

Subjective Identity of Kaunas Cityscape: Research Results and Their Relation with Objective Indicators of Urban Structure

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Kaunas city identity formants were recently identified preparing Kaunas City Master Plan in 2013. They are divided into four groups: natural, functional, iconic, and conventional symbols. Designation of symbols depicting urban identity is inseparable from the city's history, its culture, and urban development. Due to associativity characteristic to human thinking, history of the specific locality is understood through its inherent natural environment, objects created by human, and culture or its living traditions. Therefore, designating the objects forming city identity - symbols there were evaluated the following key aspects: natural conditions and historical-cultural-urban development. However, evaluation of subjective identity and its relation with objective indicators (natural or man-made objects and their characteristics) of urban structure is a very important factor for creating inclusive, phyllo-topic public urban spaces, having distinctive and unique character, and this aspect was not widely analysed in Kaunas city yet. The aim of the research is to establish links between the different levels of subjective identity of Kaunas city and its separate urban typological areas (Old Town, New Town, historical suburbs, residential areas developed in Soviet times, and city peripheral suburban areas) and objective indicators of urban structure, and to propose possible ways of urban design improvement in the places with negative identity. The research method used is sociological survey. Questionnaire is constructed employing the following theories: theory of historical-cultural artefacts (Cole, 1998), theories of the city form and image of the city (Lynch, 1984, 1960), and theory of sense of place (Shamai and Ilatov, 2005). Theory of pattern language (Alexander, 1977) was used to determine possible measures for changing negative place identity to positive. The results of the research let to identify the main objects of urban structure that are the most important to the identity of local and Kaunas level cityscape, factors of the negative identity, ways of integration of the new objects into existing urban environment preserving and developing its identity, the main elements of the local cityscape mental map, and the levels of subjective identity according the theory of sense of place. There were proposed to use 7 patterns related with communities and public spaces for the development of the positive identity. The main conclusions of the research are that positive identity of the cityscape is created by public spaces, objects of cultural heritage, parks, and public buildings; the main factors of negative identity are the following: unmaintained and unsafe streets, abandoned buildings and public spaces, etc.; the majority of the respondents feel a sense of belonging, attachment and special emotions to a place both in the local and city levels.

KEYWORDS: cityscape identity, sense of place, urban structure.

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Introduction

Place/landscape identity consists of tangible physical identity (tangible components), activities, and the symbols, images and meanings (intangible components) associated with places/landscapes (Relph, 1976). "There is no inherent identity to places: this is constructed by human behaviour in reaction to places" (Osborne, 2001), i.e. reaction comes after visual-aesthetic-semantic perception. The scientific literature distinguishes between existential (place), spatial, personal, and cultural dimensions of landscape/cityscape identity concept (Stobbelaar and Pedroli, 2011) important to overall understanding and evaluation of landscape identity.

Considering these aspects of notion of landscape identity, we define cityscape identity as the synthesis of objective identity (determined by physical properties and characteristics of tangible urban environment) and subjective identity (determined by the psychophysiological and emotional mechanisms of human-beings) (Povilaitienė and Kamičaitytė-Virbašienė, 2015). Subjective identity of the cityscape is defined by the concepts of "city as a text – system of symbols" and "people's feelings toward place". Evaluation of subjective identity and its relation with objective indicators of urban structure is a very important factor for creating inclusive, phyllo-topic public urban spaces, having distinctive and unique character. The aim of the research is to establish links between the different levels of subjective identity of Kaunas city and its separate urban typological areas (Old Town, New Town, historical suburbs, residential areas developed in Soviet times, and city peripheral suburban areas) and objective indicators of urban structure, and to propose possible ways of urban design improvement in the places with negative identity.

Methods

In order to clarify the relationship between Kaunas cityscape subjective identity and objective indicators of the urban structure as a research object was chosen Kaunas city residents and visitors opinion from different Kaunas city urban typological areas (i.e. city historical parts (New Town and Old town), historic suburbs, city parts built during the Soviet times, and the current suburban areas).

In order to get the valid analysis results, research objects were selected specifically from Kaunas city structure. The selection was carried out according to the following criteria:

- _ Distribution of the objects according to the construction period and geographical location. In order to get more accurate data about interaction of the city urban structure and human emotions it is important to select the objects in different parts of the city both from geographical and construction period points of view. We selected the objects which location is different, i.e. objects that represent all the main city zones: the historic city, the historic suburbs, modernist districts built during the Soviet times, and the city suburban areas prevailed by low-rise single-family housing.
- _ Population. It is important to select objects that comparing with similar objects would have the largest population. This allows identifying the most typical elements of urban structure of the area that are perceived by the residents.
- _ Spatial structure. The research objects are selected according to the building morphotype in the context of the common structure of the city. The main prevailing morphotypes are the following: the low-rise residential construction, multi-storey residential areas built in Soviet times, historical/cultural heritage buildings (centre of the city), and areas of mixed development (historical suburbs).

Thus, in accordance with the selection criteria there were selected the following areas of the research:

- _ City historical part (city centre) – Old Town, New Town;
- _ City historic suburbs – Žaliakalnis;
- _ Districts built during the Soviet period – Šilainiai neighbourhood;
- _ Current suburban area – Vaišvydava, Romainiai.

The research was expected to confirm or disprove the following hypothetical statements:

- 1 Identity of the place is a very important qualitative factor of living environment that is represented by objective indicators of urban structure (natural or man-made objects and their characteristics) and the specificity of their relationship with the townscape subjective identity – emotional reactions and feelings of city residents and visitors to components of physical environment and their structures.
- 2 The individual elements of the urban structure plays an undeniable role in urban development processes, they shape both the identity of the whole city and its individual parts. The identity can be positive or negative.
- 3 The subjective identity of the cityscape is perceived by the residents and visitors in the way of reading city as a text (dominants, landmarks, important areas, etc.) and it relates people with a certain location by emotional connection.
- 4 It is possible to discern a provisional urban identity in the cityscape of a part of the city (urban form and its visual expression) that can fit in one field of vision.
- 5 The visual identity of the city is shaped both by the historic parts of the city, as well as newly built up areas together with the natural environment.

The research method used is sociological survey. Questionnaire is constructed employing the following theories: theory of historical-cultural artifacts (Cole, 1998), theories of the city form and image of the city (Lynch, 1984, 1960), and theory of sense of place (Shamai and Ilatov, 2005). The theory of pattern language (Alexander, 1977) was used to determine possible measures for changing negative place identity to positive.

In order to find out public opinion there was conducted a questionnaire survey. The survey was organized in all of the chosen districts of the city (city centre, Žaliakalnis, Šilainiai, Vaišvydava and Romainiai).

The questionnaire consisted of two parts: questions about the district where the respondent lives, and questions about the city of Kaunas. The respondents answered to all questions actively articulating their observations, ideas, and valuable comments in open and semi-open questions.

Total questionnaire survey involved 96 respondents. In Old Town and New Town 22 people were interviewed. In Žaliakalnis district there were interviewed 23 people, in Šilainiai district - 26 people, in suburban areas (Vaišvydava and Romainiai districts) - 25 people.

On average even 84% of respondents indicated that it is very important that a certain area has its own identity, is unique and easily recognizable. Upon request to comment on his/her answer, there were named the reasons of identity importance (see Table 1).

People from different districts of Kaunas city state that the area's identity is an important factor of quality of living environment. It helps people to distinguish, describe the location, orientate in it, creates its overall image, making the area more easily recognizable - identifiable. Identity is important both to the city residents and visitors.

The majority of the respondents give the priority to the positive identity of location, which according to the respondents has to be created by parks, objects of cultural heritage, public spaces, water bodies, museums, community events, etc.

It is also revealed that the identity of the place is best perceived at the level of local perspective for the majority of respondents, and at the panoramic level of perspective – for the minority of respondents (see Table 2).

Results

Table 1

Importance of cityscape identity to the residents in different Kaunas urban typological areas

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/Romainiai
80 %	87 %	81 %	88 %

WHY?

Originality and exclusivity is important. It helps you to orient in the area.

It is easier to locate any object.

It is easier for resident to evaluate, in which part of the city he/she would like to live.

Identity is important for orientation, planning.

Because it gives singularity, charm and city residents can be proud of place where they live.

Because it is pleasant when your residential area has something exceptional.

It is important aesthetically and culturally.

Table 2

The main factors creating identity

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	Kaunas city	
9 %	23 %	-	30 %	8 %	Parks
19 %	11 %	25 %	9 %	20 %	Cultural heritage objects
10 %	9 %	6 %	-	3 %	Sacral buildings
13 %	13 %	14 %	7 %	12 %	Events, festivals and holidays
12 %	9 %	-	7 %	11 %	Squares, alleys, pedestrian streets and other public spaces
-	-	4 %	-	-	Academic buildings, complexes
-	1 %	-	-	-	Peculiar roads network (e.G. Žaliakalnis streets "fan")
1 %	5 %	-	-	-	Sports buildings and complexes
-	4 %	25 %	-	-	Shopping places
7 %	4 %	18 %	2 %	9 %	Memorial and monuments
5 %	6 %	-	2 %	7 %	Impressive and important public buildings
14 %	8 %	1 %	5 %	15 %	Museums
1 %	-	-	13 %	6 %	Water bodies
10 %	7 %	7 %	25 %	9 %	A place that reveals the spirit of a place – aura, feeling of the place

Maximum values

Minimum values

There were also distinguished the main factors shaping negative identity of the place. They are the following: streets with potholes, abandoned unattended buildings, lack of children's playgrounds, lack of bicycle tracks, abandoned public spaces, etc. Considering these aspects, it can be stated that there are no equipped places for cultural events, residents' communication, festivals, gathering, recreation, etc. (see Table 3).

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	Kaunas city	
13 %	20 %	8 %	24 %	32 %	Streets with potholes
16 %	13 %	8 %	8 %	13 %	Abandoned buildings
22 %	13 %	12 %	10 %	12 %	Neglected adjacent buildings
9 %	11 %	6 %	22 %	8 %	Lack of bicycle tracks
6 %	9 %	12 %	4 %	7 %	Not enough parking places for cars
6 %	6 %	4 %	8 %	-	Lack of events
3 %	6 %	19 %	8 %	8 %	Lack of children's playgrounds, unmaintained children's playgrounds
9 %	2 %	8 %	12 %	3 %	Lack of pedestrianh paths, unmaintained pedestrianh paths
16 %	18 %	15 %	4 %	14 %	Abandoned, unattended public areas
-	2 %	8 %	-	3 %	Lack of green areas

Table 3

Factors shaping negative identity of the place

After a survey of old and new objects ways of harmonization and the development ways of the area, it can be stated that the new objects should be adapted to the current environment so that they stand out as little as possible or they can slightly expose in the current environment.

This indicates that respondents appreciate their neighbourhood's identity and mostly are against drastic changes of its architectural and urban environment; give priority to "evolutionary" not "revolutionary" way of development (see Tables 4 and 5).

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	Kaunas city	
5 %	9 %	11 %	11 %	5 %	...Disappear in the existing environment
42 %	65 %	50 %	50 %	47 %	... Must be adapted to the existing environment
42 %	22 %	35 %	35 %	42 %	... Slightly expose in the current environment
11 %	4 %	4 %	4 %	6 %	... Completely distinguish from the existing environment

Table 4

Ways of old and new objects harmonization

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	
74 %	39 %	35 %	48 %	Protection a place without changing authenticity
5 %	13 %	17 %	11 %	Development of site-specific local business
10 %	4 %	24 %	10 %	Conversion, development of new functions
11 %	44 %	24 %	31 %	Development/creation of new objects

Table 5

Possible development ways of the area

Summarizing the answers to the questions about the object/area influence to respondents' feelings to the place and about respondents emotions to a particular location, we can clarify the fact that there are quite strong local communities: people feel special relation, loyal and belonging to the place, close to its goals (i.e. the respondents mostly identify that they feel a part of the community) because they feel safe in their living environment, there are a lot of green areas, places for leisure activities, aesthetic living environment, etc. People believe that public spaces – mostly green areas of the district reinforce positive identity (see Tables 6 and 7).

Table 6

Influence of certain object/area features to respondents' positive feelings to the place

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	Kaunas city	
6 %	5 %	7 %	7 %	7 %	Social contacts and friendship
6 %	7 %	8 %	6 %	7 %	Developed infrastructure
8 %	7 %	4 %	5 %	7 %	The events in the analyzed area
6 %	8 %	8 %	8 %	6 %	Feeling of safety
5 %	6 %	6 %	5 %	6 %	Psychological factors
6 %	8 %	7 %	7 %	7 %	Lifestyle
5 %	6 %	4 %	5 %	5 %	Active community in the area
6 %	4 %	4 %	5 %	6 %	Cultural heritage objects
7 %	10 %	6 %	8 %	8 %	The ecological aspect – there are a lot of green areas
6 %	8 %	6 %	7 %	7 %	Acceptable quality of living environment
7 %	9 %	7 %	7 %	6 %	Aesthetical environment of microrayon
6 %	9 %	8 %	7 %	7 %	Attractive, quiet residential area
7 %	9 %	6 %	6 %	7 %	There are locations for leisure activities, places to rest
6 %	1 %	6 %	6 %	7 %	Distance from the city center
6 %	1 %	6 %	6 %	-	Distance from work
7 %	2 %	7 %	5 %	7 %	Attractive and unkept public area

Table 7

Levels of respondents interface with (emotions to) a particular location

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	Kaunas city	
12 %	11 %	12 %	13 %	13 %	No feelings for this place
13 %	14 %	15 %	12 %	13 %	I am located in this place, but i do not feel a part of it, do not feel connected with it
17 %	18 %	17 %	17 %	17 %	I feel a sense of belonging for this place
17 %	21 %	17 %	18 %	17 %	I feel a special relation, emotions to this place
16 %	25 %	16 %	17 %	16 %	I feel loyal to this place, objectives of the place are close to me
12 %	7 %	11 %	12 %	12 %	I participate actively in local community activities, i support it
13 %	4 %	12 %	11 %	12 %	I feel committed to this place, can sacrifice myself for it

According to K. Lynch theory of urban form and theory of the image of the city there was given an open creative question to respondents: to draw a map of their residential neighbourhood. It was determined that up to 80% of the respondents draw paths or roads first (on average 45%). Landmarks are in the second place (on average 19%), and nodes (public spaces) are in the third place (on average 18%).

The paths or roads, landmarks, and nodes are very important for the residents of the district, i.e. significant objects in the district and their connections have the highest importance to the perception of the certain area.

People who are less familiar with the district tend to perceive it through the topography, large areas, and the broad arrow connections (see Table 8).

Old town/ New town	Žaliakalnis	Šilainiai	Vaišvydava/ Romainiai	
26 %	35 %	38 %	80 %	Draw paths/roads first
-	4 %	-	-	Draw limits first
26 %	9 %	23 %	12 %	Draw a quarter/district first
32 %	30 %	4 %	4 %	Draw nodes (public spaces) first
16 %	22 %	35 %	4 %	Draw landmarks (important objects, dominant) first

Table 8

Perception of urban structure of the analyzed area

The systemized results of the research showed the places with the highest negative identity in Kaunas: Ažuolynas Park, Valley of Songs, unmaintained inner spaces of residential blocks, abandoned city sport centres, etc. (Fig. 1).



Fig. 1

The public spaces with the negative identity chosen by the respondents (Ažuolynas, 2016; Dainų..., 2012, 2016; Duobėtos..., 2013; Kauko..., 2016)

In order to determine possible measures for changing the negative place identity to positive according to Ch. Alexander "Pattern Language" technique there were selected 7 patterns from 253 relevant to communities and public spaces (12. Community of 7000; 30. Activity Nodes; 31. Promenade; 56. Bike paths and racks; 57. Children in the city; 69. Public outdoor room; 106. Positive outdoor space).

In the table 9 there is proposed matrix of ways of changing negative identity into positive using particular patterns to eliminate specific factors of negative identity.

The research results let to identify the space design alternatives of urban environment according to the intensity of the designed changes that are the following: creating a new space, reconstructing the space, or developing the existing space. After selecting an appropriate space design alternative of urban environment, the main aim is to create a public space that would fulfil the needs of communities and society. This space should be an important and significant object of a certain part of the city. It should become the landmark, nodal point or dominant attracting people and ensuring their movement. It also should ensure further development of the identity to a positive direction, and prevent the formation of negative identity factors.

In order to create such space there are proposed some aspects to consider while providing management measures: consistence with the urban environment, consistence with the natural environment, meaningfulness, symbolism, consideration of the community opinion, positive feelings to location, attachment to the place, function of recreation, entertainment function, reflection of city/district peculiarity, representation, coherence with infrastructure, attraction (Fig. 2).

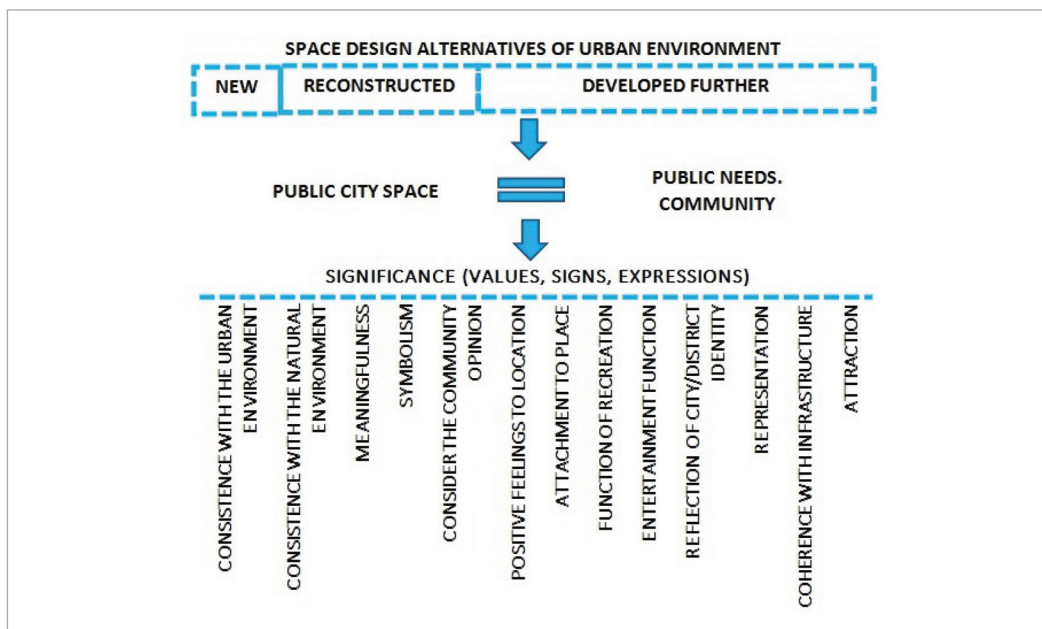


Fig. 2

Proposals how to create phyllo-topic space of urban environment

- Explicitly, identity of the cityscape is a very important factor for the quality of living environment. The performed sociological survey confirmed the hypothesis that identity of the place helps people to distinguish, describe the location, orientate in it; creates its overall image, makes the area more easily recognizable - identifiable both for its residents and visitors. It also helps to maintain and enhance the main characteristics of the preferred environment: legibility, complexity, coherence, and mystery.
- The cityscape identity is created mainly by the objects of cultural heritage, parks, public open spaces, and public buildings. It is also revealed that the identity of the place is best perceived at the level of local perspective.
- Respondents appreciate their neighbourhood's identity and are against drastic changes of its architectural and urban environment. They give priority to "evolutionary" and not "revolutionary" way of development. The majority of the respondents feel a sense of belonging, attachment, and special emotions to a place both in the local and city levels.
- There are also established the main factors of negative identity: poor condition of the streets, sidewalks, the lack of bicycle paths, abandoned public spaces, abandoned unattended buildings.

Conclusions

In order to change negative identity to positive there are recommended certain patterns from Ch. Alexander theory: 12. Community of 7000; 30. Activity nodes; 31. Promenade; 56. Bike paths and racks; 57. Children in the city; 69. Public outdoor room; and 106. Positive outdoor space.

Considering the research results according to K. Lynch theory of urban form and theory of the image of the city it can be stated that providing management measures the priority should be given to the most important objects of the city districts (landmarks and nodes): public outdoor spaces and buildings and connections between them (roads and paths).

The results of this research could be a starting point for the further deeper analysis of subjective identity comparing different research units in the same urban typological area, elaborating the set of objective indicators related with the different levels of subjective identity and foreseeing the ways of the research results integration into urban design and planning decisions.

References

- Alexander C. *Pattern Language: Towns, Buildings, Construction*. New York: Oxford University Press; 1977.
- Ažuolynas. 2016. Available at: <http://renginiai.kasvyksta.lt> (accessed 14 September 2016).
- Cole M. *Cultural Psychology: a Once and Future Discipline*. Harvard: University Press; 1998.
- Dainų slėnis. 2016. Available at: <http://renginiai.kasvyksta.lt> (accessed 14 September 2016).
- Dainų slėnis (Kaunas) | |domi vieta. 2012. Available at: <http://wikimapia.org> (accessed 14 September 2016).
- Duobėtos gatvės piktina skaitytojus. 2013. Available at: <http://www.delfi.lt> (accessed 14 September 2016).
- Kauko laiptų baseinas. 2016. Available at: <http://renginiai.kasvyksta.lt> (accessed 14 September 2016).
- Lynch K. *Good city form*. Cambridge MA: MIT Press; 1984.
- Lynch K. *The image of the city*. Cambridge MA: MIT Press; 1960.
- Osborne B. S. *Landscapes, Memory, Monuments, and Commemoration: Putting Identity in Its Place*. *Canadian Ethnic Studies Journal*, 2001; 33(3): 39-77.
- Povilaitienė I., Kamičaitytė-Virbašienė J. Theoretical premises of cityscape identity evaluation // CITTA 8th annual conference on planning research / AESOP TG public spaces & urban cultures: generative places smart approaches happy people, 25th September, 2015: book of abstracts. p. 31.
- Relph E. *Place and Placelessness*. Pion, London; 1976.
- Shamai S., Ilatov Z. *Measuring Sense of Place: Methodological Aspects*. *Tijdschrift voor Economische en Sociale Geografie*, 2005; 96(5): 467-476.
- Sporto halė Kaune. 2016. Available at: <http://www.autc.lt> (accessed 14 September 2016).
- Stobbelaar D. J., Pedroli B. *Perspectives on Landscapes Identity: a Conceptual Challenge*. *Landscape Research*, 2011; 36(3): 321-339.

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