re-organisation of open urban spaces of strong local characterisation. In such way, for the regeneration of micro and macro urban areas, including policy planning and local frameworks is essential a careful reading of open space typology that should define coded behaviours of urban environment. Additionally, putting the emphasis on urban quality means offering opportunities and facilities for both selected sites and local people.

A great desire is to identify the mending at the micro and macro scale of intervention that should be connected also to the wider city area. So, a significant improvement of urban life with environmental benefits at urban and social scale including sustainable management of public realm should consider:

- An approach to the quality of an urban space with ecological and sustainable interventions that can encourage the placement of micro spaces without forget the recovery of the surrounding built environment
- The most awaited results in order to promote a greater participation of public and private sector within the planning and design that would be the right track process
- The design and management of urban spaces that should be measured with the effects of climate change with strategies of conscious behaviour. In this regard, design interventions in urban scale should take under consideration the character of the environmental management of space in relationship with the surroundings
- A holistic approach that goes beyond simply measuring of sustainable parameters but guaranteeing design and creating the opportunity site
- The use of green and sustainable elements such as the use of local materials, important in raising awareness and reducing the environmental impact

- Energy conservation for the design and management of individual spaces and surrounding buildings but also the micro climate more than the citywide climate
- In a reasonable time, a sustainable management of urban spaces in order to address the causes and effects of urban and social changes within mitigation strategies and climate adaptation.

In particular, in designing an urban space the following points should be considered:

- Definition on the basis of identity, characteristics and urban potentiality in order to re-define characterisation and new urban scenarios
- Selection of micro and macro urban spaces according to the type of intervention of re-vitalisation with the inclusion of new uses and green
- Recognition of the environmental value and urban centrality that is based on value of urban and cultural assets
- Identity of environmental, social inclusion and cultural measures to ensure the quality of the urban space in historic environment
- Conception of new features for both preservation of the city image and micro climate benefits.

Therefore, we are referring to a specific category of micro public spaces of great urban sensibility and management.

For sure, design intents should be presented according to the complex theoretical problem that produce considerations in terms of conceptual definition of a designed place within the development of methodology tools. At local scale the expected impact in raising the practical issues for designing urban spaces can be summarised as follows:

- Designing small community spaces widespread and inclusive
- Joining through processes of participatory design and sense of places
- Contributing to improving city's environmental, functional and aesthetic impact
- Having a positive effect on property values of surrounding buildings in the areas of intervention.
- Making available to local stakeholders to be involved as co-leaders within urban frameworks.

A further level of consistency between design issues and methodology is the expression of a strong interdisciplinary attitude with innovative, inclusive involvement of local people.

Structure of the book

PART 1 – Cultural Heritage and Innovative Design Value in Historic Environment

Freshly, the reading and designing of tangible and intangible heritage in the Historic City is planned in terms of preservation and redevelopment of cultural heritage with sustainable criteria. Nowadays, Historic City is recognised by the compact built form and built quality of distinctive historic buildings; By urban morphology and character of public space and its re-definition in terms of attractiveness, functionality and sustainability; By social context in terms of uses, activities, economic resources and wellbeing.

Chapter 1 – Dimitra Babalis, *Capturing the Change of Urban Space in Historic Environment*. The chapter illustrates how the enhancement of open spaces in historic environment can create active, attractive and fully accessible new urban environments. It shows how heritage values can be considered as a great opportunity to valorise heritage in all its forms and could be used as a powerful urban design tool. Cultural heritage could be the starting point for urban design at all scales of intervention. Therefore, in terms of the existing character of place, sustainability should be the guiding principle for sustaining a core urban site, its formal configuration and social resilience. Ideally, urban spaces in historic environment they can be connected after a proper planning and design through a good open space strategy. Finally, incorporating heritage values in urban design can be a bridge between spatial planning and design and climate change adaptation. Finally, the paper identifies the major growing issues on shaping eco-sustainably inner urban spaces in historic environment giving effective responses to urban transformation process.

Chapter 2 – Dimitra Babalis, *Added Heritage Value in Making New Urban Landscapes. Sustainability and Accessibility in Regenerating Old Barracks in Florence*. The chapter describes how urban spaces can be transformed and shaped responsibly to respond to people's needs. It illustrates proposals regarding the transformation of some selected urban spaces within the old barracks in Florence in order to re-define new urban scenarios, It shows how it is important to define adaptive and dynamic approaches to masterplanning in the way they can be used to identify the urban form and potentiality. The re-development of former barracks in core areas is considered a great challenge for the achievement of urban fabric. A cross-cutting approach can undertake decisions about where new housing, facilities, services, employment and public spaces should be located. Regeneration should be sustainably planned and implemented and good open spaces can achieve and preserve urban environment. In addition, relationship between old barracks and urban environment has to be considered as a key to understanding the significance of creation of new urban context. Consequently, the acceptance of place making and its current vital role in regeneration process has to be considered of great potentiality for urban re-development.

Chapter 3 – Helen Maistrrou, *Upgrading Public Space as a Tool for the Promotion and Sustainable Development of the Historic Urban Landscape*. The chapter is dealing with public space as a key element in the historic urban landscape. Public space is defined as a structural element throughout time and has been determined by social, political and economic conditions of the city. Today public space has changed its values and image as a consequence of city's transformation. Public spaces in core areas often present their degradation and needs to be changed in order to gain their heritage values and bring back quality of life. It is therefore necessary to re-design public spaces to highlight or recover the hidden or lost functional and aesthetic qualities. The starting point for any design and any intervention should be an in-depth knowledge and understanding of the historical evolution of change and the current situation. The design of public space, along with aesthetic improvement contributes to the functional reorganisation and morphological upgrade of the historic core. Through the exposition of some significant examples, the paper shows that the design of public space must be accompanied by measures and actions to ensure the functional and morphological enhancement of the traditional core and / or the entire city.

PART 2 – *Place making and Widening Sustainable Design*

To address issues on place making within sustainable design of urban space major societal challenges should be faced. To achieve objectives of sustainable growth according to ecological issues major attention should be paid. In an urban context of transformation and growing network of changed open spaces is important to consider interdependencies, cultural and social factors and characterisation of places.

Chapter 4 – Lubica Vitkova, *The Public Spaces as Cultural and Social Factor of Sustainability*. This chapter puts in clear that cultural and social sustainability is an integral part of the effective urban development. Quality of public spaces, which support the city of short distances and the city development based on pedestrian and cycling is one of important pillars of sustainability. Cultural environment and the sense of place is another important dimension of sustainability. Urban resident and occupant identify himself with the city and urban environment via arrangement of spaces. Identification with urban space and its characteristic elements is linked to good orientation, accessibility, functions, activities. The concept consists of prioritisation and differentiation of spaces in the city centre structure, which should support their identity and good legibility. The study focuses to the presentation of the application research realised at the Faculty of Architecture, Slovak University of Technology in Bratislava with cooperation and by support of the Bratislava Municipality and the Main Architect of Bratislava.

Chapter 5 – Chéhrazade Nafa, *The Metamorphosis of Public Space as a Basis for Social and Urban Revitalisation*. The chapter shows how Integrative City can assume a new role on creating public spaces that had better redefine the significance of social, political and cultural life and in terms of accessibility for all and of environmental protection by applying both energy savings and natural resources

It is stressed that in some significant urban sites under regeneration the metamorphosis of public spaces can be interrelated within democracy and people's participation in order to reach easily successful urban design and social cohesion.

PART 3 – *Waterfronts, Greening and Wellbeing*

Waterfronts look for a dynamic transformative process while designing urban vitality of sites. Therefore, the vision and strategies for regeneration should be a valid alternative for revitalisation of waterfronts and in-between public spaces. In such way, ecological approaches become an operative term. Taking under consideration components of nature such as water, green land and their integration in the redevelopment design seems to be essential for everyday life. However, within the planning and design, consider landscapes as green lands and allotment gardens is of a great significance. These projects may help modern society to be more resilient by providing opportunities for developing personal wellbeing and social cohesion.

Chapter 6 – Irene Curulli, *Industrial Waterfront Ecologies: Integrating City, Heritage and Nature through Public Spaces*. The chapter is dealing with industrial waterfront redevelopments that have opened a large debate as spaces of compromise. It describes the role of public space in this process of transformation and

re-integration of dismissed areas into the urban scale. However, in this chapter it is considered the role of a public space able to re-connect derelict and isolated locations to the dynamics of the urban scale. This means how complexity of former industrial areas redevelopment may be easiest solved by a co-existence between public and private in terms of functions, spaces and their management. Therefore, the design of public space should reveal and strengthen the character and identity of dismissed industrial areas. The reinterpretation of the traditional ideas of urban and public space, such as in a street, a park, or a square is the inevitable result. The paper outlines planning and design key points, analyses the strengths and weaknesses of those points. Finally, reviews the conversion project of the Centennial Mills site located in the historical waterfront of Portland, Oregon-USA. This river city is well known for its progressive urban development, environmental ethics and for being the so-called 'Portland model' in a way that integrates city, heritage and nature.

Chapter 7 – Tim G. Townshend, *My Haven, My Sanctuary: Learning from Garden Allotments*. This chapter draws on a study of experiences of allotment gardeners at five allotment sites in Newcastle upon Tyne (Newcastle) England. It engages with theories and concepts derived from literature on therapeutic landscapes and, for example, explores the propensity of allotments to provide an escape from daily pressures and stresses of contemporary life; They are sometimes described as a 'haven', or 'sanctuary', by those who tend them. However, working an allotment garden is also a long term project that demands commitment and coping with disappointment as well success. These properties may help to counterpoint certain commonly experienced aspects of modern society; acceleration of everyday life, short term commitment and demands for instantaneous gratification, by providing opportunities for developing personal and social resilience.



Capturing the Change of Urban Space in Historic Environment

Dimitra Babalis

Heritage values in urban environments should be considered as a great opportunity to valorise heritage in all its forms and could be used as a powerful urban design tool. Therefore, cultural heritage, by embedding and holding the character of places, could be the starting point for urban design at all scales of intervention.

In terms of the existing character of place, sustainability should be the guiding principle for sustaining a core urban site, its formal configuration and social resilience. Incorporating heritage values in urban design can be a bridge between spatial planning and design and climate change adaptation.

Ideally, urban spaces in historic environment by nature they tend to be scattered and disconnected because they are usually developed in different times or created opportunistically. But they can be connected after a proper planning and design through a master vision and a good regeneration and movement strategy. So, urban spaces can create active, attractive and fully accessible new urban scenarios.

Well designed urban spaces can meet people's needs allowing flexibility to sustainable function. However, the establishment of sustainable public open spaces throughout the historic environment has the potential to benefit urban quality within walking distance reducing traffic and pollution.

On the other hand, from an ecological standpoint, green open spaces can help regulate micro climate and urban permeability. To make a high quality historic environment that invites people to take part in a variety of social activities is important to create a good way of assessing the urban space quality.

Conception of urban space has changed significantly in recent years. A new character of created public spaces suggests that current challenges may be significant if the *organicity* of urban form can run together with temporality and reality of current planning and design.

It is of great importance the *reading* of existing open spaces in order to establish a *new organicity*, bringing together history and architecture. Designing at the various scales of intervention, from the wider context to the urban block and building stock, it is essential for having a positive dialogue with the city.

If within the Historic City an urban space is considered a well defined space that meets the needs of a given society and time, in the Contemporary City an urban space should recognise contemporary design intentions including cultural and architecture values of urban environment.

It is in evidence that contemporary needs have to adopt new conception of design that correspond to urban transformation. New urban lifestyles

representing new social, economic and cultural attitudes are fully corresponding to new *urban imprints* and cultural debate.

Consequently, the organisation of new urban spaces in old urban pattern often has to take under consideration the inclusion of public and private spaces and their transformation in order to create connections and accessibility. (BABALIS, 2015)

The question is: How is it possible to transform core public spaces in historic environment into attractive ones to share common characteristics and provide room for recreation, pleasure, exercise and play?

Urban pattern and core urban space

A changed historic environment should prioritise good public spaces, green open spaces, walking and cycling as the preferred mode of movement and as element of urban quality and quality of life. In turn, reducing car-dependency is a key objective for making resilient cities and neighbourhoods by shifting from car oriented urban patterns to pedestrian ones.

The needs of daily living within a pleasant walking distance, a clear accessibility, connectivity and management of climate change are all a necessary aspect of securing a healthy living. The necessity for diversity, mix of uses and public spaces should be in transformed buildings and places by conserving, enhancing and creating vibrant places.

Place making including the design of heritage and of environmental significance areas is also a priority for a sustainable and resilient city.

Additionally, a strategic approach to open space can contribute to sustainable future at local level while comprehensive planning and design for open space are essential to social inclusion, community cohesion, health and wellbeing.

In detail, an *open space strategy* can reinforce local identity; Enhance spatial character of an area; Improve connectivity between places; Provide green infrastructures and safer routes for walking and cycling; Provide cultural,

recreational and educational activities; Protect and promote understanding historic value of a place; Encourage urban regeneration and help mitigate micro climate of a site. (CABE Space, 2009) In core urban environment different typologies of places and spaces can be considered for transformation such as core squares of historical significance, central market places, avenues and main streets, urban parks and historic gardens, micro and macro green spaces and playgrounds, waterfront strips and relaxation places, schools and other educational yards, courtyards within former urban blocks.

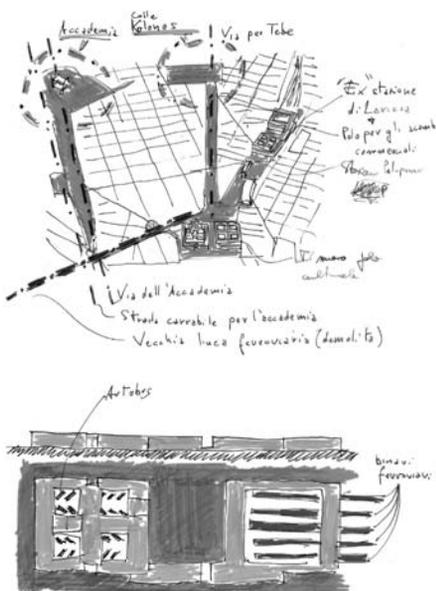
The transformation of such selected places and spaces within the historic environment can show how it is important to define adaptive and dynamic place making approaches, possible according within a local vision and an open space strategy. So, the revitalisation of core areas should help to cover mainly local people needs while preserving cultural heritage and physical image of a place.

Therefore, proposed new conditions require a strong dialogue among the parts to face social, economic and spatial demands. In any case, awareness for historic built environment should be paid in order to protect urban pattern configuration, space identity and local appearance of former building stock under regeneration.

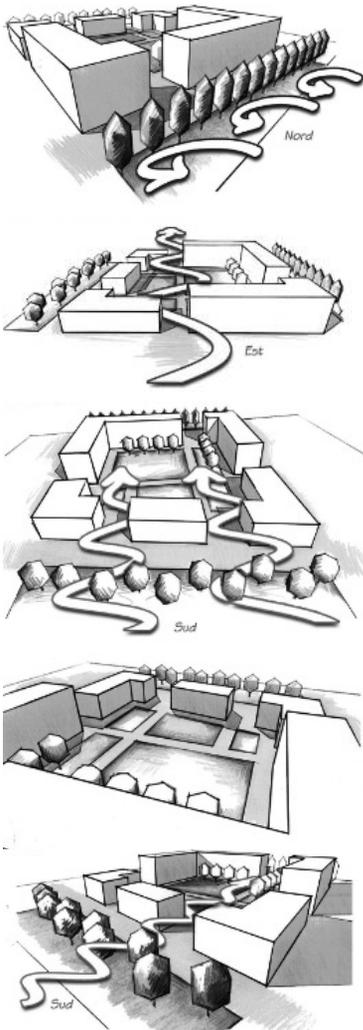
Changing and added values of urban space

Recent transformation in historic environment addressed directly to profound changes of public urban places and spaces. Traditional garden spaces are integrated with public spaces and urban parks are being redesigned to cover new community needs. Public open space policies drive to reconsider private and public spaces as well. New social and economic needs manage a variety of urban spaces especially inner spaces within urban blocks and other private spaces. New urban landscapes are arising addressing new urban functions with green.

Open spaces should be changed under a proper urban design, creating appetite for public space and public image.



Urban block models showing alternative layouts, massing of buildings, accessibility and movement to deliver open space quality.



Successful changed urban spaces should be dynamic and comfortable through spatial configuration, movement and connection management. New activities and functions can bring improvement of a public space and benefits of people who live and work in the surrounding context. Further, well arranged uses can bring people together and more facilities on the ground can respond to the community's needs. Thereby, what makes a place successful is the sustainable way of thinking and doing.

Carr et al highlighted that a successful place making it is important to examine people's needs not only because it is important for identify the specific uses but also for the success of urban space under transformation. Public spaces that they do not consider needs are destined to be underused and unsuccessful. Therefore, Carr et al they identified five types of reasons for people's needs in public spaces such as:

- Comfort
- Relaxation
- Passive engagement with the environment
- Active engagement with the environment
- Discover.

Comfort, is the essential need for food, drink, relief from sun or access to sun. *Relaxation* is a psychological comfort, is the need of a well designed space to put body and mind at easy.

Passive engagement with the environment, could lead to a state of relaxation but is diverse considering mainly the people's enjoyment to observe the passive scene, viewing the public art and enjoyable features of a site.

Active engagement with the environment, means a direct involvement within the people and the site and this function is crucial for socialisation and is considered a predominant aspect of urban space design in order to reach social interaction and cohesion.

Discover, represents the desire for stimulation, it would be essential for changing physical urban qualities and changing human activities.

Many human functioning need to be covered by a variety of public spaces and people need to relax, to enjoy and have the opportunity to enjoy the natural features of a site. Consequently,

functionality and a good use of a space can drive to the place success.

Accordingly, public spaces have to be:

- *Meaningful*: Allowing people to create social interaction and strong connections with the surroundings
- *Democratic*: Generating accessibility for all
- *Responsive*: Covering local people needs. (CARR ET AL, 1992)

Gehl Architects analysed existing well functioning public spaces in inner Copenhagen and have categorised and summarised common characteristics subdivided them in '12 quality criteria'. Good public spaces reflect the majority of the 12 quality criteria. Accordingly, the different characteristics of public spaces can give a sense for coherence of the city's pedestrian network.

Equally, a more detailed studio made at the role might have played public spaces as streets, parks, squares and other open space typologies to better understand functionality and use. (GEHL AND GEMZØE, 2001)

Recently, the *Project for Public Space (PPS)* study emphasises that a good understanding of *sense of place* is essential for place making. In turn, a successful making of a place means a good spatial design for social inclusion, responsive and ecological health providing spaces for experimentation and collaboration. Consequently, the making of a good public space cannot be measured only by its physical configuration but must consider its vitality and functionality.

Some key principles for place making have been emphasised by the PPS's *Placemaking Approach* such as:

- Having a vision that integrates diverse opinions
- Translating the vision into a plan
- Ensuring sustainability within the plan. (PPS, 2015)

The developed *Place Diagram* by PPS can be considered as a tool to evaluate a transformed urban space that should share the following four qualities:

- *Access and linkages*: A space easy to get to and get through and convenient to public transit. A space of a good connection within the adjacent buildings
- *Uses and activities*: A space with a range of uses for all. A space with different

types of activities for people to walk, to play and enjoy

- *Comfort and image*: A good image and safety of the space and comfortable for people
- *Sociability*: A space with a strong sense of place where people can interact to obtain social and cultural activities. (PPs, 2015)

The urban block open space as an opportunity

The role that open public spaces within former urban blocks can play to deliver quality is crucial for urban regeneration. A vision for walkable urban blocks for living a resilient and greener future has so far sustained most of the aspirations of local authorities. This is a strategy coming forward on the basis of some quality design criteria able to meet the context needs.

There is no clear definition of what an indoor and outdoor urban space within the urban block could be and how the spatial planning and configuration might help reduce derelict core places and grow socio-economics of today's historic environment. For sure, to achieve a long-term vision to create a good management of core urban space and in a different way of what is considered a stand-alone one, an integrated masterplan that guarantee quality of a place has to be developed. Historic environment needs to move through much open space that should provide greater access to amenities and social facilities and should bring residents closer to green infrastructures. The overall vision is to ensure safe and attractive cycle and pedestrian corridors that are based in a series of interconnected walkable urban blocks and neighbourhoods. In this way, networked places must give a strong image of a city centre that encourage diversity, accessibility, activity, resilience and functionality.

An open space strategy throughout core areas should provide the focal points for development and a range of open spaces that should be usable at different time of the day. In terms of the physical form of the sites place making principles can better define its structure that is mainly based in well walkable urban blocks. The movement network is to provide local facilities such

as shops and play areas creating a sense of arrival in a central place. The site is orientated around this space and serves as a meeting place with associated linkages that connect to other character areas. Hierarchy is the key to distinguish the various types of movement network enabling people to identify with a place or square.

A compact built form with a mix of uses and natural features can ensure active pedestrian corridors and ensure safe as well. The walkable urban blocks must have a strong significance reached by a good masterplanning and effective urban management. The new urban landscapes should be truly combining beauty, functionality and activity. Green and blue networks should be included to provide opportunities for community. Further, a clear designed street movement should prioritise footpaths and cycle routes for a healthy lifestyle. Thereby, an extended network of paths should link the rest of the residential neighbourhood, employment areas and other core areas.

The masterplanning approach can establish detailed site-wide strategies, the urban form, land uses and the design of key structuring elements, including the guidance to detailed elements of the design.

The challenge is how to open up the fragmented and former open spaces in a sensitive way, linking them into the surrounding context and enhancing permeability.

The *Methodology* has to take under consideration the following main points:

- Re-shaping sustainably the historic environment (old and new)
- Facing turbulences of Local Authority
- Overlapping patterns (urban/environmental/social/economic)
- Appraisal of the site and considering the S.W.O.T. Analysis
- Considering reuse / local climate and sustainability principles
- Adopting urban frameworks and Masterplanning process
- Identifying sustainable movement and urban dynamics (create sustainable green and open spaces)
- Re-creating the urban form
- Running with temporality to join people's need
- Re-creating liveability and urban quality. (BABALIS, 2015)

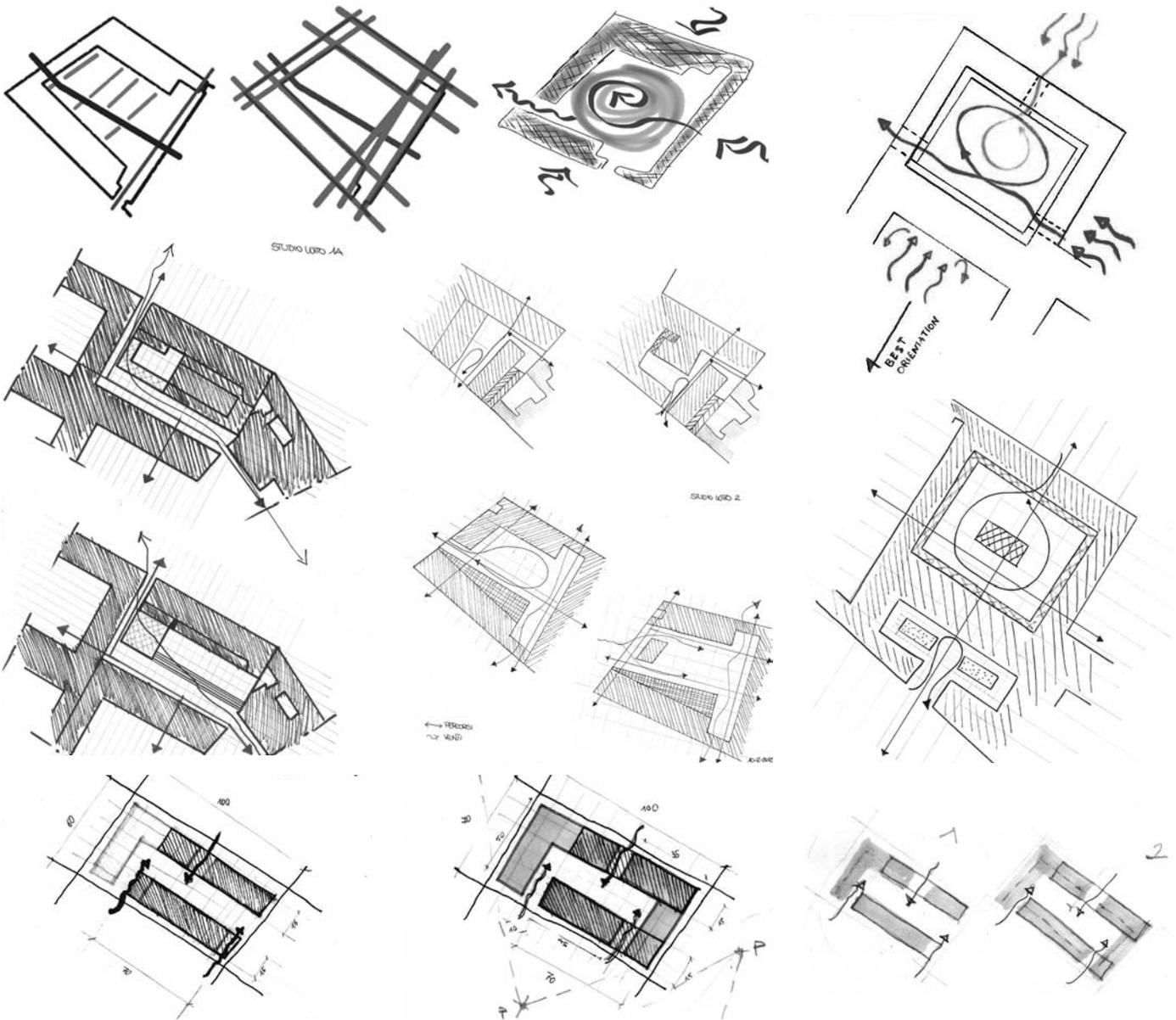
OPPOSITE PAGE

Drawings showing potentiality of open block that might be appropriate for accessibility to open space.

Drawings showing urban block routeways, accessibility and connectivity to open space.

Drawings showing urban block behaviour for solar access and wind friction.

Urban block samples showing form, dimension, accessibility and connectivity.



In conclusion

It is important to underline how pragmatic can be a modern masterplanning to respond to current social, economic and urban condition of a core urban space. Thus, transformation should be carefully controlled where it needs to be.

Therefore, proposed open spaces well connected with place making principles should be important to people that can move easily, spending time in green places, gardens and playgrounds.

Sustainability principles against micro climate and climate change should be considered in both layout of site and buildings. Urban design and re-use of former buildings should be managed efficiently.

In turn, an open space strategy needs to be robust and flexible enough to take into account the constantly changing market and local needs.

To better establish an overall spatial strategy is important to manage common and individual elements.

A regeneration programme should further consider the following:

- A variety of public spaces that are safe and attractive to the wider community
- A variety of improved public spaces that can enhance the existing environment and create a safe and healthy place for all
- Local residents to be given the opportunity to take charge and manage areas of public space themselves
- Activities and opportunities for social interaction through sustainable urban design proposals
- Perimeter block open space typologies to create an enclosed network of streets and spaces
- Proposed masterplans in response to orientation, scale and massing.

Masterplanning has to be considered as a flexible framework through joint consensus on key objectives and design principles which is open to innovation, change and social inclusion but allowing enough freedom for future proposals.

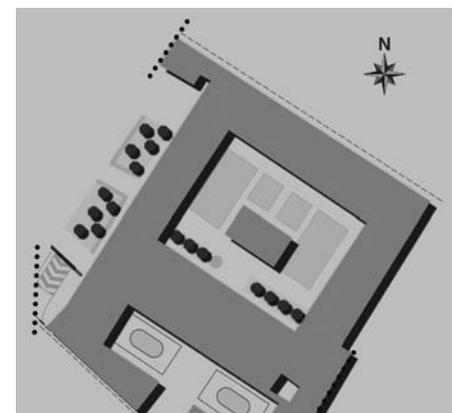
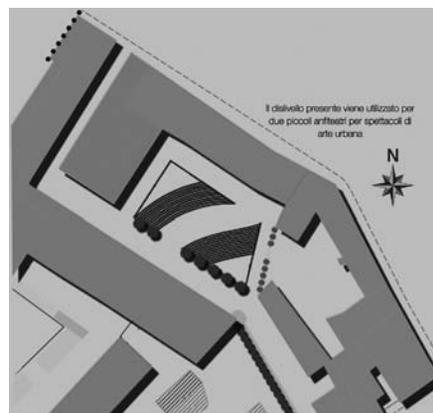
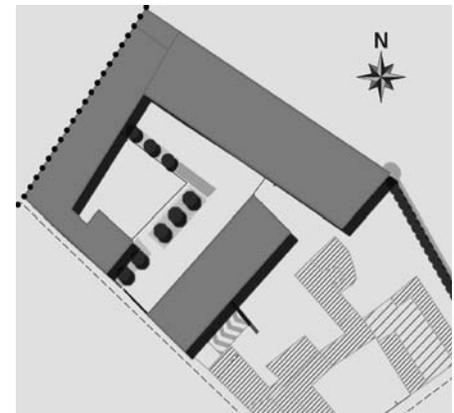
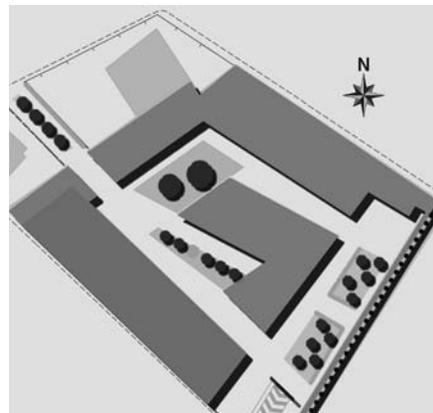
The following ten points should be considered within the urban transformation of core places and spaces:

- Integrating within the context and the city
- Respecting and considering the local image

- Respecting natural resources of the site
- Considering local community and local needs
- Considering bioclimatic conditions of the site and the city
- Creating good pedestrian and cycle networks
- Creating good and integrated types of new buildings
- Designing public realm and open spaces
- Designing for energy efficiency and low energy impact
- Involving local authorities and local people to the planning and design process. (BABALIS, 2012)

Further, well designed urban spaces provide numerous benefits to society, short-term and long-term. People benefit socially, environmentally and economically. Public open spaces can provide opportunities for social interaction and relaxation focusing attention on core values including a sense of a common heritage.

Urban blocks and design of qualified public open spaces.



An integrated urban scheme can underpin qualified open space while performing valuable tree location to reduce wind speeds on the site.

Interesting and diverse recreation areas and green spaces have a special ambiance and attractive qualities.

By developing attractive spaces, people develop a strong sense of community. An excellent example of a public-private partnership for open space regeneration can offer unique opportunities to educate people about environment and history of a site offering outdoor activity and enrichment. Carefully planned public open spaces in an economically depressed and physically core area can be helpful in guiding community towards a successful future. Open spaces provide a place for recreation and wellbeing and can increase one's appreciation for the environment. Additionally, attractive open spaces can be a primary factor in attracting and retaining economic investment. Parks and open space can also enhance the property values of nearby residential area.

Finally, social and spatial implications of new lifestyles, needs and attitudes to sustainability suggest that public open spaces in historic environment may need to be re-thought and properly designed. Looking to the future technology may contribute to the creation of new patterns of open space networks that will reflect new scientific and cultural understanding for creative visions. Therefore, specific frameworks with

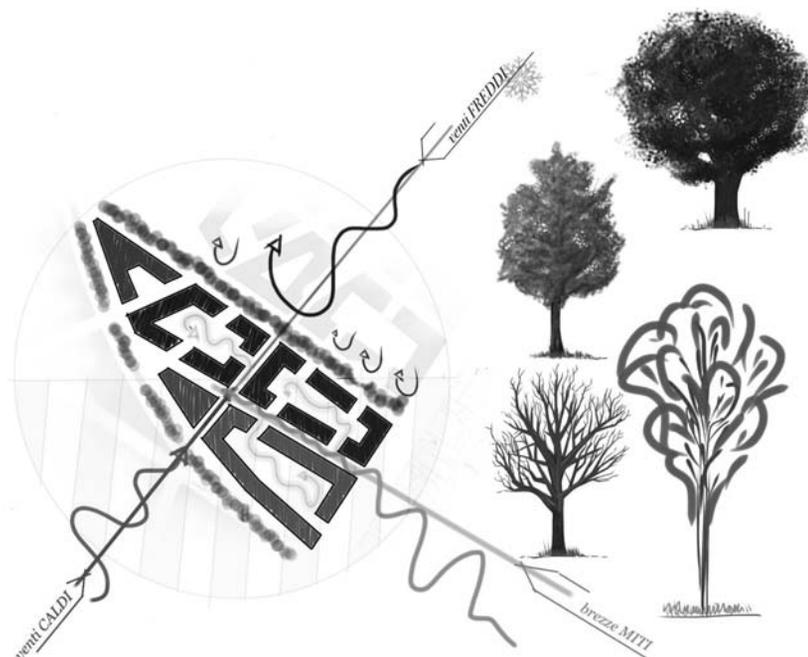
specific functions can allow new dynamics of places and spaces from aesthetic and ecological point of view. (WARD THOMPSON C., 2002)

Note

All drawings have been developed within the Design Laboratory, Academic Years 2011-2012 e 2012 -2013 (hold and coordinated by Dimitra Babalis) within the Courses of Urban Design and Eco-sustainable Urban Design , Building Engineering Master Degree Course, School of Engineering, University of Florence.

References

- BABALIS, D., (2015) *Creating Distinctive Open Spaces in Historic Environment to Achieve Temporality of Urban Form* in Proceedings Fifth International Conference on *Hyper Urban Design*, Florence May 2015.
- CABE SPACE AND THE MAYOR OF LONDON, (2009) *Open space strategies Best practice guidance*, Commission for Architecture and the Built Environment and the Greater London Authority, London.
- FRANCIS, M., (1988) *Changing Values for Public Space* in *Landscape Architecture*,
- CARR, S., FRANCIS, M., RIVLIN, L.G. AND STONE, A.M. (1992) *Public Space*, Cambridge, Cambridge University Press.
- GEHL ARCHITECTS, *Public Spaces in Copenhagen. A Public Space Guide by Gehl Architects*, see www.gehlarchitects.dk accessed in November 2015.
- GEHL, J., GEMZØE, L., (2001) *New City Spaces*. The Danish Architectural Press, Copenhagen.
- HAYDEN, D., (1995). *The Power of Place*, Cambridge, MIT Press.
- ROGERS, R., URBAN TASK FORCE REPORT, (1999). *Towards an Urban Renaissance*, London.
- BABALIS, D., (2014) *Added Heritage Value in Making New Urban Landscapes. Sustainability and Accessibility in Regenerating Old Barracks in Florence* in Proceedings/Speakers and Speeches 18 ICOMOS General Assembly Symposium, Heritage and landscape as human values, October, Giannini Napoli, 2014.
- CARR, S., FRANCIS, M., RIVLIN, L.G. AND STONE, A.M. (1992) *Needs in public space* in CARMONA, M. AND TIESDELL, S.(Eds), (2007) *Urban Design Reader*, Architectural Press/Elsevier.
- PPS, *What is Placemaking?* Project for Public Space; see www.pps.org, accessed in November 2015.
- PPS, *What Makes successful spaces?* Project for Public Space; see www.pps.org, accessed in November 2015.
- BABALIS, D., (2012) *Urban Change and Sustainability*, Florence, Alinea International Editrice.
- WARD THOMPSON, C., (2002) *Urban open space in the 21st century* in *Landscape and Urban Planning* 60: 59-72





Added Heritage Value in Making New Urban Landscapes. Sustainability and Accessibility in Regenerating Old Barracks in Florence

Dimitra Babalis

How urban spaces can be transformed and shaped responsibly to respond to people's needs? How can we have a view of a sustainable future and, in so doing, trying to making new urban landscapes? What can we learn from the historic city on sustainability?

Nowadays evolving concept on sustainability is essential to be considered to urban transformation. Further, a good core strategy is needed to identify future aspirations setting out design quality and providing links to sustainable regeneration and development for buildings' and places' achievement. On the other hand, highlighting local character helps to understand future urban quality within preservation and re-use process. In the latest decades, a proper application of urban sustainability in historic core areas has to be a basis for a critical reflection regarding achievement and future challenges of outstanding buildings and places. Finally, is increased the international awareness within the establishment of specific intentions on culture heritage that calls sustainability to urban development and regeneration.

The chapter identifies the major issues on shaping eco-sustainably urban spaces in core areas giving effective responses to urban transformation process. It describes the emergence of the concept of heritage value and

complexity of its application and aims to ensure a more visible and effective integration of culture and heritage in regeneration. The main viewpoint is focuses on creating sustainable places and tries to identify policies and strategies at the various scales of intervention. It shows how the today's intervention is the consequence of advanced understanding of the historic urban pattern. The main attitude is to consider some important urban transformation matters over the last years within reusing and developing existing urban areas.

Therefore, efficiency, durability, comfort of reuse of old buildings and sites should give identity, diversity and well-being on creating new urban landmarks. The re-development of former barracks in core areas is considered a great challenge for the achievement of urban fabric. A cross-cutting approach can undertake decisions about where new housing, facilities, services, employment and public spaces should be located.

Regeneration should be sustainably planned and implemented and good open spaces can achieve and preserve urban environment as well as human wellbeing. In addition, relationship between old barracks and urban environment has to be considered as a key to understanding the significance of creation of new urban context.