Place Attachment and Social Communities in the Concept of Smart Cities

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Abstract. Territorial identity and place attachment are examples of the soft factors in smart cities. Smart cities and communities are also those ones that make more efficient use of physical infrastructure, engage effectively with local people in the process of citizen participation. Every concept of place attachment requires a particular work within the community, its effective transmission to all the members as well as to outward environment. In the sense of place attachment there is the idea of urban gardening that generates uniqueness – specific character of places created by urban gardening contributes to calibration of unique place identity and develops emotional and social ties related to certain place. Urban gardening provides opportunities for social interactions that help residents develop their relationships in community, support community life and develop community and place attachment as well as enhance the quality of urban environment in the smart cities. Urban gardening is often viewed as one of the strategies which can improve urban sustainability and promote sustainable urban development in the smart cities.

Keywords: Territorial identity · Place attachment · Identity · Urbanity · Community life · Spatial planning · Urban sustainability · Urban gardening

1 Introduction

Cities provide the citizens with a number of services and functions to be used in the urban environment. Each of the functions - housing, employment, culture, sociability, leisure time activities, recreation – show evidence of a characteristic structure and also of various needs of current population, with various impacts on the environment. In this regard smart cities and communities are also those ones that make more efficient use of physical infrastructure, engage effectively with local people in local governance and decision with emphasis placed on citizen participation and learn, adapt and innovate and thereby respond more effectively and promptly to changing circumstances by improving the intelligence of the city.

Territorial identity and place attachment are prominent examples of so called soft factors in smart cities. They are very fragile mental structures which cannot be bought, emulated or stealt, but they are significantly contributing to the effectiveness of functioning of any social system based in certain territory. Despite the leading role of the city centres we cannot underestimate the role of the peripheral residential spatial

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structures in this process. Social cohesion based on the highly profiled identification with the living space and deeply articulated place attachments are the fundamental preconditions of sustainability of any community or settlement structure. Large parts of the Slovak cities and neighbourhoods are covered by residential areas of panel blocks of flats built in the 1970s and in the 1980s. These communities and settlements are often more than 30–40 years old and have become specific places with its own history, social climate and narratives. Unique and specific metatext of almost any Slovak city would remain unfinished without residential areas of panel blocks of flats. These areas have generated specific identity, social cohesion as well as social problems related to them. It is obvious that Slovak panel block housing areas failed to deliver the unique "tomorrow's quality of life" as once declared but on the other hand they never became the completely excluded localities without the vital contacts with the city' organism.

Acceleration of spatial development has generated also the increased probability to face also the negative effects of both the globalization as well as EU integration. Recent economic and financial crisis highlighted this risk and created threats which were not acute even some years ago. Fragile spatial and societal structures have been exposed to huge pressure originated either from international markets, unfavourable demographic prognosis, environmental hazards or another sources of risk. Spatial planning faces the problem of increasingly higher uncertainty of the framework conditions of spatial development as well as necessity to react efficiently and flexibly to unpredictable external and internal shocks like floods, fires, economic disturbances confronted with unpredictable individual behaviour/decisions of multiple stakeholders. These factors represent risks not only for planning, but first of all also for sustainability of spatial development. Spatial planning has been transformed and has become a process of permanent search without any warranty of outcome. Assessment and decision-taking under uncertainty – it's the call of the day [1].

2 Urbanity and Its Interpretations

Urban and metropolitan milieu is an example of ultimate complexity on territorial level. This milieu displays manifold hierarchical and horizontal structures and registers including the contraversions and conflicts. Few of man created systems do include so many variables; do involve so many involved actors. Moore delivers the following overview of the approaches toward the city from the social perspective:

- The city as symbol and carrier of civilization
- The city as land of economic and social opportunity
- The city as an initiating and controlling centre of a region or the nation
- The city as a melting pot versus the city as a mosaic of social worlds
- The city as heterogeneity, variety, diversity, the apex of culture and cosmopolitanism
- The city as a "feast" and the city as electronic stimulation
- The city as a place for transitory, second-hand, superficial contracts, as a place of reserve and indifference, of blasé or even predatory attitudes
- The city as depravity, the alienation of the person from the land, and the subjugation of human values to the machines and commercialism [2].

The common denominator of almost all current approaches is that the main scope of urbanity is shifting from "fulfilling the complexity and hierarchy" to "ability to deliver uniqueness and specificity". New urbanity is arising on the interface of various and manifold contexts (visual, symbolic, narrative, historical, political) etc. The tension "public-private" has been modified: it has been removed to the semi-public places. The role of the professionals (planners, architects) is to redefine the legibility of the place and its sense. The place as a point of meeting, interaction, exchange, transition...Place is becoming a pattern in the "language" of people (Ch. Alexander) and generates specific metatext in the minds of people. Place and space are opportunities for projection and self-realisation – projection of values, ideas, principles, thoughts...On the other hand we are witnesses of certain controversial tendencies: commodification of spaces, privatisation of public spaces (shopping malls, corporate plazas...), fragmentarisation of spatial experiences, globalisation of local contexts (more in [3]). This shift has been reflected also in planning paradigm shift and modification of planning culture: from the system theories ("comprehensive planning") having their roots back in 1950s toward the "incrementalism" of the 1970s and later to "cooperative planning" of 1990s and 2000s [1].

The city of optimal infrastructural performance, social equity and rather normative regulation of spatial conflicts has been replaced by postmodern conceptual approaches enhancing uniqueness, imagery and soft assets [4]. Hierarchical planning cultures based upon the authoritarian decision-making proved to be inefficient and inappropriate when dealing with complex problems of high dynamics and multilateral impacts (see e.g. [1, 5]). Change must be made by those living and acting outside the prevailing paradigm [6]. Planning has been transformed onto rather contingent nature [7] and has become a process of permanent searching without any warranty of outcome. Judgement under uncertainty – is the call of the day. Moreover, spatial planners, urban designers and architects are facing the ambiguity - lack of judgement criteria. Who knows what the stakeholders really want? Smooth, successful and genuine spatial development requires value compatibility and continuity. Integration of different values, basic assumptions and beliefs into a coherent spatial concept is a necessity and ultimate challenge for spatial planners (see [8]). Forester's concept "making sense together" has been completed by Healy's addition "while living differently" [9].

We are confronted with both positive (urban imagery, fun, celebration) and negative (urban anxiety, urban panic) connotations of urban environment. Current urban imagery is fragmented, deteritorialised, heterogeneous, diasporic, split apart...Sense of a place is constantly changing, not necessarily held together and the city is regarded as a partially connected multiplicity [3]. Archetypal perceptional patterns [10] appeared: the crowd as an ocean, skyscrapers as the mountains, the city as jungle, the cars as predators...Revival of mythological contexts represented by e.g. "oceanic feeling" (term of Paul Tillich): the individual in the city is losing its freedom and is led by crowd and the city itself...(see [10]).

3 Identity and Place Attachment

It is generally supposed that highly profiled city/place identity and strong ties of place attachment are of utter importance for social cohesion within the territory [11]. Territorial identity is crucial dimension in the concept of social identity and sense of

belonging and identity was one of the weakest points of the big modernist dreams (e.g. Brasilia). Place attachment saturates many psychological needs: the need for security, the need for self-realisation, the need for belonging and structuring the outer environment. Highly profiled identity contributes to the legibility of the place and space. The people are still generally territorial in their behavioural patterns. Slovak communities, mainly in smaller settlements (but even in urban milieu) always displayed rather strong and deep place attachment and deep identification with living place and environment. However, we can conclude from recent surveys (e.g. project Identity of River Basins, see more [12]) that both these phenomena (place attachment and territorial identification) are saturated more by emotional and social identification patterns ("I have grown up here", "my family lives her for decades") than by value based identification patterns ("I am living here because I appreciated the value profile and behaviour of our municipality"). The territorial identification and sense of belonging is rather deep, but in many cases rather monodimensional.

During recent years in Slovakia, our housing and residential estates ceased to be the monolithic sense-less places and have become chronicles of various stories and experiences which overcome sometimes the obsolete and uniform architectural language. It is obvious that the landmarks of identity are never only the physical (architectural) forms but rather the common experience, morals and stories. Identification with the living place goes far beyond the positive distinction (image) and should be based upon the common vision and values, which are present in given territory (environmental values, liberal values...). Urban gardening is in this dimension not only improvement of the physical structures but a unique platform for fostering the sense of community, reflection of place attachment and expression of the need of self-realisation.

Although place attachment and processes of identification with place/territory are growing up from certain given predispositions, they are dynamic phenomena which should be effectively fostered and further developed. Every concept of place attachment requires a precise work within the community, its effective transmission to all the members as well as to outward environment. Direct participation of the inhabitants in this process is very important. The inhabitants are key players in this process – they are both creators of the place identity and also are the key target group in the process of its acceptation and evaluation. In order to ensure the highest quality and effectiveness of the process, it is necessary to approach the place in an interdisciplinary manner and with maximum emphasis on mutual functional and value compatibility of individual participants and the measures proposed. One of the most important conditions is authenticity of the concept.

A very important category in terms of place identity and place attachment is an image of the place. Image is an abstract mental construction representing the subject in minds of audience. Positive image of a place/city means its goodwill, its good reputation or positive emotion appearing by thinking about the subject. The image is also the degree of affinity to subject manifested by significant groups of perceivers. Image in the city with significant presence of urban gardening structures goes far beyond pure visual appearance of green structures: it encapsulate also the values of solidarity, fairness, justice and advanced sense for quality of life.

4 Urban Gardening

Urban gardening is more and more popular leisure time and recreational activity among city inhabitants that offer an opportunity for people from different backgrounds to participate in the activity of gardening and provide themselves with fresh fruit vegetables or herbs and at the same time to develop social relations among community members in the urban environment during the process of regular maintenance. Urban gardening contributes to increase green infrastructure in the city thus improving the quality of the urban environment and at the same time it is also a way of communicating within a city or its suburb. In this way urban gardening is a powerful tool for creating and building up community and fostering a deep place attachment. Urban gardening is an expression of positive values and attitudes towards environment and community. In relation to place attachment, urban gardening generates uniqueness – specific character of places created by urban gardening contributes to calibration of unique place identity and develops emotional and social ties related to certain place. It is a kind of "scene" yielding the stories and tales which secure inner composure of social community.

In towns and cities there is also endless quantity of degraded or underused areas of brownfields that are waiting for more sustainable and sensitive redevelopment. Temporary use of the brownfield areas is an opportunity for a particular type of public space for urban gardening and the potential for community places open to neighbourhood. This phenomenon helps change current understanding of gardens, when gardens are not just enhancing life of the gardeners and the immediate family or close friends but serve as a tool to improve the life of local people and visitors and it is also of educational character, especially for children, who spend their whole life in a city. It gives them possibility to learn more about gardening activities and recognize different kinds of flowers, fruit and vegetables. Neighbourhood spaces and courtyard garden places in particular provide opportunities for social interactions that help residents develop their relationships in community, support community life and develop community and place attachment as well as enhance the quality of urban environment.

Donna Armstrong's survey of 63 community gardens grouped under twenty community garden programs in upstate New York resulted in the description of numerous benefits of gardening:

- Improved social connections, raising awareness and activity of local policy
- Interactions between gardeners' groups through different programs
- Identification of children with cultivated land
- · Participation also of lower income households
- Stronger community cohesion recognition of people on the streets
- Higher knowledge about local actors easier action initiation process
- Social control of the neighbourhood
- Landscaping attempts not only on the community garden
- Establishment of neighbourhood organizations
- Establishment and maintenance of parks and playgrounds [13]

The quality of the urban environment has also become a crucial component of economic and social regeneration of abandoned and underused sites and brownfields in the cities. This creates not only economic revitalization programmes but also programmes enhancing the quality of life of the urban population. Slovakia in May 2004 had become a Member State of the European Union, which also brought many responsibilities and obligations of Member States in the field of environmental protection and human health. Recently, there is a growing number of activities to promote sustainable urban development and the adoption of several documents and declarations in support of effective strategies that address the development of the urban environment towards meeting its quality for urban population. One of the approaches is the focus on ecosystem services that is part of the Strategy of adaptation to the adverse effects of climate changes in cities. Bratislava as the capital of Slovakia has adopted such a strategy in 2015 and within that context supports creating community gardens on available plots of underused land or brownfields, with environmental and social benefits for the city. Community gardens are often viewed as one of the strategies, which can improve sustainability of urban environment as well as improve health and affect lifestyle of individuals.

5 Urban Gardening in Bratislava

Urban gardening in Bratislava is organised on the basis of voluntary work that has begun under the Pontis foundation. The first attempts of community gardens have been connected with improving the courtyards in the residential areas and the civic initiative "Courtyard" has been established, with the aim to support motivation of the residents to improve public spaces in the community. Within this movement a specific project "Gaps" has started that mapped all the possible community places in the city that can be used for social activities. These community places are the plots that are underused and abandoned and as such are the holes in the urban fabric and can be designated as brownfields suitable for temporary use. Based on these available plots the first activity "mobile gardens" has started where the main motivation for stakeholders to utilise these places has been the opportunity for gardening. Surprisingly, spin-off effect of this activity has brought rich social informal interactions that have been developed while spending time by urban gardening and sharing duties and experiences among local people of various age and nationality. Gradually people started to be involved in other après-gardening activities connected with consuming their own products together and having fun and socialize together up to becoming friends and spending time together in the afternoon and evenings. The next spin-off effect of this activity has been children education in becoming familiar with the type, colour and smell of flowers and vegetables as well as getting practical experience in helping with gardening. Last but not least spin-off effect of this activity have been discussions about current situation on upgrading the outdoor environment in the community and creating semi-public spaces that are important for identification with local community and pro-active behaviour of community members. Participation in urban gardening has generated synergy of the place attachment with the needs of the development of the community.

Now there are 4 types of "mobile gardens" in Bratislava. The first is in the old town in a gap between the block of flats, the second one is on a walkway under the building called Pyramid and it is a combination of a community garden with a café, the third one is in the community close to nature under the slopes of the Lesser Carpathians and this one has extended its scope of gardening also to vineyards and tries to start with community winegrowing. Altogether there are about 276 people involved in these activities. Since these activities have only started two years ago it is quite a success. Urban gardening on the underused plots is based on the lease of the plots for three years that has been guarded by the Pontis foundation. Among the challenges and perspectives in Slovakia, the following ones seem to be most significant:

- Limited research done yet (mapping of vacant spaces)
- Number of vacant/unused plots in cities
- Brownfields as potential space for urban gardening
- Learning from first successful examples: community garden Sasinkova, Bratislava –
 Old Town, community vine yard and garden Pionierska, Bratislava Nové Mesto
- Missing complex strategy for public spaces and legal support
- Missing support instruments for attracting gardeners (passportisation of available plots, clear rules,
- Promotion for land owners usual fear of something new (gardeners will "stay forever", fear of plot degradation, administrational difficulties...)
- · Transition of our cities
- · And many others.

6 Conclusions

Urban environment can have positive effects on creation and growth of communities as they have the opportunity to build a local identity and a sense of localism around a certain space. Place attachment is a significant factor influencing identification with local community, pro-active behaviour of community members and generates territoriality based not only on routine, but on the social commitment and value consensus among the members of community. In order to utilise the synergy of the place attachment with the needs of the development of the community and space/place overall, it is necessary to foster participative planning culture involving all the actors, making optimal mix between private, public and corporate elements. Special attention must be paid to non-formal tools: cooperation with the communities living in similar environment, introduction of best practice cases to public, building up clusters, non-formal cooperation with the municipality, city and region etc. Community gardens can have a huge impact on this process as well as on the quality of urban life beginning from producing fresh food to strengthening neighbourhood bonds. It can also have positive impacts on distressed neighbourhoods where vacant lots can be converted into community gardens or community green spaces and these improvements can have an effect on residents' perception of safety outdoors, reduction of social problems and cultivation of social responsibility.

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