

## BETWEEN VIRTUALITY AND REALITY. REMARKS ABOUT PERCEPTION OF CITY ARCHITECTURE

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### **Abstract**

In the contemporary reality the term "diversity" has become the basic feature that characterizes both creation and perception of the surrounding world. Trying to describe the city as the place to live of the half of the Earth's population faces the same problem that occurs during attempts to define styles or tendencies in architecture, urbanism or each other area of human activity. Therefore it is not possible to indicate one model of the contemporary city, and to determine its appropriate scale, structure and function. Considering complexity of contemporaneity, it's multi-layering and a variety of possible reference points (named here "perception"), the only element which can be identified as prevalent in discussion about the city is man. Developing space in our cities is followed by the continuous development of the parallel virtual world. Perhaps it is still too early to name it "virtual reality", comprehended in the way in which we perceive the reality around us. It doesn't change the fact, that fragments of electronic space, acting as digital memory, change our perception of architecture and cities. Currently the technology development affects *Homo Sapiens* much more than other factors in the environment where we live. One can ask, whether this new reality won't entirely replace the need of direct contact with the real world. The city and its architecture is perceived through electronic prostheses. The surrounding world ceases to be perceived in a natural way and images of images become objects of human perception. The intention of these considerations is not to answer these questions, but to focus attention on problems arising from the change of perceiving architecture.

***Human kind cannot bear very much reality.***

T.S. Eliot, *Burnt Norton*

Today, the term "diversity" has become a basic feature that characterizes contemporary reality, either single buildings, architectural complexes, or whole cities. At the same time this term can

be applied to the process of designing, but also to the perception of the surrounding world. In such reality an attempt to describe the city – the place to live of the half the Earth's population – may face numerous problems. For there are in fact as many identifiable design ideas, as parallel ways of perceiving architecture. This rule applies to many elements of contemporary reality, not only architectural or urban. It probably can concern all types of activities of each of the seven billions of people. It is not possible to indicate one style in architecture, the only legitimate model of the contemporary city – appropriate for each and every continent, region, or country. In fact, determining its proper scale, its functional structure, guidelines for green and industry areas or zones dedicated to culture and entertainment, depends on the multiple factors. These factors are distinctive and different for each community, and climatic, geographical, sociological or cultural conditions. Perhaps the last of above-mentioned conditions is even a key feature that influences perception of architects as well as architecture perceivers. To capture the aforementioned differences, it's enough to cite just a few examples of cities showing the diversity of urban space described at the beginning. Kraków with its largest medieval market, despite the fact, that the area of the city is constantly growing – the contemporary polycentrism (absorbing in its area not only Nowa Huta, but also neighbouring Wieliczka, Zielonki or Zabierzów) still remained its almost medieval character – the Main Market Square is its centre. Quite different spaces are found in narrow streets and canals of Venice. This city observed from the viewpoint of a pedestrian in the narrow streets spaces devoid of cars, or a "sailor", observing from a deck of a *vaporetto* constantly changing frames of waterfronts – gives the perceiver the opportunity to have utterly diversified experiences, in which water is always an important element. In comparison with these two (how different) European cities, Tokyo with its population of 30 million can be seen as an example of extreme growth of the city. The image of this metropolis, described by Rykwert as the "global city",<sup>1</sup> can seem even shocking. Five-level intersections in the city centre, roads running over rivers encapsulated in concrete, and an underground network of pedestrian streets in the area of the Shinjuku metro station – these are just a few simple illustrations, presenting briefly the character of the space. Comparing these cities, so various in character, is almost impossible. Referring to the examples so extremely different from each other, serves to indicate the characteristic of contemporaneity already mentioned at the beginning of the article – its diversity.

Second, and simultaneously the most important, element of the urban space is its user – man. The city is a product of civilization, developed since the dawn of history. It is human habitat, place of work and recreation. It should be noted that the tendency of human migration to cities is constant. Urbanization progresses and the number of population increases, not only in global metropolises. Along with the human evolution and environmental transformations (including cities built by the forms of their architecture) the space around have changed and will still change. With this metamorphosis the human perception of the reality that surrounds us is constantly changing. Currently technology development affects *Homo Sapiens* much more than other factors specific for the environment in which our species lives. In the last hundred years,

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<sup>1</sup> J. Rykwert, *The Seduction of Place. The History and Future of the City*, Oxford 2004, p. 8.

and especially after the Second World War, there has been a rapid development of technology.<sup>2</sup> This process continues. A good example, directly related to the subject of these considerations, is photography. Since 1826, when the first photo was printed, through next phases of the development of this young art (as well as technologies related to it): black and white photos, colour photos, up to digital images. Today photography is not only considered as a fine art, but it is also one of the basic tools of our perception of the world. Photography is everywhere – today, when anyone can take pictures, professionalist or amateur, traditionally or digitally, even with a telephone. In fact, a long time ago we crossed a line, which described Susan Sontag 50 years ago: "Ours is a culture based on excess, on overproduction; the result is a steady loss of sharpness in our sensory experience"<sup>3</sup>. It should be noted that the perception and interaction with reality through photographs ought to be described as "indirect perception". In this perspective, a camera or a screen becomes a kind of surrogate, which replaces us direct contact with a building or a city on another continent... On one hand, it gives the possibility of seeing the places which a perceiver could never reach, but it also deprives him of a whole range of sensations, characteristic for the direct perception of architecture.<sup>4</sup> The dissonance, determining the difference between direct and indirect perception of space, is particularly clear when the "path" between the building and its indirect perceiver is traced.<sup>5</sup> A city, a building, furniture – elements of reality – are photographed by a direct perceiver. As Susan Sontag once noticed: "Nobody ever discovered ugliness through photographs. But many, through photographs, have discovered beauty. [...] It is common for those who have glimpsed something beautiful to express regret at not having been able to photograph it. So successful has been the camera's role in beautifying the world that photographs, rather than the world, have become the standard of the beautiful."<sup>6</sup> In that brief moment when a finger releases a camera shutter, the direct perception of space is replaced by the camera. The immortalized moment and the image of buildings captured by the camera separates also the direct perceiver from the object of perception. The transparency of the glass of the objective lens becomes instantly an invisible boundary that extends over the entire width and height of the frame, between the viewer and the object of perception. Replacing the real space with the virtual one does not cease with this single event. The image or its digital form is afterward uploaded to the network – the world alternative to the physical one – the virtual reality. Images reflecting the surroundings exist there in millions copies, and each of them is a record of individual perception of space. Shared, published, uploaded – the countless numbers of digitized "reproductions" of reality create a contemporary museum of imagination of each user of the global network. A final customer, using various "substitutes of the senses" – mouse, screen, computer, speaker and the customer's individually created virtual world – looks at the image of the building. In this process,

<sup>2</sup> Already in 1964, M. McLuhan wrote: "Today, after more than a hundred years of electric technology, we have extended your central nervous system on a global scale, neglecting the space and time on the entire planet." [M. McLuhan, *Understanding Media: The Extensions of Man*, New York, McGraw Hill, 1964, p. 3.].

<sup>3</sup> S. Sontag, *Przeciw interpretacji i inne eseje*, Kraków, 2012, p. 25.

<sup>4</sup> [cf.] i.a. J. Pallasmaa, *Oczy skóry. Architektura i zmysły*, Kraków 2012, also S.E. Rasmussen, *Odczuwanie architektury*, Warszawa 1999.

<sup>5</sup> The term "indirect recipient" is understood here in the terms in which Maria Gołaszewska classified the consumers of art, [cf.] M. Gołaszewska, *Odbiorca sztuki jako krytyk*, Kraków 1967, p. 68.

<sup>6</sup> [cf.] S. Sontag, *On Photography*, London 2001, p. 85.

which for the purposes of this argument was simplified to a few key steps, the relationship of architecture and its viewer is lost at the very beginning. The direct perception is replaced by numerous surrogates. Thus the world around us ceases to be perceived in a natural way – using the senses. The object of our perception becomes the image of the world – the image of the image. You cannot touch brick texture in a picture, feel a cool interior of a cathedral, hear sounds of cities. There is also no possibility of direct interpretation, as the picture of reality has been interpreted by the direct perceiver already at the beginning of the process. The indirect perceiver, the one at the end of the chain, interprets not the actual building but its interpretation. This way of perception brings into focus the term of "virtual reality". According to its acceptable definition, it means – in concept – creating the effect of an interactive, three-dimensional world in which buildings give the impression of physical existence. At this stage of computer technology development it is far from materializing that reality, but perceiving the world by contemporary man bears hallmarks of such virtual perception. Today, especially images and sounds are replaced by their artificial counterparts – computers, TV, mobile phones, screens, speakers and headphones, smartphones. Into this group one can also include all methods of advertising (in forms of photographs and moving images) and also media facades. Perhaps it is still too early to describe this parallel world as a "virtual reality". It is too "unrealistic" in the sense in which we perceive the physical reality around us. And yet: „With virtual reality, space itself becomes a new kind of prosthetic, an extension of the body rather than something that the body occupies. Any simple sense of flesh or spirit independent of the electronic is lost. To be in such an environment is to be so deeply immersed in a space that it doesn't even seem like a space. The artifice of the space becomes as invisible as water is to a fish. So much so that the concept of the virtual almost loses any meaning. In fact, the virtual is something that is always on the edge of disappearing. The virtual is not simply the collapse of the distinctions between man and machine, real and artificial, body and mind.”<sup>7</sup> Developing physical space in our cities, is followed by the continuous development of the parallel virtual world. Interaction of the perceiver with the city is limited to selected points of access to the virtual equivalent of physical reality – internet shops, online food ordering, virtual libraries and banks, access to works of art, Street View, and interpersonal communication – these are only very few, chosen examples of the use of computer technology replacing direct reception.<sup>8</sup> These pieces of electronic space, day by day increasing their reach, are digital memory of a perceiver. Simultaneously, according to the law of action and reaction, they change his perception of architecture, including cities. The difference between the direct and indirect experience is vanishing. At this point one can ask the question, whether this new reality will completely replace the need for direct contact with the real world? Moving from home to work, from work to school, from school to the store etc., browsing web pages with images of paintings, virtually traveling through the streets of distant cities. Step by step, we replace the senses-world relationship with indirect transfer. The place of

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<sup>7</sup> M. Wigley, *Architektura protez: uwagi do prehistorii świata wirtualnego / Prosthetic Architecture: Notes Towards a Prehistory of the Virtual*, [in:] *Co to jest architektura? Antologia tekstów / What is architecture? Anthology of texts*, Kraków 2002, p. 199.

<sup>8</sup> [cf:] J. Rykwert, *op. cit.*, who draws attention to the issue of computer-aided design, s. 213; also: C. Fournier, „Igrając z ogniem”. *Biomorficzny paradygmat / „Playing with fire”. The biomorphic paradigm* [in:] *Co to jest architektura? Antologia tekstów. What is Architecture? Anthology of texts. Vol. 2*, Kraków 2008, pp. 389-390.

the basic perception of reality, between man and the surrounding world, occupy surrogates: smartphones, computers, audio and video media. The city and its architecture is seen through the electronic substitutes. The computer web with an access point and a network of connections, resembles and slowly replaces the network of actual access of a customer to the urban space.

Will therefore this continuously advancing process of changing the way, in which the customer interacts with reality, become the beginning of the transformation of the space? The effect would be near to dark visions from Science Fiction movies. Contemporary image of the city for the moment seems to negate dreams known from the films such as "Blade Runner" and "The Fifth Element".<sup>9</sup> Yet, the example of overpopulated Tokyo, described at the beginning and compared to Krakow, can be understood as a dark vision of the future, which should be a warning. Nevertheless, one question remains valid – whether architectural forms in the future will be only negligible prostheses for our bodies, and will the city be a void of communication between nameless buildings? Since virtual reality can replace the customer's direct access to the city, since contacts can move to the platform of social networking, and the work in the cloud effectively excludes the need of the office, the question about the meaning of human interaction with the outside will be justified. In such vision, streets will become only a communicational network and structures defining them will be determined only by boundaries – between the exterior and interior. The intention of these reflections is not to answer the question about the directions of the development of the contemporary city, but to focus attention to problems arising from the change in the perception of architecture – not only in the scale of the city, but also the one nearest to us – referring to the area in the immediate vicinity of the place of residence, work or entertainment. Changes in the forms of today's cities also apply to smaller pieces of them – districts, housing estates, shopping centres, offices and residential buildings. After all, architecture – "the most popular" of arts – surrounds man throughout his life. Among the aforementioned examples of architecture and its virtual substitutes, replacing real spaces, only nature remains impossible to replace with the computer substitutes – yet. Considering cities continuously expanding in three dimensions, it is not possible for a single perceiver to experience their entirety.

In regard to this possible but unnamed perceiver, various fragments that directly relate to him are important – a place to live, work, leisure, together with their immediate surroundings. In such scale users of urban space will be interested in it. However, with the growing number of residents, the dissonance between the two key issues increase – the needs of individual users, whose number is constantly augmenting, and the imperative necessities essential for the functioning of the city as a unit. It seems, especially in relation to many cities in Poland, that the role of a single perceiver or a group of users is insignificant. Looking at the nearest surrounding, the "development" manifesting itself in the execution of infrastructure is visible from one side, and – at the same time – the fundamental law: the ownership law. These two trends collide within the city, and shape space which has become hostile, and even inhuman.

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<sup>9</sup> "Blade Runner" (1982), Dir. R. Scott, or „Fifth element" (1997), dir. L. Besson, also other of this species.

What is the role of architecture in building the contemporary image of the city, in searching for answers about its present and future form? One can probably give many different explanations. In these reflections, the interest was focused on two. The first is the need to pay attention to the role of the architect and architecture in the process. Architecture, because of its specificity, is realized always on request. One should raise the question about the validity of the planned constructions and their impact on the surroundings. A number of constructions constitutes a concrete evidence of the trend, in which the criterion of economics prevailed, and forever changed the environments and the character of the place.

In this perspective, the designers of a building, or an architectural complex, become co-responsible not only for a form of a single building, but also for the transformation of a space of a part of a city. This thought can direct attention to the other possible answer to the question posed above. The words of Vitruvius emphasize it: "The architect should be equipped with knowledge of many branches of study and varied kinds of learning [...] By means of optics, again, the light in buildings can be drawn from fixed quarters of the sky. [...] As for philosophy, it makes an architect high-minded and not self-assuming, but rather renders him courteous, just, and honest without avariciousness. [...] The architect should also have a knowledge of the study of medicine on account of the questions of climates [...], air, the healthiness and unhealthiness of sites, and the use of different waters. For without these considerations, the healthiness of a dwelling cannot be assured"<sup>10</sup>. In next lines of his treatise, Vitruvius presents not only the scope of knowledge needed for architectural design, but he also puts forward a range of arguments, justifying the rightness of individual statements. Today they still seem to be valid. Simultaneously, with increasing specialization of individual professions, combining different perspectives on the same problem seems to be a necessity. The role of the architect is to create a building, space, a city, but the nature of the space, its function and conditions of humans in it, belong also to other areas of our knowledge. Contemporaneity therefore requires a multidisciplinary approach to the given problem – answers to questions that go far beyond the scope of conversation about the beauty of architectural forms.

Given the complexity of modern times, their multiplanarity and a variety of possible reference points, herein referred to as "perception", the only element possible to identify as elementary for the considerations for the city space is a man. To paraphrase the title of the book by Jan Gehl – the city should be for the people. After all, a characteristic that distinguishes architecture from sculpture is its usefulness. To make them such, "we have to learn more to see, hear and feel".<sup>11</sup> Then, the words of J. Rykwert remain valid: "That is why the notion that at some future time cyberspace will perform the functions of the tangible public realm must remain chimerical. There is no possible appeal now, nor in the foreseeable future, from the here and now of bodily presence – the presence that has never felt comfortable, never been at ease in the city of housing. The bodily presence has demands of another kind also, demands of memory and

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<sup>10</sup> Witruwiusz, *O architekturze ksiąg dziesięć*, Warszawa 1956, pp. 14-15. (Vitruvius Pollio, *The Ten Books on Architecture*. English version after: <http://www.perseus.tufts.edu/hopper/text?doc=Vitr.%201&lang=original>, access 15.03.206.)

<sup>11</sup> S. Sontag, *Przeciw interpretacji*, op. cit., p. 25.

order that have had to be supplied by such surrogates as the theme park."<sup>12</sup> We can only hope that man will wake up from his virtual dream and start again to shape his surrounding with respect – also for himself – and the vision of the art of architecture due to the time "when the cathedral were white."

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<sup>12</sup> J. Rykwert, *op. cit.*, p. 217.