
Mapping Deficiency

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ABSTRACT. The article presents the concept of time-place as means to understand urban space and, particularly, the forces driving the transformation of the city, rooted in dynamic connection between users of space. Connecting social aspects of urban existence, achievements of behavioural sciences in reference to spatial issues and proposed mapping concept article discusses perspectives to manage urban space and adjust it better to the needs of its inhabitants in ever-changing reality.

KEYWORDS. urban deficiencies, cultural urban spaces, urban structure, urban processes.

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1. Urban phenomena

Understanding the city is a complex and a particularly challenging task. It is obviously not an issue related to any kind of engineering disciplines, being too strongly nested within social context, psychological context of every individual person contributing to how urban space is used, to multiple immeasurable aspects of qualitative nature. Its nature lies simultaneously in two phenomena. The first is the accumulation of cultural layers within continual processes of loss and gain which manifest in the emergence of the physical structure of urban space. This space, as a result of this accumulation, forms sophisticated and yet untamed network of nodes which reflect the gravity of civilization, consolidating and socially focalizing. Evidently, the city is the product of socialization of people, of intentional stacking of human effort in one concentrated place, where products can interact, can amplify each other, where they are accessible and available to many.

The second is the ambiguous process of cyclic interweaving of two never-fading tendencies of managing human need to stabilize and change. While stabilization, permanence or consolidation may be related to the requirement of creating safe but also connected environment, change, transformation must be related to human need to improve, to increase one's possibilities (even if it is only illusive). This can be diagnosed as contradictory only by its appearance, while stabilization and transformation meet the same goal. The coexistence of change and preservation can be generated to the unprecedented scale within limited amount of time only within the city and it is time that triggers this paradox. It reveals the origin of urban tissue generator – urban space manifests itself as a common ground where pragmatism is integrated with emotional aspects of human behaviour represented by temporal reference. The stabilization is an effect of attributing space with particular values and with will to maintain them, a kind of nostalgia, wish to freeze time. The transformation is a result of an effort to gain time, to save it, even economize it through creativity, through innovation.

We find another kind of dualism in what defines the city. It originates in two ephemeral spheres. The first is the construct, an imaginary representation of physical space being an intangible model, a mirror of a place – in some sources brought forth by the distinction between the place and the location. It is based on reaction to what is expressed by people and what is found in space, a result of processing all environmental information. The other is the parallel construct of what is ought-to-be place, a connection of dreamlike utopian imagination with something more related to the environment one lives in, a mediating vision negotiating between unreal and possible. This particular tension between the perceived and the desired (yet restrained by some elements of rationalization) is the driving force and at the same time the measuring mechanism of urban condition. The proof of its existence and, as well, the proof of the fact, that it strongly determines the possibility to maintain urban life is quite simple – one can take this as a sole reference to diagnose whether the city thrives or declines. To put it in simple words – if hope of prosperity of the city fades, the city itself becomes to fold, to degenerate or even to disappear.

This condition of urban potency can be related to the urban identity. Some researchers argue that the identity of a place is too vague term or even incorrect while it should refer strictly to psychological or social issues and therefore should not be linked to physical places¹. However, although some of these arguments are undoubtedly accurate, this special relationship between man and place, this dynamic connection and, resulting from the work of Proshansky's team as well as

Breakwell's contributions², it appears that this link (man-place) is impossible to be excluded or disregarded. Despite its seemingly fragile nature this is the only permanent source of spatial identity of urban space. The identity of place cannot be independent and cannot exist without being connected to people, but it is not conditioned or restricted to exist based on connection to particular person or group of people. Any place absorbs meaning, it is saturated with values and carries over the cultural content without necessity to be experienced, perceived or used by man. It is, however, intended to trigger human reactions, it is destined to serve man and to evoke not only the emotions, but imaginations, visions and pieces of information, even those not yet available to its recipient's self or memory³.

2. Time-space as natural urban environment

The form in space is more a catalytic converter, less a physical vessel for identity, although the latter is not impossible. This kind of concept of identity may be naturally derived from Giddens remarks pointing towards its understanding as reflexive project⁴. What's more, empirical observations of transformations, unstoppable fluctuations of individual and social forms of comprehension of identity, incorporating characteristic contents of environment into the threads of personal or group lifecycles support bigger and bigger perspective of excellent synthesis of the process. The urban space is a reflection of this particular aspect of peoples' worldview and it grows out of the decoding and coding the representation of understanding (or perceptive image) of physical places. Its unimportant, whether this image is created consciously or spontaneously, but definitely it is filled with all counterparts of what people associate with urban reality – remembered and thought events, communications of objective and subjective meanings and ideas. The urban space is not something material, cold, devoid of any semantic value, but neither has it this meaning independently. It is people who produce urban space and its contents, transform their environment, saturate this material vessels with meanings in order to read them afterwards, again changed by the very fact of its writing. If one attempts to reduce the meaning of urban space, one will find that the only thing that matters here – in both architecture and urban aspects – is human opposition to the entropy of homogeneity of space, while maintaining the ideological core content of space.

As one can find out from contemporary approaches to urban space analysis, the space understood as place, *locus*, an autonomous area or set of objects, is contemporarily questioned as unfitted to reflect the complexity of individual and social impact both people have on place as place has on people. Once brought forward by Tschumi, the *in-between* space term has been introduced⁵. However, while Tschumi, and after him critically analyzed by Rewers among others, sees the *in-between* as coexistence of values, duality, ambivalence, relativity and consent to blur the once clear definitions, it seems to be of crucial significance to go further beyond mere metaphor of palimpsest⁶, or once introduced, but now fortunately so vastly criticized concept of deterritorialization of a relationship between man and place (as a result of globalization)⁷.

The term *in-between* has to be extended and is intended here to indicate how space performs as this catalytic converter. Thus the performance of space does not correspond to places, but to *time-places*⁸. These *time-places* temporarily acquire or lose values, but always indicate the status of culture (cultural content in urban space). They signify the junction between the past and the future and thus an intervention in them affects how we perceive the past and how we impose limits on our future. To exemplify this process of recognition, interpretation and attribution ultimately leading to shaping the physical urban space one may refer to research

efforts conducted by Sepe in Barcelona⁹ or by Marzecki in Szczecin¹⁰. Another chapter may describe this relationship through the eyes of individuals and objectify it through analysis of wide array of personal responses to the cultural quality of space. This has been proceeded by Barekowska regarding the monuments and urban (or rural) sites under preservation in context of erosion of values, which are irrelevant to physical shape of the object¹¹.

Phenomena discussed above are clearly expressed in urban space participating in feedback connection. On one hand, significant places are attributed with the role of spatial markers, like archaeological artifacts allowing for decryption of urban culture. Selected, outstanding locations are made distinctive, at least uncommon and uncharacteristic of prevailing urban areas, containing functions and activities, that while not being able to be sustainable on their own, form the core component of urban specificity. Whether these focal points being the result of particular association of human activity, function, and attraction are created by accident, emerge evolutionary, yet without planned interference, or are carefully designed, they appear and their existence is strictly limited to values people refer to those objects or places as *time-places*.

On the other hand, these probes absorb and become fed with what is produced around, where things change or remain the same, according to social will, with stronger social inclination towards appeasing current requirements at the expense of wider perspective and self-reflective consciousness. They are intended to become memorials of their particular time – extensions of common memory and identity. They seem to be showcases, exhibiting proudly current naive dreams, utopian visions of space that is contemporarily, but not necessarily permanently, seen as groundbreaking, exceptional, or simply attractive. Sometimes even unwillingly they, being the ultimate product of *zeitgeist* these places (or *time-places* wearing their physical suit), become its manifestation, a display filtered to contain only the most significant concepts of the time in twisted lens. Yet, this image is only an appearance, not a real thing.

3. New map of a city

Paradoxically, the city offers perverse insight into its controversial nature. That what constitutes majority of its structure is almost devoid of essence, with scarcely noticed meanings transferred and recorded exquisitely in those specific just a few public places, in the above-mentioned nodes which, misleading when taken too literally, combine the ephemeral with the material¹². If one takes the material, then that what exhibits the peak expression of urban space, architectural substance, rarely remains true to the image of the city it is saturated with in the time of its inception. This is mostly due to the detached and unrelated function which focused on preservation and display of urban culture performs service to community, but it does not feed the life of this community. If one takes the ephemeral, than it grants the access to experiencing the true values of space as it is formed, used and recognized by people.

We may already summarize that the understanding of cityscape, the urban structure, may be performed threefold and this threefold approach is required if one is to approach the truth in this particular image – as close as an ideal concept the truth is may be acquired. To comprehend urban space one has to start from understanding it as the interface between the dynamic and the static components of the city – the relationships between individuals, communities, spaces and activities, as it was discussed above. This other *in-between* nature of the city. This

effort is currently the subject of research started and conducted simultaneously in three Polish cities – Poznan, Szczecin and Bydgoszcz¹³.

The fundamental concept behind this approach refers to spatial values, abstract ideas manifested through *in-between* into physical space, unavoidably maladroit translation of *time-place* vision into place as matter. Its implementation is planned to be as simple as possible – an analogy may be found in the classical field theory, while every particular value is assumed to be converted to singular data related to place (in time) and calibrate this place with bias indicators (+, -). Regardless of values expressed, the bias determines the quality of urban space. Thus it filters down all complex factors to one category of social factor – the shortage or the abundance of required values as seen by inhabitants of the city. This process of generating joint-value mapping of urban space is aimed at extracting what is lacking in various *time-places* and at comparing resembling structures based on the balance of where commodities or values are scarce. Its simplification is justified by the fact that identity (as well as memorization) of space may be maintained despite the fact, that the values change in time unless they are replaced with substitute ones. As Ramer points out, identity building which refers to human perception of urban environment is unaffected by beauty, structure, form, ethnical composition or any other value-related features¹⁴ and this observation may be extended to the relationship between values and space.

4. Mapping deficiencies

The first level to build the urban map of deficiencies is to establish the matrix of values respondents may refer to. Here, the matrix is used as adopted from meta-design methodology, but transferred and explained for use to facilitate the feedback from inhabitants of urban spaces¹⁵. While the sensibility of this examination is limited, one has to look for extreme or at least outstanding readings, and therefore full set of values proposed is available to choose from, but only three values may be attributed to particular place and only three deficient values may be indicated respectively. People are asked to select first the values, than declare places fitting the positive or negative attribution¹⁶.

The perception of urban space is selective, as it was previously discussed. This limitation is reflected in imaginary discontinuity of what people perceive as physical space. It is fragmented, rarely being an equivalent of more complex cluster of places or objects and there is a tendency to connect the value to distinctive, identifiable place. In other situations, when one meets difficulty with defining that kind of distinction, the borders and the definition of time-place becomes more and more blurred, without clear limits and with values attached to an area of common profile instead of particular place. This selectiveness allows to construct the representation of resultative potentials of places and to generate the first level of urban deficiency field (UDF1). Urban deficiency field corresponds to scalar field, with values determined by the dispersion or densification of certain attributions. The data provided by inhabitants, or more widely by users of space, is scaled relevant to the input of validation and connected to conventionally established areas – one of two categories of urban space, foreground and background.

The second level is applied when preliminary mapping (first level) is already done. It is due to the fact, that it requires juxtaposition of two alternative layers, one being the result of transferring data received into continuous depiction of urban area as it is seen by users of space, second being the result of objectivised analysis, where space is defined by relevance of its attributes to qualities according to current (time related) state of theory of architecture. While the latter requires

the elaboration of certain mechanisms to attempt to understand whether the concepts of existing space fulfil criteria it, again, can be simplified by reduction of values (qualities) as it was the case with UDF1. Here one is provided with two layers – one may be called experiential and another one may be called disciplinary. The juxtaposition of layers is performed to determine the discrepancies between what's planned and done according to some theoretical assumptions and what's perceived, evaluated and validated (or rejected). The scale of difference marks second level of urban deficiency field (UDF2)¹⁷. This field corresponds to vector field, by the representation of tendencies and their fluctuations.

This simple concept, however in order to generate solid data – time consuming, is believed to provide direct link between experiential sphere of human existence within urban space and professional activities often detached from ordinary lifecycle or limited in its influence on life conditions in a city. Although input data seems to be subjective – both personal evaluations and quality check mechanisms related to professional validation are innately subjective – the output simply exhibits the difference, the gap between expectations, wishes, dreams and what really affects human life. The scale of the difference displays whether people may become active participants in any undertaken transformation activity, be it revitalization or development. The set of particular values should be seen as auxiliary data, while it would be for now too complicated to control nuances and hierarchization (of values). But solely by composing the set of deficit values and by acquisition of the map of deficiencies one gains new means to take the urban management under control, to plan properly urban and architectural interventions, to acknowledge target group of users of space better and replace social engineering through architecture by engineering architecture through socially sensible approach. It is in the negative aspects of our environment that we should look for remedy to cure the cities of the future. Reference to values, although time-related and thus fragile and unsteady in longer periods of time, may give a stabilizing impulse to plan urban space while attempting to maintain absurdly fast pace of contemporaneity is too superficial to be successful, if it does not seem to be possible.

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12. Biography

Robert Barelkowski is an architect and town planner, based in Poznan, Poland. He connects practical engagement with scientific and academic activities. He is Associate Professor in IAiPP, WBiA West-Pomeranian University of Technology in Szczecin and Associate Professor as well as Director of Architecture Unit in WBAiIS at University of Technology and Life Sciences in Bydgoszcz. Since 1999 he's a member of KUAIPP – the Commission of Polish Academy of Sciences Poznan Branch, and since 2007 he is vice-chair of this Commission. He gave lectures, published, participated in conferences in many countries (USA, Canada, United Kingdom, Germany, Sweden, Spain, France, Japan, China, Portugal among others). He's the author of over 100 scientifically reviewed books and articles, over half of them published in English outside Poland. His interests cover the methodological aspects of architectural design, architectural theory application in design as well as interdisciplinary approach to architecture.

¹ Affelt (2008. 12).

² Twigger-Ross and Uzzell (1996). The authors refer to the source article by Proshansky, Fabian and Kaminoff. See also Proshansky, H. M., Fabian, A. K. i Kaminoff, R. Place identity: physical world socialization of the self. *Journal of Environmental Psychology*, 3, 1983, 57–83.

³ Barelkowski (2011. 98) and Barelkowski (2012. 78-79).

⁴ Giddens (2010. 107).

⁵ Tschumi (1996. 207-226).

⁶ Rewers (2005. 168-169).

⁷ Cf. Kibreab (1999. 385-386).

⁸ Furthermore in the article the term place may be used in intention to refer to time-place.

⁹ Sepe (2006. 153). Sepe describes the process of acquisition of spatial information, its evaluation and memorization. As this process is selective it mirrors the hierarchy and principal values that define human comfort and that are a fundamental force behind the urge for the change if they are concluded absent.

¹⁰ Marzecki (2005. 11-12). The author uses his method of Spatial Continuity Diagram. While Sepe is looking for patterns of coding and decoding of space, Marzecki attempts to start from seemingly objective elements which are physical parameters of space. It is, however, in their accumulation in particular spaces and evaluation of those spaces, where he finds his conclusions, proving that in-between space incites its feedback on reality.

¹¹ Barelkowska, K. *Miedzy ochrona a przetrwaniem sredniowiecznej architektura militaris*. manuscript, 2012. See also Barelkowska (2009. 450-451). Cf. Barelkowski considering relationship between history, society and physical structures (2009. 215-217).

¹² Scheider and Janowicz (2010. 1-2). The authors claim places, as opposed to locations, to be media containment – a vessel for (socio-cultural) content. However, one can strongly argue with the notion of place as physical spots. The dematerialization of the notion of place has been successfully defended in works by Couclelis, Cresswell or Gibson, among others. Cf. Couclelis (1992. 231, Table 1).

¹³ The research program is entitled *Mapping Deficiencies* as this article.

¹⁴ Ramer (2008. 3-4). Ramer confirms also the significance of interaction between men and place in building urban identities.

¹⁵ Barelkowski (2007. 23). The matrix from the very beginning proposed time-related values systematized as *considered fluctuable* (e.g. beauty), *considered constant* (e.g. durability) and *hybrid* (e.g. flexibility).

¹⁶ Although for preliminary stages of the research only limited areas are designated as possible indications of respondents, to narrow the results and thus acquire more precise representation of time-space validation. Three cities in Poland host the research – Poznan, Bydgoszcz and Szczecin. Within borders of those three smaller areas have been determined to test the assumptions of presented idea – Stary Rynek in Poznan, southern part of Srodmiescie in Szczecin, and Bydgoszcz-Wschod junction area.

¹⁷ Both UDF 1 and 2 may be "measured" simultaneously, but until certain amount of data is not collected to establish the cycle of urban space making and

experiencing, the image given by the two fields has to taken with caution. To receive more accurate data time span of three years is expected, but working results should be observed one year after collecting data from respondents. In current plan of research only one cycle is to be performed to check mechanisms and, depending on their evaluation, further decisions will be taken.