Landscape as a Connection – Beyond Boundaries
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1 ABSTRACT
This research deals with several problems of the contemporary city – problem of administrative boundaries and relationship between the city and its public spaces. Uzbek cities are ever increasing, often uncontrolled and rarely planned as a whole, almost always without thinking about city’s identity. Furthermore the problem of boundaries in general is evident in the periphery which is undeveloped edge of the city. In Croatia boundaries are an obstacle to urban planning, they make it difficult to overview the entire space of the city because its illogical divisions. What is an urban landscape and how it can contribute to development of the new image of the 21st century city is a current theme of planning (eg. Grand Paris considerations). At the Faculty of Zagreb cities from different regions are being researched through a series of workshops in Landscape Architecture and Urbanism. The aim is to reject administrative boundaries in order to create new area of a city based on the landscape.

We analysed current trends in urban planning with the landscape as a main resource, connecting separated city units and periphery. There are three types dealing with the activation of public spaces: first is about different highlines (Paris, NewYork, Rotterdam), second is about linear parks systems above infrastructure (Milano, Barcelona) and third are waterfronts (along canals, rivers and coastlines). Case study for this article demonstrates how these examples and world trends can be used to connect two cities in a logical way – beyond boundaries. The motto of graduate work was: the future of the city will be created on the periphery as the core is taken by the history. Project result is connection of the ancient city of Salona with the current centre of the city Split – the historic and world heritage Diocletian’s Palace. The connection is achieved through linear park.

2 INTRODUCTION
Urban settlements (towns and cities) are never completed duo to continuous changes in spatial treatment and way of life. However the city until the 19th c. had a clear edge with its fortifications of bastions and lawns of glacis. This fortification space frame was in the 19th c. used for new roads, public buildings, parks and walkways creating new urban, representative, social and public places for future city perimeter. Since then cities are growing and old boundaries are being erased, merging the city with suburbs, regions and landscape. Administrative boundaries are a necessity for effective functioning of the city. Today different administrative networks share common role in organizing political, municipal and economical life of the city, region or country. All together, while special boundaries are disappearing, administrative boundaries are being determined. As a consequence urban planning is becoming more challenging discipline which needs to mediate between both administrative directive and special facts in growing urban areas.1

3 THEORETICAL BACKGROUND
3.1 City and urban landscape
Since the 18th c. landscape architecture has an important role in shaping of urban space and it affected on public places in various ways. Viennese Ringsstrasse and Zagreb Horseshoe are models for how urban landscape can influence upon the urban surrounding of public buildings and special connection. Landscape architecture can induct cultural, social and urban process of development, like the Central Park in New York, or it can be financial basis in living areas as it is with Regent’s Park and squares in London. It is also an element of urban representation – avenues and boulevards of Paris and other cities. Some of these places have different aim: places of city excursions and recreation (Maksimir in Zagreb, Bois de Boulogne forest in

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1 This research is part of the research project “The Urban and Landscape Heritage of Croatia as Part of the European Culture” which is being carried out by the Faculty of Architecture at the University of Zagreb.

2 Tagliagambe 2008: 62 ; Doucet 2008: 93-113
Paris, Prater and Augarten in Vienna etc.), or places of daily rest (thematic parks, park squares, pocket gardens etc.).

In theoretical thinking of the city concepts every time has its characteristic idea, like green belts in the 19th c. Europe replacing city fortifications, or large recreational space in American cities at the same time. In the 20th c. there is the landscape concept of garden city and its counterpoise modern urbanism where quantitative criteria of "empty or green" space are the main element of the void among the city structure. At the end of the 20th and the beginning of the 21st c. there are new rethinking of the cityscape and landscape in general out of which new deconstruvistic parks (La Villette) are created in the context of the transformation of cities. This initiated a global process of affirmation of landscape architecture and also the development of new urban-landscape theory such as New Urbanism, Landscape Urbanism and Ecological Urbanism. While the New Urbanism aims to make contemporary interpretations of historic urban patterns, Landscape Urbanism seeks to comprehensively address to the spatial and social problems of the city by offering a socially active urban space. Ecological Urbanism logically carries on ideas of Landscape Urbanism with strong ecological approach adequate to the contemporary times. Landscape Urbanism as a new paradigm was included in the 21st c. has had the most influence in Europe practice. Town planning in the spirit of Landscape Urbanism is not based upon territorial city growth but upon reaffirmation and rediscovery of neglected and ignored city space, connecting them into system for the new urban image guided by landscape beyond the boundary division.

3.2 Landscape Architecture Workshop at the Faculty of Architecture in Zagreb

Series of Master Workshops and Master Thesis within topic of UrbanScape Emanation are being held since 2010 at the University of Zagreb on a described theoretical basis. The main goal is rediscovery of space led not by administrative and existing situations but guided by impressions – modification of consciousness. Most important part of the Workshop is research work where by mapping and analysing we search for the meaning of time and structures in the space. Students choose a task and the space they wish to research and design and in this way Croatian cities from different regions are being compared and analysed in the context of contemporary examples of town planning in which landscape architecture is primary medium for more humane-scaled planning and protection of heritage and public space.

4 LANDSCAPE AS A CONNECTION

Cities in current planning are viewed more as dynamic systems and less as a formal and static configurations and constellations. Squares, parks and districts known to us as traditional urban typologies, are fading in their design meaning. Meanwhile contemporary city is shaped by infrastructure (indeterminate by space boundaries) and its network that envelops the whole city and more. Out of this contemporary projects there are three types of urban landscape, described in next segments of text and all of them establish connections of public, multipurpose places.

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5 Bojanić, Matuhina 2012; Marić, Bojanić, 2012
6 Emanation – emission (the act of emitting) – causing to flow forth; the effect that any entity, system, and/or being has on its environment, Prof. Bojana Bojanić Obad Šćitaroci, PhD lectures Contemporary Landscape Architecture
7 Hauck, Keller, Kleinekort, 2006
4.1 Highlines as Airscape

Reshaping and transforming character of space by reaffirming it through landscape architecture often leads to the creation of new pedestrian walkways and bicycle paths which rise above the level which can be achieved also by lowering the existing level of vehicular traffic. Those are contemporary promenades and James Corner’s project with Diller Scofidio+Renfro – High Line of New York City\(^9\) – shows how this concept can become a great success for inhabitants and tourist. This is an urban renewal project which has transformed unused elevated freight rail line into a 1.6 km public space and extraordinary touristic attraction on the West Side of Manhattan. The project has its conceptual origins in 4.7 km green belt that follows the old Vincennes railway line in Paris called Promenade plantée designed by landscape architect Jacques Vergely and architect Philippe Mathieux and opened in 1993. High Line has opened its first stage of the project in 2009, second in 2011 and third is under construction. Since than many cities are thinking about the elevated parks and airscape projects of transformations in urban fabric. There are plans for 4.3 km Bloomingdale Trail in Chicago; also for an old Reading Viaduct elevated rail in Philadelphia; old railway arches at the Bishopsgate Goods Yard in London. Location of another old elevated track which is being considered for new park and shops can be found in Rotterdam. This success is a result of attractive mix of today increasingly popular walkspace and walkscape.\(^{10}\) Humans have always had the need to have a better view, which is probably why we have stood ourselves on two feet through evolution.

Except the highline there are many other new types of airscape in general that can be seen as contemporary landscape architecture projects with interventions of elevating from the ground. They can be lifted structures like the highline itself is (Tiger and Turtle, Magic Mountain 2011; Tezuka Architects, Ring around Tree, 2011) or they can be in close connection with the landscape which they emphasizes (Massimiliano Fuksas, The entry in the cave Niaux, 1993; Reiulf Ramstad Architects, National touristic route Trollstigen, 2010).\(^{11}\) These projects help the communities and small neighbourhoods to be better connected with healthier urban environment and more profitable touristic public spaces.

4.2 Linear parks above and along the traffic and infrastructure

Similar to the highlines but in much larger scale there are linear parks systems or even networks for the new future image of the cities. La Sagrera linear park,\(^{12}\) a project for Barcelona diagonal green axis by West 8, 2011, connects Natural environment of the City: sea and the mountains, bringing the City strong ecological mark for this European metropolis. It is counterpoint to today’s backbone of the city Diagonal Avenue with shaded way for the pedestrians, bicycles and skaters through neighbourhoods, El Clot Park, historical gardens and installations of fountains. Inspired as a solution for the new railway connections this linear park has underground and ground traffic depending upon the urban situation through 40 ha of urban landscape. After huge city road in Madrid went down below the ground a large linear park along the river Manzanares was built. It is a project that consist of 6 parks, city beach, recreational and cultural space and it is called

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\(^{8}\) collage author Tamara Marić (footnotes: 8, 12, 11, 14, 15, 16)


\(^{10}\) Walkspace = space of motion, space where we are moving; walkscape = places that we observe during the motion.

\(^{11}\) This is a part of the student seminar, author Jakov Fatović, univ.bacc.ing.arch., mentor: Prof. Bojana Bojanić Obad Šćitaroci, PhD, from course: Contemporary Landscape Architecture at the Faculty of Architecture University of Zagreb

Madrid Rio. Altogether there is 30 km of bicycle routes, 33 pedestrian bridges and more than 30000 new trees. This project revitalized the town on the other side of the river and made possible future development of the city. Both project give strong landscape concept to the city, more ecologically aware image. In this scale city is planned together with its periphery and further with its surroundings, respecting the historical urban patterns but giving it new idea(s) in dealing with contemporary problems of city growth. Madrid Rio is at the same time part of the subgroup type of waterfront projects.

4.3 Waterfronts

Waterfronts are fortunate to have the natural element of water as attraction and motivator for relaxation and recreation. Its shoreline area can be the edge of the sea, lakes, rivers or canals, all places that are attractive for designing and redesigning in the new spirit to make them more active in the cities life. Research project that deals with this topic is called URBEM (Urban River Basin Enhancement Methods).

One of the most known contemporary project is Irwell City Park in Manchester from 2010, FoRM ass., in which along 8 km of new vision for the river and its corridor cities conurbation is connected. It connects also two parts of the city on the other side of river by creating new and regenerating areas that have become isolated and fragmented. Toronto has developed explicit strategies of different relations of the city user and the shore of the lake Ontario. Grand Paris – Axe Seine is solution for Grand Paris by the author Antoine Grumbach, it follows and creates linear network of extended community of the Seine which goes beyond city boundaries and landscape creating connection from Paris to Le Havre.

Waterfront projects in urban space are attractive but delicate places which have particular surprising and valuable natural feature. Waterfront landscape is logical in its appearance but it is hard to articulate relationship between its elements and the city.

4.4 Comparison of urban landscape concepts

By these three types of urban landscape it is possible to distinguish some of the themes at Landscape Architecture Workshop and Master Thesis in Zagreb. The knowledge gained through the analysed project samples is first interpreted and readjusted to the scale and space and then applied adequately in the solution concepts in both urban or landscape environments or scenarios.

4.4.1 Lungomare Airscape

Intersection of Urban and Natural Scenery of the Brač Island is the name of Master Thesis at one of the south islands of Croatia in Adriatic Sea. Island was recognized in division of its north / urban side (with the large number of settlements), and south / landscape side (with only one bigger settlement – Bol). Due to the topography, this touristic attractive island especially south side can’t be connected by lungomare at the coast. That is why in this thesis lungomare is displaced along the top contour of the Island where urban and landscape side of the Island meet (fig. 3). This kind of project where different and many settlement units need to work together in common goal are rare because it is hard to make an agreement from all sides, although the Master plans for islands in Croatia need to be done for the whole islands. The quality of this project is that it uses existing pathways (pedestrian, bicycle or road) to connect interesting viewpoints, historical and new landscape places. It becomes airscape of “elevated lungomare” making it possible to put it into realization almost immediately.

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14 http://www.urbem.net/ [28.2.2013.]
4.4.2 Infrastructural re-use

Two projects can be compared with the examples of highline and linear parks along infrastructure. They are somewhere in between this two types creating the linear landscape along forgotten historical road Napoleon road at the Pelješac peninsula or unused railroad south of Dubrovnik in Konavle. 18

They are both the results of the Landscape Architecture Workshop projects and the first one is named Napoleon’s road of Pelješac – Touristic and Recreational Route and it re-activates 61km of historically strategically important road along the peninsula making accessible 48 of historical localities around the road from prehistory to the 19th century. Second work called Konavle-Reactivation of Railroad aims to, like High line, redefine in War (nineties of the 20th c.) destroyed rout. It is situated in the topographically demanding area, which is why this rail is an engineering achievement and it gives a lot of spectacular views and ambience. Altogether it connects the southernmost parts of the Croatia in the interesting manner making it very important for the whole country.

4.4.3 Waterfront connection and comparison

Croatian littoral is characterised by its coast with numerous islands along the eastern side of the Adriatic Sea. To make this attractive and interesting landscape a vivid place during the whole year, it’s necessary to put into network a hinterland, mainland and islands. This theme was a part of research in one Master Thesis of Zadar Archipelago, where analysis was based on historical processions and nowadays migrations and processions in order to explain and direct new future processions as the east-west connection. 19

18 PAVIĆ, Dijana: Napoleon’s Road of Pelješac – Touristic and Recreational Route. MILIĆ, Marija: Konavle-Reactivation of Railroad. Both projects have been done in academic year 2010/11 at the Workshop of Landscape Architecture, University of Zagreb by mentorship of Prof. Bojana Bojanić Obad Šćitaroci, PhD
Here we want to show how waterfronts are very important topic for Croatia, especially in the Mediterranean part on the coastline, but also in the continental part at the shores of rivers. In Mediterranean coast we can compare two approaches in different cities with the Toronto waterfront.

In Kaštela – the linear city between the city of Split and Trogir – urban promenade as real lungomare was suggested. It is very important project because its linear structure is very hard to organize and because of it Kaštela are divided into 7 segments without the sense of one city. Public space that would be gained is the best possible way of connection to achieve this. Minimal interventions are needed for the beginning part and after that it is up to users and community to make an effort for improvements in different parts and places which is the main difference from the serious strategically organized interventions in Toronto. More like Toronto, project in Rijeka deals with the problems of the largest port city in Croatia. Its coast is almost nowhere accessible for the public and now when the most of the industrial buildings are shut down revitalisation is necessity. In Master thesis for the coast of Rijeka it was attempted to put it into realization by organizing coast in frames of Waterfronts with different ration of interventions inside of them.

In continental Croatia waterfronts are a part of relationship between Rivers and Cities. Two larger cities in this Region are the special cases of this relation. Capital city was until 1960’s situated between river Sava and mountain Medvednica with little connections to the river. When the city crossed the river a new part of the city was created in the spirit of modern urbanism. Today still this isn’t the city at the river but the city cannot ignore that a river is running through it. That’s way one Master thesis of Landscape Architecture tried to establish the logical connections of the city and the River without ruining the relationship between them in the way it has been for centuries. And in the East Croatia Osijek is very specific city situated only on one river bank of Drava. Another Master thesis deals with this type of city by saving the landscape for the time

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20 BATINA, Iva: Kaštela – Urban Development of Coastal Areas. Workshop of Landscape Architecture, academic year 2011/12, Faculty of Architecture, University of Zagreb, mentor: Prof. Bojana Bojanić Obad Šćitaroci, PhD.
21 PERANIĆ, Marija: Redefining the City Coast of Rijeka. Master Thesis, 2012, Faculty of Architecture, University of Zagreb, mentor: Prof. Bojana Bojanić Obad Šćitaroci, PhD.
when city will cross on the other side. This shows how the waterfront landscape can connect not only urban areas but also urban spaces with landscape areas.

5 CASE STUDY: URBAN LANDSCAPE OF THE CITY OF SPLIT

Here is an example of how urban boundaries can be non effective in the urban planning of region and the city. The subject of research is the Mediterranean city of Split. It is topographically a peninsula which ends with another peninsula called Marjan.

Long ago when Split was just a small settlement, in the north on the Jadro river delta there was the ancient city of Salona, which was a Greek harbor and later a grand Roman city. Salona is the real beginning of the city of Split. In the late 4th century AD Diocletian’s Palace, was built on the site of a former village. This royal palace was (and still is) a unique Roman building large in scale and situated on the periphery of Salona and is now part of UNESCO World Heritage list. In 6th century AD residents of Salona fled from the Avars’ invasion settling in the old royal palace which soon grew into a medieval burg. That is the story of Split’s origin. The growth of the city was slow and gradual during a long period of time. As opposed to the centuries of slow growth, during the 20th century the city of Split rapidly widens its built territory. Back than Solin with the archeological park Salona was administrative part of the city of Split as its distant periphery. Today (when Solins is indeed periphery of Split) it is not the case, boundaries are separated, Solin is town and the city of Split is now peninsula where a huge urban expansion in the 20th century leaves the city with very few urban open spaces except with a huge landscape area of the Marjan peninsula.

5.1 Connections beyond Boundary

Marjan park-forest is the most precious part of landscape in the city surroundings. It is the space of walkability, recreation, culture and strong history and due to that if was an impulse for designing an urban landscape of the city of Split as a Master thesis assignment. With the motto of graduate work: the future of the city will be created on the periphery as the core is taken by the history, this research and design aims to connect two cities (Split and Solin) in a logical way – beyond boundaries – connecting Marjan park-forest, Diocletian’s Palace, City and archeological park Salona.

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23 RADIĆ, Ksenija: Osijek Garden Grid – Transformation of Urban Peripheries. Master Thesis 2011, Faculty of Architecture, University of Zagreb, mentor: Prof. Bojana Bojanić Obad Šćitaroci, PhD
Marjan landscape is the formula for how public spaces should be formed and designed only in urban character in order to achieve a healthier city with healthier inhabitants. Also reversed, with this kind of approach to the city planning, awareness about the Marjan peninsula values and problems can be induced. And with time more attention would be given to the forest and the coast of Marjan as a consequence of a Mediterranean lifestyle with more tourists actually visiting the city of Split instead of just passing by and through the city.

In order to carry out this concept, linear space was divided into five urban areas between the Marjan peninsula and Salona Park: 1) the historic and social nucleus with Diocletian’s palace 2) Gripe fortress connected with Gripe sports and commercial centre 3) residential areas 4) university campus 5) contemporary periphery along road entry to the city of Split. In every area suitable interventions were proposed considering urban existing conditions and master plan. It is necessary to make small interventions in public space of the core (Diocletian’s Palace, the fortress) and in the residential areas around its museums, schools, parks, grove, avenues, and sight-seeing points, such as: considering other purposes, ways of using the space, planting trees, or changing path material. In the city core re-using and re-designing public space is necessary and economically acceptable intervention. In residential areas it is necessary to create places of
shade and “soft facade” in order to activate open spaces in-between the buildings. By creating and adapting these places, the landscape would come to life and neighbourhoods would accomplish great walkability with many health, environmental, and economic benefits. On the other hand, only one large intervention is enough to connect Marjan and Salona all the way and for that in the periphery – the Aqueduct Park was proposed. It is a cultural park along the Diocletian aqueduct remains, from the University campus to Salona as an amplifier of the importance of the Diocletian’s Palace. Interventions are mapped and visualized and connections are designed through solution of public transport line, bicycle route and places of waiting at the viewpoints.

5.2 Resulting urban landscape – The Pulse of the City of Split

This Mediterranean city landscape of history, urbanism, society and culture – The Pulse of Split – connects the city core (Diocletian’s Palace) with the periphery and with its historical core, the Greek and Roman city of Salona. It also links the Marjan peninsula on one side and its present archaeological park Salona on the other. At the same time it passes through all historical levels of the city urban development, which gives different features to the landscape. By this it has joined towns making it possible to stay as two administrative units but united around the same interests for the future.

Indeed, urban landscape here becomes the pulse – the heartbeat of the city because it connects everything important about this city with a contemporary approach to landscape space as a walkscape thus reminding the city of the things it has forgotten about.

6 VALORIZATION: "LANDSCAPE IN-BETWEEN, WHY AND WHA"

In this research contemporary projects have been explained through categorisation in three themes: airscapes (highline projects as a part of it), linear parks above and along the existing and active traffic and infrastructure, and waterfronts. All three have in common that they give public land for the public good by transforming public space into vivid public places for the citizen and tourists. In this way landscape is seen as opportunity for regeneration of city development and better growth. Many projects belong at least partially in more than one of these types, by which they show how this categorisation is not mutually exclusive. Highlines are in one way linear parks but on the former infrastructure of transportation, now becoming infrastructure of different kind – infrastructure of walkscape and walkscape. Linear parks category includes projects of greater area and systems of urban landscapes along either diagonal or linear corridors. Sometimes it can be in relation to the water element in the city (Madrid Rio) becoming also waterfront which gives it higher value and justification. Waterfronts are project which are not only placed on the shores but also planned and designed primarily as relation to the sea, river, canal or lake.

These categories are compared to the projects for the Landscape Architecture Workshop and Master Thesis in Croatian cities at the Faculty of Architecture in Zagreb. Projects have been chosen carefully so that they can be compared with classification above, but bearing in mind the scale, reach and possibilities of Croatia. Therefore the division is not taken literally, but is carefully and purposely adjusted. In airscape example of Brač it is shown how lungomare can be a variation of this category. Infrastructural re-use is in Croatian scale between highlines and linear park category, because bigger linear parks would not be economically possible in Croatia, at least for now, but even more importantly they are not necessary or a priority due to large number of National Parks and other protected landscapes at the state level. Werfronts are shown through more projects because they are in Croatia a very important and delicate topic. Also here landscape of water itself is a way of connecting the parts in a unit, we just need to make this connection happen in a positive way.

These project proposals are developed by students under the mentorship of Prof. Bojana Bojanić Obad Šćitaroci, PhD. at the faculty during one semester and the idea is to show to the public administrations how they can use and direct their urban and regional planning or design to improve tourism, living and nature. Most of the projects have been presented to public (Brač, Zadar and Rijeka) and reactions from the inhabitants were excellent. In Bol on Brač lungomare airscape was presented together with the exhibition in the summer program. In Zadar the office for space planning was interested in this project and they have taken it into consideration. Other projects have been carried on in the workshops, for example in Split.

workshop called Marjan 2011,26 in Dubrovnik workshop the research work of Dubrovnik surroundings (Kaštela and Pelješac including) was presented and further developed. In Kaštela there was an international workshop dealing with lungomare promenade called 7 Bisera Kaštela-Croatia.27 It is difficult to make an impact on the administration of cities but the attention was turned to the problems and possible direction for solutions were shown.

7 CONCLUSION

Important part of this research was to show how boundaries are necessary, but they can be limiting in the process of urban planning. It offers also a possible solution for this conflict in the form of using landscape architecture in planning in a way that it explains how landscape can, especially urban landscape define new boundaries. As well it is shown how can landscape be a help to urban planning without changing the boundaries. This is the reason why urban landscape is beginning to be a method in urban planning and the theme of urban designs of the cities from the end of the 20th c. since when new theories have been arising in form of Landscape Urbanism and Ecological Urbanism.

This new theories see landscape as a potential for new urban revival of the cities giving them contemporary more human image. Rediscovery of neglected and ignored city space and their redesign and reaffirmation is shown on types of projects giving the correlation between examples in practice and study projects at the University of Zagreb. Highline, like the one in New York, and promenade, like student project in Kaštela, connect parts of the cities or different communities in one whole, like in aircscape of Brač. New landscapes along and above infrastructures show us how to connect peripheries and the city (Madrid Rio) or one region (wider surroundings of Dubrovnik). Waterfronts connect urban and natural landscape making attractive new public places and it is very important topic in planning of the Croatia and in the world in general.

Case study of urban landscape of Split illustrates how boundaries can become a problem for design or/and development of important historical and urban parts leaving an archaeological site of world importance to be gradually destroyed by spreading suburban areas of town Solin and not using the space adequate to its potential. City landscape of Split has been seen as a solution for this problem as a way to connect Split and Solin (centre and periphery) without administrative changes. This urban landscape would give more value to the world heritage Diocletian’s Palace connecting it with Salona and other historical places with contemporary image for the whole city and its periphery.

Landscape can be a tool in urban planning when city or region need a new image, promotion or healthier space. It is necessary to use landscape as a connection when it is about areas with strong historical and cultural heritage or natural environment, where urban landscape design can properly make this places usable in non violate form.

8 REFERENCES


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27 http://www.7bisera.info/ [28.2.2013.]