

PAPER • OPEN ACCESS

Communities Shaping Sustainable Cities

To cite this article: J Hoická 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **290** 012120

View the [article online](#) for updates and enhancements.

Communities Shaping Sustainable Cities

J Hořická

Czech Technical University in Prague, Faculty of Civil Engineering, Thákurova
7/2077, 166 29 Prague 6, Czech Republic

jana.horicka@fsv.cvut.cz

Abstract. The contribution introduces significance of local communities in global context of sustainable urban development. Since last decades, urban regeneration, redevelopment and improvements of stabilized localities has become the subject of attention, as the limits of land use and urban expansion has been understood and generally accepted. Recently, the role of community and citizens has been emphasized in international strategies, for instance UN 2030 Sustainable Development Goals (2015) or UNESCO Strategic Objectives of the World Heritage Convention, so called Five C's (the fifth C representing Community added in 2007). Bottom-up initiatives and community activities have become important in urban revitalization and regeneration. The contribution aims to describe the activities and roles of various stakeholders, based on analysis of application project in Prague, Czech Republic inspired with a project in Basel, Switzerland, and characteristics of the evolution process heading towards community activation, which is important for the integrated planning processes, involving an interdisciplinary team and active public participation.

1. Local communities in global context

Environmental effectivity of construction industry and buildings' energy performance has evolved in recent decades. Urban mobility and public spaces transformation have become a subject of urban development in the meantime. As long as the limits of land use and urban expansion were realized, urban regeneration, redevelopment and improvements of stabilized localities has become the subject of attention, at least in European region of high population density. Urban structure is a subject of continuous change, effected with many factors ranging from development regulations to ICT. Among many phenomena, globalization and gentrification should be mentioned, that brought universality, loss of identity to the cities, and caused citizens relation to the town became broken. That is why local activation and community received an important part in sustainable urban development. The situation has been reflected in international strategies, such as the UNESCO Strategic Objectives of the World Heritage Convention, so called Five C's (the fifth C representing Community added in 2007) or UN 2030 Sustainable Development Goals (2015).

2. Bottom-up initiatives and activators

Bottom-up initiatives became a significant trend in urban revitalization and regeneration. When the field of adaptive reuse was involved in urban planning processes, bottom-up initiatives and interim use of brownfield sites became a subject to research as well [1, 2]. As a result of the research, there are examples of formulation and typology of such activities [3, 4] and inspiration pool of do-it-yourself manuals, for example citytoolbox.net. Interim use is considered a relevant period within the process of



transformation of abandoned sites and bottom-up initiatives proved to be effective towards heritage preservation in the context of urban regeneration [2, 5, 6, 7]. Citizens themselves ask for being part of urban development through many initiatives in various forms. There are examples of three recent activities selected to illustrate situation in the Czech Republic:

2.1. *Public greenery*

Guerrilla gardeners brought their environmental and aesthetic opinion to the streets of Prague 3 in the spring 2018, when they planted small flowers at the tree trunks (Figure 1) and the mayor of the district criticized them for “privatizing of public spaces.”

2.2. *Cultural heritage*

In November 2018, independent initiative Tovarna, occupying officially former cast-machine factory in the district of Prague 7, organised the last event in the industrial space (Figure 2), which was abandoned before they came in 2016 and is to be demolished.



Figure 1. Peaceful guerrilla gardening 2018 © echo24.cz



Figure 2. Very last event in Tovarna 2018 © tovarnadelnicka

2.3. *Site generic art*

An artist Katerina Seda based her artwork projects on activating public and modifying public spaces and in 2017 she was awarded ABF Czech Architect of the Year prize. Her project for Venice Biennale 2018 called UNES-CO, pointing out local effects of tourism on “normal life in the town centre” (Figure 3), provoked unexpectedly intensive public discussion in Český Krumlov.



Figure 3. “Normal life in the town centre” of Český Krumlov as a summer job, 2018 © www.unes-co.cz

Although presenting very different locations and issues, these bottom-up initiatives have common features: *the activator*, who is not involved in institutionalized town planning processes, weather group of citizens, association or an artist, and *the aim* to improve the public or abandoned space of the city/town. Public subsidy was officially provided only to the last one – UNES-CO project, but was related to the presentation at Venice Biennale 2018. The activator – local or external – is the crucial condition to make such an initiative functioning. However, many experiences, mostly in off-centre locations in the Czech Republic showed, that the activator is missing, and that was the motivation to focus our research on how to activate local community and to define roles of the other stakeholders involved in the process.

3. Case study: ‘Sugar-candy’

3.1. Process and method

The process of activation of the community is developed within the particular implementation projects, representing kind of experimental research. The first project of ‘Sugar-candy’ in the district of Prague 12, initiated by the author’s team, was inspired by the project ‘Klybeckquai’ in Basel, although there are some differences (see comparison in Table 1). General principles were extracted from the case study of ‘Klybeckquai’, based on studying available materials, project website and Basel municipality documents [7, 8, 9]. These principles composed the basis for the ‘Sugar-candy’ project. The project was further developed in an interdisciplinary team, including architects-researchers, owner’s project management team and PR specialists, until the site was opened to the community in May 2018. Following analysis (3.4) is based partly on a case study of ‘Klybeckquai’ project, compared and completed with local experience and observing within the case study of ‘Sugar-candy’ project and will be the bases for our following research.

3.2. ‘Klybeckquai’ – inspiration from Basel

Interim use of a part of Basel river port area called ‘Klybeckquai’ was initiated by the owner Schweizerischen Rheinhäfen (SHR) in co-operation with the Municipality of Basel and the Canton of Basel-City. The project involves embankment part of the port of about 1 km length. Public investment of 900 000 CHF was confirmed in autumn 2011 for a purpose of infrastructure and project management. Part of the preparation costs was invested by SHR. [9] In December 2011, open public competition on proposals for interim use was announced.

Competition assignment characterized the demands on the proposed projects very carefully. The intention was to find various projects, providing space for different groups of citizens. Important goals were both to respect industrial character (*genius loci*) of the area and to preserve free space to be used spontaneously. Interim use was defined as a combination of commercial and non-profit activities. Rental costs were varied according to a percentage of a commercial activities in a proposed project. Operating and other costs were to be financed by the project holders themselves. During spring 2012, there were eight pioneer projects selected of 60 projects registered in the competition. The selected projects represent wide range of activities, for instance special gastronomy, skatepark, urban gardening, leisure-time activities and alternative education etc. The association of project holders called I-Land was formed to communicate with the municipality and SRH representatives. Municipality provided a support in administration of necessary approvals. Finally, during several months (2012–2014) six of the pioneering projects get involved in the operation of ‘Klybeckquai’. The interim use developed gradually in to a wide range of activities and events. It was originally planned to finish in 2017, but nowadays there is an ambition to continue until 2023.

3.3. ‘Sugar-candy’ – under the smoke stack

Interim use of the brownfield in Prague district Modřany was initiated on university grounds. There is a large brownfield area close to the railway station, which was a sugar refinery estate since 1861. The production ceased in 2002 and after the demolition in spring 2005, only a wall and few objects along

the street and one of the smoke stacks survived. In 2017, during historical survey of the smoke stack, ordered by the current owner, an underground part of the boiler house was revealed.

This part of Prague has been a subject of massive residential development in recent years and the particular sugar refinery brownfield is not an exception. However, the development project of this estate was specific for the participation process initiated and organized by private property owner. We introduced the possibility of interim use of the brownfield to the owner only in the last stages of participation process, in summer 2017.

Based on history of the property, the interim use project was later named ‘Sugar-candy’ (‘Cukrkandl’ in Czech). First internal phase of the project focused on searching of the target group, communication with the district municipality and scheduling. Considering the company CSR strategy and location of the property, the primary target group was local community including both original and new residents. Next step was an open call for proposals presented in February 2018, addressed primarily to local citizens, clubs and associations. As a result of the open call, following activities were proposed:

- Cycle-shop and Café (Roubike)
- Pump track and playground for children (Roubike)
- Sporting facilities for local youth sports club (Spartak)
- Community garden (Kokoza)

The activities were spatially organized to be in contact and to provide space for spontaneous use and further development of the project. The opening event was scheduled on 19th May 2018 and included among others graffiti art workshop, university students’ hands-on workshop ‘Creative recycling’ and light performance on the smoke stack (Figure 4). Most of activities and events was family-oriented, but during the summer there was a certain shift: the secondary target group – cyclists – became more significant, owing to the Cycle-shop and Café owners, who instigated additional activities, for instance bike-sharing point was located at the property. They undertook the on-site management of the project and organised most of the events. Nowadays, there is an off-season and extension of the project is planned for the second (summer) season.



Figure 4. ‘Sugar-candy’ opening event in May 2018 – Café and Light performance on the smoke stack, 2018 © Martin Vonka

3.4. Analysis: stakeholders and roles

The case study represents interim use of a brownfield, which is a convenient field for activation of the community. Moreover, there is a specific value of fragmental industrial history. Although the location is not central, it is in the capital city. Analysed process covers initiation, planning and preparatory works, activation of a community, implementation of the proposals, project development and transformation of the project management. The stakeholders involved in the process were defined as follows (see also Figure 5):

- (process initiator: university researchers)
- property owner: residential development company
- municipality: Prague 12 – district municipality
- project holders: Roubike, Youth sports club, Community garden
- local community: original and new residents
- other target groups: cyclists, Prague citizens
- invited others, e.g. artists and university students.

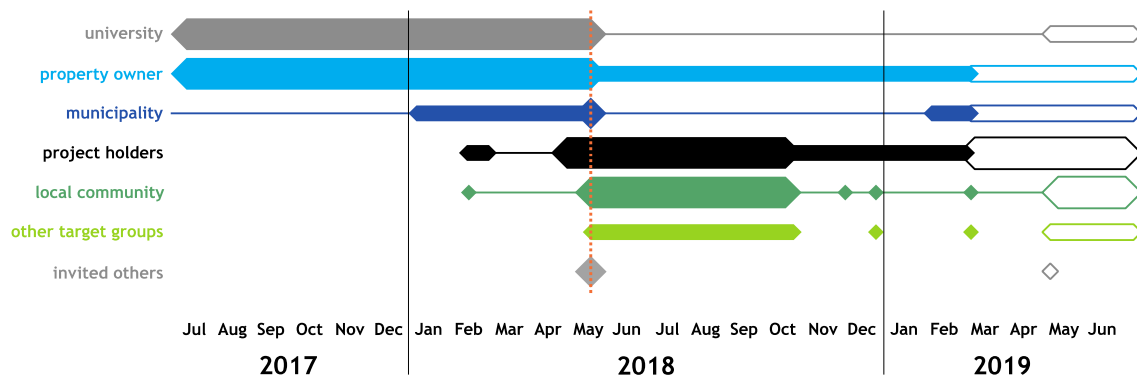


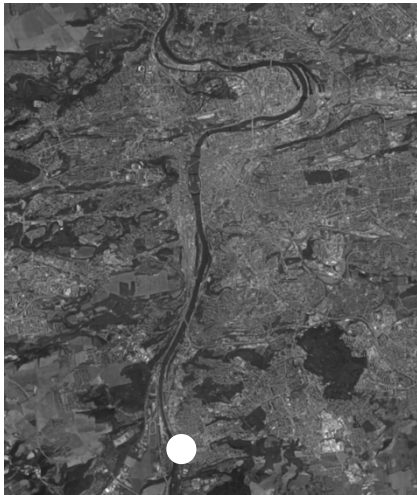

Figure 5. ‘Sugar-candy’ project – scheme of involvement of various stakeholders, 2019 © author

During initial phases, the competencies are distributed between property owner and municipality. In the case of ‘Sugar-candy’ project, we (researchers) provided mentoring and private property owner took over the responsibility and reduced municipality inputs to supportive activities. However, municipality needs to be involved since the very beginning. Considering ‘Klybeckquai’ case, the wider possibilities of municipality to influence the process are obvious: Municipality could be an initiator of the process and would be able to develop infrastructure, to run the call for proposals, to provide support in necessary administration and searching for a public subsidy, to participate in project management, to organise some events etc.

Communication of the project is very important – defining a target groups and a scope of activities is a foundation stone of the project. In ‘Sugar-candy’ project PR specialists were engaged in this issue. The moment to activate the community is the open call or competition – the invitation to participate on the project. However, it is crucial to create a frame for citizens’ ideas – What is a range of possible activities? – and in Prague case, it proofed to be useful to present some inspiration projects.

Sustainability of the project is based on mix of artistic, commercial and non-profit activities of various subjects. Financial participation of the project holders is a positive tool for motivation of individuals to cooperate and for economic sustainability of the project as a whole. In Prague case, initial costs were mostly financed by the owner, except form commercial activities. Once implemented, the project needs to be open to change, not only to enable other activities to join it. Last but not least, management of the project is subject to change as well. Professional management of the initial phases is partly shifted to community or to an active local personality, who represents project holders.

Table 1. Comparison of the projects ‘Sugar-candy’ and ‘Klybeckqai’

Project	‘Sugar-candy’, Prague, CZ	‘Klybeckqai’, Basel, CH
Property owner	Skanska Reality (residential developer)	Schweizerischen Rheinhäfen
Public body	Prague 12 – district municipality	Basel municipality, Canton of Basel-City
Location		
Connectivity	<ul style="list-style-type: none"> • 11 km from the city centre • cycling route along the river • public transport 	<ul style="list-style-type: none"> • walking distance (3km) • from the city centre • public transport
Target group	<ul style="list-style-type: none"> • primary: local community, • secondary: cyclists 	<ul style="list-style-type: none"> • primary: citizens of Basel
Form of address	open call	open public competition
Form of use	interim use	interim use
Timing (proposal-open-close)	2017-2018-?	2011-2014-2017 (2023)
Initiating functions	<ul style="list-style-type: none"> • Cyclo-shop and Café • Sporting facilities for children • Community garden • Students’ workshop • Art performances 	<ul style="list-style-type: none"> • 2 Restaurants • Skate park • Mobile architecture • Civic initiative office • Community garden
Public investments	none	900 000 CHF
Owners’ investments	ca 1 mil. CZK	not available

4. Conclusion

The interim use of brownfields became a laboratory of processes in terms of urban regeneration and activation of local community, which is mainly caused by the limited period of time. Neither the processes nor the documents are legislatively defined for temporary projects in the Czech Republic. On the other hand, both spatial and time scale of the projects is comprehensible. Despite that fact, many principles traced in the interim use and described above are transferable.

Nevertheless, community supportive planning is required in stabilized localities as well. Sustainable urban development needs to preserve historical and socio-cultural values, but the values need to be identified and understood by the local community. This is both a weak point and an opportunity of public

participation. The examples presented in this paper were carefully selected to reflect Czech specifics and to prevent criticism of internationalized strategies. The duality of top-down town planning system and bottom-up activities in the Czech Republic requires transformation to the integrated planning processes, involving an interdisciplinary team and active public participation. Our research and implementation projects will continue this direction.

Acknowledgments

I would like to express thanks to all participating people, who did their best to develop the ‘Sugar-candy’ project. Special thanks belong to my university colleague Jan Pustějovský, who supported the idea since the very beginning.

References

- [1] Baum M and Christiaanse K 2013 *City as Loft: Adaptive reuse as a resource of sustainable urban development* (Zurich: gta Verlag)
- [2] Oswalt P, Overmeyer K and Misselwitz P 2013 *Urban Catalyst: The Power of Temporary Use* (Berlin: DOM Publishers)
- [3] Pogačar K 2014 ‘Urban activator’ – Participatory and bottom-up tool of urban change *Prostor* **48** 188–99
- [4] Pogačar K and Šenk P 2018 Alternative approaches and tools for the transformation of Streetscapes *Prostor* **55** 170–83
- [5] Med T 2015 *Spontaneity catalyst industrial heritage regeneration* (PhD thesis)
- [6] Bartošová N 2017 Mill and Secondary Industrial Chemistry School in Bratislava: Two Examples of Building Re-Use at the Outskirts, as a Potential Impulse for Development of Urban Areas *Architecture in Perspective* (Ostrava) pp 249–53
- [7] <http://www.hafen-stadt.ch/zwischenutzung-klybeckquai.html> [online] [cit 2018-12-15]
- [8] <http://i-land.ch/projekte/> [online] [cit 2018-12-15]
- [9] Marková B Slach O Hečková M 2013 *Továrny na sny* (Pilsen) p 28