

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

Book of Conference Proceedings

Sarajevo, Bosnia and Herzegovina, June, 08th - 09th, 2017

08 & 09 JUNE

SARAJEV0

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

PLACES AND TECHNOLOGIES 2017

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

BOOK OF CONFERENCE PROCEEDINGS

Editors:

Dženana Bijedić, Aleksandra Krstić-Furundžić, Mevludin Zečević



Sarajevo, Bosnia and Herzegovina

Title:

PLACES AND TECHNOLOGIES 2017 - KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY BOOK OF CONFERENCE PROCEEDINGS

For publisher:

Prof.Mr.Sci Mevludin Zečević

Chef editors:

Prof.Dr Dženana Bijedić, Prof.Dr Aleksandra Krstić-Furundžić, Prof.Mr.Sci Mevludin Zečević

Editorial board:

Prof.Dr Eva Vaništa Lazarević, Prof. Dr Aleksandra Djukić, Dr Milena Vukmirović

Publisher^{*}

Arhitektonski fakultet Univerziteta u Sarajevu

Year of publishing:

2017

CIP - Katalogizacija u publikaciji Nacionalna i univerzitetska biblioteka

Bosne i Hercegovine, Sarajevo

711.3/.4(063)(082)

INTERNATIONAL Academic Conference Places and Technologies (4; 2017; Sarajevo)

Keeping up with technologies in the context of urban and rural synergy [Elektronski izvor]: book of conference proceedings / [4th International academic conference] Places and technologies 2017, Sarajevo, June, 08th - 09th, 2017; editors Dženana Bijedić, Aleksandra Krstić-Furundžić, Mevludin Zečević. - El. zbornik. - Sarajevo: Arhitektonski fakultet, 2017. - 1 USB fleš memorija

Sistemski zahtjevi: Nisu navedeni. - Nasl. sa nasl. ekrana

ISBN 978-9958-691-56-0 COBISS.BH-ID 24131590

08 & 09 JUNE

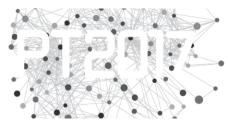
SARAJEV0

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

CONTENTS

DRGANIZATION	ix
ABOUT	xiv
TOPICS	xiv
KEY NOTE SPEAKERS	XV
NORD OF THE P&T_2017 CONFERENCE DIRECTORS	xvi
DPENING AND SPECIAL PAPERS' TOPICS	1
JRBAN AND RURAL CONNECTION BETWEEN GLOBAL AND LOCAL – BETWEEN ROLE AND REALITY. WHAT DESIGN CAN DO TO ACHIVE THE SYNERGY?	3
SPACES OF LOW AND HIGH-INTENSITY CHANGES	4
DECENTRALISING CITIES: TECHNOLOGY, THE NEW CLIMATE AND THE FUTURE OF PERI-URBAN GROWTH	13
TOPIC I: IMAGE, IDENTITY AND QUALITY OF PLACE	27
LIGHT AND ARCHITECTURE IN THE CASE OF ADIL BEY AND KUWAIT MOSQUE IN SARAJEVO	28
THE HOMEOSTASIS AND THE SYNERGY IN THE CONTEMPORARY AND FUTURE LANDSCAPING	38
PRINCIPLES OF ARCHITECTURAL REGIONALISM AS MEANS OF BUILT FORM IMPROVEMENT IN BOKA BAY, MONTENEGRO	48
NVESTMENT OPPORTUNITIES IN SERBIA: KIKINDA CASE STUDY	57
Free zone in Kikinda	64
DEVELOPMENT CONCEPTS OF <i>UrbRur</i> AREAS	68
COMPLEX PATTERNS OF SYNERGY BETWEEN URBAN AND RURAL SPACES	77
THE IMPORTANCE OF IDENTITY AND QUALITY OF LIFE. THE CITY OF BANJALUKA	88

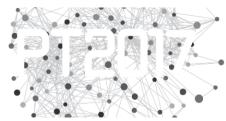


SELF-ORGANIZED PATTERNS OF RURAL SETTLEMENTS VS. PLANING AND DESIGNING THE BUILT ENVIRONMENT	
KNEZ (PRINCE) MIROSLAV SQUARE IN OMIŠ (CROATIA)	105
IMAGE, IDENTITY AND QUALITY OF CVJETNO NASELJE HOUSING DEVELOPMENT IN ZAGREB	115
THE SMALL-SCALE APPROACH AS A GENERATOR FOR URBANITY INCREASE OF BANJA LUKA CITY	126
SPATIAL, TECHNOLOGICAL AND STYLISTIC PATTERNS OF PRODUCTION OF THE BUILT ENVIRONMENT IN BOSNIA AND HERZEGOVINA	135
TOPIC II: URBAN AND RURAL PLACES TOWARD HUMAN COMFORT, HEALTH AND INCLUSION	144
THE EXPERIENCE OF SMART CITY IN LIGURIA, ITALY. THE CASE STUDIES OF THE MUNICIPALITIES OF LA S AND SAVONA	
HEALTHY URBAN ENVIRONMENT AND DESIGN: THE OUTDOOR SPACES	155
TENDENCIES IN NEWLY-BUILT MULTI-FAMILY HOUSING IN SERBIA: OUTLOOK OF URBAN EXPERTS	169
DECODING URBAN FRAGMENTATION: MORPHOGENETIC PROCESSES IN THE SHAPING OF A SUBURBAN TERRITORY IN LISBON'S METROPOLIS	180
RETHINKING ARCHITECTURE AND RELATED ENERGY EFFICIENCY IN WESTERN BALKAN CITIES "Case study the housing developments in city of Sarajevo"	
THE ZONE OF TRANSITION: BETWEEN CITY AND LANDSCAPE	204
INNOVATIVE APPROACHES IN THE PROOCESS OF RE-INTEGRATION OF CITY AND VILLAGE	215
PERSPECTIVES THAT ARISE FOR PREVENTIVE MEDICINE FROM THE SYNERGY OF URBAN AND RURAL AREAS	227
WATER PROTECTION IN URBAN AREAS	236
RELATION BETWEEN PLANNING AND REALIZATION OF OPEN SPACES IN NEW BELGRADE SUPER-BLOCKS: STUDIES OF BLOCKS 45 AND 70	
IMPACTS OF EARTHQUAKE ACTIONS ON URBAN AND RURAL AREAS	253
TOPIC III: SUSTAINABLE COMMUNITIES AND PARTICIPATION	263
THE ARCHITECTURE OF GARDEN AS NEW RECREATION FIELD OF EVERYDAY URBAN LIFE	264
THE SCIENCE OR ART OF MAPPING? - ELABORATING THE PROCESS OF TIS CREATION IN CITY OF NIŠ	273

4th International Academic Conference **PLACES AND TECHNOLOGIES 2017**

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

08 & 09 JUNE	SARAJEV0	BOSNIA AND HERZEGOVINA	BOOK OF PROCE	EDINGS
			IG COMMUNITY PARTICIPATION THROUGH	284
CREATIVE CITY	CHALLEGING (ONCEPT "ALL FOR ONE – ON	E FOR ALL''	295
			AND AFFORDABILITY OF CURRENT SOCIAL	304
			GH SOCIAL NETWORKING – "NEGOTINSKA KR	
			TO HOUSEHOLD RISKS – CASE STUDY OF AD.	
MULTILEVEL GO	OVERNANCE IN	STRUMENTS FOR ACHIEVING	BALANCED URBAN-RURAL DEVELOPMENT	332
			G PROCESS. CASE STUDY OF THE CITY OF	341
INTEGRATIVE A	ND LOCALLY S	ENSITIVE APPROACH TO THE	COMMUNITY PLANNING IN SERBIA	350
THE "DYNAMIC	EDGE": RE-CO	NCEPTUALIZATION OF THE UR	BAN FRINGE	359
TOPIC IV: ARC	HITECTURE AN	D BUILDING TECHNOLOGIES.		370
SUSTAINABILIT	y in higher ed	DUCATION AND RESEARCH: TH	IE ROLE OF THE ARCHITECT	371
			BUILDING ENVELOPE OF THE MULTIFAMILY	379
			ERGY PERFORMANCES OF RESIDENTIAL BUILI	
			FAÇADE SYSTEMS FOR RENOVATION	399
INTEGRATED DI	ESIGN IN THE P	ROCESS OF ARCHITECTURAL	EDUCATION	408
EVALUATION O	WALL THERM	AL PERFORMANCE FOR VEGE	TATION WALL	417
			ing on energy efficient technologies in order to dina	418
			HE ROLE OF TECHNICAL BUILDING EQUIPMEN	



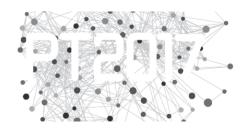
TOPIC V: ENVIRONMENTALLY FRIENDLY MODES OF TRANSPORT AND COMMUTE 438	
WEARABLE DEVICES HELP THE WALKER TO EXPLORE THE CITY	. 439
EXPLORING THE CITY WITH THE BICYCLE AND TECHNOLOGY HELP TO IDENTIFY HAZARDS MET THEREBY	. 445
AIRCRAFT TECHNOLOGY ENHANCING ENVIRONMENTAL PROTECTION WITHIN URBAN AREAS	. 455
CARSHARING – USING INSTEAD OF OWNING	. 461
CONCEPT OF THE REGIONAL PUBLIC TRANSPORT SYSTEM DEVELOPMENT	. 470
TOPICS VI: CLIMATE CHANGE	. 477
ENERGY SAVING POTENTIAL OF THE REFURBISHMENT OF BUILDING ENVELOPE OF THE EXISTING SINGLE-FAMILY HOUSES IN URBAN AND RURAL AREAS OF BOSNIA AND HERZEGOVINA	. 478
(R)URBAN SYNERGY RECONSIDERED: THE ROLE OF INFORMATION NETWORKS IN CLIMATE CHANGE ADAPTATION AND MITIGATION	. 489
TOPICS VII: GEOGRAPHY AS DEVELOPMENT FACTOR	. 499
ROLE OF TWIN CITIES AND SATELLITE TOWNS IN INTENSIFYING REGIONAL DEVELOPMENT	. 500
SMALL URBAN CENTERS AS DRIVERS OF DAILY MIGRATIONS AND AGENTS OF TRANSFORMATION OF RURABACKGROUND: EXAMPLE OF BLACE MUNICIPALITY	
TOPIC VIII & IX: CULTURAL PATTERNS AND SENSITIVITY; SUSTAINABILITY LESSONS FROM VARNICULAR ARCHITECTURE	. 525
USING SPACE SYNTAX MODEL IN TYPO MORPHOLOGICAL STUDIES - UNDERSTANDING THE TRANSFORMAT OF URBAN FORM AND URBAN LIFE OF THE EDGE BLOCKS OF NEW BELGRADE	
THE FUNCTION OF GREENERY IN A SKYSCRAPER: THE PLACEMENT AND ITS INFLUENCE	. 536
Moshe Safdie	. 539
THE IMPORTANCE OF THE APPLICATION OF CO-DESIGN WITHIN THE REDESIGN OF THE CULTURAL CENTER: B&H	
LEARNING FROM THE TRADITIONAL MEDITERRANEAN ARCHITECTURE: MICROCLIMATIC AND LIVEABILITY CONDITIONS IN INTERMEDIATE OUTDOOR SPACES	. 553
SUSTAINABILITY AND RESILIENCE IN TRADITIONAL BOSNIAN AND HERZEGOVINIAN ARCHITECTURE - LEARN FROM TRADITION FOR BETTER FUTURE	
TOPIC X: TOURISM FOR URBAN-RURAL SYNERGIES	. 572

4th International Academic Conference **PLACES AND TECHNOLOGIES 2017**

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

08 & 09 JUNE	SARAJEV0	BOSNIA AND HERZEGOVINA		BOOK OF PROCEEDINGS
FLUIDITY: NETW	ORKED CONTE	XT AND CONTEMPORARY N	ETHODOLOGIES OF ARCHITEC	TURE IN TOURISM .573
ICT POTENTIAL	FOR ENTREPRI	ENEURSHIP IN RURAL AREA	S	582
			I URBAN AND RURAL PLACES	
			AVA DISTRICT IN SOUTHEASTE	
TOPIC XI: RESIL	JENCE OF PLA	CES		624
		,	NMENTAL PROTECTION AND S	
			OCESSES OF TERRITORIAL RES	
CONTINUOUS P	ERFORMATIVE	LANSCAPES FOR RESILIENT	CITY OF SKOPJE	644
AGILE METHOD	S IN FORMATIO	N OF METROPOLIS NEIGHBO	OURHOOD	654
REVITALIZATION	I OF VAST CITY	SPACES THROUGH THE ME	ANS OF SOUND	663
			ES" - CASE STUDY OF BELGRA	
			OMBINED MORPHOLOGICAL AI	
COMBINED GMA	A AND SD DISA	STER RISK REDUCTION MOD)EL	688
TOPICS XII: HIS	STORY AND PH	LOSOPHY OF TECHNOLOGY	AND PLACES	694
REDESIGNING C	OMFORT			695
TOPICS XIII: BI	OMIMICRY AND	SMART INNOVATIONS TO	HUMAN CHALLENGES	706
REVERSE BIOMI	METIC ANALO	GIES IN DESIGN OF ARCHITE	CTURAL STRUCTURES	707
TOPICS XIV: PA	ARTICIPATORY	AND CRITICAL DESIGN IN U	RBAN DECISION-MAKING PRO	CESSES718
MODERN SPATI	AL CONCEPTS,	PROGRAMMES AND TECHN	OLOGIES AIMED AT SUSTAINA	BILITY OF HISTORICAL

NUCLEI – THE CASE OF THE TOWN OF BUJE......719



PLACES AND TECHNOLOGIES 2017

4th International Academic Conference

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

ORGANIZATION

Organizers:

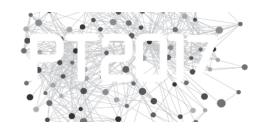
University of Belgrade, Faculty of Architecture, Serbia University of Sarajevo, Faculty of Architecture, Bosnia and Herzegovina

Dr Vladan Đokić, Dean

University of Belgrade, Faculty of Architecture, Serbia

MSc Mevludin Zečević, Dean

University of Sarajevo, Faculty of Architecture, Bosnia and Herzegovina



TOPIC II:

URBAN AND RURAL PLACES TOWARD HUMAN COMFORT, HEALTH AND INCLUSION

HEALTHY URBAN ENVIRONMENT AND DESIGN: THE OUTDOOR SPACES

Francesca Giofrè

Department Planning Design, Technology of Architecture, Faculty of Architecture, Sapienza University of Rome, Via Flaminia 70 zip code 00194, Rome, Italy, francesca.giofre@uniroma1.it

Zoran Đukanović

Department of Urbanism, Faculty of Architecture, University of Belgrade, Serbia, duke@arh.bg.ac.rs

ABSTRACT (STYLE: ABSTRACT HEADING)

The paper discusses the evolution of the concept of health and its relationship with the urban environment and design, starting from the first phase (1997) of the initiative of World Health Organization Regional Office of Europe 'Healthy Urban Planning'. At the same time, the paper focuses on the evolution of the debate at European level and internationally produced initiatives and documents. "Healthy urban planning means planning for people. It promotes the idea that the city is much more than buildings, streets and open spaces, but a living, breathing organism, the health of which is closely linked to that of its citizens" (Barton and Tsourou, 2000). According with this concept, the Zagreb declaration (2009) has defined that "A healthy city offers a physical and built environment that supports health, recreation and well-being, safety, social interaction, easy mobility, a sense of pride and cultural identity and is accessible to the needs of all its citizens". The urban planners and the architects plays a strategic role in delivering those requirements.

In these frameworks at European and at International level, the paper highlights the themes and actions of the urban planner and architect discussing examples of best practices related to open spaces. Such spaces are in fact identified and represent one of the areas of action for sustainable regeneration of cities and the activation of proactive health projects which are becoming 'common goods'.

Keywords: City, Health, Open Space, Environment, Participatory Design

08 & 09 JUNE SARAJEVO BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

Introduction

The initiative of the World Health Organization (WHO) Regional Office of Europe began, in 1987, launching the Healthy Urban Planning Initiative, which integrates the concept of health into sustainable development. It is an important moment, the beginning of a well-articulated path that draws attention to the fact that city planning policies do not take into account the concept of health and well-being and how it can overcome this gap. The urbanization is a growing phenomenon: by 2050 it is estimated that the world population will reach 9.3 billion, of whom 6 billion will live in urban areas and in 2025 there will be 27 megalopolises with unimaginable consequences in terms of demand for services, consumption of resources and on the system of spaces, social relations and health. The cities today occupy approximately only 2% of the total land, however they comprise: 70% of the economy; 60% of the global energy consumption; 70 % of the greenhouse gas emission and 70% of the global waste. Furthermore, 95% of urban expansion in the next decades will take place in the developing countries. Previously, in 1976 the first United Nations (UN) Conference on Human Settlements in Vancouver (UN HABITAT I), recognised the magnitude and consequences that would have a rapid urbanization on the international level.

One of the urgent issues is to protect and ensure the health and wellbeing of people living in cities, even through the regeneration or the creation of an appropriate environment. In fact, the state of human health would be conditioned by 50% of their behaviors and lifestyles, but also environmental factors (20%), genetic factors (20%), health care (10%) (Amara, Bodenhorn et all 2003).

Health according with the principles of Constitution of WHO, is a positive concept and it is defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" and it is a right and as such it underpins all other fundamental rights which belong to all people. Certainly, the right to health cannot be guaranteed unless some basic prerequisites, linked to the political and cultural dimension of each country and people, are satisfied, such as: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity (Ottawa Charter, WHO, 1986). The health is the result of several factors, determinant of health, which interact with each other and every individual and in general each society based on its culture has a different way of expressing the relationship between health - disease - social context. "The Meikirch Model of Health posits that: Health is a state of wellbeing emergent from conducive interactions between individuals' potentials, life's demands, and social and environmental determinants. Health results throughout the life course when individuals' potentials — and social and environmental determinants — suffice to respond satisfactorily to the demands of life. Life's demands can be physiological, psychosocial, or environmental, and vary across individual and context, but in every case unsatisfactory responses lead to disease" (Birchera and Kuruvillab 2014).

When addressing the issue of healthy city, it's necessary to refer to the context, approach, and implemented strategies that must deal with the reality on which they act. The equity is defined in the sense that "All people must have the right and the opportunity to realize their full potential in health" is only a slogan, in reality because it is not related to the North and the south of the world, "rich and poor people live in very different epidemiological worlds, even within



the same city. And such disparity occurs in both high-income and low-income countries" (Rydin, Yvonne, at all. 2012).

The awareness of the close relationship between Health and Planning and Architecture is highlighted by the evolution of the debate at European and international level.

HEALTHY URBAN PLANNING AND ARCHITECTURE: EVOLUTION OF THE DEBATE IN THE LAST 30 YEARS. FROM LOCAL TO GLOBAL

At European level, the first phase of the European Healthy Cities Network (EHCN) began in 1987, it was launched by World Health Organization (WHO). The main goal was to introduce new ways of working for health in the cities and to exchange and highlight the best practice and projects in the participating cities. The concept of healthy city from the late 1980s to today is clarified and detailed up to the present multi-sectoral concept. It is not only about improving health care services, but also creating political, economic, social, cultural and environmental conditions so that communities can live in health and well-being. In these processes, a key role is played by the participation of stakeholders and local leaderships, and by researching ways of involving and motivating citizens, or by the political will and the processes put in place to activate such policies.

It's from the third phase of EHCN, since the late 1990s, that the awareness of the role of health promotion through urban planning is considered as a main element, also driven by the maturation of the Agenda 21 principles, signed by 183 countries from all over the world, arising from the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. From this point on, as suggested in Agenda 21, participatory practices are the focus of interventions: the authorities are called to create their own agenda through dialogue with citizens, local organizations and private companies, that has an aim to understanding and acquiring, from the local community and the industrial sector, the information needed to formulate the best strategies.

Four years away from UNICED and 20 years from Habitat I, Habitat II, the United Nations Conference on Human Settlements (UN, 1996) called the 'City Summit', takes place in Istanbul. The main themes covered and reported as global objectives in the Istanbul Declaration, in continuity with UNICED and Habitat I and in integration of Agenda 21, are: adequate shelter for all and sustainable human settlements in an urbanizing world. In the full globalization of the economy, opportunities are highlighted, but also risks and uncertainties. The Agenda pays attention to people who are subject to be placed at the center to promote actions for sustainable development, and the local governments are identified as the most important partners for the implementation of the stated principles. The interdependence between the South and the North of the world is recognized and acknowledges that "The growth of cities and towns causes social, economic and environmental changes that go beyond city boundaries" and that "Rural and urban development are interdependent. In addition to improving the urban habitat, we must also work to extend adequate infrastructure, public services and employment opportunities to rural areas in order to enhance their attractiveness, develop an

08 & 09 JUNE

SARAJEVO

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

integrated network of settlements and minimize rural-to-urban migration. Small and medium-sized towns need special focus". The topic Healthy City, healthy habitat, etc. is frequently used in official documents.

From the reading of the various documents produced by EHCN and International Organizations, it is evident that the philosophy behind all levels is the putting in place of policies, processes, actions, long-term projects that are at the service of the people who live and work in cities and made with their participation. The city is understood as a living, breathing, growing and complex organism, having an ever-changing internal dynamic.

A key moment in the definition of the Healthy City is represented by the Zagreb declaration (2009), which defines the core themes of the fifth phase, the healthy urban environment and design. The issues related to this core are identified later and identify the fields of action of the urban planner and the architect in: healthy urban planning; Housing and regeneration; Healthy transport; Climate change and public health emergencies; Safety and security; Healthy urban design and creativity and liveability (fig.1).

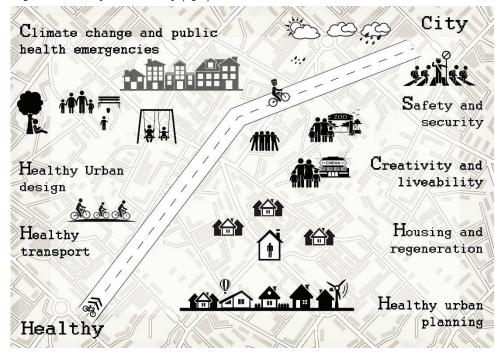
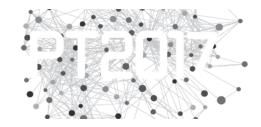


Figure 1 – Healthy urban environment and design: the main cores (by authors)



- "- Healthy urban planning. Integrating health considerations into urban planning processes, programmes and projects and establishing the necessary capacity and political and institutional commitment to achieve this goal. Especially emphasizing master planning, transport accessibility and neighbourhood planning.
- Housing and regeneration. Increasing access through planning and design to integrated transport systems, better housing for all, health-enhancing regeneration schemes and to green and open spaces for recreation and physical activity.
- Healthy transport. Promoting accessibility, by facilitating the ability for everyone, including very young people and people with limited mobility, to reach their required destination without having to use a car.
- Climate change and public health emergencies. Tackling the health implications of climate change in cities and being vigilant about global changes such as the impact of globalized economies, the free movement of people and preparedness for and response to public health emergencies.
- Safety and security. Ensuring that the planning and design of cities and neighbourhoods allows social interaction, increases a sense of safety and security and supports easy mobility for everyone, especially young and older people Exposure to noise and pollution. Promoting and adopting practices that protect people, especially children, from toxic and health-damaging exposure, including indoor and outdoor air pollution, tobacco smoke in workplaces and public places and noise.
- Healthy urban design. Creating socially supportive environments and an environment that encourages walking and cycling. Enhancing cities' distinctive and multifaceted cultural assets in urban design and promoting urban designs that meet all citizens' expectations for safety, accessibility, comfort and active living.
- Creativity and liveability. Promoting policies and cultural activities that encourage creativity and contribute to thriving communities by developing human and social capital, improving social cohesion and activating social change." (WHO, 2009)

At the global level, among the eight Millennium Development Goals (MDGs), 2000-2015, it is identified "ensure environmental sustainability" that in its articulations highlights the link between the environment, life and human health. The goal to be pursued globally in the policies followed by the various countries is that the principles of sustainable development are taken: by halting the loss of environmental resources, by halving the proportion of people without sustainable access to drinking water and achieving a significant improvement of the lives of at least 100 million people

08 & 09 JUNE

SARAJEVO

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

living in poor neighborhoods. The objectives are addressed mainly to the poor countries, the low and medium-income countries, and emphasize the importance of the involvement of local population in the solutions, as well as the need for political change in high-income countries. This objective also highlights the key role of the solutions implemented in the planning of cities and interventions on buildings' sanitation, especially in low-medium income countries, where the population growth in urban areas reaffirms to be the fastest and most Disastrous (2009, WHO).

In 2012, the report "Shaping Cities for Health: Complexity and Planning of Urban Environments in the 21st Century", which outlines the "how health outcomes are part of the complexity of urban processes" is elaborated in the Collaboration between The Lancet and University College London, UK in 2012. It identifies "how health outcomes are part of the complexity of urban processes, drawing attention to the part that urban planning can and should play in delivering health improvements through reshaping the urban fabric of our cities". The Commission, made up of a group of different scholars, developed the study underlying the city as a complex body and therefore proposed "approach based on complexity thinking that looks at the interconnected elements of a system and how that system has properties not readily apparent from the properties of the individual elements ". The Lancet report "provides an analysis of how health outcomes can be improved through the modification of the physical fabric of towns and cities and discusses the role that urban planning can play in delivering health improvements" and analyzes mainly the connections between: health outcomes and the urban environment; between urban sanitation and wastewater treatment; between the built indoor environment and health; Between transport and health and the connections of the urban heat island and health.

The "European Healthy Cities Network of the: goals and requirements in phase VI (2014-2018)" (WHO, 2013) reiterates the goals of creating resilient communities and supportive environments, identifying priority issues for most City: community resilience, healthy settings, healthy urban planning and design healthy transport climate change and housing and regeneration.

In 2015, the UN Sustainable Development Summit in New York launches the 2030 Agenda for Sustainable Development, which contains the 17 Sustainable Development Goals (SDGs) 2015-2030 (UN, 2015) and puts at the base the five 'P', People, Planet, Prosperity, Peace and Partnership. An important step that sees sustainability as an integral part of development: from MDGs to SDGS. The goal 11 is "Making cities and human settlements inclusive, safe, resilient and sustainable".

To this end, the first UN global summit on urbanization was held in Quito since the adoption of the 2030 Agenda for Sustainable Development, the UN Conference on Housing and Sustainable Urban Development, UNHABITAT III. In Quito, the New Urban Agenda is adopted, "which sets out global standards of achievement in sustainable urban development, rethinking the way we build, manage and live in cities through drawing together cooperation with committed partners, relevant stakeholders and urban actors at all levels of Government as well as the civil society and private sector", after a year of sessions and preparatory documents. The New Urban Agenda reiterates the relationship between urban planning and the health, especially in some passages where we can read: "we will support



the implementation of urban planning strategies, as appropriate, that facilitate a social mix through the provision of affordable housing options with access to quality basic services and public spaces for all, enhancing safety and security, favouring social and intergenerational interaction and the appreciation of diversity. (...omissis...) We will support the provision of well-designed networks of safe, accessible, green and quality streets and other public spaces that are accessible to all, free from crime and violence, including sexual harassment and gender-based violence, considering the human scale, and measures that allow for the best possible commercial use of street-level floors, fostering both formal and informal local markets and commerce, as well as not-for-profit community initiatives, bringing people into public spaces, and promoting walkability and cycling with the goal of improving health and well-being. (...omissis...) We will strive to improve capacity for urban planning and design and the provision of training for urban planners at national, subnational and local levels."

In all of the above-described documents (Figure 2), it is evident that, despite the differences between 'local' and 'global', North and South of the world, there is a principle of interdependence between the various policies that can no longer be neglected and the 'construction' of the Health City represents a long-term urban and territorial planning process.

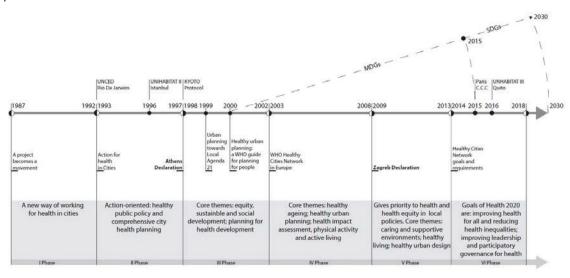


Figure 2 – Healthy city: evolution of the VI phase of the WHO European Healthy Cities Network and the relation with international documents (by authors)

4th International Academic Conference **PLACES AND TECHNOLOGIES 2017**

KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY

08 & 09 JUNE

SARAJEVO

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

We wonder if large urban agglomerates in themselves are not unhealthy, and we think it is necessary to think how to counteract the phenomenon of wild urbanization and to rethink the relationship between city and countryside, so as to create an interconnected osmotic system, served by the infrastructure to Mobility.

In densified European cities, "with the failure of the great urban utopias, contemporary planning is inclined towards the recovery and reuse of city fragments, a careful use of soil and built spaces, towards preservation and improvement of environmental quality" (de Saint Mihiel, 2016). One of these fragments is precisely the open spaces, which, as described below, assume different connotations and declinations, but on which it is possible to act with sustainable and healthy regeneration actions in the city, within an overall view.

Urban open space: common Goods?

At the beginning of the twenty-first century, urban theory and policy throughout the world is returning to the issue of open spaces, particularly to public open spaces. The fact that open spaces do benefit the daily urban living, and play a vital role in creating healthier, more sociable communities, is changing the attitudes, policies and actions (Woolley, 2003), in the sense that the open spaces have been recognized as one of very important common goods, whit a crucial impact to the quality of life in general.

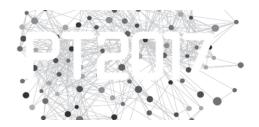
The terms: 'open spaces' and 'public open spaces', are not synonyms. These terms are related in many ways, but doesn't mean the same thing.

The term 'open' could be understood in different ways. To be properly understood, 'openness' of open spaces has to be related to, and explained by some of very specific sort of definition.

The definition of Benjamin W. Stanley and his team (2012), for an open space is "any urban ground space, regardless of public accessibility, that are not roofed by an architectural structure". We define the urban open space as: any urban space, which is permanently open to the open air with at least one of its sides. Our main aim of such definition is to try to include into the systematization of open spaces, not only the prestigious 'Mona Lisas' of open spaces such as: squares, streets, parks, coastal areas, agricultural land, gardens and so on, but also to include an uncountable number of forgotten 'micro' open spaces, such as: roofs, roof terraces, balconies, passages, gaps between buildings and other 'junk spaces', even building facades. Therefore, in this sense, there are many areas of intervention to improve the healthy city.

A matter of 'urban open spaces' is highly multidisciplinary and interdisciplinary. Different disciplines have different point of view on this multidisciplinary field. We can notice several types of approaches to researching and defining the 'openness' of the open spaces:

- Landscape / green / environmental / horticulture



- Formal / morphological / physical / shape / size
- Functional / functions / type of activity / mode of use
- Cultural / public life / community / politic / identity / proud / human rights
- Economic / investments / money value.

On the other hand, the term 'public' mainly relates to public or communal ownership, or mode of public use of the open spaces. Moreover, there are a many of the open spaces which are private. Although, there are many examples of private open spaces in public use.

However one would define the term *public space*, the definition has to take into account both the right of public access to it, and the right of participation in its use, on the individual, and on the collective level (as groups and communities). In the very ideal sense, a public space would be the one where everyone has a right to come to without being excluded because of economic or social conditions, and use it freely for any activity that does not conflict the rights of other groups and individuals that may be using it as well; while in a broader meaning it includes also places, such as a café, train, or a movie theater, where everybody can come if paying, and sticking to certain regulations.

Public spaces do not necessarily include only urban agoras – for instance, traditionally in Norway, Sweden and Finland, all nature areas were and are considered public spaces, due to a law that is listing them as being in the sphere of Allemansrätten^{xvi} (everyone's-right), and in contemporary times are used for tourism. Also, in Britain, mainly Scotland, there is a legal notion of a 'common' (or common land), which is the name for a piece of land over which various people could exercise one of a number of traditional rights, like allowing their cattle to graze upon it. xvii In today's English the word 'commons' come to be used to name any set of resources that a community recognizes as being accessible to its each and every member, including also various types of creative cultural resources xviii.

The openly accessible character of public spaces is highly stressed in a German term Öffentlichkeit, which is used to denote 'public sphere', as the context of public spaces. In 1962 book by Jürgen Habermas, titled in German as Strukturwandel der Öffentlichkeit, or, in English, as The Structural Transformation of the Public Sphere this notion got the main academic use, which is still commented in most of the contemporary writings on public spaces. In that work Habermas has described a moment in the social and political history of Europe in which a rising bourgeoisies was able to gather in different public spaces such as salons and cafes to discuss various matters which were of public concern and formulate public opinion on many different issues, from trade to politics, from culture to social issues.

The public sphere as we know it was, according to him, founded in eighteenth century, as a kind of a fourth sphere, distinct from the family, economy and the state, with a power to mediate between the former three, and this very notion has retained its currency in contemporary debates in uniting Europe, surrounding the issues of citizenship and

08 & 09 JUNE

SARAJEVO

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

identity. Later criticisms and revisions of this model, such as the ones by Calhoun in 1992, Fraser in 1993, and Hauser 1999, have focused on the public sphere's exclusivity and its dependence on a culturally-specific set of discourse practices that made this sphere, although open in theory, an arena for a small, privileged part of the public, while, as Miriam Hansen claims, the explosion many new forms of 'publicity,' in the following decades has forced us to redefine "the spatial, territorial, and geopolitical parameters of the public sphere" (Vuković, 2011).

As a 'public good' open spaces can be seen trough the 'value system', the system of established values, norms, or goals existing in a society, which is obviously reflecting also in the matter of the 'current value' of the open spaces. The 'Current value' of the open space is the base point for any further researches and calculations. It is related, not only to value of the land (built or undeveloped), streets and infrastructure, but also to presence of the other valuable goods, product and attractions and moreover to specific value it has related to people: activities, behaviour, believes, health, and so on.

Among all, we decided to point-out a short list, sort of typology, of the 'open space' values:

- The Value of Open Space as a Natural System: "Open space often supports natural systems that provide direct benefits to human society such as ground water recharge, climate moderation, flood control and storm damage prevention, and air and water pollution abatement (Fausold and Lilieholm, 1996).
- Use and Non-use Values of Open Space: "a)'consumptive uses' such as hunting, fishing, and trapping; b) 'non-consumptive uses' such as hiking, camping, boating, enjoying scenery, viewing and photographing wildlife, etc.; c) 'indirect uses' such as reading books or watching programs on open space-related resources or activities such as wildlife and travel (ibid.)."
- Production Value of Open Space: "Lands valued for open space are seldom idle, but rather are part of a working landscape vital to the production of goods and services valued and exchanged in markets (ibid.)."
- Revenues Generated by Open Space-Related Activities: "Activities directly or indirectly associated with open space may generate significant expenditures and provide an important source of revenue for businesses and state and local governments: hunting, fishing, hiking, bird watching, nature photography, snowmobiling, skiing, and mountain biking (ibid. p.14)."
- Intangible Values of Open Space: "Earlier 'types' of values, which was focused only on open space values of high interest to humans, and which came from humans, are the only values that can be expressed in economic terms (ibid.)."

Open space is the vivid system, all the time with constant changes. As the system is changing, its values are changing too. Nowadays, those changes are carefully monitored and mostly well planned and managed - means controlled.



Regarding to the fact that open spaces are one of the main representatives of the public goods, the main aim of these activities is to protect public goods, means public interest (but private interest too), and to offer new opportunities for getting new, increasing benefits for the future. Open spaces are providing a wide range of opportunities to reach desirable benefits as much for the community, that much of the private sector.

At present, the debate around immaterial and material commodities also invests in the urban open space. The common good is not a public good, but a good acknowledged as important to the life of the community and cannot be the object of any private appropriation. On this principle, the so-called 'Cooperation Pact' is spreading in Italy on the basis of the Article 118 of the Italian Constitution, Article 118 identifies the principle of subsidiarity, that is, "The State, regions, metropolitan cities, provinces and municipalities shall promote the autonomous initiatives of citizens, both as individuals and as members of associations, relating to activities of general interest, on the basis of the principle of subsidiarity". Citizens, by applying the principle of subsidiarity, can thus exert a new form of participation that has objectives of general interest, that is, material and immaterial goods. One of the first municipalities to initiate the Cooperation Pact was that of Bologna, which by a regulation in 2014 has identified the various areas of intervention, including material assets such as roads, squares, porticoes, flowerbeds, parks and Green areas, school areas, buildings, etc. The procedure it envisions is the opening of a public notice for the collection of proposals for the provision of spontaneous, voluntary and free energy, resources and skills in favor of the community by citizens' associations. Relations between the municipality and the organizations are governed by the Partnership Pact which identifies: shared care goals and actions; Object of the proposal; Ways of collaboration; Accounting reporting and valuation: Forms of support from the administration: Duration, suspension and revocation and liability, Currently, among the ten active collaboration agreements, 4 concern open spaces such as parks and residual green spaces. Partnership Pacts represent a form of management of participation in the innovative common good that has undoubtedly strengths but also fragility linked to, for example, management at the expiration of the pact and the nonlocalization of interventions in a broader requalification strategy for the city, so costs and benefits should be valued in the widest sense. What we are interested in pointing out is that in the participatory processes the urban planner and the architect assume a new role as mediators of participatory processes and facilitators of the implementation processes.

CONCLUSIONS

The paper argues that if health, in its various declinations, is a human right as it is, through transitory property, sustainable development. Urban planners and more generally architects take on a significant role in the debate from an interdisciplinary point of view and on the various levels of intervention: from territory to building. Relations between urban planning, architecture and health are many: how the environment designed at its various levels of intervention can have positive or negative effects on people's health, can promote or dissociate some behaviors, but still today it is far from considering health determinants and assuming them as input generators of design choices. This undoubtedly represents a long-term challenge that highlights the need to enable shared research methodologies and

08 & 09 JUNE

SARAJEVO

BOSNIA AND HERZEGOVINA

BOOK OF PROCEEDINGS

the monitoring of real data. Undoubtedly, we cannot be indifferent to the local characters of culture and the different societies, there are no exportable models as there are no generalizable procedures of management processes, but there may be open methodologies and innovative management models to experiment. If traditionally in the past the building process model was linked to a commission and a defined process model, nowadays, urban planner and architect in participatory processes assume a new role as mediators and facilitators. For this reason, new teaching strategies must also be tested to bring students, as much as possible, to the simulation of a real process, in order to make the future designers of healthy cities, who before being this, they are still citizens who live in the city, like us all. An area of interest is the urban open space, as common goods that they do not just add value, it can create it in terms of health, and the improvement of health as a major social investment.

REFERENCES

Barton, Hugh, and Tsourou, Catherine. 2000. Healthy Urban Planning. A WHO guide to planning for people. London: Spon Press.

Birchera, Johannes and Kuruvillab, Shyama. 2014. "Defining health by addressing individual, social, and environmental determinants: New opportunities for health care and public health". Journal of Public Health Policy, 35 (3) (August): pp.363–386.

Calhoun, Craig. 1992. Habermas and the Public Sphere, Cambridge, Mass: MIT Press.

De Saint Mihiel, Alessandro Claudi. 2016. "Urban transformation for the development and enhancement of the consolidated city". TECHNE - Journal of Technology for Architecture and Environment, (November): 144-151.

Fausold, Charles J. and Lilieholm, Robert J. 1996. "The Economic Value of Open Space: A Review and Synthesis", Land Lines (September).

Fraser, Nancy. 1993. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy" in Robbins, B. and Social Text Collective (editors): The Phantom Public Sphere. Minneapolis: University of Minnesota Press-

Giofrè, Francesca and Đukanović, Zoran. 2016. Health Spaces. Hospital Outdoor Environment. Florence: Tesis.

Hauser, Gerard. 1999. Vernacular Voices: The Rhetoric of Publics and Public Spheres, Columbia SC: University of South Carolina Press.

Hansen, Miriam. 1993. "Forward," into the book by Negt, O, and Kluge, A: Public Sphere and Experience, Minneapolis and London: University of Minnesota Press.

Mattei, Ugo. 2011. Beni Comuni un manifesto. Italy: Laterza.

Roy Amara, Karen Bodenhorn et All. 2003. Health and health care 2010. The Forecast, The Challenge. The Institute of the future. San Francisco: Wiley.

Rydin, Yvonne, at all. 2012. "Shaping cities for health: complexity and the planning of urban environments in the 21st century". The Lancet 370, no. 9831 (June): 2079–2108.



TOPIC II:

URBAN AND RURAL PLACES TOWARD HUMAN COMFORT, HEALTH AND INCLUSION

Stanley, Benjamin W., et all. 2012. "Urban Open Spaces in Historical Perspective: a Transdisciplinary Typology and Analysis." Urban Geography, 33, 8: pp. 1089-1117.

sustaUN. 1976. The Vancouver Declaration On Human Settlements Accessed March 1, 2017. http://mirror.unhabitat.org/downloads/docs/The Vancouver Declaration.pdf.

UN.1996. United Nations Conference on Human Settlements (Habitat II) World Assembly of Cities and Local Authorities Istanbul, 30-31 May 1996 Final Declaration. Accessed February 1, 2017. http://citiscope.org/sites/default/files/h3/WACLA Declaration 1996.pdf.

UN. 2015. "Resolution adopted by the General Assembly on 25 September 2015". Accessed January 7, 2017. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

UN. 2015. Draft outcome document of the United Nations summit for the adoption of the post-2015 development agenda. Accessed March 1, 2017. http://www.un.org/ga/search/view doc.asp?symbol=A/69/L.85&Lang=E

Vuković, Stevan 2011. Javna umetnost: definicija i trendovi; in Đukanović Zoran and others, Umetnost u javnom prostoru: ekspertska studija prostorne provere užeg gradskog jezgra Užica za potrebe umetničke produkcije u javnom prostoru; Academica – akademska grupa, pp. 167-175

WHO. 1986. "The Ottawa Charter for Health Promotion". Last modified. Accessed February 27, 2017. http://www.euro.who.int/ data/assets/pdf file/0004/129532/Ottawa Charter.pdf.

WHO. 2009. Phase V (2009–2013) of the WHO European Healthy Cities Network: goals and requirements. Accessed February 27, 2017.

http://www.euro.who.int/ data/assets/pdf file/0009/100989/E92260.pdf.

WHO and UN-HABITAT. 2010. Hidden cities: unmasking and overcoming health inequities in urban settings. Kobe: World Health Organization, The WHO Centre for Health Development, Kobe, and United Nations Human Settlements Programme, 2010. Accessed February 27, 2017.

http://www.who.int/kobe centre/publications/hiddencities media/who un habitat hidden cities web.pdf.

WHO.2013. Phase VI (2014–2018) of the WHO European Healthy Cities Network: goals and requirements. Accessed March 1, 2017. http://www.euro.who.int/__data/assets/pdf_file/0017/244403/Phase-VI-20142018-of-the-WHO-European-Healthy-Cities-Network-goals-and-requirements-Eng.pdf.

Woolley, Hellen 2003. Urban open space. London: Spon press.

xvi Allemansrätten is the Swedish spelling; in Norwegian it is spelled Allemannsretten. The Finnish term is *jokamiehenoikeus* (singular nominative form) or *jokamiehenoikeude*t (plural nominative form). It has never been codified, but retains its validity as a customary law of not being allowed to prohibit entry, or demand a fee for it. It goes for camping, berry picking, taking water from lakes and springs, picking wild flowers (excluding those protected by law), berries, mushrooms, fallen cones, acorns and beechnuts on land that is not a building site, a garden or a plantation, then, bathing or going by boat on most natural watercourses and cross-country skiing. The land

08 & 09 JUNE	SARAJEVO	BOSNIA AND HERZEGOVINA	BOOK OF PROCEEDINGS
--------------	----------	------------------------	---------------------

ethics surrounding Allemansrätten is taught at school and is commonly accepted as such. More About that in: Vail D. and Held T: "Institutional Factors Influencing the Size and Structure of Tourism: Dalarna (Sweden) and Maine (USA). Current Issues in Tourism, 3 (4), 2000,pages 283-324

xvii In 1500 at least half of England and approximately half of Scotland were recognized as common land. However, by the mid-19th century, commons had virtually disappeared, and there are about 800 administrative units left, covering approximately 5,000 km², which is 7% of the terrestrial area. However, Scotland the Land Reform Act was passed in 2003, with an attempt to give back the rights to rural and croft communities, which still makes quite some legal debates in Scotland. About that, see Callander, R.:'The History of Common Land in Scotland', Commonweal of Scotland Working Paper, 1(1), Caledonia Centre for Social Development, 2003.

xviii One can take, for instance, *The Creative Commons*, a non-profit organization enabling copyright holders to grant some of their rights to the public while retaining others through a variety of licensing and contract schemes including dedication to the public domain or open content licensing terms. The intention is to avoid the problems current copyright laws create for the sharing of information. Their licenses were pre-dated by the Open Publication License and the GNU Free Documentation License (GFDL). The GFDL was intended mainly as a license for software documentation, but is also in active use by non-software projects such as Wikipedia.