

DLA-DISSERTATION / THESIS

BUDAPESTI UNIVERSITY of TECHNOLOGY and ECONOMICS  
DOCTORAL SCHOOL of ARCHITECTURE

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Social residences

Budapest, 2015.



>in binary code:

01001000 01000001 01000011 01001011 01001001 01001110 01000111  
00100000 01110100 01101000 01100101 00100000 01000011 01001001  
01010100 01011001

>in alphabetic code:

# HACKING

the   
#CITY



# HACKING THE CITY / abstract

#urban #trend #system #code #hacking

## HACKING THE CITY

### TRENDS

- > The growth of the importance of cities within the system of world settlements cannot be doubted. The population of urban settlements exceeded the 50% ratio in 2006, which means that more than half of the world's population lives in today's cities. The urbanization process is expected to become even more intense – relevant research claims that 1 million people will have immigrated into cities each week therefore 70% of the world's population will have become city dwellers.
- > As a result of the blast in information technology parallel to urbanization there are important global social and economic processes going on that redefine the world.
- > The special topicality of the current thesis is given by the fact that as a result of the fast-paced urbanization processes, cities themselves generate problems, the majority of which is closely linked to the ever intensifying global phenomena of urbanization.
- > However, cities are not only the root-cause of these problems but also the solution – primarily due to the processes going on within and the ever increasing levels of innovation.

### The CODE

- > The city itself as a formation or phenomena can be interpreted – among others – as a system and can be examined from the point of view of systems theory. The city just like the systems of information technology or biology possesses codes that control its functioning and define processes within.
- > The city code defines – of course besides and connected to other layers of the system – its spatiality and built structure, describes its dimensions, the trajectories of its growth and development, its possibilities and limits.

- > The conceptual model of a system which determines its structure and behaviour is called systems architecture by the terminology of information technology. Systems architecture – as shown by its name – is not unprecedented, its basis is rooted in practical experience and technologies accumulated over thousands of years, the nature of which is more architectural therefore it can be approached from architecture and urbanism and can be interpreted in their context, too.

### HACKING

- > In this analogy of codes used for urban systems, there is naturally some kind of hacking involved. Sets of rules always come with deviations from them, in other words codes and the hacking of codes come hand in hand.
- > Hacking is the breaking of regulated systems by by-passing them, or by combining the elements of the system in an alternative way in order to solve problems either previously unknown or ones that are individual and thus do not play an essential part in the globality of the system. In the case of a city this informal process can be looked upon as the representation of self-organization and self-regulation.
- > Hacking, as understood by this thesis, should not be confused with “cracking” where breaking in is direct and causes deliberate harm. Hacking, as opposed to cracking, has no intention of destroying the system or causing harm to the system but rather to creatively overcome the rigidity due to overregulation within the system and thus improve it indirectly. From the point of view of working mechanisms, hacking involves incomparably more freedom as a result of which systems can benefit a great deal from the hack as they can develop and improve their own codes applying and integrating the foreign elements of hacking.

