

CONFERENCE
PROCEEDINGS

**3RD INTERNATIONAL
ACADEMIC CONFERENCE ON
PLACES AND TECHNOLOGIES**

EDITORS
EVA VANIŠTA LAZAREVIĆ
MILENA VUKMIROVIĆ
ALEKSANDRA KRSTIĆ-FURUNDŽIĆ
AND ALEKSANDRA ĐUKIĆ

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Eva VaništaLazarević, Milena Vukmirović, Aleksandra Krstić-Furundžić, Aleksandra Đukić

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PLACES AND TECHNOLOGIES 2016

KEEPING UP WITH TECHNOLOGIES TO CREATE COGNITIVE CITY
BY HIGHLIGHTING ITS SAFETY, SUSTAINABILITY, EFFICIENCY,
IMAGEABILITY AND LIVEABILITY

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DETERMINATION POST INDUSTRIAL CITIES: CREATIVE PLAY - FAST FORWARD BELGRADE 2016

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ABSTRACT

In the post industrial society of today we are witness to certain rather odd phenomenon: only a handful of industries have survived: high fashion, being one of them, which is interacted with mostly through technological gadgets; over-abundance of information freely offered through the net has disabled our ability to realistically evaluate facts, which often leads to spoiled tourists that have to be catered to through the repackaging of heritage sites found in cities with apps that are hand-held and are used as guides, as they move and search for new experiences that the cities of today have to offer, by competing with each other.

In order to save the Cities in this cruel world full of competition, to regain their youthful, fresh and interesting appearances - architects and planners are seeking out the right answers and suggestions on several issues. What should we focus on while re-thinking the City? How can we bring in tourists and investors, can we improve the social frame? How can we regain the pride of the citizen? Perhaps by keeping or restoring their jobs? How can we maintain a creative and enthusiastic attitude under really bad social conditions? This necessary mix with new technologies – does it really improve a city or does it simply disables a city's ability to move forward? The hypothesis that a mixture of creative industries and new technologies can upgrade weak social structures by providing small jobs and generally revitalising the city – is discussed in this paper. Using Belgrade as a case study, my Master class students attempted to build an integrative platform entitled *BeL_app_grade*, which will provide necessary big data, all in one place. This work is also about a presentation of their idea. Creative play –the new city of the 21st century is moving at a *fast forward* pace.

Keywords: post industrial cities, sharing, creativity, integrative platform

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POST INDUSTRIAL SOCIETIES: COMPETENCE, COLLABORATION AND SHARING

The social context of the 21st century that we have stepped foot in may be referred to as a post-industrial community, and it is possible that most of us are unaware of what we are dealing with. This new society involves quite a change in the state of affairs where services have taken over and are generating wealth; production has fallen to second place and is less important. Also known by other names such as an information society, an economy of know-how, a post-industrial economy, a network economy or a convivial society which brings with it considerable changes. Knowledge or know-how has become a valorised form of capital and the production of ideas and creations have, it would seem, become an important method used to grow economies. The new actors of social progress belong to a younger generation of people. They are 'Professionals' or 'Specialists' – scientific professionals and experts in creative industries as well as IT professionals. They are the ones creating a new world, miles away from the world that middle-aged generations living in Europe grew up in. This drastic split between different generations indicates something more: two thirds of the active population is out of touch with the flow of business, unequipped to deal with the latest technologies and newly established relationships.

Behavioural economy, computer-generated architecture and theory, cybernetics are areas where know-how is a prerequisite for young people and they are learning as they go, easily, because this is what they've always done (the mentioned generations were born in the era of the first computers). The objective is to create *human capital*². So-called 'know-how', social and personal attributes that include creativity are intertwined in such a way as to produce work, thereby producing economic value. Marx's thesis on ones' own hand-made production which made us feel valuable, is, it would seem, an almost abandoned category.

The behaviour of fashionists has become a universal guideline. The fashion industry gained in popularity through advertising and media. Fashion insists that the members of today's societies maintain eternal youth and freshness, although we know from experience that such a goal is unreachable. This too may be imposed on other entities, cities for example. Universal questions and desires are imposed: how do we create and present ourselves in full light, how do we physically shape ourselves so that we are easy recognisable and readily fit in; how do we attract the recognition of widespread acceptance all the way up to and including admiration? How do we attain the eternal fountain of youth? Who, and what kind of behaviour is considered positive, and who remains a looser and left behind in the process? Numbers and amounts have been imposed upon us, bars constantly raised.

Competitiveness is not only a trend but also desirable behaviour, a concept fostered by a capitalist society. The focus of such competitiveness can be described as a desire to achieve more in the least amount of time. We are striving to attract as many acclamations as possible (i.e. LIKES) regardless of whether our behaviour remains within ethical boundaries.

Why is it that we often think life has accelerated in the 21st century? The answer to this question is not just founded in new technologies; it also lies in a true fear and awareness of the inevitable passage of time and a possible disappearance of resources. A fear of even the hint of (biological) insecurity moves us forward. The 21st century has created a type of magnified selfishness, flatteringly proclaimed as direct self-preservation in this new era.

The most influential people of today are individuals who have the most followers on Twitter, and the causes of this may be quite incomprehensible and often ephemeral. The number of followers one has is an assessment and seems to demonstrate personal quality. However, statistically, this is precisely how high paying jobs are obtained. This is where we finally enter the sphere of

²Human capital is a combination of know-how, skills, abilities and personal relationships, necessary in order to generate economic value through labour

recognition and can choose freely between branches of successful business, thereby gaining the freedom a rich life offers, which includes being able to participate freely in consumerism.

The phrase "If you're not on *Google* - you probably don't exist" has crept into our subconscious, so that now, before meeting in person we view, people online evaluate them through their profiles on social networks, which takes just a second, with this information come to quick generalisations about a person that may in fact be completely distorted. Interactivity has contributed to the fact that we are subtly but definitely drawn into objective and ruthless critique on a daily basis. Our network of acquaintances and influence is growing. Competition is considered desirable, positive and that which "propels us forward faster".

Another key word of the 21st century is *collaboration*. It is unnatural in its essence, just as excessive force is in competition. It is expected that various professions work and operate together, even though until yesterday they were opponents. They now jointly collaborate to perceive issues for the purpose of finding more complex and superior solutions. It is understood that by considering issues from various angles, through different paradigms and aspects, it is easier to come to more expedient and complete solutions. Placing younger generations from various professions into so-called *hubs* marks a shift. It is assumed that physical closeness in informal spaces stimulates mutual creativity. Connecting the youngest and the oldest in the population, men and women doing the same creative jobs, people from both the private and public sectors, and experts of various ethnicities - is viewed as a welcoming *mix* and has proven to produce good results.

Sharing is the third aspect of an entirely new behavioural form, which idea represents both savings in resources as well as in the sphere of sustainable development. Platforms which offer car pooling for the purpose of saving money and petrol, using privately-owned vehicles as taxis, or exchanging privately-owned flats were inconceivable solutions just a decade back, when anything 'personal' was not considered a consumer good. Each exchange of this type is reviewed and momentarily available online. Even prostitutes offer their service to clients only after they have reviewed the clients through secret online groups. Furthermore, cameras track our every move, both at work and in our vehicles. We compete for the best reviews and evaluation marks. We have become more careful and prudent.

In comparison with life in last century it seems that we expend a lot more energy and fight for the lower standard of living that we are now able to obtain. Facebook is the best representative of our time: full of other people's content. The perfect example of an initial idea with creative brilliance: a valuable product, generating lucrative amounts of money through marketing in its second phase. FB, on a global scale is free entertainment to all of planet Earth; it is a gift of the 21st century.

ARE CREATIVE CITIES BASED ON COGNITIVE THOUGHT OR DO THEY REQUIRE EMOTIONAL INTELLIGENCE?

Creativity is about innovation and *entrepreneurship*. It's not just about coming up with ideas. It includes development studies as a discipline. We perceive cities as products; gatherings which were built by creative individuals. Successful people, citizens of the world, who have stayed mostly in metropolises, are fully aware of the power of leadership that they have in their hands. Some believe that emotional intelligence is twice as important as both technical and analytical skills put together.³ The importance of loyalty in this process is indubitable. No single task of great importance can be achieved without honest and open team work.

Today's leaders have to be positive, available, warm, empathetic and optimistic and all of these traits are an essential element of their intuitive emotional intelligence. Regardless, they are additionally trained to feel how an atmosphere is developing and consequently to react. One of

³. <http://www.danielgoleman.info/topics/emotional-intelligence/>

the roles of the right brain is to choose art and creation over numbers, analysis and rationality. It seems that we will need to use this intellect more often for the requirements of the 21st century. Our sense of space, visual recognition and our ability to create and feel music are all owed to our right brain. The elected, renewed, fresh and vibrant *Leader Cities* will have to be led by the Leaders of tomorrow: cognitively aware but also emotionally upgraded and enriched.

Attractiveness, warmth and charisma will be an expectation and will set the tone and the overall impression of cities. The overall atmosphere will be taken into consideration while evaluating cities. Their side effects on consumers will be reviewed and carefully evaluated. The factor and the trigger which will attract people into new cities no longer leans solely on recognising architectural heritage. A creative new city may not have any of attractive landmarks to be recognised as an enticing place. Both Curitiba and Medellin, two cities which have been listed as the top 5 creative cities in the world represent two of those extreme examples.

Cities began competing with each other, each striving to become more attractive than the rest. Unfortunately, a large number of *new* tourists prefer *fast and affordable over quality and insight*. This new target group for competitive cities is hard to satisfy. Statistically speaking, these young *new* tourists have a lower education, they are employed as a result of their skills and online training. They have access to large amounts of information (sometimes insufficiently confirmed) and therefore are easily bored. Creative support must be made in this particular area. Some of the new branding ideas are surprisingly unusual and are more able to powerfully attract these tourists: for example, war tourism in war torn areas or swimming with the sharks in the Red Sea or war enactments with historical weaponry for the purpose of releasing negative energy. Another appealing factor may be sex tourism and / or even underage prostitution, such as it is in Thailand. *New* tourists are proficient, tough and consume less. They desire action. The phrase "*quick and dirty*" resonates with a Wall Street of the 80's and has seeped into everyday life. It will play a significant part of tomorrow's life as long as it remains well wrapped within the state of the art technology.

The best possible score given by interested tourists will indirectly launch the concerned cities into their second phase; i.e. the targets of large investment. The more popular the cities, the more they will be able to attract powerful investors and will succeed in increasing their vitality. By gaining visibility, inserted into the network of cities that are 'on the map', cities have an easier time showing off their attractiveness. Unattractiveness should be avoided at all costs; this pulls with it a slew of negative symbols which we all find menacing, from ageing and powerlessness to insecurity and poverty, even crime.

The most unusual cities in the world have become centres of *elected elements of anything smart*: branded by creative geniuses. Sometimes the motives are quite uncommon and in no way related to the context of the city but usually they are linked to tradition or intertwined with the city's history. During the hardships of the economic crisis, consumerism for example, had to come up with a new way of developing relationships in order to strengthen cities from within, opening up an entirely new segment. Creativity as a method, proved statistically to be a suitable replacement for consumerism. The public is expected to demonstrate their creative skills as a sort of replacement for their lack of financial power. Individual cleverness is inspired through positive examples. Being smart and creative also mean being quick, fun and concise. That is why it is important for a city to simply exude creativity through an interactive approach, under constant reviews and by continuously probing the market. The corporate method has seeped into everyday life. We compete in everyday life and we are constantly trying to prove ourselves. We have to survive but more importantly, we have to stay attractive; we as citizens, but also as owners and creators of new, increasingly attractive cities.

Certain branches of industry have disappeared. Fashion, in its broadest sense is one of a group of survivors, though through other forms of entertainment such as media. Currently the entire region of Northern Italy as well as a west coast of the US is sustaining themselves through fashion and

related industries. Film and theatre productions have become secondary as attracting factors relating to fashion. Authors and actors spend more time having their pictures taken in formal wear for fashion magazines (that quickly circle the world that very same day) than they do focusing on or watching films or plays in theatres.

Furthermore tourism is packaged in gadgets - mobile phone apps; overly embellished in a 3D virtual world (augmented reality) in order to sell products more easily. We are encouraged to work in hubs so that we can share ideas and mix professions. We engage with platforms that are interactive and use them to consider all of the benefits of *big data*. Architectural projects are immediately uploaded into 3D printers and made available online. Through the use of helmets, we visit museums that are thousands of kilometres away. We walk through virtual jungles, and heal ourselves through the internet. We use distance learning through mobile phones to educate poor populations in Africa online. The transfer of information is moving at light speed. And all information has to be located in one spot and available immediately with just the click of a mouse. Additionally, if quality reviews are easy reachable and can be perceived by consumers immediately, all the better. Bad reviews require immediate reaction. The new leaders of new cities are continuously proving that quality matters and that attractiveness will improve city life, propelling it forward. Evaluation is based inter alia on the higher rate of new employees, under the scope of economic revitalisation.



Evaluation

STIMULATIVE CREATIVE TRIGGERS WHICH UTILISE EXISTING OR CREATE NEW POTENTIAL

Creativity as a method (or creative industries largely perceived) as it is mentioned in the previous context is inexpensive; it is a gift expectant of emotionally intelligent individuals. And how has this natural gift grown into a lucrative product? Fast forward and you have moved into the creative and playable city! Look at the following possibilities! In the chart below (Table 1), we notice the importance of these additional, creative elements that relate to cognitive awareness. We can view examples of the triggers used by global cities that offer us creative elements and methods. These creative guidelines belong to 21st century city models. The examples show a selection of creative methods entitled '*bringers of vitality*'. These creative guidelines demonstrate the creative and playable new city of the 21st century and how they could be planned out, developed, utilised and concentrated on. They show results tangible in income.

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TABLE 1 London - Toronto ⁴	Berlin: a socially integrated city - a case study lasting until 2004	New York - the Bronx	Toronto, Canada: A cultural renaissance	Rotterdam Berlin, Toronto
Intensive education for youths in primary public schools on the importance of creation (it is considered that only a small segment will be able to face this possibility later on).	Involving communities in cultural and creative programmes , free of charge, will lead to less crime, a higher employment rate and will offer people the chance to participate in community centres.	The X Factor Small businesses and NGOs organise artistic programmes and find local talent within the community: people who are talented in music, dance, photography or fashion. The topics of these creative events are structured so that they also deal with the fight against pollution and concern for sustainability.	Both private and public Philanthropic investments have brought in over a billion dollars for the reconstruction and revitalisation of large opera houses, box-offices, ballet and other theatres, as well as film festivals.	The enticing power of well-known companies/brands (architectural, for example the OMA in Rotterdam); or well known artists creators of jazz music scene in Berlin, or famous Canadian rock bands that maintain the music scene and promote Canadian cities.
Curitiba	Medellin	Melbourne	Hannover	Belgrade
The promotion of design as a symbol of the Brazilian lifestyle since the '70s; the development of TODs infrastructure has added to the quality of regeneration; the enthusiasm of the city's major resulted in amazing developments occurring in all of the society's segments.	Number 1 among global cities as a creative centre; strong financial input was achieved through development and the implementation of many urban contests with creative ideas for the renewal of the city, primarily establishing order and the newest forms of infrastructure.	Gastronomy and traditional craftsmanship are the basis for which creative clusters in Melbourne came about. Film, literature and music in the form of festivals or large events can increase the economic power of a city / a prerequisite being: they must have strong sources of financing.	UNESCO City of music is based in the city's most important feature - music and was made by mixing music with technology (acoustic technology).	-Traditional craftsmanship for creative promotion, as well as a bohemian lifestyle - festivals of importance (Fest, Bitez, Bemus) - the first Design creative hub in the Balkans - Mikser Individual and NGO initiatives. - Mapping of creative streets, squares and spots through a new platform that will harmonise it all.

⁴Gren, E.; Foord, J.: Munk Centre of International Studies, University of Toronto, Cities Institute, London Metropolitan University: Strategies for Creative Spaces and Cities: Lessons Learned
London, Toronto, 2006; http://web.net/~imagineatoronto/Creative_Cities_Lessons_Learned.pdf

TECHNOLOGY USED AS A TOOL TO MAKE AN IMPACT IN OUR CITIES

A new interactive platform in Belgrade – innovative product⁵

Today cities are becoming ever more complex systems with vast amounts of data flowing through various channels of our societies. By adding layers and layers of complexity, we as individuals become more disoriented in the vast amount of available information, possibilities and choices. It is only when we are able to structure this information and data into meaningful patterns, can we find ways to understand and cope with the issues at hand. Whether it be seeking employment, better education, cultural events or trying to solve complex issues at a larger scale, similar principles apply.

This brings us back to the famous quote by Cedric Price, who said: "Technology is the answer, but what was the question?"³

Technology as such, no matter how advanced, is either a tool or a medium that we use to send messages, evoke emotions, and enhance our living conditions and environment or to inform. This is where a significant topic arises regarding which technologies we use, and how we use them. Also what kind of an impact can technology have in both reaching out to the community and changing physical reality?

Cultivating a community and bringing people together represents one of the most important aspects of how we choose to use these tools/technologies to make an impact on cities and the globe. As architects, we are expected to exercise empathy and a deeper understanding of the human condition than that which is merely physical. Our ability to synthesise, to take parts and turn them into a whole, or to create a well-structured model, qualifies us to have a significant role in coordinating and articulating the development of both our cities and our communities.

If we look for a deeper meaning of the word *architect*, which derives from the Greek *arkhi*, meaning the beginning or the chief, and *tekon*, which stands for builder. So the architect is the chief builder, or the supervisor of all the other builders. This requires us to take on the role of conductor, and one who understands where each instrument of the orchestra should be positioned and how each instrument achieves its fullest potential as a part of the whole. That is to say that our set of skills enables us to cope with different aspects, processes, factors and forces that form our reality. But this also requires us to find new modalities to mould and shape the cities we live in.

In order to do this, there has to be an interdisciplinary approach which includes the participation of people from various areas of expertise. By forming a team of individuals with different backgrounds, know-how and skill sets, it is possible to create new concepts and bridge the boundaries of each profession individually.

The development of today's cities is inevitably influenced by large amounts of capital pouring into them, entrepreneurial endeavours that redefine how we work, civil engagement which gives a voice to thousands of community members who are changing the way the government operates, etc. Internet and social networks have become dominant means of communication and exchange. And yet we still feel alienated and solitary, while living amongst millions of others. This is where our approach, fuelled with empathy and understanding of the human condition, comes to its full potential. If we are to use technology in a meaningful way to make a positive impact in our cities, we are required to take into consideration the community of individuals and their needs, desires and aspirations.

⁵An Integration platform is defined as a computer software which integrates different applications and services. It differentiates itself from the enterprise application integration which has a focus on supply chain management.

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That is what motivated a group of students from the Faculty of Architecture at the University of Belgrade⁶ to investigate new ways of using available technologies to make a positive impact in our city. We decided to build (with help of the Faculty of Electrical Engineering) a digital platform in the form of a web application whose purpose is to present the unutilised potentials of Belgrade, to promote entrepreneurship, innovation, creative industries, cultural events and public art. The potential users of *BeL_app_grade* are individuals, companies, students, professors, etc. The platform was made with high levels of flexibility and adaptively, so that it is susceptible to fast and efficient changes. We can't always anticipate who the user of our product will be, so it is reasonable to assume that changes will be unavoidable. The concept of an open platform is able to take on a significant amount of information and data, and enable easy exchange with other organisations.

This approach allows for the participation of different organisations, companies and partners, as well as the gradual integration of all important aspects and parts of the project.



belappgrade

Create playful future.

LOGO: a newly-planned integrative platform for the City of Belgrade

The process of building a web application/digital platform should be based on MVP – *Minimum viable product*, which means that the product should be put into function as soon as possible and tested with minimum investments in time and money. The reason for this is also a better way to find a path to potential users and to make corrections early on, to get rid of needless categories, or to add and develop new applications for the platform.⁷

The first phase of the project includes making a map with hyperlinks, pinpoints and other tools which ensures the efficient mapping of start-ups, collaborative spaces, cultural events, etc, so that users can easily search and get information. The goal in this phase was to have a clear understanding of the context and to be able to share information with other subjects.

Furthermore, new layers of information were added, such as job opportunities, the possibility to fill in a CV form and send it directly to companies that are hiring, or the option to add new cultural events, intended for the organisers of those events.

⁶ Masterclass "Grad i dizajn" (in Eng: City and Design), 2015/2016 under the mentorship of Prof. Eva Vaništa Lazarević, PhD - Faculty of Architecture, University of Belgrade

⁷Lean Start-up, Eric Ries, Mate, 2014.

The case study of Tel Aviv, Israel, as a good raw model - testifies to the success of the cities which use entrepreneurship and innovation as generators of development and their ability to connect with the global market, thus giving them the opportunity to offer their product or service to a large number of users. Web application was built to show all the existing resources in the city concerning start-ups, collaborative spaces, venture capital firms, investment funds, services and R&D centres. This local infrastructure was established to fully support entrepreneurs and innovators in their efforts to push the boundaries and create new value. Presenting the unique potentials of Belgrade and its resources, inclusion of city infrastructure in the broadest sense, both physical and administrative, activation of places which may become new collaborative hubs, is an important factor in defining a strategy that will incentivize entrepreneurial endeavours. Considering that rental and living costs in Belgrade are much lower than in other parts of Europe, this becomes a competitive edge in attracting young talent from all over Europe and the world to start and grow their businesses here.

Integration of different options, filters, criteria on an interactive map, has the objective to empower users with a wider range of opportunities and make the quest for information much easier. We aspired to achieve balance between providing good quality service by preserving the initial goals on one hand, and on the other, creating interesting interactive usage so that platform stays active for a longer period of time.

This is an example of initiation, animation and the additional training of the young specialists mentioned at the beginning of this work; those future new leaders who will be responsible for the development of new creative cities in the 21st century, we can refer to them as *soft* leaders. They will surely need surely to blend cognitive and emotional intelligence in order to fully succeed in creating a new model of the city; a city which is both competitive and attractive.

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