

STUDYING THE IDENTITY OF URBAN LANDSCAPE FOR PARTICIPATORY CITY PLANNING

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Abstract

With the adopting of European Landscape Convention (2000) the meaning of landscape as an arena is recognized as a mainstream in modern European landscape research. The shift to the arena meaning in landscape research gave rise to exploring social dimension of landscape, in particular the landscape perception. The author of this paper argues that (1) subjective values, images and perception of the environment influence on individual and community decisions, behaviour and actions; (2) evaluation of subjective perception could be used for implementation of participatory approach in landscape planning. The main starting point for this article is the fact that while the city management in Russia was under transition for last two decades, the city planning remained largely the same. City planning is an arena of the architects and planners; and the applying of participatory approach to landscape planning is very limited. This paper demonstrates the use of the sketch mapping technique for studying the lay-public's perception of the urban landscapes. The main goal of this article is the exploring the lay-public's perception of the centre of Krasnoyarsk city. For achieving the goal the next research questions were examined: (1) What are distinctive elements of urban landscape which are shaping city centre image and place identity according to citizens' perception? and (2) What are differences between perception of the lay-public and experts' vision? The paper assumes that (1) definition of landscape by Landscape Convention is a core point for studying subjective perception of urban landscape; (2) the full reflection of the perception of the city centre is expressed in the concept of place identity; (3) sketch mapping technique is appropriate for the exploring subjective perceptions. Similar to elsewhere, the key issue of participatory planning is distrust between professionals and the public, strong expert-based approach to planning and low level of awareness of the public about planning procedures. At the same time, knowledge about city image, landscape identity and place attachment of the lay-public could be useful for minimizing potential land use conflict, increasing satisfaction with spatial planning mechanisms and involving the public in decision-making process. Mental maps proposed good starting point for discussion about planning solutions and created a platform for mutual understanding between professionals and the lay-public.

Key words: landscape perception; landscape identity; sketch maps.

Introduction

The concept of landscape is used as an intermediating concept for studying the relationship between the humans and their environment. Three meanings of the concept can be found in the history of landscape research: the visual scene, the arena, and the way of seeing (Soini, 2001). The meaning of landscape as an arena is recognized as a mainstream in modern European landscape research after adopting of European Landscape Convention (2000). According to the Convention, "landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. In this paper, landscape is considered (Soini et al., 2012) as "a dwelling place, which is not something external to human being and thought, but simultaneously both the object and the subject of dwelling". The shift to the arena meaning in landscape research gave rise to

exploring social dimension of landscape, in particular the landscape perception. According to Scott (2011), research on landscape perception has shifted and turned, incorporating a significant number of different theories concerning how people perceive landscape. The author of the paper argues that (1) subjective values, images and perception of the environment influence on individual and community decisions, behaviour and actions; (2) evaluation of subjective perception could be used for implementation of participatory approach in landscape planning.

Evaluation of the city image is not a new subject for spatial planning research. The investigation of the subjective city images was started in the 1960s from the famous study of Lynch (1960). From 1970s within the phenomenological tradition, people's perception of the environment, the way of interrelationship and reflection of the experience became the mainstream for studies on humanistic geography. The concepts of "space" and "place" gained prominence among researchers through Norberg-Schulz's work on the existence of a "genius loci" (1980, 1971), the spirit of a place, Relph's work on "sense of place" and "placelessness" (1976), and Tuan's work on positive affective ties to place described as "topophilia" (1974, 1977). Place has also been explored in works by Seamon (1979), Buttner and Seamon (1980), and Hart (1979). Canter's (1977) work on place, Proshansky et al.'s (1978, 1983, 1987) work on place-identity, and Altman and Low's (1992) work on place attachment are other important milestones in the research literature on concept of place. "Space" and "place" are distinguished here according to Tuan (1977): "space is a structure in which physical and intangible processes flow through; often an abstract concept representing the areas of movement between places". Place is a portion of geographical space and could be defined as "territories of meaning". The most important aspect of a place is that it is an area or context whereby various meanings, values and cultural significance are attached. It is also an area where perception is enriched and a person is made aware of the distinctive character of specific localities. Place is socially constructed and operating, including interaction between people and groups, institutionalized land uses, political and economic decisions, and the language of representation. Such meaning of place and meaning of landscape as arena are similar. From this perspective, "landscape" and "place" cannot be seen as opposite, but rather as inseparable units (Soini et al., 2012).

Research on sense of belonging to specific place is recognized as an important part of concept of place. Relph (1976) and Tuan (1974, 1977) used the terms "insiderness" and "outsiderness" to describe people's feelings of being part of a place. Tuan (1974, 1977) separated "sense of place" and "rootedness", where sense of place is described as an awareness of a positive feeling of a place, and rootedness as a feeling of being home. All concepts that have been used in relation to place, such as "sense of place", "place attachment", "place-identity", "place dependence" etc., are difficult to separate, and might have parallel definitions representing mainly positive affective ties to a place (Patterson & Williams, 2005). Despite the lack of the conceptual clarity, one could observe that mentioned above terms examine belonging to specific place from "distinctiveness" point of view, denoting that places are distinguishable from one another. In the paper Lynch's meaning of place identity is used. According to Lynch (1984), identity is "... the extent to which a person can recognize or recall a place as being distinct from other places as having a vivid, or unique, or at least a particular character of its own". Landscape identity defines belonging to place in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals and behavioural tendencies and skills relevant to this environment, and how the physical setting provides meaning and purpose to life (Brown & Raymond, 2007; Proshansky, Fabian, & Kaminoff, 1983).

The main starting point for this article is the fact that while the city management in Russia was under transition for last two decades, the city planning remained largely the same. City

planning is an arena of the architects and planners; and the applying of participatory approach to landscape planning is very limited. Krasnoyarsk is not exception from this case. Krasnoyarsk is a typical Siberian city, which was mainly developed after the Second World War as a huge industrial centre for extracting natural resources. This is the city of migrants, who came to Siberia for “long shillings”; many of them spent several years in Siberia and went back home. The mind-set of a “temporal worker” leads to specific perception of urban environment and weak feeling of place identity and place attachment.

The main goal of this article is to explore the lay-public's perception of the centre of Krasnoyarsk city. For achieving the goal the next research questions were examined: (1) What are distinctive elements of urban landscape, which are shaping city centre image and place identity according to citizens' perception? and (2) What are differences between perception of the lay-public and experts' vision?

The paper assumes that (1) the definition of landscape by the European Landscape Convention is the core point for studying subjective perception of urban landscape; (2) the full reflection of the perception of the city centre is expressed in the concept of landscape identity; (3) sketch mapping technique is appropriate for the exploring subjective perceptions.

The study is limited only to the city centre due to the following reasons. City centre in general has some special characteristics that make it the most important place and the essence of the character of most towns (Worskett 1969, Worpole 1992). The city centre has a location and a boundary which, according to Rapoport (1977), can be defined both objectively and subjectively. In addition, as the core of the city, the centre is usually associated with its evolution and thus has a special attachment for the people. Gibberd (1959) contended that city centre should be the place that gives the greatest feeling of urbanity and the impression of city's environment.

Materials and methods

Perception of urban landscape by the lay-public was analysed through the concept of place identity by using sketch mapping technique. Conceptual framework for studying of landscape identity is represented in Fig. 1. There are three terms that need to be clarified in regard to the figure – perception, cognition and image. Perception is a form of environmental knowing in which the information, presented by the environment, is sorted and categorized. However, perception is also affected by a person's appraisal or their feelings towards the environment (Nasar, 1989). Environmental cognition is the study of the subjective information, images, impressions, and beliefs that people have of the environment, the ways in which these conceptions arise from experience, and the ways in which they affect subsequent behaviour with respect to environment (Moore, 1976). Cognition includes the various processes by which visual, linguistic, semantic and behavioural information is selected, coded, reduced and elaborated, stored, retrieved, decoded and used (Altman and Chemers, 1980). Image is a mental representation of those parts of reality which is known through direct or indirect experience, thus grouping the various environmental attributes which is then combined according to certain rules (Moore, 1976). Image may be of a specific element or events, or symbolic, or of a semiotic character which were derived from real life experiences or from the media. Image of landscape is its identity and to understand something of the social structure of image is an essential prerequisite in understanding identity (Relph, 1976).

Thus, mental map represents image of landscape and identity and shows not only reflection of physical structures in the mind but indicates the power relations, social ties, the historical development or future prospects of an area from the subjective point of view. In the mental map could be found all key constituents of landscape identity (Garnham, 1985) - physical features and appearance, activities and meanings.

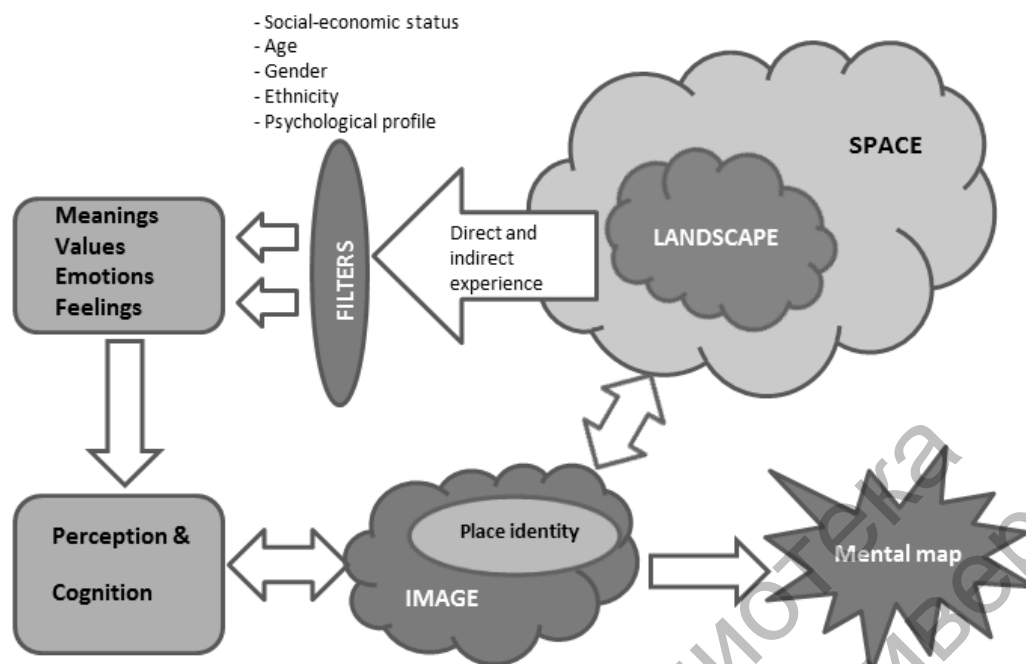


Fig. 1 Conceptual framework for exploring the place identity

According to Lynch (1960), *edges* are the linear elements which act as boundaries between areas or as linear breaks in continuity. In regard to edges following aspects were investigated: (1) which elements were recognized as borders of city centre; (2) where borders were drawn by respondents; (3) how common was view on borders of city centre among respondents; and (4) how subjective representation about city centre borders coincides with the official view of city planners. *Paths* refer to channels along which observers move. Paths included streets and bridges. Their representation on mental maps was explored as triangle of structure, activities and meanings: (1) how detailed street network was drawn; (2) which streets were mentioned and how often (familiarity); (3) connectivity and walkability of different parts of city centre were observed; (4) which kinds of remarks in regards to activities, meanings and associations were noted. *Distinctive elements* include nodes and landmarks. *Nodes* refer to transportation junctions and concentrations of activity, where people can enter, examples being places that offer a break in terms of transportation, a convergence of paths or an urban square. Nodes consist of squares, traffic / parking, bus / railway stations, parks, river bank, river islands and etc. Questions on number, names and reasons of mentioning were investigated. Nodes are associated with shopping and leisure activities (cinemas, theatres, museums, cafes and restaurants). At the same time nodes indirectly reflect past activities and location (associations), familiarity and sentimental attachment as a part of meanings. Thus, remarks and character of drawing nodes were investigated and analysed. *Landmarks* are notable objects with very special sense and meaning for respondents and include buildings, fountains and monuments. Landmarks represent memory, history, worship places, sentiments and nostalgia of respondents. In this case were analysed (1) landmarks on mental maps; (2) their location; (3) how they draw; and (4) accompanied notes.

Sketch (mental) maps were drawn by 51 students on Biology, Philosophy, Journalism, Architecture and Urban development educational programs of the Siberian Federal University during 22-27 of February, 2014. Students were kindly asked to draw a sketch of the city centre of Krasnoyarsk for person who visits the city at first time, very interested in city sighting but have time only for walking around city centre. Students were proposed to indicate

all remarkable and interesting places and objects, buildings, streets, squares, parks and etc. including elements useful for easy orientation. Students were also invited to write all kinds of notes, remarks, signs and symbols which are appropriate and useful for better understanding of their sketch maps. Each sketch map took 15-20 minutes on average to be drawn. After gathering the data, maps were evaluated according to mentioned above criteria of place identity. Maps with few elements, little information, and wrong positions were classified as poor maps and excluded from further analysis. There were 3 poor maps from 51; thus 48 sketch maps were examined finally. Next stage included the creation of community image of city centre based on individual mental maps. Then community image was compared with map developed by Ministry of sport, tourism and youth policy of Krasnoyarsk krai.

Results and discussion

There are different types of maps in regards to scope and details in the mental maps. Detailed maps make up 38.9 % from total number of mental maps, non-detailed maps – 61.1 %. Subjective edges of the city centre do not have a single meaning (fig. 2). The borders on the east and the south were identified the similar way by all respondents: the eastern edge is located at the Strelka (mouth of the river Kacha, the location of ancient wooden fort). The southern edge is marked by the Yenisei River. The western edge was drawn along Gorkij Street or Profsoiuzov Street or near Red Square, but more than half of respondents draw western edge along Gorkij Street. The northern edge was drawn along Lenin Street by the 2/3 of respondents. Some of them drew the northern edge along Lebedevoi Street. The subjective edges of Krasnoyarsk city centre are smaller than official ones (fig. 2).

More than 75 % of respondents pointed out street network of the city centre. Most maps did not include detailed street network; respondents drew only some of sub-longitude streets; the sub-latitude streets were not mentioned or even not drawn. Usually were mentioned three streets associated with the city centre, at the same time about 27 % maps did not have names of streets, in 12.5 % maps were mentioned four and more streets. The most frequent mentioned and the most familiar streets in the Krasnoyarsk city are Mira Avenue (68.75 %), Marx Street (68.75 %) and Lenin Street (62.5 %). Three respondents wrote special remarks in respect to streets: “quiet” is about of Uritskii Street, “busy environment, the working place” and “street, the order and moving in which are hardly remembered” are about Marx Street and Lenin Street. It should be pointed out, that only simple routs along the main streets (Marx, Lenin streets and Mira Avenue) were drawn. Formally, according to tourist map the walkability of the city centre is high (fig. 2), at the same time sketch maps illustrated the subjective perception of low connectivity and walkability of the city centre.

Four bridges were mentioned on the mental maps. In 31.2 % maps bridges were not drawn at all. The most popular bridge was Kommunalnyj Bridge. It was mentioned by almost 40 % of respondents. The bridge is depicted on the Russian 10-ruble banknote and could be named the symbol of Krasnoyarsk. Other bridges were distinguished more rarely: the pedestrian bridge to Tatyshev Island (16.7 %), Kopylov Bridge, pedestrian bridge near the Central park and the bridge near the City Administration building were mentioned by only one person.

Squares were mentioned on average once time or in the 52 % of maps. The most frequent mentioned square was the Square of Revolution (56 %), Square of the Theatre and Ballet (40 %) and Red Square (16 %). Personal associations, activities were noted in regard to Red Square (“don’t seat on the benches!”) and to the Square of the Theatre and Ballet (“tattoo, portraits are drawing, tell fortunes here”). A few respondents drew bus stops and parking, thus this kind of nodes was not marked as distinctive element of the Krasnoyarsk city by respondents. Despite the location outside of the edges of the city centre, the railway station

was recalled by 14.6 % of respondents, bus station – 4 % of respondents. The river-boat station was remembered by 12.5 % of students.

Special attention should be given to open spaces of Krasnoyarsk city centre – city parks, river banks and river islands (fig. 2). They were very distinctive elements associated with city centre and play important role in shaping place identity of locals. The most important natural distinctive element of the city centre is the Yenisei River; it was mentioned almost all respondents and was occupied a large part in every drawn map. Besides, the river bank along the Yenisei was very familiar and popular node in Krasnoyarsk and was mentioned by 52 % of respondents. The notes pointed out “weddings here”, “ducks” and etc. At the same time, the Kacha River and its bank was mentioned only by 17 % of students, despite the historical meaning of the river. Only one student noted the attractiveness of the Kacha bank: “here are beautiful pavilions”, other one pointed out personal meaning and associations: “feed ducks! They like bread”. About a third of the respondents recalled river islands – Tatyshev and Otdyha which were associated with leisure and sport activities. About 20 % of respondents noted personal associations and activities linked to islands: “leisure”, “a lot of bikes”, “you can drive bike here”. Special sense for citizens had the Karaulnaya Hill as the best panorama view on the city accompanied by strong place attachment and associated with history and city past. A quarter of all notes and remarks were related to the panorama view from the hill and recommendations to visit this place. Mentioned city parks inside of the centre edges were Central park, small Dzerzhinskii city garden and park near Pushkin monument.

Altogether, 55 distinctive objects were mentioned in the sketch maps; 14 of them were recalled only by one person. The structure of remembered elements was following: administrative building – 34.5 %, leisure objects – 21.8 %, monuments – 16.4 %, other architectural objects – 16.4 % and open spaces – 9.1 %. Recalled nodes which were linked to leisure activities were cinemas, museums, theatres, stadiums and shopping centres. The most popular objects were cinema “Luch” (60.4 %), Theatre of Opera and Ballet (56.25 %), City Library (31.25 %), Concert Hall (27 %) and Cultural and historical centre (18.75 %). Remarks and notes were written about Pushkin Theatre (“mom’s job”, “beautiful music”), about City library and Organ Hall. It was mentioned the sweet shop of “Krascon factory” with remark: “tasty sweets”. The most frequent mentioned remarkable objects were city clock tower (12 %), chapel on the Karaulnaya Hill (10 %), Lenin monument (10 %), fountain “Yenisei with tributaries” (8 %), and Pozdeev monument (7 %). Only two respondents mentioned the historical housings in the city centre. At the same time, some un-finished and abandoned constructions were remembered as remarkable places. A few persons noted architectural features of city buildings. In compare with tourist map, most distinctive and popular city sighting objects coincide partly (Fig. 2). Locals recommended visiting and looking at other buildings, monuments and parks. Strelka and Mira Avenue represent place identity for locals in Krasnoyarsk. These places are very sensitive to any construction activity and require a lot attention and careful redevelopment in new Master plan. At the same time, sketch maps give ideas how to make impressive architectural city image and to save place attachment and landscape identity of city with support of redevelopment from the lay-public.

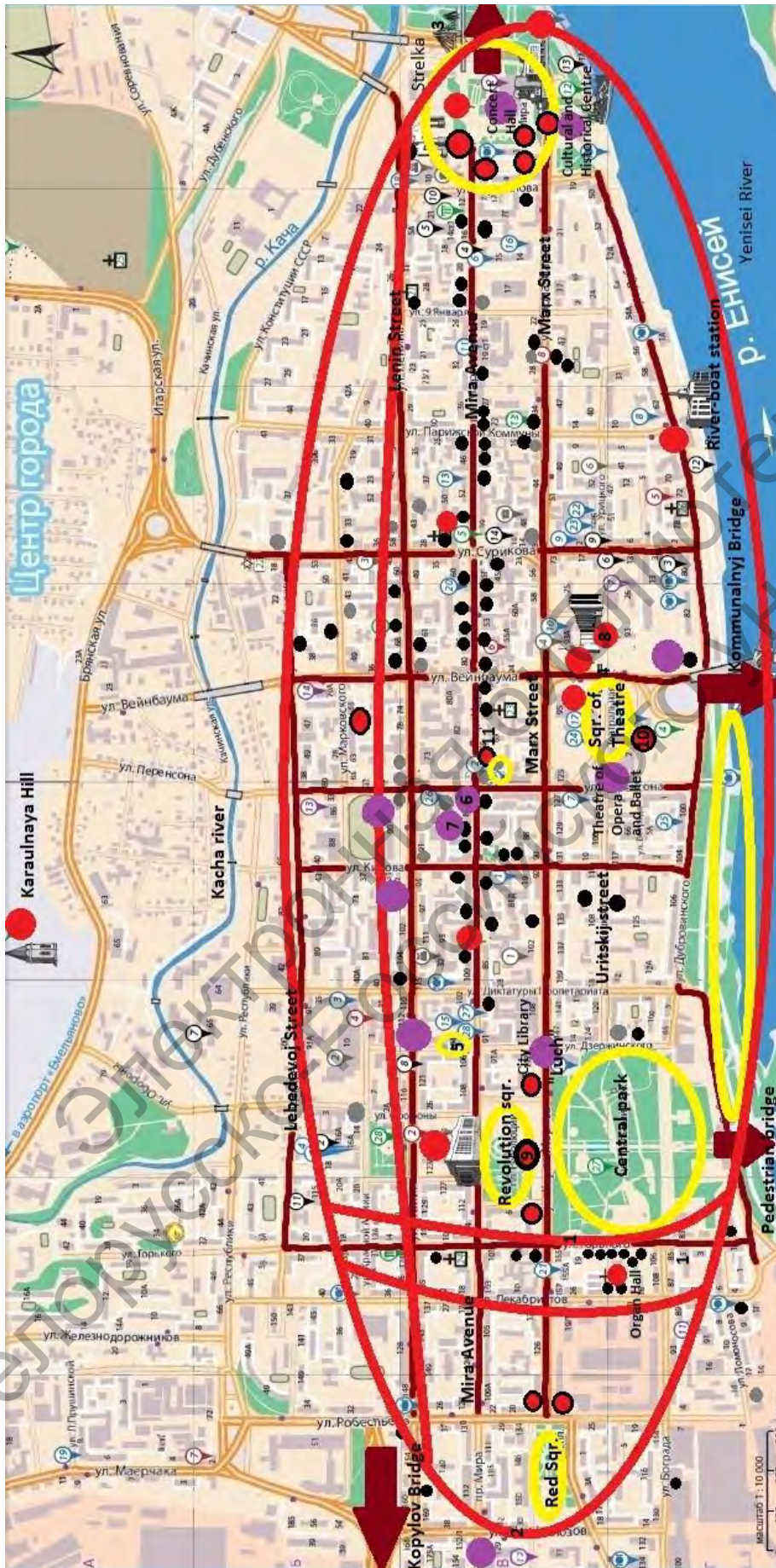


Fig. 2 Generalized image of Krasnoyarsk city centre based on sketch maps

- borders of city centre
- most familiar streets
- most familiar open spaces and green areas
- most popular objects coincide with tourist map
- historical buildings

- 1 - Gorkij Street, 2 - Profsoiuzov Street, 3 - pedestrian bridge to Tatyshv Island, 4 - bridge near the City Administration building,
- 5 - Dzerzhinskii city garden, 6 - Pushkin Theatre, 7 - sweet shop of "Krasnon factory", 8 - city clock tower, 9 - Lenin monument,

Perception of urban landscape is affected by features of urban landscape and the public activities associated with it (Raymond & Brown, 2007). Landscape features include components of natural landscape and man-made elements. Raymond & Brown (2007), Brown (2006), Kaltenborn and Bjerke (2002) found strong associations between place identity (place attachment) and spiritual, wilderness (naturalness), and aesthetic characters of the landscapes. The study of Krasnoyarsk city confirmed this finding. According to mental maps, natural landscapes (the Yenisei, the river bank, Tatyshv and Otdyha islands) are distinctive elements strongly associated with city centre. Natural landscapes of Krasnoyarsk are a part of place attachment and place identity of locals, most valuable and recognizable image of city.

Streets in an urban context are places of economic and social significance, they reflect the image of the cities and represent the people's perception of city character and identity. Shamsuddin (2008) found, that recognition of streets link to places visited and used often or every day. This study shows that street network in Krasnoyarsk is not basic element of landscape identity. There are a few mentioned streets in the mental maps. It could be concluded that streets are rarely used for walking. Main reasons are (1) lack of walkability of city centre, (2) busy and noisy streets and (3) location of natural landscapes near city centre.

Raymond et al. (2010) mentioned that attributes of the physical and social setting cannot be viewed in isolation of the highly personalized emotions formed in these settings which we refer to as the personal context to place attachment. Therefore, social bonds and their significance contribute to landscape identity. Activity is the most influential components associated with the attachment and the sense of place. Sketch maps of Krasnoyarsk coincide with this statement. Distinctive objects drawn in the mental maps reveal associations, memory and familiarity, special meaning and value, emotions and feelings linked to them. Distinctive objects are used for leisure and shopping.

Conclusion

Similar to elsewhere, the key issue of participatory planning is the distrust between professionals and the public, strong expert-based approach to planning and low level of awareness of the public about planning procedure. Usually, experts and locals distrust each other: experts say that the public does not know about planning procedure, and the locals say that their interests are given up easily by planners. Master plan and supplementary documents are very difficult to understand by the lay-public, and very often people cannot say what they desire in appropriate words. The study shows that use of mental mapping can be a bridge between planners and the lay-public which coincide with Brown (2006) and Raymond & Brown (2007). Sketch maps allow making full picture of preferences, feelings and emotions in regards to certain urban landscape. At the same time, knowledge about city image, landscape identity and place attachment of the lay-public could be useful for minimizing potential land use conflict, increasing satisfaction with spatial planning mechanisms and involving the public in decision-making process. Mental maps proposed a good starting point for discussion about planning solutions and created a platform for mutual understanding between professionals and the lay-public. Sketch maps could be a communication platform between experts and the lay-public for discussion of urban development project, involving the public in decision-making process. In the case of sensitive urban projects, sketch maps could be instrument of deliberation to bridge different opinions and interests, to reduce land use conflicts and to find common solution satisfied all stakeholders. In order to acquire the better understanding of practical use of sketch mapping in planning process we might need to make further research of participatory tools and techniques applied in the decision-making process.

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