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# Mental Mapping Method in Anthropological Studies on Cultural Landscape\*

**Abstract:** This paper presents the method of mental mapping, adapted for the purposes of anthropological research on perception and assessment of urbanised spaces. Its application is also discussed in the evaluation of cultural landscape, taking into account the aspect of human experience. The method allows for examination of the inhabited environment's perceptions and their externalisation in the form of mental maps constructed on the basis of residents' relations of examined locations. The analysis of mental maps allows both for identification and description of elements that create the structure of the space and the evaluation of their role in the life of the community and in the formation of a harmonious landscape. The source basis of the article, apart from works referred to in the bibliography, are ethnographic field studies conducted between 2014 and 2017 in ten villages in the Kielce Voivodeship and in Kielce.

**Keywords:** space, place, cultural landscape, sign, mental map, anthropology of culture

**Słowa kluczowe:** przestrzeń, miejsce, krajobraz kulturowy, znak, mapa mentalna, antropologia kultury

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This paper presents the method of mental mapping, adapted for the purposes of anthropological research on perception and assessment of urbanised spaces. Its application is also discussed in the evaluation of cultural landscape, taking into account the aspect of human experience. The method allows for examination of the inhabited environment's perceptions<sup>1</sup> and their externalisation in the form of mental maps constructed on the basis of residents' relations of examined locations.

The source basis of the article, apart from works referred to in the bibliography, are ethnographic field studies conducted between 2014 and 2017 in ten villages in the Kielce Voivodeship<sup>2</sup> and in Kielce. The objective of the study and analyses was to understand the nature of relations between the respondents and places and facilities regarded as important to them and located in the environment they live in and to interpret the way in which the magical, religious and symbolic thinking of the residents is encoded and reflected in the cultural landscape. The author also intends to define a new perception of cultural landscape's core and its identification and scholarly interpretation. Conclusions were also drawn with respect to the possibilities of applying the results of the study in the process of evaluation, revitalisation, and shaping of the modern cultural landscape.

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<sup>1</sup> Anthropological interest in these perception dates back to the 20th century and focused on research of cultural determinants of world images. For Yi-Fu Tuan, a mental image is a perception, an intellectual construct (Y.F. TUAN: *Przestrzeń i miejsce*. Warszawa 1987, p. 167). Kevin Lynch defines this term as the world's (place's) image emerging in the human brain (K. LYNCH: *The Image of the City*. Cambridge, MA, 1960). Lucien Lévy-Bruhl differentiates individual and group concepts and understands them as the "image or idea of a given object" [L. LÉVY-BRUHL: *Czynności umysłowe w społeczeństwach pierwotnych*. Warszawa 1992, p. 56]. Émile Durkheim defines them as relations occurring among quality-different parts of the space and coordination of data of a sensual experience, the source of which is classification into parts and directions. He emphasises the collective and social nature of spatial perception [É. DURKHEIM, M. MAUSS: *O niektórych pierwotnych formach klasyfikacji. Przyczynek do badań nad wyobrażeniami zbiorowymi*. In: M. MAUSS: *Socjologia i antropologia*. Warszawa 1993, pp. 703-870].

<sup>2</sup> The results of the first stage of the study concerning images of villages and cities functioning in the awareness of Kielce region residents conducted between 2010 and 2013 are presented, among others, in the following publications: E. SZOT-RADZISZEWSKA: *Obraz wsi w wyobrażeniach mieszkańców. Miejsca i ludzie*. Kielce 2013 (Monografie, Studia, Rozprawy); E. SZOT-RADZISZEWSKA: *Emocjonalny wymiar przestrzeni*. In: *Kielce – kształtowanie przestrzeni współczesnego miasta z zachowaniem historycznych obrazów*. Ed. E. SZOT-RADZISZEWSKA. Kielce 2016 (Seria Monografie Politechniki Świętokrzyskiej. Architektura 5), pp. 17-27.

## Landscape as Cultural Text

In anthropological reflection on the issue of phenomena's spatial organisation and people's behaviour in the inhabited environment, the city and the village are perceived as a certain type of phenomenon, a cultural occurrence, a multi-layered space of events, meanings and senses. A harmonious cultural landscape of thus perceived place creates a self-controlling structure that functions as a complete and consistent system. The components of this system (places and facilities) are interrelated and each of them has a significant place in it; it performs a specific function and operates as a sign in the context of other elements. Such signs, full of historical references, feeling of identity and inter-human bonds inherited from the ancestors, but also created nowadays by the residents, combined by mutual relations, create the cultural code of a location. The network of signs creates a spatial structure, which is filled with different content by every community. Thus, it may be said that a cultural landscape is a carrier of cultural memory<sup>3</sup> of local communities and a unique spatial structure. Historical processes, symbols, cultural meanings, and memory about events in the form of diversified places to which local communities assign the status of memory signs and space signs, are recorded in it. Its individual elements are meaningful, understandable and recognizable for the residents and create a consistent image.<sup>4</sup>

The results of current studies confirm that cultural landscapes are characterised by ongoing processes of transformation, rebuilding and shaping the space anew though they also have their fixed, characteristic spatial forms formed throughout the ages, such as public squares, streets networks, rivers, hills and characteristic places and facilities organizing the space vertically and horizontally, such as, for example, city halls, temples, cemeteries, crosses and wayside shrines. Due to harmonious urban, architectural and natural setup, they provide the location with clarity and imagery. A unique example in such composition had been, until recently, the cultural landscape of a traditional Polish village, characterised by stability of spatial structures and slow changes. In the recent years, as a result of rapid civilisation changes, the structures, the forms and the content incorporated into the landscape have been subject to deeper and deeper transformation processes. Consequently, the order of the inhabited space that until recently

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<sup>3</sup> Cultural memory understood as the community's concept of its own past plays many important social functions and is an element of transmitting joint values, models of behaviour and symbols enabling communication inside a group and making its members aware of belonging to a community. Cultural memory according to Jan Assman encompasses a distant past perspective and relies on institutionalised carriers of memory (J. ASSMAN: *Pamięć kulturowa. Pismo, zapamiętywanie i polityczna tożsamość w cywilizacjach starożytnych*. Trans. A. KRYCZYŃSKA-PHAM. Warszawa 2008, pp. 66–71). See: B. JAŁOWIECKI: *Przestrzeń jako pamięć*. "Studia Socjologiczne" 1985, nr 2 (97).

<sup>4</sup> See: J. BOGDANOWSKI: *Czytanie krajobrazu*. "Krajobrazy Dziedzictwa Narodowego" 2000, No. 1, pp. 7–19.

had been organised by folk architecture, traditional fields' layout, transport routes, greenery and water, has been disrupted. Rapidly progressing globalisation causes a unification of spatial structures, blurring communities' cultural identities; it destroys values, continuity and cultural diversity and destabilises the hitherto functioning system. The areas that until recently were agricultural, are ousted by spaces of consumption, residence and entertainment.<sup>5</sup> As a consequence, cultural memory of past generations recorded for centuries in the landscape becomes illegible; places and facilities which were significant for residents cease to carry meanings and their sense becomes illegible.

A harmonious cultural landscape is a civilisation value, as it is a record of collective memory of a community, a carrier of meanings and senses. Furthermore, it is used for group communication, building identity of local communities and serves as a basis for forming harmonious relations of people and the environment. Thus, it should be subject to efficient protection, together with elements that create it.

## **Particular Nature of Cultural Landscape and Significant Places**

Landscape of every location has its unique cultural code and characteristic features which are created by places and facilities important for local communities and which are the carriers of meanings. In order to research the inhabitants' perceptions about the inhabited environment, during the research we attempted to identify and describe these places, objects and their locations on mental maps.

The method designed for our research was inspired by structural studies of Kevin Lynch, who analyzed the problem of the visual quality of the great American cities. We elaborated this method in order to conduct mental mapping research of the perception, valorisation of urbanized spaces and an assessment of value of urban spaces.

Theory and methodology of studies on cultural landscape in anthropology results both from mutual relations of human with the inhabited environment and from various modes of perception and organisation of space, depending on the values system in a given community, traditions, religion, culture, climate and other factors. These factors make up a filter on which choices, significance and meanings ascribed to specific natural and cultural elements of landscape depend. Basic relations established by man with the environment are: (a) landscape perception understood as experiencing it with various stimuli; (b) structuring of space and identification, recognisability and evaluation of elements significant

<sup>5</sup> See: B. JAŁOWIECKI, M. SZCZEPAŃSKI: *Miasto i przestrzeń w perspektywie socjologicznej*. Warszawa 2009.

for people through the prism of knowledge held; this stage also encompasses emotional experiencing and understanding of its core; (c) interpretation leading to determination of landscape specifics. Interpretation encompasses not only the structuring of landscape, recognition of spatial relations and cultural codes, but also determination and assessment of cultural elements' locations mentioned by the respondents, determination of the frequency of their occurrence and variability in the landscape.

The cognitive process consists in the structuring of space by its users and it is indispensable in the folk image of the world enabling emergence of "own world" (Cosmos), ordered and tamed, from chaos. While organising the environment, the human divides the space into parts, names them, evaluates them, designates the centre and borders, determines directions, instils them with meaning and enters into relations with them. In this way, the human changes the fragments of "alien" space into "tamed" safe places important for the organisation of community life.<sup>6</sup>

The special role of meaningful places in shaping harmonious landscape was noted already in the 1980s by American geographer Yi-Fu Tuan. In his work, "Space and Place: The Perspective of Experience," he pointed out the cultural determinants in the organisation of places by people, emphasising their strong emotional relations with the inhabited environment. His concept provided the place with the character of "humanised space" and raised the question on how people understand such space, get to know it, organise it and instil it with meanings. Tuan defines a place as a fragment of a closed space, which has always belonged to somebody, "tamed," safe, having specified borders and a designated centre. For the place to exist, it has to be named and be of significance for man.

As indicated by the results of hitherto studies in the Kielce Region (cf. footnote 3), certain elements of the space structure, such as, for example, a church, home, crosses and wayside shrines, cemetery, public utility buildings or trees, rivers, springs, mountains, "haunted" places, paths, roads and borders were listed by the residents of the examined places with great frequency and in recurring locations. Such places are perceived by subsequent generations as fixed, durable, "eternal," and thus they can be called archetypal.

It may therefore be declared that the specific nature of the cultural landscape of human settlements consists in formation of places and facilities important for residents, as they determine their unique nature and are the carriers of strongly structured social bonds, they designate the intensity and forms of participation of people in the process of communication.<sup>7</sup>

<sup>6</sup> See: E. SZOT-RADZISZEWSKA: *Obraz wsi w wyobrażeniach mieszkańców. Miejsca i ludzie*. Kielce 2013 (Monografie, Studia, Rozprawy), pp. 51–57.

<sup>7</sup> The fundamental role of places in shaping a harmonious and legible image, especially of contemporary cities, is indicated by the architecture critic, Kenneth Frampton. In his works, Frampton emphasises the necessity of recovering public places and space in the commercialised

## Mental Maps Concept

As mentioned before, the concept of mental maps and structural (descriptive) methods of examining spatial concepts were presented and popularised in the 1960s by an American planner, representative of humanistic trend in urban planning Kevin Lynch in his book *The Image of the City* (1960). His structural studies on images of large urban agglomerations (Boston, Jersey City and Los Angeles) played the fundamental role in development of studies on spatial concepts. The essence of a structural approach is the imageability of space constructed on the basis of location of its elements in its structure and description of their mutual relations. Lynch assumed that people, by organising, experiencing and valuing the environment, create perception about it and develop mental maps in their consciousness. The image emerging in the residents' minds has great emotional and practical significance for them. Lynch understood the perception (image) as an effect of a complex cognitive process, assessment of the environment which, in the human awareness, obtains the form of a mental map. He defined a mental map as a fragmentary and simplified image of the environment, culturally conditioned, developed in the human mind and based on the world-view, cultural memory, tradition, religion, history and education. Due to the fact that human experiences the environment spatially, a mental map is a special type of imagining a "tamed" space. It constitutes a collection of concepts containing information about spatial organisation of phenomena which may be presented in the form of sketches showing simplified plans of places (mental maps). He attempted to get to know these images by analyzing mental maps drawn by the inhabitants. On all of these maps he identified five repetitive elements: paths, edges, districts, nodes and landmarks, which he analyzed, treating them exclusively as physical objects. He completely ignored their history and emotional significance for the inhabitants.

For Lynch, mental maps were primarily a tool that enabled people to get their reference points in the inhabited environment. In spite of the criticism that this method of examining images of large cities provoked, many scientists continue to develop it, modify it and adjust it to the research needs of the practised discipline.

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city space. He believes that only places are capable of restoring balance to the dismembered urban space, deprived of value. Another architect, Peter Zumthor, draws attention to the fact that in the world that is so full of "empty" signs, it is difficult to fill the cultural landscape of a city with "good" buildings, which are incorporated into and permeate the history of the place, filling it with energy and which have the capacity of "absorbing human life." The necessity of searching for and restoring order, proportion and harmony in the human environment is also emphasised by the architect Christopher Alexander, who shows the traditional cultures, the geometry of nature and colour as the source and inspiration.

## **Anthropological Mental Maps**

In contrast to mental maps described by Lynch, which for him was merely the tool for orientation in the environment, mental maps we have constructed on the basis of relations of residents from the examined places also take into account their historical and legendary aspects. The opinions expressed in conducted interviews in turn reveal emotional connection between the interlocutors and significant elements of the landscape. Therefore, they allow for “recording” the information, meanings and senses encoded in the cultural landscape. Mental maps prepared in this manner are the maps of meanings and due to the specific nature of ethnographic sources they can be named anthropological mental maps. The method of mental mapping in the perspective of anthropological outlook on the human environment allows for showing the mental and visual dimension of the inhabited space, multi-dimensional, “live” image of a location by recreating the permeating cultural landscape: modern, historical, sacral, mythological and legendary. Analysis and interpretation of such maps enables determination of specific regional and local nature and identification of landscape both in the diachronic and synchronic perspective.

The images of cities and villages not only have the material sphere (architecture), but also the semiotic, mythological and symbolic dimension. The ritual and mythical sphere is hidden under the material layer, and this sphere, together with the historical and sacral layer, creates the landscape that can be named mythological and legendary. The mythological and legendary landscape is an imagined space, mental one, created in the human mind, yet it has also a real impact on the human life. It reflects and codes the magical, religious and symbolic thinking of residents as it is related to myths, legends, ceremonies and beliefs incorporated into places, transferring the oldest layers of history to our times. Myths and legends explain ethical standards, they are the common asset of all civilisations, they are beyond the cultural divisions; many of them are directly related to the rituals of agrarian cycle. The concept of a mythological landscape was introduced to the academic literature and popularised by English geographer and archaeologist, Michael Dames and Swiss ethnologist, linguist and historian, Kurt Derungs. The researchers postulate enrichment of scientific facts, determined by such disciplines as ethnology, archaeology, linguistics (dialectology, etymology of names) and history by the so-called soft-facts, such as myths, legends, beliefs, ceremonies and rituals. Until recently, they provided the places with meaning and sense, creating the unique “cultural text.” To a certain degree, they still communicate the knowledge about the local tradition, rituals, beliefs, ceremonies; they are elements uniting the local community inhabiting a given location with the past. We would never understand the essence and the phenomenon of such places as Góra Ślęża, Łysiec or Góra Chełmowa if only dry historical and archaeological facts are researched. The saturation of places

in the landscape with dialect names, stories from the past and legends indicates the intensity of the relation and a strong emotional bond of the residents with their location. In the mythological and legendary landscape, the emotional dimension of space is expressed in the strongest way. In particular, it is manifested in the cultural determinants of providing special meanings via diversified forms of commemorating and through the frequency of visiting the selected places. Understanding the message of stories and legends is necessary to understand and to preserve tradition, cultural heritage and legibility of cultural landscape.

Anthropological mental maps help to get to know the character of a local community's relations with the inhabited environment, as they contain hidden information about emotional bonds that connect people with places and the process of creating a "living" space. Their analysis allows both for identification and description of elements that create the structure of the space and the evaluation of their role in the life of the community and in the formation of a harmonious landscape.

The results of our ethnographic research indicate that the most durable elements of landscape structure, logically ordered and significant (phenomena, places, facilities) are shaped on the basis of traditional cultural norms, perceived by subsequent generations as unchanging and durable and have archetypal character. Their recognition and protection is of fundamental importance as for centuries, they have been satisfying multiple socio-cultural needs of the community. They exist as important signs of memory and space, as they are closely related to the history of a place and the fate of residents. The mental mapping method in anthropological research, proposed by authors of this article, may be useful in their identification and protection with the aim of preserving them in the landscape.

For the local communities inheriting places and facilities, anthropological mental maps show significant similarities, they are culturally multi-layered and greatly thickened. Therefore, they allow for research, analysis and interpretation of functioning mechanisms, in the memory of local communities, of significant places and facilities and determination of their role in shaping cultural landscape. The results of hitherto conducted studies indicate that mental maps have become an important tool to examine human perceptions, as they allow showing not only how subjective the perception and remembering of space is, but also its strong rooting in the social and cultural framework.

## Conclusions

Given the current crisis of the cultural landscape and traditional public spaces, the classic concepts of Yi-Fu Tuan and Kevin Lynch referred to in this

paper, still inspire and provide more accurate explanations than the ones developed nowadays. They offer answers in the current discussion on important problems related to globalisation, locality, identity and mechanisms of shaping a harmonious cultural landscape. They help answer the question of which aspects in the modern world shape the human consciousness, influence people, excite emotions, and which elements of culture create tradition in a local dimension.

The discussed research method of mental mapping, adapted by the authors to the needs of cultural space and landscape research in an anthropological perspective, relies on the structuring of space (elements, models, relations and spatial configurations) on the basis of analyses and interpretations of interviews and on perception (identity, emotions, significance) and valuation (mechanisms of giving meaning to signs and differentiating certain places and facilities in the space, semiotisation and de-semiotisation). The proposed mode of evaluating the cultural landscape by examining concepts with the application of anthropological mental maps allows for getting to know the mechanisms for differentiating and accepting certain places and rejecting others. This method enables examination, analysis and interpretation of mechanisms of functioning in the memory of local communities of significant places and facilities and determination of their role in the formation of a cultural landscape.

Analysis of mental concepts in the anthropological perspective showed the important role of archetypal elements in the landscape and a strong dependence between their perception and valuation in a culturally determined mode and shaping of a harmonious cultural landscape.

In the modern degraded landscape more and more often we notice blurring of its specific features, disappearance of significant places and facilities, or even absence of certain archetypal elements and basic spatial categories. As a result, we notice bad management of its resources.

The presence of archetypal elements, basic categories of space and traditional reference systems should be taken into account while designing and forming the landscape. Getting to know the opinions of residents is a condition pertinent to proper planning and good resources' management. The conclusions drawn in this paper may be helpful for conservation services, urban planners, architects and clerks during concepts development for urbanised areas and for all parties that are interested in shaping of a harmonious and beautiful environment for people.

## Bibliography

- ASSMAN J.: *Pamięć kulturowa. Pismo, zapamiętywanie i polityczna tożsamość w cywilizacjach starożytnych*. Trans. A. KRYCZYŃSKA-PHAM. Warszawa 2008.
- BANASZCZYK T.: *Studia o przedstawieniach zbiorowych czasu i przestrzeni w durkheimowskiej szkole socjologicznej*. Wrocław-Warszawa-Kraków 1989.
- BARTNICKA M.: *Wyobrażenie przestrzeni i ich badanie*. "Etnografia Polska" 1985, t. 29, z. 2, pp. 25-35.

- BOGATYRIEW P.: *Semiotyka kultury ludowej*. Warszawa 1979.
- BOGDANOWSKI J.: *Czytanie krajobrazu*. "Krajobrazy Dziedzictwa Narodowego" 2000, No. 1, pp. 7–19.
- DAMES M.: *Merlin and Wales. A Magician's Landscape*. London 2004.
- DERUNGS K.: *Mitologische Landschaft Schweiz. Mythos und Kult im Alpenland*. Neuausgabe 2010.
- DURKHEIM E., MAUSS M.: *O niektórych pierwotnych formach klasyfikacji. Przyczynek do badań nad wyobrażeniami zbiorowymi*. In: M. MAUSS: *Socjologia i antropologia*. Warszawa 1993, pp. 703–870.
- ELIADE M.: *Sacrum, mit, historia*. Warszawa 1993.
- FRAMPTON K.: *Towards a Critical Regionalism: Six Points of an Architecture of Resistance*. In: *The Anti-Aesthetic*. Ed. Hal Foster. Port Townsend, Bay Press 1983.
- GĄDECKI J.: *Architektura i tożsamość, rzecz o antropologii architektury*. Złotyryja 2005.
- HALBWACHS M.: *Spoleczne ramy pamięci*. Trans. M. KRÓL. Warszawa 1969.
- HASTRUP K.: *Przedstawianie przeszłości. Uwagi na temat mitu i historii*. "Konteksty. Polska Sztuka Ludowa" 1982, No. 1–2, pp. 22–28.
- JAŁOWIECKI B.: *Przestrzeń jako pamięć*. "Studia Socjologiczne" 1985, nr 2 (97).
- JAŁOWIECKI B., SZCZEPAŃSKI M.: *Miasto i przestrzeń w perspektywie socjologicznej*. Warszawa 2009.
- LÉVY-BRUHL L.: *Czynności umysłowe w społeczeństwach pierwotnych*. Warszawa 1992.
- LYNCH K.: *The Image of the City*. Cambridge, MA, 1960.
- ŁOTMAN J., USPIEŃSKI B.: *O semiotycznym mechanizmie kultury*. In: *Semiotyka kultury*. Selection and edition E. JANUS, M.R. MAYENOWA. Warszawa 1977.
- SERAFIN E., SERAFIN E.: *Vicenza wtajemniczenie w naturę – w poszukiwaniu człowieka ekologicznego*. "Literatura ludowa" 1998, nr 1 (42), pp. 37–54.
- SIMMEL G.: *Filozofia krajobrazu*. In: *Most i drzwi*. Warszawa 2006, pp. 165–179.
- SZOT-RADZISZEWSKA E.: *Emocjonalny wymiar przestrzeni*. In: *Kielce – kształtowanie przestrzeni współczesnego miasta z zachowaniem historycznych obrazów*. Ed. E. SZOT-RADZISZEWSKA. Kielce 2016 (Seria Monografie Politechniki Świętokrzyskiej. Architektura 5), pp. 17–27.
- SZOT-RADZISZEWSKA E.: *Obraz wsi w wyobrażeniach mieszkańców. Miejsca i ludzie*. Kielce 2013 (Monografie, Studia, Rozprawy).
- TILLEY C.: *A Phenomenology of Landscape: Places, Paths and Monuments*. Oxford 1994.
- TUAN Y.F.: *Przestrzeń i miejsce*. Warszawa 1987.