[4] Wordplay, cannot be translated into English, i.e. »Vojaki in vošibki / korenjakajo.«: vo-jak = soldier; jak = strong; šibki = weak; kor(enj)akajo: korakajo = marching, korenjak = tough guy, korenjakajo: derived noun meaning what a tough guy probably does – *toughguying along.*

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The visual language of spatial presentations – a barrier, or a crossroad?

Enhancing the efficiency of communicating spatial ideas to expert and lay publics

1. Introduction

Relationships between actors in the process of spatial planning have changed dramatically in the last decades. During face-offs of different publics in the process of planning there is interference in communication (on different levels), discrepancies and differences in understanding, and explanations of visual messages. This problem is most obvious in contacts between the general and the expert public – expert public being the one, which is professionally active in spatial planning, and is well versed in the use of visual language. Expert public can be further divided into the public, which is actively using visual communication – it has mastered its use, its writing and its explaining (architects, landscape architects, designers, urban scientists, etc...), and the public, which is limited to passive use of communication, in the sense of explaining it, but not writing it (sociologists, ecological psychologists).

The public is not uniform it is a loosely connected form, whose members we all are, but the level of our information exchange is very low. Formation of uniform views is, in comparison with the expert public, difficult, and articulation of these views is much harder. This problem is even more evident in architecture, urban design, and in discussions about spatial forms, and spatial connections, where one side is (relatively) commanding in visual articulation, and the other barely formulates adequate answers on the verbal level, let alone on the visual level. Because the expert public is used to its own visual language it is often unaware of its peculiarities, and of the knowledge needed to understand visual messages, and presentations.

The general publics lack of knowledge, and lack of understanding of visual communication often leads to conflicts, which do not arise from different interests, but mainly from differences regarding the expected and actual understanding of what was seen, and presented.

It happens that the expert public warns of the consequences in a language the general public does not understand, and the general public articulates its dissatisfaction, even though it can't articulate the reasons for it. The first one is directing the vision into ideal images, and the second one acts in accordance to general experience, fashion trends, and most of all follows the most tangible economic results. This way both sides get the feeling that they are »talking« around each other in a foreign language. When all sides are communicating it is important that they have a common knowledge of the basis of the »language«, which is, in the case of urban design and in architecture, explicitly visually oriented. Bringing both »languages« closer, and attempting to unite them in the cross-section of the knowledge stockpile is very demanding, sometimes even a self-confronting mission of all the actors in the process of spatial planning. Similar, only less evident contradictions are present in communication between different fields of experts, which are involved with spatial planning and spatial design – between those that are using visual language actively and those using it passively.

2. Starting points: visual communication and presentation

In the process of visual communication there is an exchange of messages, which are built up by presentations. In short we can define them as »(...) any system of symbols that means something to us (has a meaning for us). It presents and symbolizes something in the absence of that something [1]«. We have debates about architecture or about cultural space, we explain it, and we recognize it almost exclusively with the help of presentations (theoreticians connect architecture – as a recognized field of expertise – with the development of perspective [2]. That is why these perspectives are often regarded the same as architecture

itself, and even more they can become an art because of art itself. »The tools of presentation are never neutral«[3].

The outlaid fact is not problematic within itself, and it can express (and cause) the strength of ideas within the creator. The problem begins when these presentations lose contact with other levels of architectural expression, mainly with those that are more practical and are not meant for individuals, but for wider communities. Especially in the processes in which this community also cooperates, and is not only the beneficiary but also the inhabitant of its own environment: it takes care of it.

Sometimes a presentation is more convincing than that what we present, claims the editor of the review of different views of architecture presentations, Kester Rattenbury [4]. The basic level of the presentations shows how architects understand architecture. The second level – publications, journalisms, exposes, books – forms general norms; only on the third level we can see critical theory, which a lot of times deals more with presentations than with the objects that are presented. So it is not a coincidence that the author finishes the book with a debate about on critical theory and its influence on the understanding of legibility of both architecture, and its presentations.[5] Presentations are always partial, but are often the foundation for our comprehension of space.

Architecture or the urban field has at its disposals a wide variety of traditional and modern presentations, which deliver (and sometimes also accept) forms of spatial phenomena, and comprehension of them with the help of different techniques and intercessors. Suitability (for different purposes, different publics) and understandability of presentations is nowadays the subject of intensive scientific research.

Most of the research is focused on the process of visual communication within the field of architecture or urbanism (for instance research TU Vienna [6]. However the attempt to come closer to the general public is more and more apparent, with research, which is oriented into recognizing its own expressive resources (presentations, combinations of presentations, intermediary tools), the reactions of the public to them, and with recognizing the visual communication capabilities of the public in general.

A group of researchers at the University of Lund has researched how the new media affects the perception and deliverance of architectural ideas to the public.[7] Another research studies the influence of the characteristics of individuals on general public's perception of built environment. [8] Some people find new ways of presenting to the general public, which are made possible by modern computer tools (Borde, A. et al, 1999). Similarly, the newest research from the University of Aalborg is focused into comparison of differences between the analogue and the virtual (as a presentation of real space), and between the levels of understanding of both with the preceding knowledge of the primary or secondary space.

Different viewpoints can be clustered into some basic research questions:
– Which presentations, and to what account, can be understood by the general public?
– How does the public react to them?
– Which presentations should be used in communication, and which are more effective in passing the information

to the general public?
– And last, but not least, which presentations are the most popular with the public?

The main question, which defines the whole area of the research, is:
– The question about the differences in understanding visual presentations by the general and expert public, and the search of common points of both of them?

2.1 Research: efficiency of different groups of presentations with the expert and the general public

In light of these question a research was prepared, which checked the level of efficiency of different groups of presentations with the general and expert public. On the basis of a claim that we can divide visual presentation techniques into two main categories [9] the assumptions used in the research were divided into more groups. The division is derived from the assumption that the thought of man is created in two ways – conceptual and on the basis of experience. Both were formed through time, and with them we can connect the two main groups of presentations, which present space and interactive spatial relations.

Presentations formed on the basis of experience can be defined as those closer to man's perception of space, and everyday experiences with it. Conceptual presentations are more abstract, using a system of expert signs with which the general public is not comfortable. Amongst presentations formed on the basis of experience we can find perspective drawings, sketches, computerized shading, rendered models, animations, etc. In all of these the beholder is included as the primary observer (seeing the space through his own eyes), and he sees the world that is close to him (materials, people, references of height end depth). Conceptual presentations involve plans, abstract schemes, perspectives, and insights to which man is not used from his everyday experience, and most of the time they involve expert codes. In such presentations the connections between everyday experience and the presented space are loose to the point that despite measurability of most presentations it is difficult to judge the relations between heights, depths, distances, etc.

The hypothesis of the research was that with a sensible use of combinations of presentations it is possible to improve the effectiveness, understanding, and intercession of spatial ideas. The research was intended to find those ways of presenting (in the framework of conceptual, and experience based presentations), which are the most expedient, and accurate in delivering the desired visual message to the end recipient. In the attempt of understanding the general public and in acknowledging the differences between the planners (their intentions), and users (understanding of planner's intentions) the research compared two publics – expert and general.

The leading questions of the research were about the existing differences on one hand, and about the common points on the other. The results should point the way in which the differences can be diminished and common points can be underlined:
– To what extent are the expectations of the expert and general public in line with each other, when the question is comprehension of problems in space, on the basis of different presentation techniques?

– What can the spatial planners and designers, who want a better understanding amongst the co-creators of space, and a better awareness of the consequences of spatial change, do, in order to achieve this goal?

3. The process and the material

A series of ten presentations of urban design of a village square was presented to voluntary participants of a web survey. Every participant of the survey was confronted with a series of presentations, and at the same time answered questions. The whole presentation included presentations, which can be used as analogue or digital, and all are suitable for the begging phase of planning. The questions demanded quantitative (height, distance) and qualitative answers. A bit over 200 participators were divided equally into two big groups: the expert public, which comes face to face with visual presentations on an every day basis, and is comfortable with preparing, and using them (experts), and the general public, which has limited experience with such presentations, and which must understand them in the context of their general knowledge, and everyday experiences (users). The computer program took care of the randomness and of equal filling of all four control groups: conceptual presentations, experience based presentations, the sum of all presentations, and the architect's choice (the presentation most effective according to his/hers belief).

Answers to quantitative questions (largeness, number, etc.) were predetermined by the researchers as constants, which were used as a tool to measure the accuracy of the participants. The time that participants took to answer the questions was also measured, and the ratio between the accuracy and the time spent for each question was used to determine efficiency.

The analyzed variables included: general demographic data (gender, age, education); the accuracy of perception in relation to the accuracy of answers; time of perception, the presentation which gave the participant the most information, and the choice of presentation, which the participant would pick for the others; the level of affection for different presentations and the liking of presentations as a whole.

4. Results

During the analysis of data acquired by the presentations, statistical methods were used, and the analysis was comprised of the following: analysis of the accuracy of answers to each question, analysis of accuracy of answers per individual user, analysis of accuracy of answers to direct and indirect questions, comparison of accuracy of answer accuracy of the expert and general public, comparison of reaction to conceptual and experience based questions.

The analysis showed the following:
– Experience based presentations deliver data more accurately than conceptual presentations, both with the general and expert public. In general their effectiveness reached maximum values.
– Double quantity of information (the sum total of all information – conceptual and experience based information) is not always the most efficient way to go, because the user spends a considerably bigger amount of time for percep-

tion, however the accuracy does not improve much.
– The planner's choice of presentation – of those which are according to his belief most appropriate for presenting, and, which should deliver the most information – is only second-place in sense of efficiency;
– Experience based presentations have more accurate answers for indirect questions;
– Answers concerning direct questions receive equal accuracy both with conceptual and experience based presentations (questions connected with counting and largeness assessment, etc.);
– Experience based presentations keep the delivered level of data through time – time has a very small influence on the accuracy of answers;
– The level of accuracy of delivered data in conceptual presentations is growing with the amount of time to which the user is exposed to the presentation;
– The expert public understands conceptual presentations more easily and more accurately than the general public, which also spend more time for them.

5. Debate

5.1 About the results of the research and about their use

The survey confirms the claim that the level of abstractness/concreteness of presentation techniques has a different effect on the deliverance of messages with the expert and the general public. To put it in another way – with a carefully chosen presentation it is possible to improve the efficiency of communication between different participants in the process of planning, and in the process of compromising about space. Certain – experience-based – presentations are evidently ahead in efficiency both with the general and expert public. This common point is one of the founding points in which both publics can come closer to one another. The experts need the necessary formalization of the idea for the implementation that will follow, during which expert knowledge, and the knowledge of expert symbols (decidedly conceptual presentations with a large quantity of information, the perception of which grows with the time of exposure), but on this level the experts of one field talk with experts of other fields, which have at least passive understanding of this language. For communication with the general public these presentations aren't appropriate, in fact they are useless and senseless. The phrase »coming together of the publics« means communication on the basis of visual language, which takes into account everyday experience with space, general education and versatility with a sense of orientation – both physical (quantities, clear perception of spatial relations, possible comparisons), and cultural (level of incorporation of the observed into a specific cultural space, into a determined culture).

5.2 Open questions and further work

The research showed that the general public should not be underestimated – the amount of knowledge and the capability of understanding visual presentations is bigger than we would expect. So visual conceptual presentations achieve a relatively high level of accuracy, however the consumption of time is almost doubled. If the public is not used to visual communication in a way that is compliant with the un-

derstanding of visual communication by the experts, that does not mean that it does not understand it – this is just a minor level of clumsiness that can be overcome by different planned interventions. This is confirmed by the children's capability of abstraction, and visual way of thinking, a capability, which slowly becomes stunted during the contemporary education process.

Uncritical simplification of means for expression can't contribute to sustainability and enrichment of culture.

The search for equilibrium – between traditional and innovative presentation techniques, between miserliness and abundance of information, between abstractness and concreteness, between conceptual and experience based presentations – is therefore directed into pursuit of the innovative spirit of timeless modernity of the visual language. This spirit does not depend on the level of development of the media,[10] but it helps to sustain the cultural level of visual language, even though the afore-mentioned equilibrium adapts to different publics in the process of delivering ideas about space.

The language of architectural presentations is widely known to the general public. Almost everybody has at least a general level of knowledge about mathematics, physics, geography, psychology, sociology and similar fields, at least everybody with primary and high school education. It is not a question of accurate, precise knowledge the question at hand is informative knowledge of the area, and it's scope, of the laws that apply to it, of fundamental vocabulary, and most of all understanding and insight into the expert language, and into the way of communicating in this field. Mathematical and physical formulas are not only a bunch of letters and signs, they actually tell us something (they at least tell us that they are formulas, and that this is the field in question), and since we were thought to read maps in school we recognize a map when we see one. Most of us even know how to use it, and we can understand the symbols it contains. Alongside with knowledge about different fields, the teachers also passed on to us the ethics and values that go with these fields, which we all subconsciously adopted. However you learn very little about architecture and urban design in primary and high school education. We are not familiar with the area, with the scope of activity, with its language, and its way of communication. Furthermore in all this time we do not talk about the aspects and about the values of interventions into space, let alone about ways of designing and using it on a quality level. That is why in the latter stages the general public – the actual co-designer of spatial intervention – reacts in a way it does; the responses are unskilled, dispersed, and actually inferior – this neglect is being felt and expressed as a frustration, a continual, and principled fight with the planners. Solutions are showing themselves in the same areas where frustrations appear – in permanent education and introduction of such themes into the curriculum of primary, and high schools.

A lot of new questions are opening in the field of research, which is a consequence of active education. These new questions shed new light onto the findings in the area of visual communication and presentation. Dierckx and his co-workers [11] claim that the educational data systems can be efficiently used in the area of architectural education. They introduce and explain clear structural set-ups of such systems, which include: a creator (databases), a user, a database (knowledge stockpile), and a user interface, which functions as a middleman between the database and the users. The concept of an »educational database« is understood as a digital system, which involves specific data that can be used in the process of architectural education.

In this case there is a question of the intercessors of information in education and in general communication with the mass public:
– What is the difference between man as a intercessor and between other kinds of delivering facilitators?
– What kind of intercessors should there be?
– How should intercessors adapt to different publics
– To what account should they be interactive (capable of more than a one-way communication)?
– Which visual presentations are the most appropriate, and what kind of a succession is most efficient?

On the other hand another demanding question is the question of content of the educational databases:
– How does the content adapt to different activities?
– What should be the scope of the content?
– How should we bring the content closer to different interests of the individual within the mass of others?

6. Conclusions

The search for solutions concerning the problems of communication between different publics in matters regarding spatial planning and design should not turn into the direction of one language dominating over the other, but should be concentrated into meeting halfway. In the differences amongst the publics solutions should be found, solutions concentrating on adapting and coming closer. The experts can make their part of the journey by watching and learning of its own ways of communication. With the checking of its own, mostly visual language, and with the checking of different available media, and with determining what the public understands more and what it understands less, what is close to it, and where is the most efficient junction of understandings of both sides. With adapting the levels of communication the expert public can come closer with different publics without the loss of variegation of the expert language through age groups (kinder-garden, primary school, high school, etc.), with regard to different lifestyles and living preferences.

For the »other half of the way« that should be covered by the general public, the experts are also partially responsible, because we can't expect a dispersed general public to promote its own initiatives. The expert public accustomed to express itself in visual language must, with the support of a conscious policy, find ways to motivate permanent, systematic and coordinated education of the general public on the values of cultural space.

Interactive enrichment of results – on one hand the education of general public, and on the other adoption of experts to the general public – could lead to a basic consent about spatial values, a consent that is lacking at this time, and is urgently needed in the future. With a better understanding of the language the tensions arising from misunderstandings and misinterpretations of messages from both sides can decrease. With a higher level of consciousness, and with an improved level of understanding – when both sides will understand each other, and will at least try to coopera-

te constructively – it is possible, according to an optimistic prognosis, to decrease the elemental force that is present in space at the moment.

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Notes:
[1] W. M. Eysenck, M. Keane, 2000: 244.
[2] K. Rattenbury, 2002:1
[3] A. Perez-Gomez, 2002: 3.
[4] H. Hertzberger, 1991.
[5] K. Rattenbury, 2002: XXI, XXIII.
[6] A. Voigt.et.al., 2002.
[7] G. Ucelli et al, 1999: 539.
[8] A. Obeid in A. F. Ibrahim, 1999: 33.
[9] P. Bosselman, 1998.
[10] T. Zupančič Strojan, 1999: 107.
[11] T. Dierckx et.al, 2002.

Illustrations
Figure 1: Conceptual presentations
  The group of conceptual presentations used in the research (Presentations prepared on the international urbanism workshop in Komen 2001, supplemented, and alternated for the needs of the research).
Figure 2: Experience based presentations
  The group of experience based presentations used in the research (Presentations prepared on the international urbanism workshop in Komen 2001, supplemented, and alternated for the needs of the research).
Figure 3: Architects choice:
  The group of presentations according to the choice of the planner – a mixture of conceptual and experience-based presentations (Presentations prepared on the international urbanism workshop in Komen 2001, supplemented, and alternated for the needs of the research).
Figure 4: Research – questionnaire
  Interviewees were faced with a web questionnaire. The left side contained a group of presentations, and the right a group of closed, and semi-open, questions.

Špela HUDNIK

Architecture and communication

1. Introduction

Ideas about popular culture are tightly connected to theories of mass culture. The latter even more so with Marchall McLuhan's legendary quotations: »the media is a message« and »the world is a global village«, which are being unstoppably and quickly achieved with the ongoing revolution in electronics. Richard Hamilton, the British pop-artist describes the new aesthetics of the sixties – pop culture – as »popular, transitional, consumerist, cheap, massive, youthful, funny, sexy, glamorous and commercial.« The sixties were therefore the time that had the strongest influence on the vision of the future. It was a time that bridged the gap between architecture and other artistic fields. It was the time of popular culture that was full of symbols and metaphors, new visual sensibility, which demanded changes, pleasure and novelties. New technologies evolving from completed projects by NASA, development of the media, science fiction and pop culture influenced the mergence of futuristic fashion, design, art, music, city planning and urban regeneration. The terms mass society, communication and consumerism were given significance even in architecture. This was the first time that an entire generation of artists and architects worked globally and despite geographical differences (London – Archigram, Vienna – Coop Himmelblau, Hollein, Missing Link, Haus-Rucker-Co, Florence – Archizoom, Superstudio, Tokyo – Metabolists etc.) offered common visionary concepts about cities and architecture. Influenced by Andy Warhol, Cleas Oldenburg, Roy Liechtenstein and Tom Wesselmann, the most distinguished representatives of pop art, they projected their visions by various media (collage, film, performances, installations, newspapers, posters). Warhol reproduced millions of icons of the media society and became the trademark of Coca Cola, Campbell, Brillo and other commercial products. In the film Barbarella (1967), directed by Roger Vadim, Paco Rabanne dressed Jane Fonda in a metal dress. A fantastic world of sensible and tactile surfaces and soft organic plastic forms was offered by Olivier Mourgue and André Courrĕges for the psychedelic landscape in Stanley Kubrick's film 2001: A Space Odyssey (1968). The »Poster Dress« with Bob Dylan as its motif, the modular system of chairs and interiors by Verner Panton, Pierre Cardin's space-age hat and spherical TV sets and chairs, designed by Eero Aarnio, represent innovations that are founded on technological promotion of the consumerist society. Consumerism and technology became the providers of human needs and desires.

Today Velvet Underground and Nico are replaced by new pop-icons on the music scene: Madonna, Björk, Bowie. Martin Margiela, Maria Blaisee, Hussein Chalayan, Issey Miyake, Jean Paul Gaultier are fashion designers of technological membranes, message bearers, interfaces between bodies and architecture. Jeff Koons popularised Cicciolina, Martin Creed created soft, mobile environments and Jenny Holzer wrote art on electronic displays. She creates media spaces and searches for limits between information and propaganda. Even architecture is entering electronically stimulated environments. Mass consumerism and icons of