



## **HOUSING AS AN APPROACH FOR THE BROWNFIELD REGENERATION KNOW-HOW TRANSFER**

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### **Abstract**

Regeneration of brownfields is nowadays a welcome approach mainly in the urbanised areas of the city centres. Mainly the cities of the Central-East European countries suffer from the lack of housing opportunities in the city centres as a result of the former socialist system and the strong suburbanisation in the following decades. Due to this urbanisation processes people started to leave the urbanised cores of the cities and even more new brownfields have emerged. Nowadays, not only due to the crisis but as well due to the reurbanisation tendencies in the cities, brownfields are seen as a new potential for the housing in the many times neglected areas of the cities. The process of the brownfields redevelopment contributes to better use of space and brings a new life to the upgraded areas. Improved organisation of the space linked with the new use of the space – housing – communicates better with the other parts of the city.

Improvement of the brownfield sites can be perceived not only through the physical change of the space. Gentrification as a social process is one of the possible options how to enrich the process of transformation on the brownfield areas. The regeneration process takes usually many years and the process of gentrification and the presence of alternative entrepreneurs ensures stable development of the site visible in many cities around Europe. This is a reason why in the study programme “Spatial Planning” redevelopment of brownfields should be included, based on transfer of know-how and experience from other countries. The focus of the work is therefore put on the brownfield regeneration based on the housing examples from the European cities focusing mainly on the example of Bratislava.

Transfer of Innovation is a new project under the Lifelong Learning Programme – Leonardo da Vinci No. 11310 1614 on “Brownfield Regeneration Know-How Transfer” (acronym: BROWNTRANS) that has started with the support of the CEE countries (CZ, SK) and will disseminate the gathered know-how and experience into several professions that deal with brownfields. This project runs in 2011-2013 in the frame of Leonardo da Vinci and summarizes knowledge and know-how on brownfield redevelopment in the modules that deal with economic, financial, legal, technological,

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managerial, social and cultural and environmental aspects. Outcomes in the form of a handbook will bring substantial increase in the skills and knowledge potential of human capital involved in cross-professional activities. There is a unique opportunity to communicate results from praxis within the theoretical teaching process as well as to use the theoretical approaches to improve production processes of the brownfield redevelopment from the European perspective.

## **1. Introduction**

In this paper I would like to make a brief overview of brownfield sites regeneration approaches in the urban space. Creativity has always been a capability and privilege of a human being. It can be followed many aspects of our lives. In the past, nowadays city centres were usually on the edge of cities itself which gave them the ideal position for situating working opportunities in the form of diverse industries. After the WWII and later after the Velvet revolution followed by the political changes many of those industrial areas did not survived and brownfield site arose. In many countries especially these sites, nowadays centrally situated, were recognised as a potential for cities and shortly afterwards were converted into diverse uses. In many cases this process of regeneration was not straight but catalysed by the activists operating in those spaces using them on the temporary basis, later on converted to the housing use. In meantime we can find some successful conversions in Slovakia too.

Methods used for this work were of an analytical nature, applied in the theoretical part as well as in the part where good-practice examples from the city Bratislava are introduced. In the theoretical part the focus is mainly on the analysis of the existing literature on manifold aspects related to the gentrification and brownfield regeneration in urban space while synthesising the knowledge along with the personal experience from the research. The second analytical part is a base on the analysis of existing projects of brownfield sites conversion made in the recent time and at the same time being used by the creative class and the housing approach is visible.

## **2. Gentrification**

The origin of the word “gentrification” derives from “gentry” (French origin “genterise” denoting “of gentle birth” and “people of gentle birth”). In England (“landed gentry”) it denoted the social class, consisting of “gentlemen” (wikipedia, 2012). As described in the book *Gentrification* by Loretta Lees (Loretta Lees, Tom Slater and Elvin Wyly, 2008), the term gentrification was for the first time defined in 1964 by the British sociologist Ruth Glass who is perceived as one of the pioneers of urban sociology in Europe. She used the term gentrification to describe distinct processes of urban change affecting the inner parts of London. Nowadays, the changes described, are known as the classical gentrification. She has investigated this process on disinvested inner-city neighbourhoods which are upgraded by pioneer gentrifiers where the indigenous

residents are displaced and working-class housing becomes middle-class housing in London. Throughout the history we can follow several waves of gentrification (Table 1).

*Table 1: Waves of gentrification*

1950s – 1973	<b>First-wave gentrification</b> – <b>Sporadic gentrification</b>	Prior to 1973, the process is mainly isolated in small neighbourhoods in the north eastern USA and Western Europe.
	<b>Transition – Gentrifiers</b> buy <b>property</b>	In New York and other cities, developers and investors used the downturn in property values to consume large portions of devalored neighbourhoods, thus setting the stage for 1980s gentrification.
1970s – 1980s	<b>Second-wave gentrification – The anchoring of gentrification</b>	The process becomes implanted in hitherto disinvested central city neighbourhoods. In contrast of the pre-1973 experience of gentrification, the process becomes common in smaller, non-global cities during the 1980s. In New York City, the presence of the arts community was often a key correlate of residential gentrification, serving to smooth the flow of capital into neighbourhoods like SoHo, Tribeca, and the Lower East Side. Intense political struggles occur during this period over the displacement of the poorest residents.
	<b>Transition – Gentrification slows</b>	The recession constricts the flow of capital into gentrifying and gentrified neighbourhoods, prompting some to proclaim that a “degentrification” or reversal of the process was afoot.
Mid 1990s –	<b>Third-wave gentrification</b> – <b>Gentrification returns</b>	Prophesies of degentrification appear to have been overstated as many neighbourhoods continue to gentrify while other, further from the city centre begin to experience the process for the first time. Post-recession gentrification seems to be more linked to large-scale capital than ever, as large developers rework entire neighbourhoods, often with state support.

Stage model of Gentrification according to Hackworth and Smith (Jason Hackworth and Neil Smith, 2001)

Gentrification, even 50 years later after the first definition by Ruth Glass, is still a current topic in urbanism. It is mainly perceived as a transformation of a working-class or vacant area of the central city into middle-class residential and/or commercial use. It is a process that has attracted the attention of the media, local governments, urban planner, architects and developers, businesses, city stakeholders, and political activists. In the 1990's in several works we can follow the shift from the classical gentrification to the new-build gentrification described by Neil Smith as a much broader phenomenon. He perceives it as a highly dynamic process where the reinvestment of capital at the urban centre which is designed to produce space for a more affluent class of people than currently occupies that space (Smith, 1996).

The city of Newcastle upon Tyne can be perceived as an example for new-build gentrification. The city council introduced a citywide regeneration strategy named "going for growth" that sought to remodel low-demand housing areas in inner-city Newcastle. One of the objectives was to rebalance the population of disadvantaged and stigmatized communities by building housing that would attract the middle classes into these areas. Gentrification that took place here, was not on the former brownfield site, rather it took place on pre-existing residential land. This new-build gentrification was about social engineering aiming to attract the middle classes to parts of inner-city Newcastle with the aim to socially rebalance these areas (Loretta Lees, Tom Slater and Elvin Wyly, 2008). Example of the city Newcastle shows how the city can make an advantage from gentrification and at the same time obtaining the status of a creative city (see Chapter 2).

### **3. Temporary use of brownfield sites**

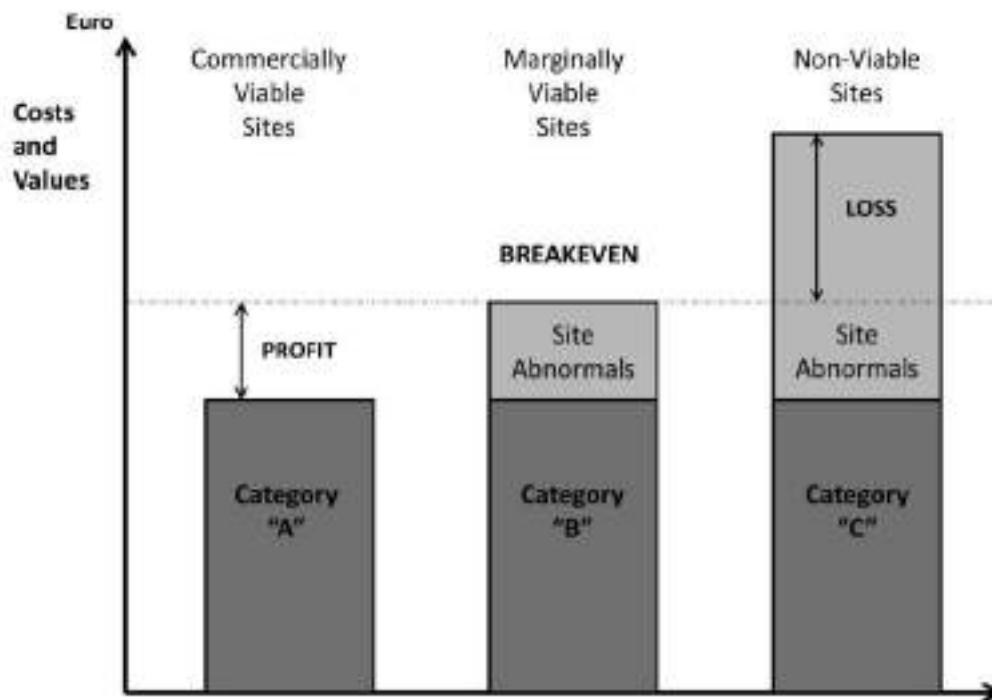
#### **3.1. Brownfield Sites**

Urban derelict sites are results of changes in functional use of the sites. The loss of main functions of the area leads to the degradation of the environment and further loss of the reputation and attraction of the sight from the point of view of users. Brownfields are predominantly perceived as a result of industrial destructuralization and wave of the recession. Brownfields regeneration is very often very complicated with respect to the strict legislation and environment protection as well as with the respect to the housing market and banking sector. Sustainable way of regeneration requires the integration of social, cultural, economic and environmental aspects (BRIBAST, 2010).

Integrative approach to regeneration lies in a sustainable way in implementation of combinations revitalization strategies based on the knowledge of mutual links among economic recession, degradation of the physical environment and social stress factors. Strategy for brownfields regeneration depends on external and internal framework conditions for the process of regeneration. One of the key factors for strategy selection is the possibility to gain the financial support for regeneration of external resources and

total costs for the regeneration of the site (Picture 1). Application tools for the brownfield sites regeneration can be divided into passive (e.g. local taxes, intervention for investors) and active (e.g. improvement of the infrastructure, social infrastructure, transport, social infrastructure, environment, economic activities) financial interventions. The legal framework of the environment, lack of trust and practical experience in majority of the sites is a limit for the private-public-partnership, but the cities should look for other forms to how to use this approach for their advantage (BRIBAST, 2010).

*Picture 1: A-B-C Model for the site regeneration*



A-B-C-Model for the brownfield site regeneration according to BRIBAST (BRIBAST, 2010)

### 3.2. Creativity, Culture and Creative Cities as an Approach for Brownfield Site Use

Creativity itself has a very long history and therefore we can find thousands different types of creativity and always from a different point of view. In general it is very difficult to define the creativity. We can understand it as a capability to create new and genuine thoughts, which were before unknown for the definer (Zlatá, 2011). As many authors as many definitions. Robert Weisberg perceives creativity as a work of the

history's most creative personalities and innovation (Weisberg, 1993), and John Howkins links the word with the spiritual and very personal point of view (Howkins, 2005).

Culture is an important source of creativity. Creative industries foster on the rich core of the cultural heritage, gifted artists and culture professionals. This core is linked with connected innovative services bringing creativity to the market (Zlatá, 2011). Many professionals consider linkage of arts and creativity with innovation crucial for the creative potential of the place. Richard Florida, the author of "Creative Class", sees the connection of culture with economic growth by producing incentives that promote effort, thrift and hard work. Culture according to his view motivates economic growth by focusing human energy and effort on work and away from the pull of distraction (Florida, 2005). Charles Landry describes creativity as historical evolution, while understanding a place from which culture comes from. This attitude creates a potential for a city to rethink its attitude and vision for the future. Landry, as the inventor of the idea of "creative cities", sees a hidden potential in each city. This concept is a positive one; he assumes that ordinary people can make extraordinary happen if they receive a chance to do so (Landry, 2008).

Creative cities are spaces you want to live in, places to be visited (Hartley, 2005). Often they possess various characteristics as: vibrant arts and cultural sector, capability to produce employment, distribution of resources, etc. As summarized by Jinna Tay, "creative cities" is about how local urban spaces can be remained, rejuvenated and repurposed within a competitive global framework. Traditionally the city has been studied from disciplines as architecture, sociology and urban planning, developing ideological concerns. Concern over how the new economy may impact on the local has also played a part in directing attention toward the city as a possible site for social and economic renewal. The establishment of a creative milieu is frequently identified as the means of meeting development outcomes. Cities are sites where shifts in social and economic processes, development strategies and emerging spaces can be observed. Creative cities highlight the significance of consumption-led economics, cultural production and urban space designing (Tay, 2005).

The concept of the creative city can be replicated but the success itself is depended on how it deals with long-term development questions, such as economic and social sustainability, gentrification and local displacement, exclusionary practices, and local identities. Creative expression may come up against conservative systems or ideological cultural bias, which may act to smother the natural diversity of creativity (Tay, 2005). This renewed focus on social identities also manifest in lifestyle and service consumption as cafes, restaurants, bars, tourism, the night-time economy. Cities that offer lifestyle and creative sector but at the same time they provide affordable loft spaces and cheap drinks will always be greater attracter for creative workers and diverse communities. This social aspect of the creative industries links the cultural network to

economic and creative production and the city of Newcastle upon Tyne can be perceived (Ward, 2002) as an outstanding example able to compete world-wide known centres of culture.

### **3.3. Temporary Use of Brownfield Sites**

Temporary use describes the interim stage when a sites original purpose has been abandoned, its future development is still uncertain, and it can be used on favourable terms. It refers to an extremely wide range of concepts and timeframes, from single events through to seasonal projects and creating the field for the permanent establishment. This term is not a new social phenomenon: temporary ventures have always been a feature of cities that were conceived and built for the long-term. Temporary uses are now becoming more diverse, leaving their foot print on the city locations, mostly on derelict sites becoming a structural component of urban development. Temporary uses today are the product of structural changes in the economy (ed., 2007). Older industries that occupied extensive sites are disappearing. The main criterion when choosing a new production location is its accessibility. Thanks to new technologies goods can be supplied whenever needed. Former industrial premises, disused railways and rail-freight yards, or wastelands created by the demolition of large housing estates are spreading mainly throughout the inner cities.

There is a growing demand for free and affordable space mainly by artists, creatives, social initiatives, youth and sport projects. Facing the problem of derelict brownfield sites, people involved in such developments reintegrate apparently redundant spaces into the urban structures. These “space pioneers” (they discover abandoned sites and reinvent them), often perceived as temporary users, are evidence of a trend to greater social commitment (ed., 2007), to more participative approach (BRIBAST, 2010). Such creativity has a chance to blossom on disused sites and in vacant buildings. The aim is to initiate a temporary use at a suitable site or premises. At the same time, the concept of many temporary use projects rests on the liberty of organizing everything oneself (ed., 2007). Space pioneers, as mentioned above, apply particular criteria to their search for the right location. Alongside the characteristics of the location itself, a personal commitment to work, available networks, mutual voluntary support, creativity and a love of experimentation, all play a role at the start of a temporary use project. They recycle the structures for little cost trying to compensate the deficits of a peripheral location by actively networking with other temporary users. Shared locations help to create creative clusters and support the creative environment of the site.

By helping temporary use projects settle at such locations, local authorities can regenerate the latter as a part of a lively cityscape. The potential of these sites is a chance for young creative start-ups as well as voluntary workers, to implement their ideas without making major financial investments and subsequently, to contribute to the

social and economic foundations of urban society. Particularly in a projects initial phase, conditions for rapid “cellular growth” tend to be ideal.

#### **4. Case studies from the city Bratislava, Slovakia**

The topic of brownfield sites regeneration under the Slovak conditions has been a relatively new topic. By now we have had relatively little experience with regeneration of brownfield sites in our country, however, the quantity of them, the economic situation in the country and the (lucrative) position of brownfield sites within the towns obliges us to be increasingly interested in the issues of how to transform and bring them back to life. It is not a simple task, given the fact that former industrial buildings and other underused areas are frequently perceived as underestimated and investors as well as municipalities often do not consider their importance and value of their cultural heritage. The general attitude is rather to "erase" brownfields, eliminate any traces of the past and reshape the land for “empty site” and start to build from on the greenfield site. In Slovakia, majority of the unused brownfields are considered only as a great potential for the future and they still wait for their chance, but some of them have already been successfully rebuild and some are currently undergoing important changes towards the new future. Examples introduced are from the city capital of Slovakia, Bratislava, where many brownfield sites have been already demolished, focusing on three examples of successful conversions through various approaches at different stages.

##### **4.1. Design Factory (Bottova ulica)**

Design factory is one of the few examples how old industrial places can be transformed into cultural place. The building is situated in the area of a former industrial zone in Bratislava where a Kablo factory of a 15 000m<sup>2</sup> size was situated(Wikipedia, 2011). Originally this site was suggested for a transformation into a multifunctional complex Twin City, the plans have changed several times, by now no investment except demolition has been made. In the area were located some valuable objects possessing the potential to be listed as technical monuments and at the same time to be protected from dereliction or further demolition. Inflexibility of authorities led to the decision to demolish the former valuable industrial buildings with the excuse of a bad technical state of art and threat to the population (Mistrík, 2011).

Nowadays the former industrial building where the Design Factory is situated serves as an exhibition space, gallery, cafe and ateliers for 3 architects who were behind this conversion. After its opening in 2005 design factory won several awards for design and architecture. Atmosphere of the place aims to be the intermediary between business sector and cultural happening, an example where history meets creativity and culture. Design factory is only a small “island” of creative industries in the area possessing a significant potential to become the creative centre of Bratislava (designfactory, 2005-

2012). The site has got a good location close the city centre, neighbouring with the site where the Slovak National Theatre is located, called Eurovea.

#### **4.2. Cvernovka**

Cvernovka is an example how the former industrial site, where knits were produced, can be transformed into a centre of culture based on a temporary way. At the beginning of the 20<sup>th</sup> century the factory had already eight buildings. In 1948 the factory was a part of socialization process while in the 1960's the production has reached its maximum with up to 2,500 employees. Goods, mostly sewing and knits were exported all over the world. Due to the economic reasons in 2004 the factory was closed, industrial buildings remained (Mistrik, 2011). Nowadays these buildings are used for cultural purposes. In the entire area of Cvernovka about 300 companies, including paintball arena, bookstore, alternative workshops and Gallery of Cvernovka, have found its place here. Nevertheless, Cvernovka is very well known for the location of creative ateliers of painters, architects, interior designers, photographers, fashion designers, graphic and industrial designers, including lofts.

The second building is located on the block of the streets Trnavská, Záhradnícka, Miletičova and Jégého. The architecture of the building is very valuable and atypical for an old industrial architecture. Nowadays the area is used for cultural purposes. After PKO (Park of Culture and Leisure) was closed it became a popular space for cultural events, concerts and exhibitions.

#### **4.3. Eurovea**

Eurovea is the name of a new international trading centre in Pribinova Street on the left bank of the Danube River, between the Apollo bridge and the Old bridge in Bratislava, in the vicinity of the new Slovak National Theatre building and office building Tower 115. Thanks to its location in the city centre it connects the river embankment with the old town and extends the offered open public space. The whole area of Eurovea is a former brownfield site. An oil refinery was originally located in this place, which was founded in 1885 and produced gasoline, kerosene, paraffin, candles, mineral jelly and asphalt. In 1944, during World War II the refinery was bombed and 80% of the factory was destroyed and continuously caused contamination of soil. All refinery activities were definitively shut down at this place in 1963 when the plant moved to other location in the outskirts of the city. In July 2006, the execution of the first phase of the project began. Eurovea (phase I) was opened in spring 2010 and in an area of 230,000 square meters it offers 60,000 m<sup>2</sup> of shopping spaces, leisure facilities and entertainment as well as other area over 60,000 m<sup>2</sup> of office spaces, hotel facilities and apartments (wikipedia, 2011). The completion was possible thanks to foreign capital of the Irish developer who cooperated also with Slovak architects on the final design. It is

considered to be a successful urban extension of Bratislava's (relatively small) historic city centre.

An important part of the project, in terms of the brownfield regeneration, is the Warehouse No. 7 object. The reinforced concrete structure was built in the 1920s in a functionalist style, as a reminiscent of the classical style. The industrial nature is enhanced by the railway track leading directly to the object, still preserved, which originally connected the entire embankment of the Danube from the refinery to the contemporary port. The building was completely renovated and nowadays it houses an exhibition related to the Eurovea. The role of the Warehouse No. 7 should increase its importance in the near future, when the transformation to the city auditorium, as an alternative to the former PKO (Bratislava's Culture and Relaxation Park), will be finished.

## 5. Conclusion

This contribution shows how the underused areas and spaces, situated mainly in the city centres, can be repeatedly used and successfully converted into housing. These conversions of former brownfields are influenced by several conditions one of which is gentrification as sociological changes in urban space. The process of gentrification is often used together with the approach of a temporary use of the site through interventions, actions, acts or events. Three on-going projects from Bratislava were described as an example of successful brownfield sites regeneration in the urban space showing the capability to transform the former brownfield sites into successful projects in the Central Europe.

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## 6. References

- BRIBAST, 2010. *Brownfields Handbook*. Ostrava: VŠB-Technical University of Ostrava.
- designfactory, 2005-2012. <http://www.designfactory.sk/>. [Online] [Cit. 5 4 2012].
- ed., S. f. S., 2007. *Urban pioneers*. Berlin: jovis Verlag.
- Florida, R., 2005. Cities and the Creative Class. In: *Cities and the Creative Class*. New York : Routledge.
- Hartley, J., 2005. *Creative Industries*. Oxford: Blackwell Publishing.
- Howkins, J., 2005. *Understanding the Engine of Creativity in a Creative Economy*: [Interview] (22 to 22 June 2005).

- Jason Hackworth and Neil Smith, 2001. The changing state of gentrification. *Tijdschrift voor Economische en Sociale Geografie*, Zväzok 22.
- Kahn, A., 2011. Process-Project. In: *Urban interventions / Mestské zásahy*. Bratislava: Vydavateľstvo SLOVART.
- Landry, C., 2008. The Creative City: A Toolkit for Urban Innovation . In: *The Creative City: A Toolkit for Urban Innovation* . London : Eartscan .
- Loretta Lees, Tom Slater and Elvin Wyly, 2008. *Gentrification*. New York: Routledge.
- Mistrič, Ľ., 2011. <http://reality.etrend.sk/komercne-nehnutelnosti/pozrite-sa-ako-ma-vyzerat-nova-cvernovka.html>. [Online]  
[Cit. 5 4 2012].
- Mistrič, Ľ., 2011. <http://reality.etrend.sk/komercne-nehnutelnosti/pozrite-sa-ako-ma-vyzerat-twin-city.html>. [Online]  
[Cit. 5 4 2012].
- Smith, N., 1996. *The New Urban Frontier: Gentrification and the Revanchist City*. London: Routledge.
- Tay, J., 2005. Creative cities. In: *Creative industries*. Oxford: Blackwell Publishing.
- Topolčanská, M., 2011. Stop wasting urban space. In: *Urban interventions / Mestské zásahy*. Bratislava: Vydavateľstvo SLOVART.
- UzemnePlany.sk, 2011. *Mestské zásahy Košice 2011*. Košice: DIVE BUKI.
- Vallo Sadovsky Architects, 2008-2012. <http://www.vallosadovsky.sk/>. [Online]  
[Cit. 5 4 2012].
- Vallo, M., 2011. Unsolicited architecture. In: *Urban interventions / Mestské zásahy*. Bratislava: Vydavateľstvo SLOVART.
- Ward, D., 2002. Forget Paris and London, Newcastle Is a Creative City to Match Kabul and Tijuana. *Guardian*.
- Weisberg, R., 1993. *Creativity: Beyond the Myth of Genius (Series of Books in Psychology)*. s.l.:W.H. Freeman & Company.
- wikipedia, 2011. <http://sk.wikipedia.org/wiki/Eurovea>. [Online]  
[Cit. 5 4 2012].
- Wikipedia, 2011. <http://sk.wikipedia.org/wiki/Kablo>. [Online]  
[Cit. 13 4 2012].
- wikipedia, 2012. <http://en.wikipedia.org/wiki/Gentrification>. [Online]  
[Cit. 13 4 2012].
- Zlatá, D., 2011. <http://www.jetotak.sk/autonomna-zona/kreativne-mesto-a-kreativne-klastre>. [Online]  
[Cit. 5 4 2011].