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# PLACES AND TECHNOLOGIES 2017 KEEPING UP WITH TECHNOLOGIES IN THE CONTEXT OF URBAN AND RURAL SYNERGY 

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"URBAN RENEWAL UNDER THE SCOPE OF SECURITY ISSUES" - CASE STUDY OF BELGRADE - GLOOMY PARTS OF THE CITY

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## Abstract

City center of Belgrade, Serbia, is broadly known for its generally high level of safety, which gives him a special advantage in between the European cities; having in mind its past, postwar trauma oriented inhabitants and migration processes passing through.
Never the less, to upgrade the level of safety of certain quarters by urban renewal would lead Belgrade to more resilient city, more enjoyable and open to touristic but primarily with more comfort for its inhabitants. There are, indeed, some less secure spots what the city statistics clearly show; which could be improved through the process of urban renewal: through reconstruction, urban regeneration and conservation - especially places left demolished after 1999. NATO bombing.
Along with identifying the factors of urban renewal, professionals should be open to explore concepts which bring new light to how resilience could be enforced. While concept of fragility or "zero tolerance" is defined as a strong sensitivity to a stressor, antifragility is associated to generating positive responses to stress instead of harm. Antifragility describes cautious actions, being strongly related to risk management, and, as we may propose, represents a component to be included within the urban renewal and community resilience factors. As new risks can emerge overnight, constant assessment should be made to detect whether the urban renewal is facing benefits or impairments in coping with unexpected events or in the phases of expecting it. The question, as always, is one of proportion (How much of each concept/strategy?) and relevance (What kinds of dangers deserve the different concepts?), and ultimately, given uncertainty, of bias (When in doubt, which concept should receive priority?).
This paper is analyzing those gloomy spots in the city in order to establish the guidelines based on real indicators and parameters targeting public resilience in response to particular known or unknown security risks. For risks with high ambiguity, it can be suggested to adopt a approach which is designed to reach stakeholder consensus on the acceptability and tolerability of a risk based on multi-level governance processes termed 'distributed responsibility'.
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Both urban renewal and distributed responsibility are increasingly being used by governments and public sector organisations to effectively influence the public resilience. Finally, the guidelines should be incorporated in legislative in order to become an obligation, which should be practically used afterwards.

Keywords: Urban Renewal, Gloomy Spots, Security, Distributed Responsibility, Public Resilience.

## Introduction

City center of Belgrade, Serbia, is broadly known for its generally high level of safety, which gives him a special advantage in between the European cities. This may seem surprising having in mind it's past, postwar trauma oriented inhabitants and migration processes passing through. The end of the past century was a period of turmoil for Serbia. A decade of civil war in the whole region, severe political transitions and relocation, which occurred during and, after wartime resulted in huge sociological change (Vaništa Lazarević et al. 2016: 5). This all had a great impact on overall level of security in capital town.
Never the less, to upgrade the level of safety of certain quarters by urban renewal would lead Belgrade to more resilient city, more enjoyable and open to touristic but primarily with more comfort for its inhabitants. There are, indeed, some less secure spots what the city statistics clearly show. The research conducted in 2007-2008 by the team of Urban Planning Institute of Belgrade which involved the analysis of users' perception of space and its safety based on the survey of the citizens, showed that $51 \%$ of population avoids some parts of the city because of fear; $69 \%$ of the respondents considered that they personally had had or had the knowledge that somebody close to them had had some sort of an unpleasant experience, from verbal attacks, insults and comments to physical attacks, thefts and other criminal acts (Danilović-Hristić, 2012: 124). Unsafe urban locations could be improved through the process of urban renewal: through reconstruction, urban regeneration and conservation - especially places left demolished after 1999 NATO bombing. On one of them, we will focus in order to point out the significance of our investigation: the so called "Mostar's Loop", under the high way through Belgrade, the cross with famous boulevard named after "Knez Miloš", in Belgrade.


Picture 1. Underway Picture
2. The cross way - so called: Mostar Loop
3. sexual delicts

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## RESILIENCE OF PLACES



Any city of the world, Belgrade as well, "...as a government unit, is growing increasingly larger, more complex and more important. It has always had the capability to adapt and to improve, due to external and internal stressors, due to the variety and plurality of needs and desires of their inhabitants, users, social and economic subjects, using available technologies and information» (Blečić \& Cecchini, 2017: 5). But processes of globalization, urbanization and modernization with all its consequences have made cities places of constant insecurities for its residents. These insecurities are shaped by vulnerability which is closely linked to under-development and resulting from combination of factors that determine the degree to which some places (or someone's life and livelihood) is put at risk.

The number of people at risk is increasing significantly, with rapid urbanization inducing uncontrolled and densely populated informal settlements in hazard-prone areas. The lack of capacity of cities and local governments to regulate building standards and land use plans exacerbates the risk of those living in vulnerable conditions (Kekovic, Ninkovic, Džigurski, 2016). With the rapid increase of the urban population worldwide, cities face a variety of risks, concerns, and problems; such as pollution of air, water and soil, unemployment, violence, poverty etc. (Nam \& Pardo, 2011: 282). Processes of globalization and urbanization have provoked such problems as creation of slums, pressure in infrastructure, and threats related to public transportation and health (Lemieux, 2016: 1). Except higher crime rates, 21 st century cities face challenges of disease epidemics, as well natural emergencies, which have significant impact on urban population safety and security. New mega-cities are unfortunately cities of poverty, almost often (in big percentage) real slums, settled on south part of the globe: Asia, Africa and Latin America. Furiously upgrading rates of inhabitants, which reach between 15 and 20 millions of inhabitants, ring the bell and appeal for immediate global attention and reaction in order to prevent disasters.


Picture 3.
Poverty diminishes the feeling of wellbeing through a lack of security, and opens widely door to all sorts of criminal behavior. It is well known that the safety is an essential component of healthy neighborhood. As Chan and Lee argue citizens "would like to know what is going on in the public areas around their dwellings and hence urban design that
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fails to keep the space under public surveillance reduces a sense of security of the citizens" (Chan \& Lee, 2008: 247). Well planned renewal project should stress upon security and resilience dimension, should provide accessible and useful open spaces, spaces where residents not only feel safe, but are really safe; spaces that contribute to social cohesion and wellbeing and reduce human stress. It is easier to mention that thesis in scientific theory but pretty difficult to implement in real life.
Bearing this in mind, the aim of this paper is to try to define an average example of a gloomy spot in the city of Belgrade in order to establish some preliminary elements of the guidelines based on indicators and parameters targeting community resilience in response to particular known or unknown security risks. Along with identifying elements of resilience, professional should be open to explore new concepts with special emphasis on security and community resilience dimension. Since resilience refers to the ability of human settlements to withstand and to recover quickly from any plausible hazards (Kekovic, Ninkovic, Džigurski, 2016), we will try to present some of the up going starting strategies in that particular case, in order incorporate direct urban renewal project to reduce the vulnerability and strengthen the resilience of the city and its residents.

For risks with high ambiguity, it can be suggested to adopt an approach, which is, designed to reach stakeholder consensus on the acceptability and tolerability of a risk based on multi-level governance processes termed 'distributed responsibility'. The Report of the Secretary-General's High-level Panel on Threats, Challenges and Change (United Nations, 2004: 10) pointed to new tasks for the UN system in the 21st century: "Without mutual recognition of threats there can be no collective security. ...What is needed is nothing less than a new consensus. ...The essence of that consensus is simple: we all share responsibility for each other's security."
Both urban renewal and distributed responsibility (for example - between private and public partnerships) are increasingly being used by global governments to effectively influence the community resilience. We need all kinds of synergy fighting against referred fatal issue in new cities: insecurity. The safe economy will surely ensure a better position for fighting against, but we are stressing the fact that the lack of security in even "old cities" on the north of the globe is entirely the effect of generally bad times we live, especially in European geographical frame (except Germany and Nordic countries) meaning upon low salaries, unemployment, lack of possibilities, economical consequences of big crisis from 2008 and gaining of new better position for BRIC countries versus Europe. In a sense of strength EU position after UK left last summer is also deeply disturbed. Huge migrations from 2015 do not simplify the overall situation.

## URban renewal - Concept and Significance

Concept of European urban renewal has its roots in the second half of 20th century, mostly lately 70ies and beginning in 80ies formally starting with an integrative regeneration of London's docklands. Jane Jacobs, on the contrary wrote about American cities from 60ies concerning Urban redevelopment, and United States are considering itself as a pioneer actor and initiator of Urban renewal, American way. Often it is happening under the negative context, especially towards gentrification, which ends with ghettoisation.

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Old city centers, however, were faced with threat of extinction back in the 80 s, while population fled to residential suburbia, "promised green zones" (Vaništa Lazarević \& Djukic, 2006: 73). In city centers remained usually old inhabitants that lack resources for maintaining buildings in which they live in. Those buildings were often architectural and cultural heritage. Infrastructure was mainly run-down and unmaintained, criminal rates were high, while drugs and prostitution are widespread. Bearing this in mind, old city centers were facing significant security risks, with its residents fearing for personal safety.

This motivated local authorities in European metropolis to invest in urban renewal of old city centers. Numerous developers saw potential in restoration of smaller venues and desolated industrial zones with high potential. Soon, this became trend in all European big cities in which more than $80 \%$ percent of the population lives. Cities are, it is well known - places where most significant decisions about future of a region or a country are made. Their economic, social and cultural prosperity is of the at most importance for the wellbeing of future generations. 156 At the same time, city represents social, political and cultural environment in which individuals directly exercise their civil and other rights, i.e. the place where those rights are most obviously threatened. Therefore, enhancing living framework of the city, raising comfort and life quality of its residents are main goals of urban renewal (Vaništa Lazarević, 2003: 5859). Nevertheless, the new century is coming with some transformations regarding coping with the cities development: there is no more priority in preserving architectural heritage and caring about pure aesthetic of new interpolated objects, but focus on primordial needs like maintaining a social environment. This important change of paradigms is essential to understand time frame of today. Now we are approaching two of today's new "plagues": poverty and insecurity, mixed together, depending on each other and provoking each other, multilayered exposed to the global audience. Both phenomena's are our biggest concern of cities of today, and maybe a reason why a pretty new term as "resilience" in urbanism is stepping up front.

Infrastructure and environment have strong influence on what is happening on the streets surrounding them. Architects and urban planners have long suggested that that the types of buildings and architectural design have impact on people's perception of security, but as well as real events. Paths that have bushes in many locations might enable offenders to hide, or cutting back the distance to be walked and removing hiding places affects the opportunity to commit crime (Dymén \& Ceccato, 2011: 315). 157 Visual images of buildings and its design and interconnectivity of streets have strong impact on how city residents perceive its significance and whether they feel satisfied and safe. Feeling of comfort is maybe the prime parameter on which we should stress to achieve.

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Having this in mind, there is full justification to incorporate urban renewal and enhancing community resilience into single concepts. This would certainly lead to better prevention and reaction to security risks city residents face every day, but it will also increase their subjective feeling of safety, which can overall improve their wellbeing. Due to the fact that different groups often share the same physical area (i.e. Savamala in Belgrade has historical value with ruins in reconstruction sites which are also famous for its rich nightlife. Next to this site with the community is emerging so-called Belgrade Waterfront as a new complex of buildings which is supposed to be the most modern part of the city populated with well situated inhabitant). It is important to consider the social contexts in which risks occur and that people therefore do not necessarily share the same perceptions of risk and their underlying causes. Resulting from the roles of values, beliefs and norms, the mediating role of perceptions between perceived vulnerability and policy responses is of tremendous importance for the distributed responsibility among members of community.

## Enhancing Community Resilience through Urban Renewal

## Vulnerability and Resilience in the context and as a part of Urban renewal

Security issues and threats in urban context can emerge from different sources and are various. Modern cities are mixture of elite quarters and deteriorated locations, regenerated modern places and run-down industrial building not active today, as well abandoned construction sites (Treu, 2016: 2). That is why is important to outline the basic meanings of resilience and vulnerability, as two concepts that could have great importance for the urban renewal project in the diverse surroundings of the $21^{\text {st }}$ century city, like Belgrade is.
As the ability of cities, communities and households to manage risks, by maintaining or strengthening their capacity to prevent and adapt to them, concept of resilience describes how to adapt to changing conditions through learning, planning, or reorganization (World Resources Institute, 2008). As Brauch argues we need to shift the basis of planning "from a 'threat based' model that has dominated thinking in the past to a 'capabilities-based' model in the future [that] ... focuses more on how an adversary might fight rather than specifically who the adversary might be or where a war might occur" (Brauch, 2003: 391).

As opposed to resilience, vulnerability concept addresses weaknesses of entity on how an adversary might fight. Nathan (2009: 1125) pointed to a dual vulnerability: on the one side "a tendency to undergo damages, i.e. a state of fragility, or a set of conditions, that raise the susceptibility of a community to the impact of a damaging phenomenon. On the other side, vulnerability is incapacity to anticipate, cope with, resist to, adapt to and recover from hazards. Vulnerable units are either not resistant, i.e. not capable to withstand the shock (without adapting); and/or not resilient, i.e. not capable to absorb the shock and adapt to come back to an acceptable state".

We can say that vulnerability is considered as a state of fragility which is characterized by: 'transversal' features (overall vulnerabilities are cross-related); constantly changing over time; cumulative effects (causing crisis that in turn aggravate it); both hazard and subject/asset related; highly differentiated (different subjects, even at the same

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'level', have different vulnerabilities); context-dependent; aggregated effects (human vulnerability is induced by physical and social vulnerability).
As Cardona (2004: 49) summarises vulnerability originates in:

- Physical fragility or exposure: the susceptibility of a human settlement to be affected by a dangerous phenomenon due to its location in the area of influence of the phenomenon and a lack of physical resistance;
- Socio-economic fragility; the predisposition to suffer harm from the levels of marginality and social segregation of human settlements, and the disadvantageous conditions and relative weakness related to social and economic factors; and
- Lack of resilience: an expression of the limitations of access and mobilization of the resources of human settlement, and its incapacity to respond when it comes to absorbing the impact.
Having in mind these dimensions of vulnerability and resilience, we argue that urban renewal decision making process needs to be based on vulnerability and capacity assessment providing the complex set of characteristics and indicators which primarily includes: unsafe physical conditions - fragile physical environment: dangerous location, unprotected buildings, infrastructures; and fragile local economy: livelihoods at risk, low income levels; vulnerable society: special groups at risk, lack of local institutions; lack of disaster preparedness, prevalence of endemic disease.

Another concept that is important to mention when we think about community resilience and urban renewal is risk perception. It is argued that in situations where 'normal' daily life was itself difficult to distinguish from crisis, it is expected high level of acceptable risk since fragility is intrinsic characteristic of affected area and people at risk. Acceptable risk includes technical, technological, environmental, social and other aspects, and represents a compromise between acceptable the level of security and economic opportunity for its achievement (Kekovic et al., 2011: 46). What people think the risk is (risk perception) presents integral part of vulnerability framework which determines appropriate set of indicators. In the context of community resilience, the issue of risk perception depends substantially of the real, the expected benefits (Kekovic, et al, 2011: 46). The perception of risk may be also determined by the difference between willing and unwilling accepted risk. Involuntary accepted risks are risks imposed outside and beyond individual control. As a rule, tolerance to such risk is lower (Kekovic, et al, 2011:47).

Along with identifying the significance of vulnerability, resilience and risk perception as factors of urban renewal, professionals should be open to explore concepts which bring new light to how resilience could be enforced. In that sense we can propose new strategies that can be easily incorporated in the urban renewal projects in order to enhance security and resilience of community and citizens facing different threats in their everyday life in the city. We focus on the concept of fragility, specifically antifragility that is associated with positive response to stress instead of harm.
Something that is fragile is likely to get damaged or break over time. Fragile systems fail because they are easily broken regardless of the nature of stress they are exposed to (Johnson \& Gheorghe, 2013). But there are systems, objects and communities that developed ability not only to withstand stress but they actually get better as they are exposed to stress or they produce serendipitous outputs. They have became antifragile. The most essence of the concept of antifragility we can find in Taleb who stated that antifragility is "beyond resilience or robustness. The
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resilient resists shocks and stays the same; the antifragile gets better" (Taleb, 2012: 21). As cities consist of buildings and people, urban renewal projects should focus on enhancing antifragility of them both. Antifragility describes cautious actions, being strongly related to risk management, and, as we may propose, represents a component to be included within the urban renewal and community resilience factors.

As new risks can emerge overnight, constant assessment should be made to detect whether the urban renewal is facing benefits or impairments in coping with unexpected events or in the phases of expecting it. The question, as always, is one of proportion (How much of each concept/strategy?) and relevance (What kinds of dangers deserve the different concepts?), and ultimately, given uncertainty, of bias (When in doubt, which concept should receive priority?).
For risks with high ambiguity, it can be suggested to adopt an approach which is designed to reach stakeholder consensus on the acceptability and tolerability of a risk based on multi-level governance processes termed 'distributed responsibility'. Urban renewal projects planned with the idea of shared responsibility, have potential to give certain public spaces a new role of promotion sociability and social cohesion. Governments and public sector organizations to effectively influence the public resilience are increasingly using both urban renewal and distributed responsibility. The highest political leaders to assure good financial and time frame launch the urban renewal. The whole team of different professionals is needed to provide the urban renewal complexity (Vaništa Lazarević \& Đukić, 2006: 72).

Synergy in the processes of urban regeneration implies different professions working together, alongside joint stakeholders who, in most cases include: representatives of local government, investors, businesses and members of the public (Vaništa Lazarevic et al, 2016:10). Building secure urban environment requires a long-term dedication, bringing together diverse parties, stakeholders, scholar, NGO and citizens to rebuild a safer urban community with the whole city, center and suburbia. Most successful examples of urban renewal are a result of strong national and local support along with residents` participation in direct or indirect decision making (Vaništa Lazarević \& Đukić, 2006: 76). Communication and collaboration between experts, local community and government representatives is important in terms of socially responsible management and planning, and also for clarifying responsibilities and institutional arrangements. Based on distributed responsibility, any true multi-stakeholder project should strive to include permanent and temporary members of community, to ensure community support to the urban renewal efforts in early stage. In that way, consensus and willingness to engage in prevention efforts and recognizing warning signs and signals for risk factors on potential human-induced risks is being provided.

## Example: Mostar's loop in Belgrade



Picture 5. 6. and 7: New development: business and residential complex "Skyline" near Mostar Loop
There are many devastated parts of Belgrade, known for its insecurity. For a while, no deep analyze has been established except some individual statistics (above mentioned), so we are defining facts based upon average experience: dark and gloomy parts under the streets, passages, and zones near greenery not enlightened enough. Anyway, the citizens instinctively know and feel which quarters are not being secure enough in order to avoid them: for example Banjica, Kaluđerica, Karaburma, Krnjača, Zemun, New Belgrade (in particular block 45 and surroundings), Voždovac in some aside zones, Rakovica etc. Those parts share one another poor characteristic: poverty. Statistically, Iow social structure of inhabitants often encourages insecurity and enhances a possibility for crime. Therefore, we will try to describe one typical gloomy spot in the center of Belgrade and how an urban renewal project - a new development named "Skyline" has potential to impact on the overall security, objective and perceived.
The first Author of this paper (Eva Vaništa Lazarevic) has worked as a Councillor for urbanism on assignment of urban regeneration of the area near our example - Mostar's Loop. Urbanistically, it consisted of an abandoned place (previous MUP's building devastated after NATO's bombing in 1999 staying in ruins for 17 years). An Israeli famous architect, structured a base with of three high rise buildings, planned as a huge mega structure. Designed on purpose to become a symbol, which can be spotted from all areas of the city, an object obtained all local permissions and is very welcomed by City Government as a big foreign investment in Belgrade. Placed on a place - a cross of a main boulevard and a highway, till now unpleasant for pedestrians, Skyline building as the interpolation in the old city core consisted of traditional urban blocks - is expecting to be a factor of upgrading and gentrifying the whole area. Its urbanistic approach is very important: the new public place around the building will connect the main boulevard through the slope with till now a gloomy spot of underground traffic junction by a new, redesigned contemporary path, with a lot of green areas and places for relaxing and rest (picture 6 \& 7). Surely, a new level of the safety will be obtained naturally along with the gentrification of the whole area so the pedestrians could spend more time in a renewable \& enjoyable urban passage.
More than a decade ago, under the patronage of the Italian Embassy, an architectural competition upon four points of the cross around Mostar loop was launched. Smartly as a procedure, it was envisaged that this problem has to be evaluated and considered as a whole. The building of the Ministry of Interior at the northeast corner, for example, also damaged by bombing in 1999 still stands in anticipation of investors, and repurposing or demolition. Building brewery, beer industry "BIP" across the street, at the southeast corner of Mostar Loop is the vernacular industry facility from

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first part of the 20th century, without intending to become an urban rapper - the highway did not exist in that Era. Today, after several unsuccessful privatizations it has been abandoned and is waiting for new investors. The fourth corner, the southwest one, an area of previous old mill, after a series of unsuccessful tenders received quality epilogue: a luxury hotel was erased. Till now, formally underground, pedestrians` paths under the high way near Mostar's Loup were unsecure, badly enlightened and unsurveilled. As the stop of a public traffic is near, the pedestrians had to pass through the unsecured and unsafe land to reach a Street of Knez Miloš. A lot of rapes and burglaries' are still happening at this particular spot, although in the strict city center, near the main Boulevard of Knez Miloš. That particular spot represents a real gloomy place, even not in a bad area of some earlier mentioned suburbia quarters. It is believed that it is of crucial importance that this time the State and the City retain investors and provide an opportunity to begin final revitalizing of the Mostar Loop's quarter focusing on all of four corners of Mostar place through the methods or Urban renewal. "Skyline" (picture 5, 6 and 7 ) on north-west corner is just starting the process of building. "Skyline" object will spread out its focus of design to the surrounding - public land, now a gloomy and unsafe spot - which will be fully redesigned, reconstructed and revitalized free of charge, given as a gift to the city and its inhabitants. That is how a method of urban renewal, as a reconstruction or interpolation can change not only a spot but also an environment and a significance of a quarter.

## Conclusion

Cities of the $21^{\text {st }}$ century are complex phenomena that incorporate urban center and growing suburban sprawl. Development plans must be created together with prevention programs against insecurities, "which require aimspecific policies of urban regeneration and renewal" (Treu, 2016: 1). If want to be successful, urban renewal aimed at enhancing resilience of the city and its residence must be freed from analysis and actions shaped according to political interests. Urban renewal should be oriented in accordance to meet various social, economic, political and cultural objectives These project oriented to promote security should focus on regeneration centered on the quality of public spaces, as well as renewed network of material and immaterial services and cultural mediation between different generations and cultures (Treu, 2016: 8). Destruction of existing social networks, expulsion of vulnerable groups and adverse impacts on living environments should be avoided.

In that sense, this paper is useful source of information on basic concepts that can contribute to enhancing security, resilience and public preparedness through smart programs of urban renewal. Urban renewal based on common work of different interested parties who design, build and use public urban spaces can strengthen the understanding of urban planners, local authorities and citizens on the connection of physical and social characteristic of the environment. That is why we suggest considering concepts of vulnerability, resilience, risk perception and fragility together with urban development.

TOPIC XI:

## RESILIENCE OF PLACES



The quality of whole community can be raised when all the significant factor, social, political, cultůral and security, are considered before creation and implementation of urban renewal projects. With this sustainable living environment could be established, and both physical and psychological needs of the citizens are satisfied. Ideas developed in this paper could be further developed for the other Serbian cities, as well in countries with similar social and cultural background. This also leaves space for other urban and security scholars to raise new questions in regard to public urban spaces resilience and public preparedness of its citizens. Further research in this field could provide a broader list of precise indicators for evaluating successfulness of urban renewal projects that should be implemented in the future.

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Picture 4: https://www.google.rs/search?q=latin+american+slums
Picture 5, 6, 7.: private archive from Afi Group - investor


[^0]:    ${ }^{156}$ This idea is best framed within the concept of smart cities. This concept is not new, but in recent years has gained new quality by incorporating the use of Information and Communication Technologies. The idea of smart cities has evolved to "a model to mitigate and remedy current urban problems and make cities better as places to live" (Nam \& Pardo, 2011: 283).
    ${ }^{157}$ Another example of security threat considering urban environment might be outdoor sexual violence. Rape, for instance, tends to occur in area characterized by construction sites, urban renewal, parks and temporary lodgings. These, and many other concerns, have guided urban planners to develop principles of Crime Prevention through Environmental Design.

