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UVODNIK

V tej številki revije AR so prispevki zelo raznovrstni in zajemajo področja arhitekture od statističnih metod prilagodljivemu načrtovanju večstanovanjske gradnje do oblikovanja obrednega posodja. Skupna nit prispevkov ni razvidna na prvi pogled, šele ob prebiranju vsebine je razvidna želja in usmerjenost avtorjev, da zberejo, analizirajo in opišejo problematiko, ki je vezana na *prostor časa*. Avtorji na različne načine odgovarjajo na tematiko arhitekture, pogost odgovor je pogled od *tu-zdaj* na *tu-nekoč* za *tu-jutri*. Prispevki pa ne ostajajo le pri osnovni lokaciji, temveč presegajo meje in skušajo predstaviti generičnost ugotovitev za *tam-jutri*. S tem objavljeni prispevki ne ostajajo zgolj Slovenski, Nizozemski, Poljski, Španski ali Italijanski, temveč svetovni. Vsi prispevki so sočasno objavljeni še na svetovnem spletu. Objavljeni so kot odprti članki, saj je namen objav v širjenju znanja in medsebojni delitvi ugotovitev. Znanost za vse in vsakogar, to je vodilo univerze.

Kolega doc. dr. Matej Blenkuš in Saša Popovič opisujeta potrebo po načrtovani in izgradnji prilagodljive večstanovanjske gradnje. Tematiko vpenjata med arhitekturo in tehnologijo izvedbe gradnje. Raziskovanje sta podkrepila z vpeljavo statističnih metod in pri analizi sta upoštevala pet ključnih prostorskih parametrov: svetlobo, hrup, raznovrstnost, velikost in zasebnost. Arhitektura je odgovor na potrebe naročnika in uporabnika, usmerjena je v prilagajanje danostim okolice.

Mlada raziskovalka Weronika Dettlaff je bila gostja v okviru doktorskega študija pri prof. dr. Tadeji Zupančič (UL FA) in je razvila idejo o vidikih občutljivosti javnih prostorov. V prispevku nam predstavlja občutljivost javnih prostorov v mestu Gdansk (Osowa). Z dobro interpretacijo je v prispevku opredeljen pomen rezultatov, ki ima generične lastnosti. To pomeni, da so prenosljivi tudi na druga območja analize.

Tematiko načrtovanja mest opisuje prof. dr. Tuna Tasan-Kok, ki opisuje sosesko Jane-Finch v Torontu v Kanadi. Izpostavlja problematiko nezadostnega upoštevanja prebivalcev na območjih urejanja. Izbrana soseska je zasnovana po modernističnem načelu in ima vse značilnosti razdvojenosti med teorijo in prakso. Članek obravnava ta preobrat in predstavlja nujnost iskanja novih načinov načrtovanja z vključevanjem kompleksnih urbanih skupin v ta proces.

Pregledni članek o slovenskih arhitektih v Črni gori med leti 1960 in 1990 predstavlja izbor izvedenih projektov. Doc. dr. Rifat Alihodžić in dr. Svetlana Perović sta ob predstavitvah teh projektov pronicljivo opisala izraz črnogorska arhitektura, saj ti projekti niso črnogorska arhitektura, temveč so s časom postali del arhitekturne baze Črne gore. V bistvu govorita o antagonizmu poimenovanja in asimilaciji arhitekture v *prostor časa*.

Diametralno od predhodnega prispevka je postavljena problematika razlogov in posledic odgovornosti graditve enostanovanjskih objektov. Mlada raziskovalka Andreja Benko se problemsko loteva tematike enodružinskih hiš. Tematika odgovornosti je etična dilema, ki jo avtorica deli na odgovornost pri projektiranju enostanovanjske hiše in odgovornost pri gradnji enodružinske hiše. Prva je laboratorij s kontroliranimi parametri in druga je prostor z variabilnimi parametri. Kombinacija med kontroliranimi in variabilnimi parametri terja izvedbo vprašalnikov z uporabo statističnih metod. Avtorica bo končne ugotovitve predstavila v doktorski nalogi.

Iz Valencie pa smo v uredništvo prejeli strokovni prispevek o družbeno odgovorni stanovanjski zazidavi v zgodovinskem središču Valencie. Prispevek predstavlja odgovorno graditev večstanovanjskega kompleksa, kjer so upoštevana načela smotrne rabe energije in gradiv. Nastala je bio klimatska stavba z naravnim prezračevanjem, senčenjem in omogočanjem prodiranja dnevne svetlobe v globino objekta. Projekt predstavlja preslikavo načel tradicionalne arhitekture *tu-nekoč* za *tu-jutri*.

Prispevek doc. dr. Leona Debevca opisuje arhitekturo obrednega posodja, kjer arhitektura sublimira v oblikovanje. Avtor v esejistični diskusiji opozarja na kreativnost arhitekta in upoštevanje arhetipa sakralnega kompleksa ter sposobnosti razločevanja med posebnim in splošnim.

O posebnostih vernakularne arhitekture nas opozarja knjiga Harangláb, zvonik, Holzglockenturm. Samostojni leseni zvoniki v panonskem delu Slovenije, Avstrije in Madžarske so posebne arhitekturne strukture, ki so bile slabše raziskane. Knjiga predstavlja dober začetek raziskav na Slovenskem in jo priporočam v branje.

S to številko je revija prešla v novo obdobje, osvežili smo prelom revije, ki je prilagojen različnim vsebinam in je bolj sproščen.

Želim vam dobro in uspešno raziskovanje in branje.

Urednik
doc. dr. Domen Zupančič

EDITORIAL

Papers published in this issue of AR journal cover a wide angle field of architecture, from statistical methods in flexible housing design to target personal design of liturgical elements. The common premise of the papers is in the relation place-time. Authors eagerly describe problematics, present analytical tools and develop fruitful discussions with firm conclusions. The most common answer to given research questions is the point of view (POV) *here-now* to the POV *here-past time* for POV *here-tomorrow*. Papers do not remain at basic location of research. They pass the limits of place and present results as generic (*there-tomorrow*) – applicable at any space with common parameters. Scholar papers in AR are not only just Slovene, Dutch, Italian, Polish or Spanish, they become worldwide and may contribute to better knowledge based on architectural management. Using www on-line PDFs, the papers become part of an open access base for any researcher at any place in the globe.

Assist. Prof. PhD. Matej Blenkuš and Saša Popovič describe the design tools that were developed using common statistical methods. This theme is part of architecture and technology of construction. Research parameters were selected: light, noise, vivacity, size and privacy. Architecture design is an answer to needs of clients and users combined with the given parameters of environment.

Young researcher Weronika Dettlaff was a guest doctorate candidate at UL FA Prof. PhD. Tadeja Zupančič. Paper presents sensitivity of public places in Gdańsk Osowa district. As authors point out: "The results include the incremental methodological contributions to the methods used as well as the interpretation of place sensitivity as the starting point of the intervention potentials of the case study itself." This is the point of joint venture research teams, to develop generic there-tomorrow tools.

Relatively similar theme describes Prof. PhD. Tuna Tasan-Kok. Jane-Finch neighbourhood in Toronto is the result of modernist planning. The area has all the symptoms of modernist planning results and shows differences from theory to practice. The paper presents new changes with evoking participation of people within the neighbourhood.

Assit. Prof. Ph.D. Rifat Alihodžić and Ph.D. Svetlana Perović present an anthological paper of Slovenian projects in Montenegro from 1960 to 1990. Along the interesting projects authors develop, they discuss the term of "architecture in Montenegro". Presented Slovene projects built in Montenegro are per se out of context in Montenegro; however they influenced other Montenegro architectural structures and became a prehistorical base of architecture. This may be called an assimilation process of place-time.

Dialectics of responsibility in single-family housing project is presented by Andreja Benko. This paper is part of a doctoral thesis. Author presents reasons and consequences of the lack of responsibility during construction. The duality of responsibility provokes several antagonisms among controlled parameters and variability of real space. Author will present final conclusions in the doctoral dissertation.

With love from Valencia could be the working title of the paper of Fernando Vegas López-Manzanares and Camilla Mileto. Authors present their own project of subsidised housing units in the historic centre of Valencia, where they have followed the principles of integrated design. Social responsibility and awareness of the influence of the built environment were combined with the traditional architecture of Valencia. Project is not just a fine composition of voids, it literally follows the premise here-tomorrow.

For Assist. Prof. PhD. Leon Debevec personal targeted design in liturgy is a rule. Architecture as spatial design process sublimes in design of elements including archetype of sacral complexity using general and specific parameters.

Vernacular architecture is a combination of general and specific parameters, too. The book Harangláb, zvonik, Holzglockenturm presents wooden bell towers in the Pannonian area of Slovenia, Austria and Hungary. The book is a result of in-depth field research of Prof. PhD. Borut Juvanec and Andreja Benko.

And last but not least, the AR journal has entered in a new design era. The layout is refreshed and tuned towards a better reader experience. I wish you all the best in your research field and pleasant reading moments.

Editor
doc. dr. Domen Zupančič

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UPORABA STATISTIČNIH METOD PRI PRILAGODLJIVEM NAČRTOVANJU VEČSTANOVANJSKE GRADNJE

THE USE OF STATISTICAL METHODS IN FLEXIBLE HOUSING DESIGN

Ključne besede
statistični postopki; načrtovanje stanovanjske gradnje; korelacijska analiza; percentilni rangi

Key words
statistical methods; housing design; correlation analysis; precentile rank

Izvleček

Potreba po načrtovani in izgradnji prilagodljive več stanovanjske gradnje je že od 20. let preteklega stoletja pomembno arhitekturno in tehnološko vprašanje. Upoštevajoč principe gradnje je bilo v praksi preverjenih več načrtovalskih prijemov, malo raziskav pa je narejenih na področju upoštevanja uporabnika. Prilagajanja stanovanjske gradnje običajno temeljijo na preprostem algoritmu, ki obliko, velikost, razpored prostorov in izbor materialov določa na osnovi vhodnih podatkov. Članek opisuje postopke načrtovanja osnovane na običajnih statističnih metodah. Razdelimo jih lahko v dve skupini. Prva opisuje postopke s katerimi lahko določimo potreben razpon prilagoditev glede na celotno analizirano populacijo, druga skupina postopkov pa se osredotoča na posameznika. V kakšni meri se loči od povprečja, kaj so njegove posebnosti? Pri tem smo v analizi upoštevali pet ključnih prostorskih parametrov: svetlost prostora, hrupnost, pestrost, velikost in zasebnost.

Statistični postopki so se izkazali kot učinkovito orodje s katerim je možno izluščiti razlike in posebnosti bodočih uporabnikov stanovanj. Zaradi svoje preprostosti in mehanske logike, jih je smiselno vključiti v ekspertno programsko opremo ali aplikacije, ki skušajo potrebe in pričakovanja bodočih uporabnikov vključiti v proces načrtovanja.

Abstract

The article presents the design tools that were developed using common statistical methods. The design tools are grounded on assumption, that flexible housing design should include the specific pieces of data obtained from its future users or residents. Presented design tools are split into two groups. The first group of tools helps to identify the maximum and reasonable scope of variability in the specific living properties and spatial characteristics that housing design and construction should allow. In other words it answers how much variability and flexiblitiy we really need. The second group of tools is focused on the aspect of the individual user. How and how much does the user differ from the average? What are the user's particularities? Five major spatial properties were taken into consideration: lightness of space, noisiness, vivacity, size, and publicity. The parameters were selected from a much bigger list of personal spatial descriptors in order to simplify the tools that were designed in previous studies.

Statistical methods proved to be efficient enough in determining the assumed differences. Due to their simplicity and mechanical logic they can be used in various kinds of professional software or applications dealing with flexible housing design when there is a need to include a future user into a design process.

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1. Introduction

The need to design and produce adaptable housing has been an important technological and architectural issue since the 1920s [Schneider & Till, 2007]. Regarding the actual construction, many solutions have been designed and tested in practice, but very little research and practice has, in fact, been done with the user in mind. Customization in housing as a process is based on a simple algorithm, which interprets particular and actual data in a certain way, hence influencing the shape, size, configuration, or even material choices of the product. We distinguish between one-time customization, which occurs on the point of the delivery of the product to the customer [Pine , 1999], and lifetime adaptation, which leaves certain options opened for the user to decide upon during the buildings' lifespan. In both cases, the architectural design theory and construction practices are lacking suitable tools to collect and interpret the data gained form the user or inhabitant in a sensible and univocal manner.

The variability regarding housing needs and expectations can be either estimated or measured. It is always linked and thus limited to a specific population expected to constitute the future users of a building to be designed. Estimation is usually grounded either on previous market experiences and does not need scientific methods. But measuring the variability requires a much more specific approach, where one must know precisely what kind of information they would like to obtain from the population. The selection of the expected data content and data quality determines the method used to gain both general and specific pieces of information.

In housing design where only one-time customization is required and professional assistance is offered, the need for a systematic treatment of user data is not critical. Usually the contractor displays the selection of choices to the client, i.e. the future user, and the user makes the relevant decisions, with our without the professional help offered. In cases where no help is offered, the possibility to analyse the user much more intensively and with focus becomes essential. Due to the increasing popularity of web-based user interfaces in various types of economy (e.g. food, clothing, books, cars, furniture) it is expected with great certainty that such an approach is going to dominate in real estate economy very soon. The core structures of such marketing mechanisms are data collection, data processing and real-time responding based on certain algorithms. On the other hand, the systematic analysis of potential users also limits the number of possible choices, ultimately making the design and production of housing much more efficient.

In cases where lifetime adaptability of housing is expected and pre-designed, the algorithms described earlier can provide design solutions based on the change of initial data conditions.

Which data are essential and should be collected on the user side? What is the selection of parameters that would describe the user well enough, but would not be too complicated for everyday use?

The proposed design tools described in this article is grounded on a much larger theme which is usually described as a parametric architectural design. The final form (or current, depending of the type of flexibility) of the building is determined by various changeable parameters. So the form is shaped by the alteration of values of the parameters. The values are usually derived from the site conditions, economy or other external force which should influence the final form of the building. Very rarely the actual user or the resident can influence the parameters, and even if he could, all the choices are simply left to him without any professional help. These methods, on the other hand, try to find the architecturally and spatially important pieces of data from the user and present them in such a way that they can be directly used during the design or performance of the building.

2. Method

The study is based on the study conducted as part of doctoral work, i.e. the survey on living habits (Blenkuš, 2003). What is new here is the aim to make the method more applicable, to limit the population to a group of expected future housing users, and to focus on the actual relationship between the input data and the architectural response. The selection of living parameters was limited to five instead of 16 parameters [Blenkuš, 2003], and the analysis was limited to statistical methods only. The reasons for such decisions will be presented below.

2.1. Selection of living parameters

Living parameters describe the living habits of a single user – or a group of people if they are statistically analysed. Data are usually obtained through a survey, either by paper or online. The parameters were selected to address the widest possible quality of information focusing on personal, environmental and operational parameters of living [Blenkuš, 2003]. The practical use of data gained through the survey proved that not all information is essential for design work and that, in fact, the necessary scope of information depends on design decisions themselves. The designer first determines the variables to be left open. These can be adjusted during the initial design stage adapted to personal needs or regulated by the users across the building lifespan. In our case, by comparing the technical construction options provided on the market [Schneider & Till, 2007], the selection of choices was limited to:

- number and size of rooms,
- amount of light in particular rooms,
- level of privacy,
- amount of noise, and
- level of vivacity.

These spatial properties can be regulated either by design or by use, with the help of passive or active technical devices. It is important to decide on the amount of flexibility in early design stages, because – as mentioned previously – this decision influences the shape of the user survey. The selection is thus limited to the following living parameters: size, lightness, publicity, noise, and vivacity. Reducing the number from 16 to 5 will reduce the time to fill

in the survey by 60%, while the necessary information is preserved.

In our pervious researches 16 living parameters (name, importance, publicity, adaptability, size, vivacity, lightness, warmth, airiness, smell, noise, position, duration, frequency, time and persistence [Blenkuš, 2003]) were introduced. They were selected in order to be able to describe maximum variability of the living styles, habits and cultures possible. No technical or construction limitations were taken in account. But as the expected population is smaller and less variable (coming from the same cultural background), many parameters appear to vary very little from person to person. In order to make design tools as simple as possible the final selection of five properties was chosen.

Most of five selected properties are very clear what they represent. Vivacity on the other hand is slightly different, because its name by itself does not tell directly what it measures. It's a measure of the amount of sensory information which present in a certain room or a space.

2.2. Selection of respondents

The pieces of information about building's future residents were obtained by the help of a survey form. According to the initial method [Blenkuš, 2003], each person was asked to list the living activities that they wish to perform in their place of accommodation, and each activity is described using five selected living properties. When for example sleeping was listed as a needed activity, it was then described in detail by the amount of light it requires on the scale from 1 to 5 (1 means very dark, 5 very light). Expected level of privacy, tolerated amount of noise, the desired level of vivacity and the required size were also described on a scale from 1 to 5 (1 means very private, very silent, very restrained and much smaller, while 5 means very public, very noisy, very vivid and much bigger). The survey did not ask for a specific required size but if the activity in itself would need bigger or smaller size of space than usual.

When more than one person is expected to use an apartment, the whole group or a group representative should fill the survey. In cases where there was more than one result describing the expected conditions in a certain apartment (e.g. two or more results from family members) an approximation was made.

At the initial design stage the expected population of people who are likely to buy or rent an apartment in a building to be designed fill the survey. In our case 60 people were surveyed. Targeting the population is very important as it is neither reasonable nor necessary to open the construction to any number of choices, but rather to make decisions regarding the amount and scope of variability based on actual facts. In our case the surveyed people were aged from 20 to 45 and the majority of them had high-school degree.

3. Evaluation of group results

3.1. Correlation analysis

Correlation analysis was performed to learn whether there was statistical background in the group results to base certain design decisions upon. In other words it gives us enough evidence to use specific design elements which can respond to two or more living parameters at the same time. So if there is a proven correlation between publicity and noise (or privacy and silence), for example, then only one flexible design element is needed to address both parameters at the same time.

The correlations were calculated based on the whole population, the average values of all five living properties for each person were taken as the initial piece of information. The result would tell us, for example, if most persons would at the same time prefer bigger and lighter rooms – in this case the correlation between lightness and size would be relatively high. Statistical correlations were calculated using the Pearson product-moment correlation coefficient (PCC).

3.2. Analysis of average values

We have calculated the average values of a certain parameter (size, lightness, privacy, noise, and vivacity) for all of the listed activities. The aim of this process is not to get the actual average values; we are much more focused on the particularities than on averageness, to learn some general information about the group and its properties. This general information will help us then to reduce the number of required design choices or options in terms of flexibility. What was studied in detail is (a) the trend of the group, e.g. if it tends to be more affected by privacy or publicity, and (b) the shape of the distribution of the activities according to their average values, i.e. if the activities tend to split into groups or are evenly distributed from the lowest to the highest values.

To test the relevance and the general variability of the data gained by our survey we also calculated the numerous and the standard deviation for all activities concerned.

The average values were calculated for each of the five living parameters as a sum of the particular values form the survey for each of the listed activities divided by the number of persons which listed that activity. For example if 20 persons would specify reading as a desired activity at home, we have summed all the values of the lightness of reading and divided it by 20.

4. Evaluation of results

4.1. Analysis of percentile ranks of living parameters

An insight into the deviation of a certain living parameter or activity from the mean value (in our case median value was taken into account) can be learned from the analysis of percentile ranks (Crocker & Algina, 1986). It is sensible and descriptive to use it because it can evidently point out the most specific living parameters and demands of a certain person – demands which vary from the population average the most [Blenkuš, 2003].

The aim was to find out how much a certain person who decided to live in a designed housing unit differs from other persons. All of the activities were taken into consideration. The difference can be examined in both dimensions – according to the living properties, or according to the activities themselves. However, the latter would not give us the

information on the quality of differences but only on its "location" (e.g. which activity differs the most).

To calculate the percentile ranges for each person separately we first need to calculate the average value of each living parameter (based on all the listed activities the person has specified in the survey). Then the average values for all persons (N=60) were ranked in the arithmetical order. The person with the lowest average value of e.g. publicity was ranked with 1 (R1), and the person with the highest value with 60 (R60). Based on the ranking we can now determine the percentile rank for each person. It would tell us the relative position of the person in the ordered list. We selected the relative position to be expressed in the percentage of the population with the lower value of a certain parameter. Thus, the sample size of population would not affect the result.

Enačba 1 / Equation 1

$$P = \frac{(R - 0.5 \times E)}{N}$$

P = percentile rank
R = absolute rank
E = number of persons with the same rank
N = population size

The results would have values between 0 and 1. Value 0.17 means that 17% of population have the average value of the investigated living parameter lower than that of the investigated person. To make the results more architecturally applicable we decided to demonstrate the positive and negative inclinations of a certain person according to all examined properties. To this end, a value of 0 was chosen to designate the population mean value, thus the deviation varies between -0.5 and 0.5. The calculation formula is slightly adapted to more expressive data presentation.

Enačba 2 / Equation 2

$$P_0 = 0{,}5 - \frac{(R - 0.5 \times E)}{N}$$

P0 = biased percentile rank (mean value = 0)

The percentile ranks of person no. 54 (A54) can be depicted in a bar chart as shown on Figure 1. According to the percentile ranks, person 54 deviates mostly in lightness, noise and privacy. The person would prefer a very light apartment, with quite a lot of noise tolerated, but also with a lot of privacy. The size and vivacity do not deviate so much and do not need much attention when designing an apartment for this person. A general design solution could be used when addressing these two parameters, but certain specific choices need to be selected according to the quality of light, noise and privacy. In principle, the parameters with ranks which are greater than 25% or lower than -25% should be addressed with particular care. In general (considering the person's average value), this person's rank would not differ much from the mean population value, but upon closer examination, some specificities appear. It is thus very important to not be initially satisfied only with the person's mean value of deviation, as quite often actual differences appear in detail, i.e. regarding only specific living parameters.

4.2. Analysis of percentile ranks of living activities

Contrary to the analysis of percentile ranks of living properties, the ranks of living activities are not measured as a deviation into positive or negative directions from the mean value but as an absolute value. This is because the deviation for each activity is determined from the various properties which do not have an evaluation scale of the same direction – the positive value of lightness for example does not mean the same as the positive value of noise.

To be able to make persons more comparable in terms of selected activities we chose 17 most common activities and performed the ranking analysis only on them. So the entire population was compared within the most common denominators – the activities more or less most of them share. The calculation method in the first step is the same as in the previous case (see Equation 1). In the next step, we depicted the absolute value of the deviation from the mean rank of the population. The overall equation would be as follows:

Enačba 3 / Equation 3

$$P_0 = \left| 0{,}5 - \frac{(R - 0{,}5 \times E)}{N} \right|$$

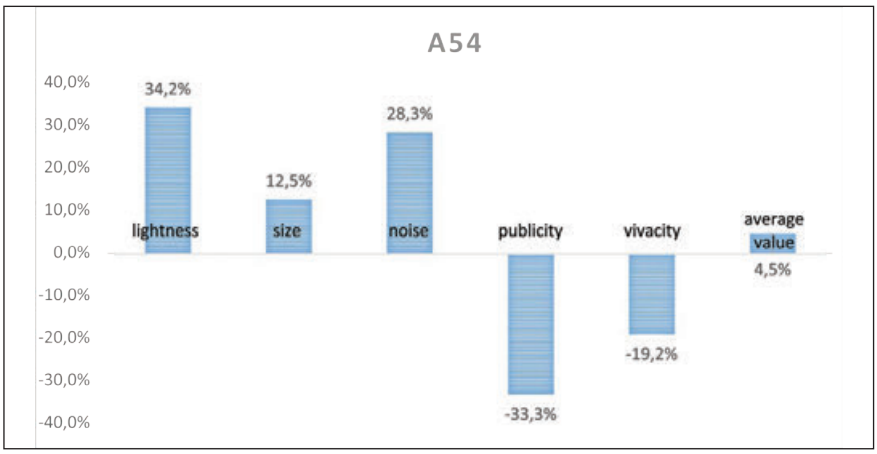
From Figure 2 one can notice that person no. 53 (A53) deviates from the population in most of the activities. The only activities where the person appears to be close to the population mean values are children playing, washing and bathing. Combined with the information based on the percentile ranks of living parameters, we can narrow down the scope and the quality of the differences of a certain person compared to the population. Activities with a value of 0.0% were not present in the case of this person.

5. Results

5.1. Results of the correlation analysis

As described in the method, the correlation analysis addresses the question whether the measured living

Slika 1: Percentilni rangi parametrov prebivanja za osebo št. 54.
Figure 1: Percentile ranks for the living parameters for person no. 54.



parameters act together in any sort of correlation. The results show a high level of correlation among most of the parameters. Relations between vivacity and noise (0.933) and between vivacity and size (0.918) are particularly high. Compared with the correlation between size and noise, which is also relatively high (0.850), we can conclude that these three parameters work together as a group. This means that when designing for a specific population one can, with great certainty, estimate that the expected adaptations of room size can be designed simultaneously with the level of vivacity and noise. Bigger rooms are more vivid and less disturbed by the amount of noise. In addition, the correlation between publicity and noise should be considered (0.902). That means that rooms or places where we provide a higher level of privacy (are less public) require a more silent environment (are less noisy). In general, lightness shows little correlation with any other parameter, proving that it needs to be designed and controlled independently from the rest.

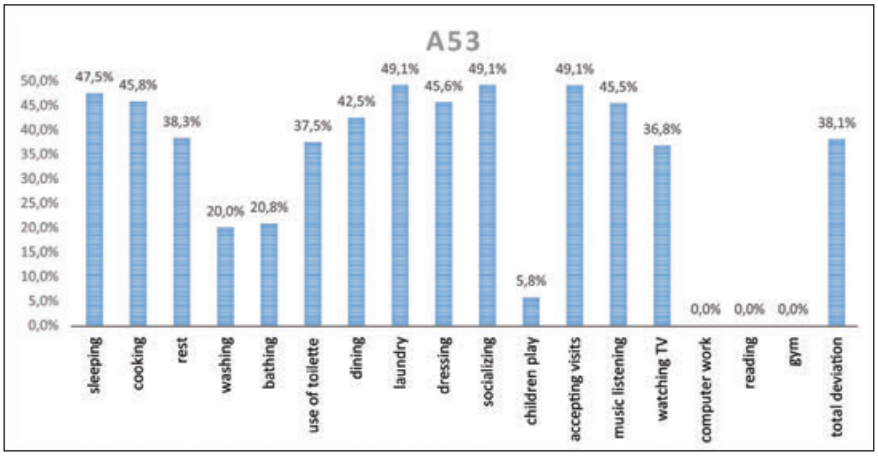
living parameter	*lightness*	*size*	*noise*	*publicity*
size	*0.615*			
noise	*0.684*	*0.850*		
publicity	*0.557*	*0.759*	*0.902*	
vivacity	*0.709*	*0.918*	*0.933*	*0.848*

Tabela 1: Povezave parametrov bivalnih parametrov.
Table 1: Correlations between the living parameters.

5.2. Results of the analysis of average values

5.2.1. Size parameter

In general, the average values of the size of each activity shown on Figure 3 are inclined towards higher values rather than lower ones. This is evident because the activities with the average value of the necessary size lower than the mean value 3.0 are in minority. More than three quarters of the activities demand bigger spaces than usual. This is quite important to consider at the design stage of housing, as it is obvious that future residents in general will not be satisfied with the basic or normative sizes of spaces or rooms [ULRS, 2011].



Slika 2: Percentilni rangi parametrov prebivanja za osebo št. 53.
Figure 2: Percentile ranks of the living activities for person no. 53.

5.2.2. Parameter of lightness

Very similar results are obtained when we consider lightness. Most of the activities (about two thirds) require some light. When deciding on an initial level of fenestration in the building, one needs to exceed the normative amount of the required natural light or window sizes by at least 20% to meet the average population expectation. Of course, the amount of light needs to be adaptable for each user or apartment individually.

5.2.3. Parameters of noise, publicity and vivacity

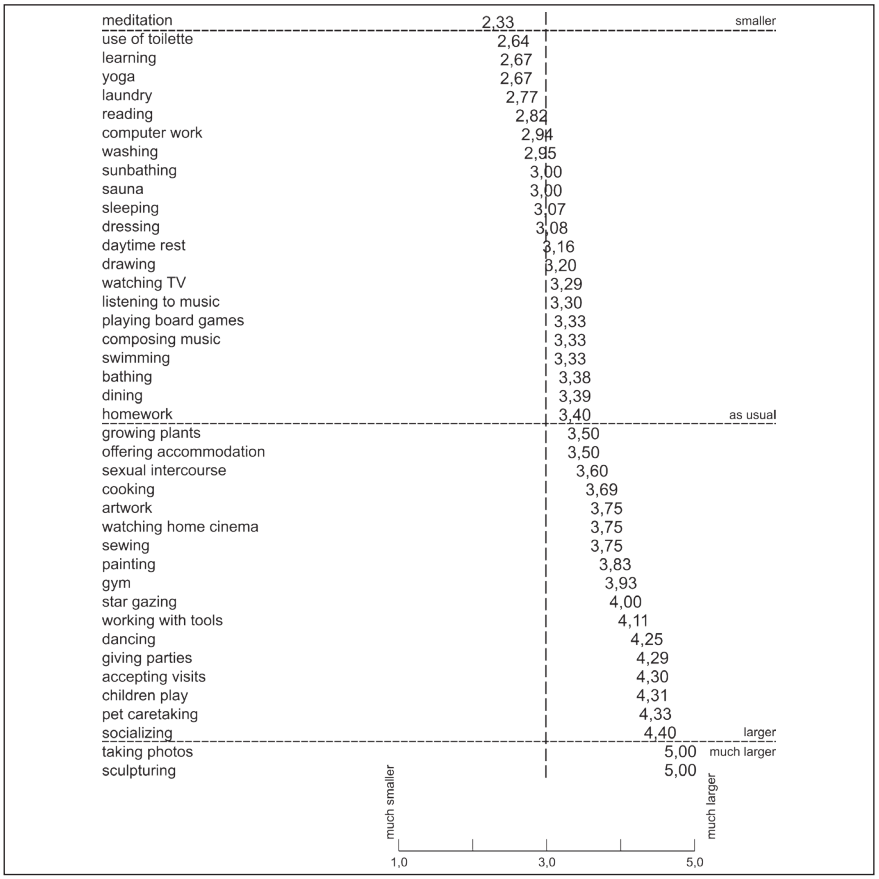
These three parameters can be analysed together, as the correlation analysis revealed that they behave in a group manner. Contrary to the two parameters of size and lightness the sample population shows very low tolerance toward noise in the living environment (see Figure 5). Most of the activities have an average value of less than 3.0 (mean value), which means that they require a more or less silent environment. As a conclusion, the design should allow that most of the activities are separated from the rest. Particularly in the apartments with more than one family member, the overall layout tends to be cellular rather than open. The same conclusions can be drawn from the privacy diagram on Figure 6.

Vivacity is also on the modest side. In architectural terms, this means that rooms and spaces in the apartments will function better with less visual and audial information – with modest, inexpressive design. However, certain variations exist and they correlate well with publicity and noise parameters.

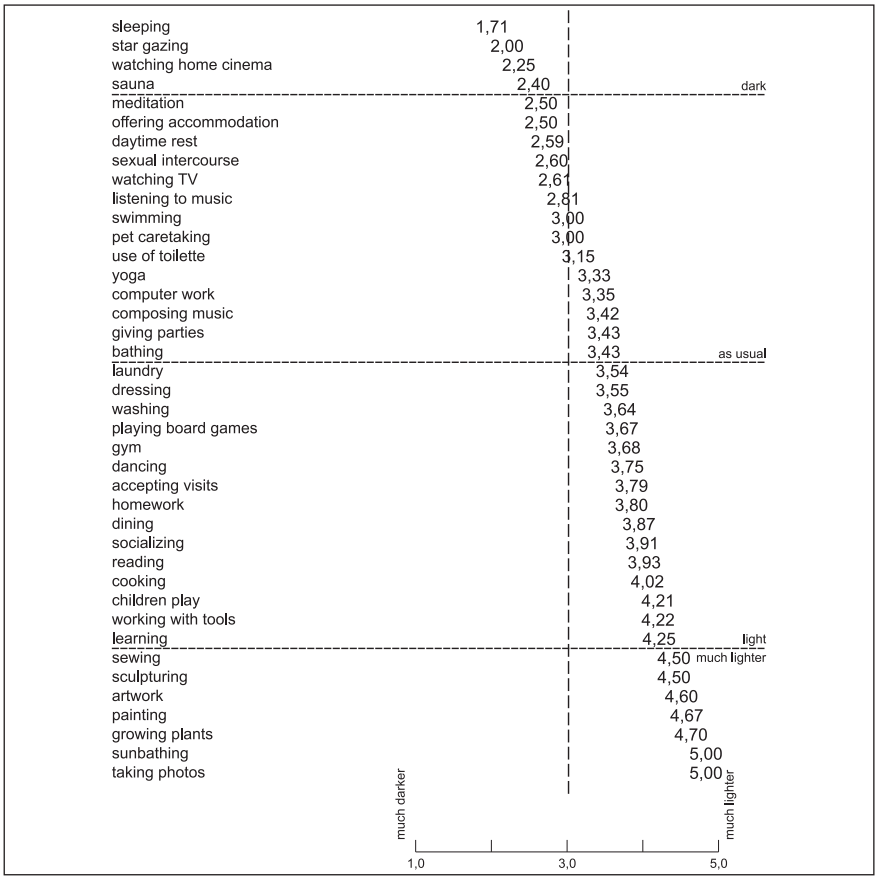
The results gained from the average values for each examined parameter revealed the general bias of the population. On average, the sizes and the level of lightness should be increased, while the levels of noise, publicity and vivacity should be reduced. We can estimate that a general modernist design approach would meet most of the expectations, with a discreet separation of the activities in terms of separated room, alcoves or compartments. To be more precise, the apartments should not be designed as an open space with very little spatial structure but rather with a clear functional and spatial organization. Each activity needs to be precisely positioned in the apartment, grouping of the activities which take place in the same rooms, should address their shared properties. Schneider [1994, X] in his book Floor Plan Atlas uses a term "clustering floor plan".

We can also take into consideration the actual values for the most common activities, and design the initial apartments according to those values. For example, if we decide to group bathing, washing and using the toilet in the same room we know that this space would be discreet in design, very private, moderately silent and with a high level of natural light.

However, these are only general determinations. Variability still needs to be provided according to the calculated standard deviation (SD) of the survey results. We will not show all the calculations of the standard deviations but only state that for the



Slika 3: (Zgoraj) Povprečne vrednosti zahtevane velikosti prostora za navedene dejavnosti.
Figure 3: (Above) Average values of the required size of the room for the listed activities.



Slika 4: (Spodaj) Povprečne vrednosti zahtevane svetlosti prostora za navedene dejavnosti.
Figure 4: (Below) Average values of the required lightness of space for the listed activities.

17 most common activities which appear to be desired by most persons the standard deviation is between 0.7 and 0.9. Assuming that the values of all of the persons are distributed in normal distribution, this means that approximately two thirds of population would only require the adaptation by less than one-step up or down on the scale from 1 to 5 for each parameter. In other words, it means that the one-time and lifetime adaptability of the apartments in terms of size, lightness, publicity, noise level, and vivacity do not need to be radical and extreme in options. So if the basic apartment has an average level of lightness, e.g. 3.5 on the initial scale of lightness, than the required flexibility should cover the lightness form 2.5 to 4.5. Consequently a relatively small level of adaptation is enough.

5.3. Results of the analysis of the percentile ranks

5.3.1. Percentile ranks of the living parameters

Percentile ranks proved to be a very efficient tool to become aware of the particularities of a certain person. We randomly chose four persons who will be explained in more detail. Persons nos. 1 to 4 are shown in Figure 8 to Figure 11. These are actually the first four persons who took part in the survey – but they could easily be the actual future residents.

By examining the correlations between the parameters and their average values we gained a good insight into the overall proportions and characteristics of the designed building in terms of its size, openness (fenestration), provided level of privacy, noise protection, and vivacity. However, when we take into account concrete persons we need to be aware of their differences and how those differences can be implemented in the one-time or lifetime floor plan and layout adaptation. In general, the least adaptation is to be considered with person no. 3 (see Figure 10) as the results show that in most parameters the person is very close to the population mean values. The value concerning lightness is above average, which means that the person would prefer to have more light in the apartment than the rest of the

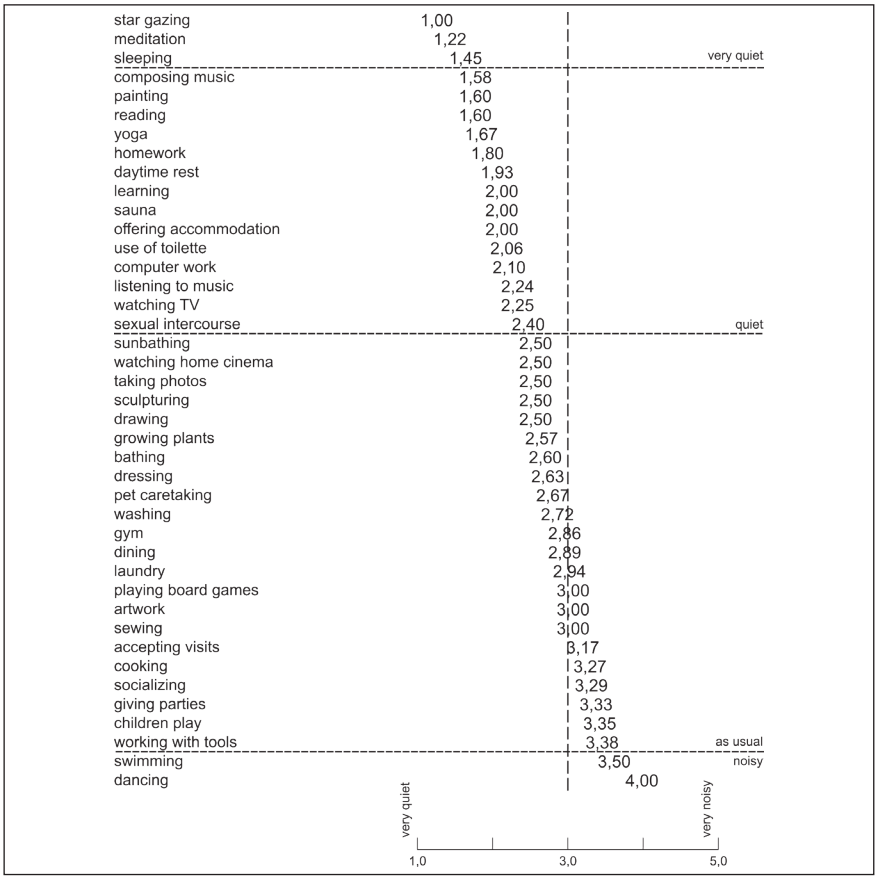
residents. The results of person no. 1 (see Figure 8) deviate in the negative direction in all parameters. This means that the person would prefer slightly less light, less noise, smaller room size and, particularly, a much higher level of privacy. Only 10.2% percent of the population stated the need for a higher level of privacy. This, of course, is a very important piece of information.

Person no. 2 (see Figure 9) is also specific in requiring very private spaces on the one side and very large ones on the other. Regarding both properties, i.e. size and publicity, the data place the person at the very edges of the sample population (values are higher or lower than 40%, only 10% of population showed more extreme results). In a similar manner, we can interpret the results of person no. 4 (see Figure 11). The person would obviously prefer much lighter and bigger spaces than average.

Ranking based on the living parameters is a very simple and efficient statistical tool that reveals the crucial pieces of information about the specific person. Of course, if they are to be interpreted with relative accuracy they need to be compared with the results of the whole population. In other words, they only measure the amount of deviation, not the actual value in itself. However, as architecture is not a precise discipline, particularly when it comes to considering individual personal demands, such an approach can be even better if it provides the designer with a set of accurate data. In the end we, as persons, are more inclined toward interpersonal comparisons (e.g. I'm satisfied because my room is bigger than yours) than toward absolute properties (e.g. I'm satisfied because my room is 22.7 m² big). A designer should take the normative properties of the apartments design [UL, 2011] and then change them accordingly to the results of this method.

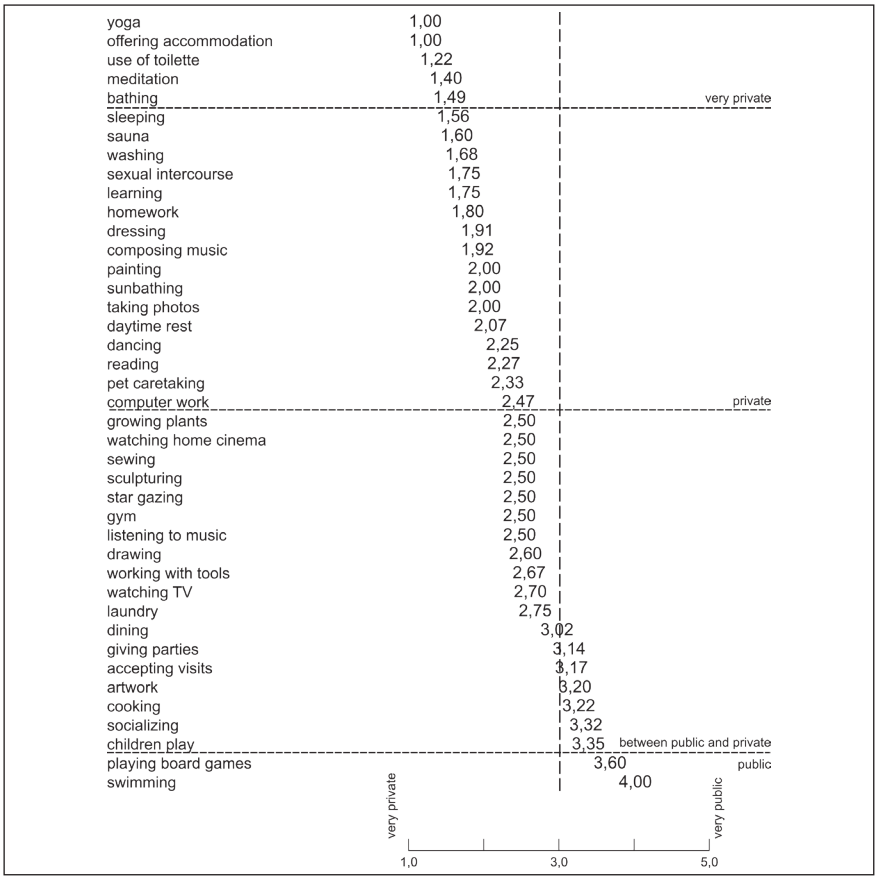
5.3.2. Percentile ranks of living activities

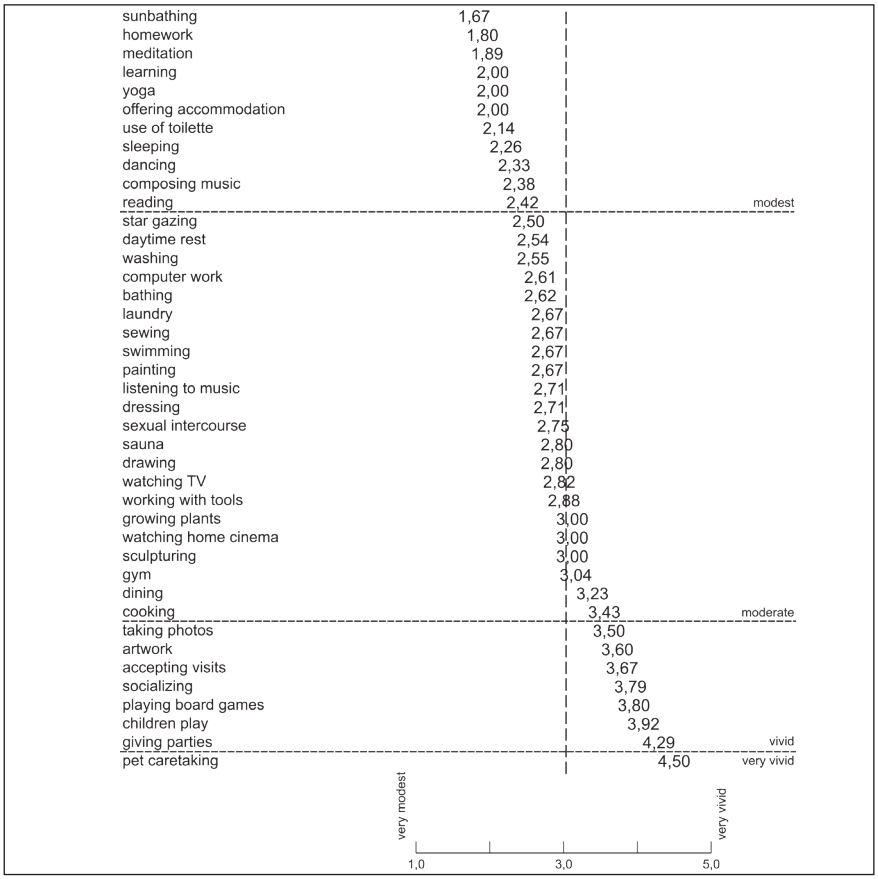
The ranking was calculated for all persons in the survey based on 17 most common activities. The results show the deviation of the living parameters from an average value for each specific activity. Results are not as illustrative as the previous type



Slika 5: (Zgoraj) Povprečne vrednosti dopustne ravni hrupa za navedene dejavnosti.
Figure 5: (Above) Average values of the tolerated noise for the listed activities.

Slika 6: (Spodaj) Povprečne vrednosti zahtevane stopnje zasebnosti za navedene dejavnosti.
Figure 6: (Below) Average values of the required privacy for the listed activities.



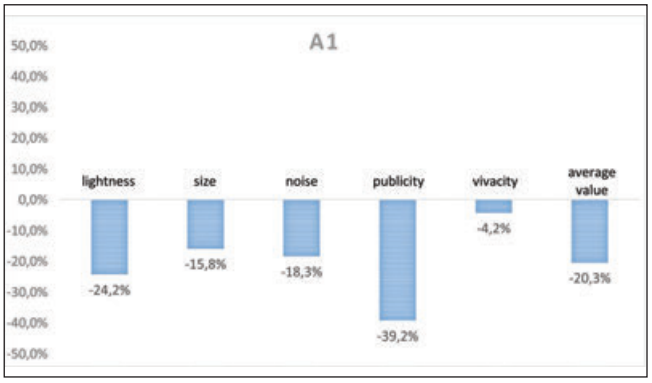


Slika 7: Povprečne vrednosti zahtevane pestrosti prostora za navedene dejavnosti.
Figure 7: Average values of the required vivacity for the listed activities.

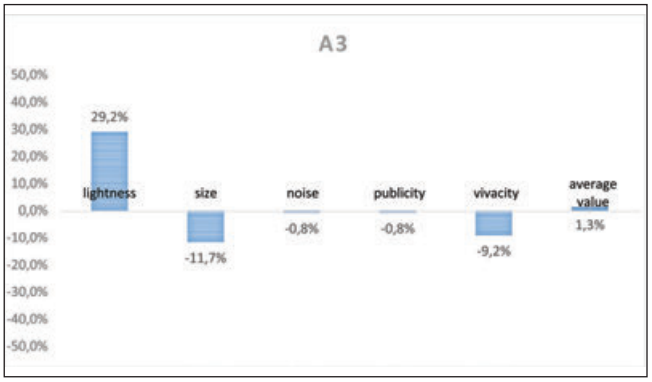
of ranks (see Percentile ranks of the living parameters), as they tend to be confusing. If we, for example, take a closer look at the result of person no. 1 (see Figure 12: Activity percentile rank for person no. 1), there is little concrete information that can be directly used in a design. As mentioned in the previous chapter, this person prefers slightly less light, less noise, smaller room size and especially a much higher level of privacy; we can further conclude that this is true for most of the activities, while only bathing, eating, dressing and reading are close to the population mean values. The activities with a result of 0% were not present at all.

In certain cases when we deal with persons very close to the mean values it can be useful to take a closer look at the activities' ranking, since the parameters do not tell us much. In the case of person no. 3 (see Figure 13) we already found that the person deviates from the population only in terms of lightness. The person would prefer to have more light in the apartment. Looking at the bar chart, we find that this is particularly true for activities of daytime rest, laundry (!), children

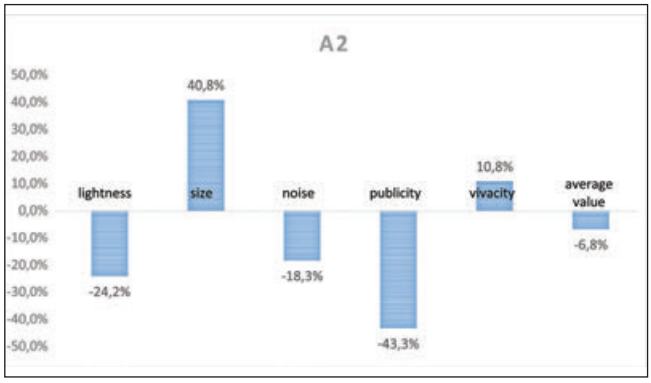
Slika 8: Percentilni rangi parametrov prebivanja osebe št. 1.
Figure 8: Percentile ranks of living parameters for person no. 1.



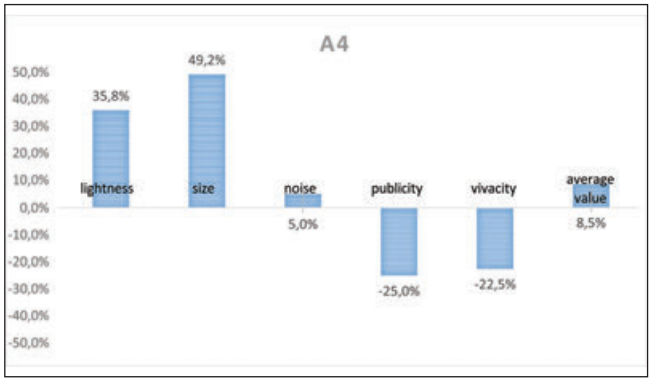
Slika 10: Percentilni rangi parametrov prebivanja osebe št. 3.
Figure 10: Percentile ranks of living parameters for person no. 3.



Slika 9: Percentilni rangi parametrov prebivanja osebe št. 2.
Figure 9: Percentile ranks of living parameters for person no. 2.



Slika 11: Percentilni rangi parametrov prebivanja osebe št. 4.
Figure 11: Percentile ranks of living parameters for person no. 4.



playing, gym, and watching TV. In the end, this makes a lot of sense. We could mistakenly place the TV set or sofa into a darker part of the apartment, which would be against the person's desires.

6. Discussion

We have shown several methods how statistical tools can be effectively used as a supplement tool in a flexible housing design, i e. not only to learn more about the general directions that housing design should follow (correlation and average value analysis), but to be able to address the particular expectations of individual future residents (percentile ranks). It is very important that a flexible design should already limit a set of choices (e.g. types of partitions, their positions) to select from or provide a set of predefined layouts [Schneider & Till, 2007]. During the design process, the partitions can be similarly evaluated according to their provision of light, publicity, silence, and vivacity. So the right choice is more a matter of a mechanical decision than a professional one. Similarly, various layouts can be evaluated according to the overall or particular room sizes. With movable and sliding walls [ibid.], lifetime adaptability in room sizes can be achieved. As a set of choices from the book Flexible Housing [ibid.], we would suggest combing our design method with the following principles:

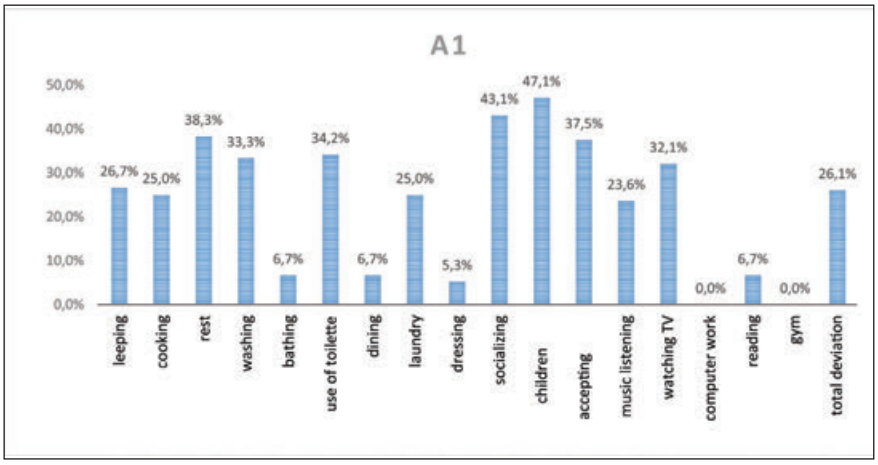
- functionally neutral rooms (allowing various room properties independent of its function),
- connections between rooms (to flexibly control lightness, privacy, and noise),
- layers and clear span (to allow lifetime changing of the partitions with different spatial parameters).

Using a simple and effective flexible design, we can combine the technological part of the process with the part on the users' side. The statistical tools are simple enough to be used in any kind of web-based platform to help potential residents to effectively and independently find the suitable future apartment.

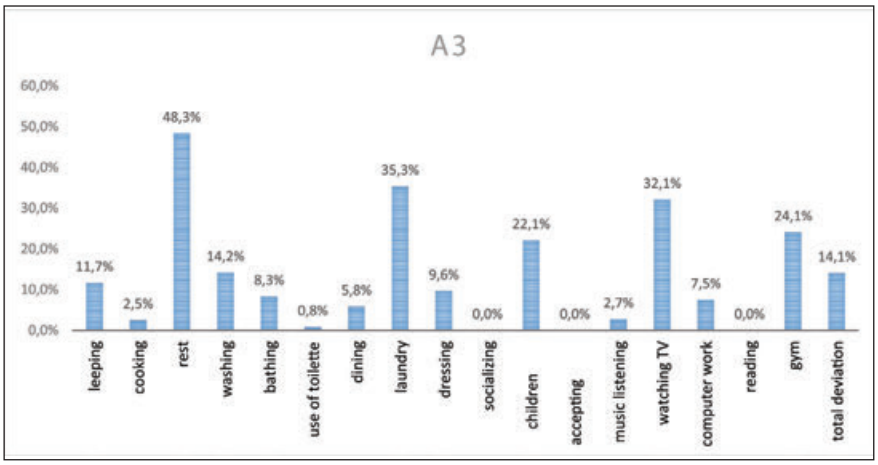
On the other hand, this research – contrary to our previous work – proved that it is very important to use the results from the group analysis of a relatively small population with similar interests and background, i.e. the group, which is likely to define the target residents of the designed housing. If the initial population is too big or too sparse, we cannot gain enough initial directives for the overall design. We can conclude that a sample of 50 respondents is fine enough to get a relevant picture.

Smooth integration of survey results with the design method is also challenging. An interdisciplinary team of architects, designers and computer programmers could provide enough operational knowledge to make our proposed methods generally applicable.

Slika 12: Percentilni rangi dejavnosti osebe št. 1.
Figure 12: Activity percentile rank for person no. 1.



Slika 13: Percentilni rangi dejavnosti osebe št. 3.
Figure 13: Activity percentile rank for person no. 3.



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OBČUTLJIVOST JAVNIH PROSTOROV NA PRIMERU GDAŃSKEGA OBMOČJA OSOWE

SENSITIVITY OF PUBLIC PLACES IN GDAŃSK OSOWA DISTRICT

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Ključne besede
Gdańsk Osowa; vrednotenje javnega prostora; občutljivost prostorov

Key words
Gdańsk Osowa; public space evaluation; sensitivity of places

Izvleček

V pričujočem prispevku so predstavljeni rezultati raziskovanja na Fakulteti za arhitekturo Univerze v Ljubljani v času doktorskega gostovanja prve avtorice iz Gdanske tehniške universe, in sicer v okviru predmeta 'občutljivi prostori mesta', pod vodstvom druge avtorice. Študija izhaja iz posebnosti problemov območja Osowe v mestu Gdansk na Poljskem.

Razvija idejo ravni in vidikov občutljivosti urbanih prostorov, ki zahtevajo odzivne ravni in načinov oblikovalskih posegov v prostor. Za premostitev dvojnosti med prepoznavanjem problemov in možnosti prostora sta uporabljeni dve metodi: prva se osredotoča na konceptno razumevanje prostora ('space syntax' metoda), druga pa poudarja izkustveni vidik (metoda 'spatial sensitivity').

Med rezultati naj poleg metodoloških prispevkov poudarimo interpretacijo občutljivosti prostora, kot izhodišča za razumevanje njegovih razvojnih možnosti, kar kaže tudi vzorčni primer. V razpravi so razložene raznolike ravni pomena in prenosljivosti rezultatov.

Abstract

This paper summarises the results of the research carried out at the University of Ljubljana, Faculty of Architecture, Slovenia, during the PhD visiting period of the first author from the Gdansk University of Technology, Poland, in the framework of the PhD course "Sensitive urban places", leaded by the second author. Focusing to the specific problems of the Gdansk Osowa district in Poland, this research develops the idea of sensitivity levels of public places, requiring respectful modes and levels of design interventions. In order to bridge the gap between the spatial potentials and the actual situation it demonstrates the dichotomy using two evaluation methods: the first representing abstract (the 'space syntax' method), the second starting from the experiential point of view (the 'spatial sensitivity' method). The results include the incremental methodological contributions to the methods used as well as the interpretation of place sensitivity as the starting point of the intervention potentials of the case study itself. The discussion shows the diverse levels of the transferability and relevance of the results.

1. Introduction: problem background, research questions

The paper presents the research carried out to define and describe the sensitivity of public spaces in Osowa, a suburb district of Gdansk (Poland). The work was done in collaboration of both authors during the course "Sensitive urban places" at the University of Ljubljana, Faculty of Architecture. The first author, as an inhabitant of the district, experienced the problem of lack of social interactions and interventions in public spaces in Osowa. She decided to conduct a study on sensitivity to changes of significant public places of this area. The PhD exchange from the Gdansk University of Technology to the University of Ljubljana offered the opportunity to investigate the reasons through the traces of the perceived problems, which are reported also in the research on post-socialist urban governance [Sagan, Grabkowska, 2012] or recent applied research results [Cultures of the Suburbs, 2014]. The case-study related open question, addressed in this article, is: how to define the intervention needs, to enhance the potentials of places discussed?

The second starting point of this paper is the idea to use the 'space syntax' method for the investigation mentioned. It is a theory initiated by Bill Hillier and Julienne Hanson in 1984 at UCL Barlett School of Architecture in London [Hillier & Hanson, 1984Sagan, Grabkowska, 2012]. Hillier & Hanson, 1984). The initial assumption of the methodology was to create a language and grammar to arrange spatial elements and analyse those (Hillier, 2009). From the beginning the method was used as a tool to help architects to simulate the likely effects of their social projects. Since then the methodology is constantly improved and developed as a design method that can determine the nature of space. It is used to help to understand how buildings, areas, and even entire cities operate. The theory is based on several principles described mathematically, which give a possibility to generate graphs and numerical results, maps and analyses of linear space availability. The theory proves that the way in which elements are brought together affects the behaviour of its users (Hillier, 1996). The starting point for this idea was the observation that it matters where and how people walk in the city. From analysing a spatial configuration it is possible to predict how people would behave in a given space. It is possible to use space syntax methodology to study both micro and macro scales. [Hillier & Vaughan, 2007]. Analyses always consider 2D layout model, which can be loaded into a special program (e.g. DepthmapX). Bin Jiang and Christophe Claramunt [2002] described the process of analysing given data. In the Space Syntax Methodology, only topological properties of space matter. All of analyses start from the subjective process of separating elements of spatial configuration and what is between these elements. There are three ways of topological representation of the space (axial map, convex space and isovists). Each of these representations is used for analysing different aspects of space. For urban configurations the best representation is axial map. With the special algorithm it is possible to examine an axial map and calculate its four basic syntactic measures (Connectivity, Depth, Control value and Integration). The result is a 'spatial accessibility map', or 'spatial integration map'. On such a map, the lines representing the most accessible spaces are marked in red, and the least available in blue. The results achieved from space syntax analysis very often match with the empirical observations and this it seems nearly a literal translation of spatial experience into 'scientific' language of spatial interpretation. The question addressed in this article is related to the complementary nature of this method: how to combine the abstract knowledge which can be created using this method with the knowledge from more experientially oriented practical methods?

The third starting point is the 'spatial sensitivity' method used in the PhD course of the University of Ljubljana, Faculty of Architecture, entitled Sensitive Urban Places [Zupančič, 2009-]. Among the objectives of the course are: an ability of cross-scale phenomenological thinking; an ability of parallel spatial investigation from conceptual and experiential point of view and an ability of experimental methodological developments for micro-urban redesign and redevelopments. The idea of sensitivity of urban places is seen as the red-line of the evaluation system development. The levels of sensitivity, delicacy, fragility and/or vulnerability are defined from different points of view - for example: natural sensitivity, social, architectural...; the summary evaluation is far from a simple numerical exercise, but an integral investigation. Furthermore: the levels of sensitivity are taken as referential 'platforms', and are always contextualised: minimum and maximum (or/and the intermediate one) are defined within a selected socio-cultural context, represented by selected actual cases. The relativization of seemingly abstract numerically defined referential framework bridges the problematic gap between quantitative and qualitative evaluation. The identification of spatial sensitivity, even fragility [Zupančič et. al, 2011], is complemented by the identification of the modes and the levels of interventions needed and possible, respecting the sensitivity level detected. This requires a high level of responsiveness, challenging the sensitivity of people involved in both evaluation and co-design of places discussed. This sensitivity of people needs to be enhanced, awaken consciously, as it doesn't derive from talent only. The open question, addressed at this article from the methodological point of view is: how to address this sensitivity both of people and spaces - to develop the in-depth investigation without losing the integral and holistic nature of the method?

2. Methods

As mentioned in the introduction, two existing methods, the 'space syntax' and the 'spatial sensitivity' method were used for the evaluation of the case study. The questions stated in the introduction were answered through the evaluation process itself: both - case study and methodological development related.

The starting point for the initiation of studies was an attempt to capture the nature of the character of suburban district and to present its characteristic places in the urban

scale. The basis for the identifying those places was the experience and impressions of the residents.

To answer the question about the potential of public spaces in the described district was required an understanding of the current functioning of the various public spaces in Gdansk Osowa. Methodology was based on a comprehensive study of the functioning of open spaces in the district. The first step of the research was to collect data and information about the area. It was followed by the analysis and evaluation of the chosen spaces and finally a suggestion of what might be improved. The methodology was based on map analysis, sketches, and a community interview. Overviewed spaces helped to isolate potential sub centres that could be used in a variety of ways by citizens. Selected public places were examined in terms of availability, ownership, visibility and control, and the potential for being centres. To find the relationship between the spatial configuration and people's movement in the district, a special method called Space Syntax was used. This method allowed estimating which spaces are theoretically more available for the people and thus are more likely to be used frequently. The benefit of examination public spaces as a spatial geometry was a theoretical model of the occurrence of a well-suited places to be centres of social life in the district. The results obtained with these methodologies showed some similarities and were consistent in general.

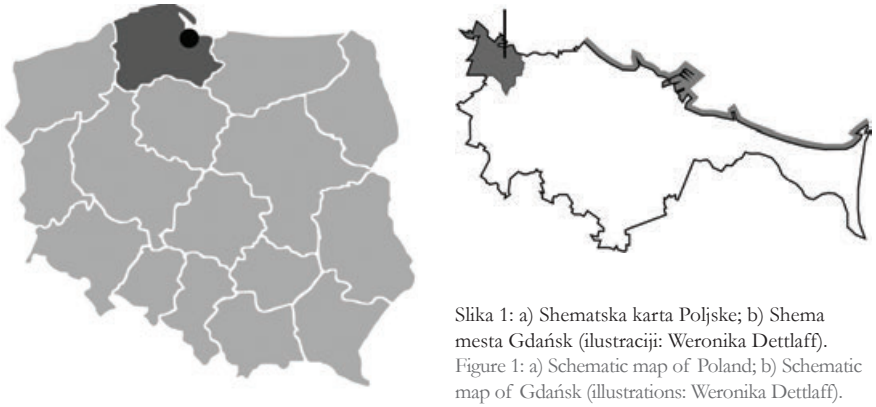
In the end of survey, three spaces were analysed and compared in detail. The key of this selection was to find and describe three places with different amount and scale of changes required to revive them and improve their social potential. The notion of "sensitivity" of space was used to show how susceptible to changes an area is and how some particular changes made there could influence the social interactions in the whole district. It should also be noted that during identification of origin of the problem occurring there were extracted distinct features of public spaces, which influence social life.

3. Case study

3.1. Location and the history of district

Osowa is a suburb district located in the north western of Gdansk. It borders with two other cities (Gdynia and Sopot) belonging to the Tri-city metropolis. It is surrounded by Tri-City Natural Landscape Park from the west and two lakes (Wysockie and Osowskie) from the east. The eastern side of the district is crossed by the Tri-City Bypass. The size of the area is around 14.13 km² and it is inhabited by 13,245 citizens [Okręgowy Urząd…, 2014]. Figure 1 shows the location of Osowa on the map of Gdańsk and the map of Poland.

"Osowa" as the name of a village was first mentioned around 1659. In 1973 it was joined to Gdansk as its suburb district. After a few years some new living quarters were built there, followed by the erection of the first church in 1983 (parish of Christ the Savior). Since 1995 several wholesalers and supermarkets were placed in Osowa. Four years later the first regional clinic and a police department were established. In 2000 a new church was built, dedicated to St. Nicholas Polycarp. In the meantime, three schools were opened, a primary school, a gymnasium and a high school. The district has expanded significantly since 1973 and is still growing. A major part of the population consists of young families with children.



Slika 1: a) Shematska karta Poljske; b) Shema mesta Gdańsk (ilustraciji: Weronika Dettlaff).
Figure 1: a) Schematic map of Poland; b) Schematic map of Gdańsk (illustrations: Weronika Dettlaff).

3.2. The observed problems of the district

The relatively young district is an example of suburbanization in Gdansk with many typical problems of such areas. The low housing prices resulted in almost 13,500 new residents in the last 30 years. Despite the fact that the district is densely settled already, public facilities, pavements, bike roads, or even streets are still not completed.

Public transport in Osowa offers three bus connections with Gdańsk Oliwa and one to the city centre and Old Town. However, none of them drives around the district itself. Many citizens have to walk very long distances from the bus stops to their house. The railway station is located at the end of the district and is neglected, as the trains from Gdynia pass by very rarely, and there is still no connection to Gdańsk. Lack of jobs in Osowa forces the citizens to drive to Gdańsk or one of the neighbouring cities (Sopot or Gdynia) every day. This in result, combined with a poorly developed public transport causes huge traffic jams on the main street to Gdańsk Oliwa during peak hours.

Despite the fact that there are three schools in Osowa and that children form a great part of the population, there are just a few places for them to play outside. Due to the insufficient number of social and cultural events, the residents spend most of their free time in their houses and gardens. And yet, even the neighbours hardly know each other.

The architecture of the district is rather poor. Although a lot of new houses are being built, their design refers mostly to those already existing ones, than to some examples of good contemporary architecture.

These social and architectural problems were an impulse to form a diagnosis about the potential places for urban acupuncture interventions.

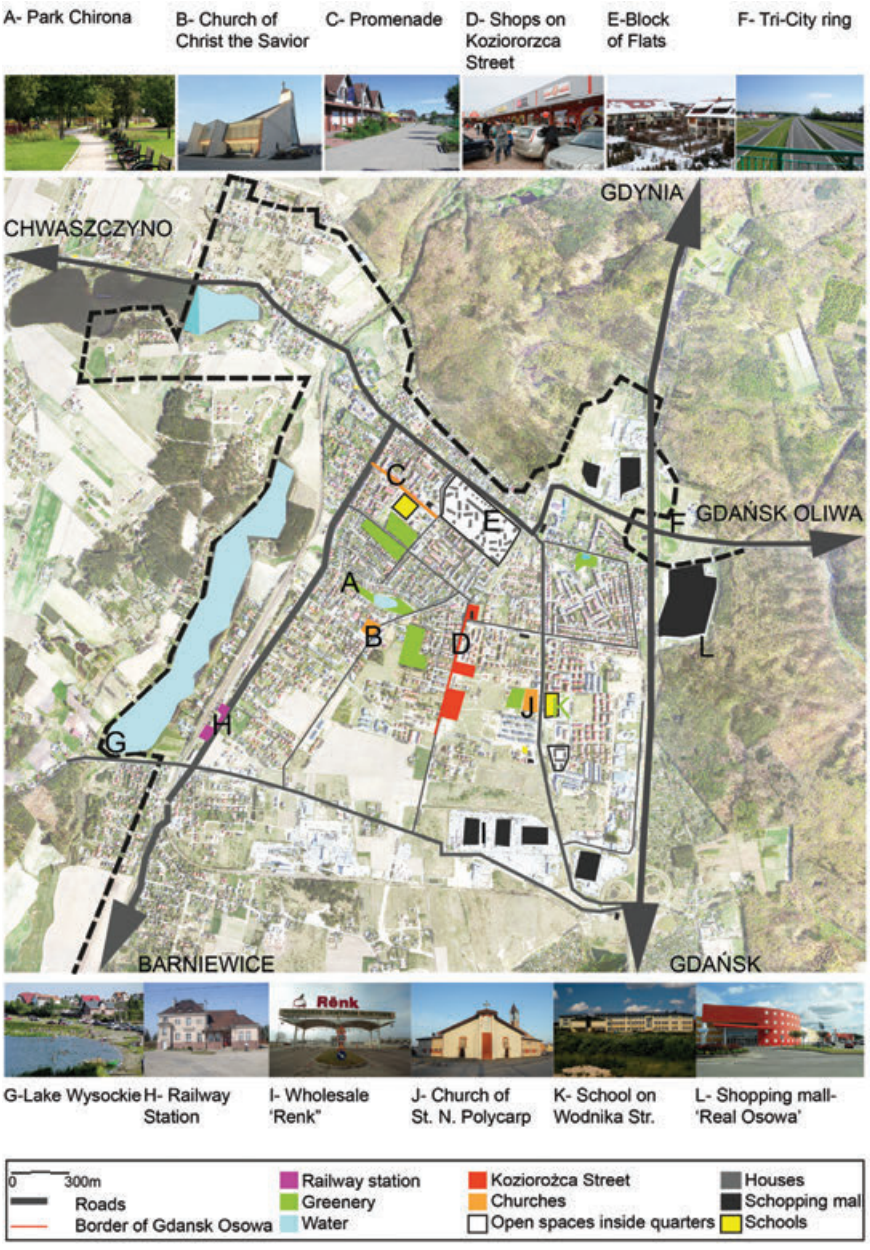
3.3. Analysis of Gdansk Osowa

Two types of analysis (one analysis based on observations and the space syntax analysis) were conducted to find and characterise the most significant public spaces in Gdansk Osowa. The first of the analysis was about the spatial use of the district. The methodology was based on sketches, analysing maps and personal experience. To improve the sense of character of Osowa some places of different use were extracted.

3.4. Analysis based on observations

From the result of the first stage of analysis some conclusions were drawn (Figure 2). All of significant spaces with unique character were selected and evaluated further. Those could be used in the future for creating and improving the sense of a community in the district.

Slika 2: Prva faza analize: (upo-)raba prostora v Gdańskem območju Osowe (ilustracija: Weronika Dettlaff).
Figure 2: First stage of analysis: terrain usage in Gdańsk Osowa (illustration: Weronika Dettlaff).



Firstly, it appeared that two churches form quite a strong community in Osowa. Not only church squares provided public spaces for meeting, but also school areas are the potential places for integration of the users. There are also three green recreation areas – a big park, a playground at the pond and a forest. In addition, the lake seems to be also an area that could stimulate potential social activities.

The district appears to be full of trading places. Twelve shopping centres larger than 2000 m² were found in the district. It could be a reason why people rather meet inside the shops while doing shopping, that in open air. Unfortunately, only a few of the living quarters appeared to be open for everybody, without any fences around. This is also an obstacle for finding a peaceful place for citizens' interactions.

3.5. Space syntax analysis

The second analysis was about the spatial configuration of open spaces in the district. Analyses were made with the methodology of space syntax.

In the Figure 3 all of the open spaces in Gdańsk Osowa were examined with this method.

The result of the space syntax analysis of Gdańsk Osowa shows the axial map terms of integration. The darkest segments are those most intensively integrated in the whole spatial system. It means that in these spaces it is highly possible to meet the biggest number of people. Consequently, these spaces could have the largest potential for development as a centre of the district. The opposite situation relates to places that are blue in the picture. The more place is blue, the less people would appear in there. The diagram showed that not only the promenade in Osowa is a good meeting place, but also Koziorożca Street should be such one as well. The results of that analysis were firstly surprising, because contemporarily this street is very poorly developed.

However, later on this was a starting point, which has helped to recognise a big potential of this space.

3.6. The chosen examples of public spaces in Gdansk Osowa

During the process of identification of the nature and sensitivity of the public space in Gdańsk Osowa eight places were selected, that seem to be the most significant for the development of Osowa's community (Table 1). Each of them offers some potential to become an attractive place for the users. The criteria that were taken into account are: Ownership, Accessibility, Use, Visibility and Control [Hertzberger, 1991]. Accessibility, Use and Control where 'graded' from one to eight (one means the weakest and eight means the strongest). All the results are shown in the Table 1.

3.6.1. Open spaces between old blocks of flats

This public place is located between old blocks of flats in the oldest part of the district. The quarters are organised in a clever way, which allows having some privacy in the public. There are a few playgrounds for children, some public and private greenery around. Because of the fact that visibility of that place is low, the access to the place is difficult. On the other hand, that makes this place very cosy, welcoming and comfortable.

3.6.2. The pond on the Kielnieńska Street

The park near the pond on the Kielnieńska Street is one of the few green places intended for both adults and children. There are some benches and playgrounds for children and although it looks neglected, the place is in use for the whole year. For example, during winter there is an ice rink on the pond.

3.6.3. Park Chirona

Park Chirona won a competition in 2008 for being the most pleasant open public space for people in Gdańsk. The facility is a complex of greenery combined with playgrounds for children and adults, benches and small bridges above a small river. Nowadays more and more people appear there and use all its facilities every day.

3.6.4. The square of the Church of Christ the Savior

It was historically the first place where people started meeting and making closer relationships after masses. Nowadays the square is near by the Chirona Park and is rather used for bigger events connected with catholic feasts than for every day meetings. It is also used as a parking place because of its size and good accessibility.

3.6.5. Koziorożca Street

Koziorożca Street would seem to be a very important street as it is located right in the middle of the district. However it is poorly developed, having nothing more to offer than one shopping complex. There roads is not finished, without pavements or bike paths. People walking there use

Slika 3: (Levo)Rezultati 'space syntax' analize prikazujejo povezovalno vrednost odprtih prostorov območja Gdańsk - Osowa. (ilustracija/ DepthmapX: Weronika Dettlaff).
Figure 3: (Left) Results of space syntax analysis shows the integration values of the open spaces in Gdańsk Osowa. Analysis made in DepthmapX (illustration: Weronika Dettlaff).

Slika 4: (Desno) Izbrani so prostori, ki so najbolj pomembni za razvoj skupnosti gdańskega mestnega območja Osowe. (ilustracija: Weronika Dettlaff).
Figure 4: (Right) The extracted open spaces that seem to be the most significant ones for the development of the community in Gdańsk Osowa (illustration: Weronika Dettlaff).

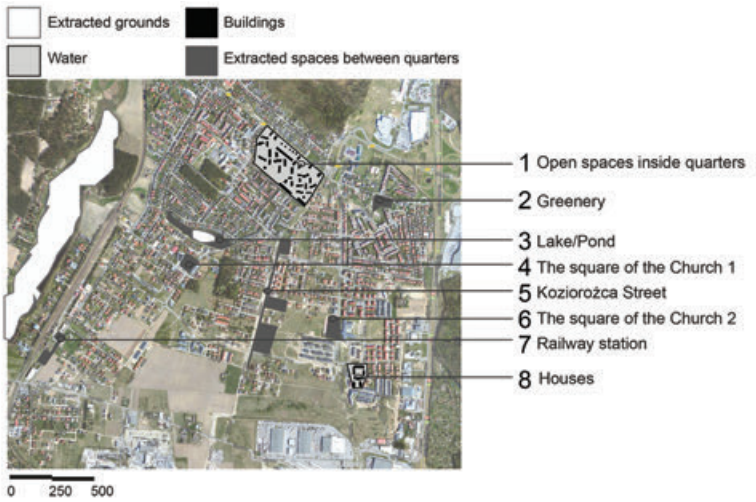


Tabela 1: Ocena izbranih javnih prostorov.
Table 1: The evaluation of extracted public places.

PUBLIC SPACES \ VALUES	OWNERSHIP		ACCESSIBILITY	USE	VISIBILITY			CONTROL	SUM	PLACE
	public	private			weak	medium	good			
1 Open spaces between old blocks of flats	public		3	5	+			7	16	IV
2 Pond on Kielnieńska Street	public		4	6		++		3	15	V
3 Chirona Park	public		5	7		++		4	18	III
4 Square of Church of Christ the Savior		private	7	3			+++	6	19	II
5 Koziorożca Street	public		8	4			+++	5	20	I
6 Square of Church of St. N. Polycarp		private	6	2			+++	2	13	VII
7 Railway station 'Gdańsk Osowa'		private	2	1	+			1	5	VIII
8 Open spaces inside quarter on Wodnika Street		private	1	4	+			8	14	VI

their own trodden paths. There is no greenery, or any places to rest. Cars pass by this street regularly because is the shortest way to across the district. It is very surprising that this area is still undeveloped, even though it would potentially bring many social and economic benefits.

3.6.6. Square of Church of St. N. Polycarp

Square belonging to Church of St. N. Polycarp is nowadays the hosting place of some social events for the whole district. This church is quite new and the community is still growing. Even though the new church and the square are still under the construction, it is a place for some picnics (e. Ex. "Osowiada") and other activities. The square is planned to have some places to rest in the open air. The place appeared to be one of the most interesting on Wodnika Street. Only this area along the street is completely open for all users.

3.6.7. Railway station 'Gdańsk Osowa'

Railway station 'Gdańsk Osowa' appears to be one of the worst public spaces in the district. The place, which should be full of people, is empty and almost closed. It is located in the end of the district and insufficiently connected to the rest. Two buses ends their route there, but the lack of train connections reaching this station makes it look practically abandoned. The interior of the building is in a poor condition as well. There are no restrooms and the ticket office is usually closed. People waiting for the few trains during the day stand on a very old platform with just a few benches. For 2015, the new metropolitan train connection is planned to be opened and this would be a chance and a good occasion for restoration and revitalisation of this area.

3.6.8. Open spaces inside quarter on Wodnika Street

The quarter is rather unknown, because is hidden in the end of Wodnika Street. In this quarter, everything is open and well organised. The inner part of the quarter is visible from the blocks standing around so it is well controlled. The only inconvenience is that the quarter is located far from the centre and almost nobody visits this neighbourhood on regular basis.

3.7. Tree chosen public spaces from the previous ranking

The last part of the work was intended to choose three from the spaces listed above, compare them and find out what is their "sensitivity for changes". The Table 2 shows the evaluation of the tree extracted places from the previous research. It was decided to select one place with the best, one with an average and one with the worst potential. Each of these places has some strengths and some limitations

3.7.1. Koziorożca Street

Koziorożca Street appeared to be a public space with big potential for development. Because of its location and accessibility, it can be well controlled. It might be good organised and it is a chance that it could be a new centre of the district. Many changes are necessary to be done to make this place more pleasant for people.

3.7.2. Open spaces between old blocks of flats

Block of flats, which had the fourth place in the previous ranking where extracted as a space with medium potential. It is a place that is very sensitive for any changes. Its character seems to be very delicate. The location and its potential are used quite well. There are spaces that are calm, peaceful and suitable for relax and recreation. Only few changes are needed to improve this public space.

Tabela 2: Omejitve in možnosti bodočih intervencij v treh izbranih javnih prostorih gdanskega območja Osowe.
Table 2: The limitations and potential for the future interventions of three chosen public spaces in Gdansk Osowa.

	KOZIOROŻCA STREET	BLOCKS OF FLATS IN OLD OSOWA	RAILWAY STATION
LIMITATIONS	1- no infrastructure, 2 - no small architecture, 3 - no pavement, 4- not in use (untapped its potential)	1 - hard to get there, 2 - hidden space, 3 - not very available	1 - too far from the centre of Osowa, 2 - no infrostructure, 3 - no reception, 4 - only few trains during the day
POTENTIAL	1 - very good visibility, 2 - very good access, 3 - access is sufficient for a lot of different activities	1 - places for children, 2 - a lot of greenery, 3 - not closed, 4 - safe, 5 - good proportions of silence, safety and available activities.	1- in 2015- new conncections with Gdańsk and Gdynia planned, 2 - a possibility to make more bus connections, 3- a lot of spaces for small infrastructure, 4 - alternative for car transport
SENSITIVITY OF THE PLACE	normal	very sensitive place	now- not a sensitive place
INTERVENTIONS	To use and explore the potential of the place- a whole comprehensive project should be made. Pavements, bike roads, infrostructure, greenery, playgrounds, benches, bike parking needed.	Almost no intervensions needed. Only small changes- more benches, more toys for children.	The place should be more available. Renovation and new interventions are needed to make this place more usable. Firstly- more connections with Gdańsk and Gdynia needed. More buses and the car parking necessary. Bike parking, more greenery around, small infrastructure, toilets, cashbox, small shop are required.

3.7.3. Railway station 'Gdańsk Osowa'

The last space is the railway station, which had the last place of the previous ranking. It is needed to improve its use. The first thing, which is needed, is to rework the timetable of bus and train connections. Obviously, it is not exploited enough to relieve the car traffic. When the connections would be improved, then the whole infrastructure around should be planned in such a way, that would let the users interact there. Small architecture of all kinds is needed there as well as some new facilities inside the building.

4. Discussion and conclusions

The case-study related open question, addressed in this article, is: how to define the intervention needs, to enhance the potentials of places discussed? The answer is clear and demonstrated in the case study: in respect to the sensitivity levels detected, and to the sensitivity modes recognised.

The results obtained with the methods used showed some similarities and were consistent in general. However, it is clear that experience related issues cannot be communicated with methods focusing to their abstraction only - like in the case of the space syntax method. The knowledge, which can be created using this method, needs to be combined with the knowledge from more experientially oriented practical methods. Searching for balance of abstract and experiential point of view is the key to complementary knowledge creation.

On the other hand, the 'spatial sensitivity' method takes the balance between abstract and experiential aspects into account seriously from the very beginning. Nevertheless, the question of general and specific should always be re-addressed. How to develop the in-depth investigation without losing the integral and holistic nature of the method then? One of the answers is demonstrated in the case study evaluation: keeping the awareness of the method contextualisation level in mind. The aspects important for the context may vary (usual criteria of natural, social and architectural point of view were integrated through the criteria of public/private definition) but the idea of the referential matrix, representing the wholeness, remains.

There are some results of the study, which are transferrable to other places in further work on the case study:

- the examination of Park Chirona as a space where people from the district spend their time. For the first author, after the examination finalised this is a place similar to the "green living room" in the district. She would like to compare how people from different groups (et. sex, age) chose the place in Chirona Park to spend their time. This suggests thinking about similarities of living rooms in the houses and open public spaces in the districts. People spend their free time there – meeting together, entertaining, doing sports, eating, dating. All kind of activities, which they do in living rooms - but in the city.

Other results can be identified as transferrable to other cases in further work:

- the examination which key factors affect the liveability of a district/ city is the next step: "A liveable city is a city where I can have a healthy life and where I have the chance for easy mobility – by foot, by bicycle, by public transportation, and even by car where there is no other choice… The liveable city is a city for all people. That means that the liveable city should be attractive, worthwhile, safe for our children, for our older people, not only for the people who earn money there and then go and live outside in the suburbs and in the surrounding communities. For the children and elderly people it is especially important to have easy access to areas with green, where they have a place to play and meet each other, and talk with each other. The liveable city is a city for all." [Hahlweg, 1997]

After exchange in Ljubljana the first author met Malgorzata Chmiel, who is the Gdansk City Councillor. She also lives in Osowa. Unfortunately even though she agrees with the need of changes – those changes seem impossible to her. Almost all areas have private investors and nobody cares about public good. She explained that the city cannot use the research results presented because almost all of the places discussed no longer belong to the city. Park Chirona was one of the city terrains. To create it was a very big investment and the whole process last for two years. The discussion mentioned indicates that the research conducted was of a simulative nature, theoretical –'just' professional analysis and evaluation…. It can be used in scientific research about Gdansk urban spaces. However, the case study can still be continued:

- The first option is talking with actual/existing investors/ actual stakeholders/land owners about the profit they can make while contributing to common goods.
- The second option, which is even more relevant, is to involve general public in the discussion, to introduce civil control of investor's behaviour. After all, not all investors are fixed… and also the urban policy is changeable… Media can help.
- The third scenario is to find investors willing to benefit from the new offer to common goods. The keys are the long-term defined economic-arguments. A recent referential example of working with communities and offer professional solutions shows that it is possible to find investors and not just simple responding to their demands without having the public dimension in mind [Examination Tom Holbrook, 2014].

These results are transferrable within the field of urban design, focused to practice and/or to practice based research:

- To create a district which functions well it is needed to develop different kinds of

possibilities for users.

- Every potential place for changes has its own sensitivity and needs different level of interventions.
- The 'space syntax' method should be used as an extra tool to describe space. It should be used with other tools.
- The results can be also developed and used for theoretical studies about spatial configurations of public spaces and its users

Last but not least - this is transferrable most generally: Not all of the problems and potentials are visible from the first inspection. More than one type of the analysis is needed to look at the problem holistically, even in the case we believe in the holistic nature of one of the chosen methods.

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USTVARJANJE PROSTOROV RAZNOLIKOSTI IZ PROSTOROV SODOBNOSTI: PRIMER SOSESKE JANE-FINCH, TORONTO (KANADA)[1]

CREATING 'SPACES FOR DIVERSITY' FROM 'SPACES OF MODERNITY': THE CASE OF THE JANE-FINCH NEIGHBOURHOOD, TORONTO (CANADA)[1]

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Key words
modernist planning; spaces of diversity; Toronto; community planning

Izvleček

Modernistično načrtovanje in urbani razvoj sta pogosto urejala prostor brez upoštevanja prebivalcev na območjih urejanja. Veljalo je splošno prepričanje, da je načrtovalec tisti, ki dobro pozna problematiko in tudi rešitve. Načrtovalec je bil postavljen v vlogo oblikovalca (načrtovalca) fizičnega prostora s odrejanjem odprtih zelenih površin, visokimi zgradbami ali z določanjem območji stanovanjske zazidave. S temi preddoločenimi načel so modernistični načrtovalci zasnovali in oblikovali mnogo novih sosesk, novih mestnih četrti in celo novih mest. Idejno so sledili tezi idealnih skupnosti v idealnih prostorskih zasnovah. Pogosto so se ti ideali preslikali v njihovo nasprotje: izguba kvalitet prostora zaradi utilitarnosti zasnove; zgoščevanje etičnih skupin, območja revnejšega prebivalstva, stigmatizirane skupine in visoka stopnja kriminalnih dejanj.

Na severozahodnem delu mesta Toronto je soseska Jane-Finch, zasnovana je po modernističnem načelu in ima vse značilnosti razdvojenosti med teorijo in prakso. Cenena stanovanjska gradnja in priseljenske skupine so osnovni atributi. Navkljub stigmi, to območje doživlja preobrat pri upravljanju prostora in prebivalstva. Članek obravnava ta preobrat in predstavlja nujnost iskanja novih načinov načrtovanja z vključevanjem kompleksnih urbanih skupin v ta proces.

Abstract

Modernist planning and urban development created a lot of residential space without consulting the people who would live in it. It was generally assumed that the professional planner was the best judge of the needs of the community and knew exactly how to meet these needs through physical design: open green space and high-rise, cheap-to-build apartment blocks with fresh air between them. With these and other principles in mind, modernist planning, produced many neighbourhoods and new towns in an attempt to create 'ideal communities and spaces'. Before long, most of these neighbourhoods and towns had lost their charm and had descended into rundown hubs of poverty, racial and ethnic exclusion, criminality and stigmatisation. Toronto is no stranger to this problem. Jane-Finch, a neighbourhood in the north-western corner of the city is one of the products of modernist planning. Jane-Finch, as a cheap neighbourhood, houses a large immigrant population and diverse groups, but thanks to its community-planning tradition, some social transformations are taking place there and turning a stigmatised rundown area into a community hub. This paper discusses the changing social and spatial dynamics in the Jane-Finch neighbourhood and underlines the need to find new planning approaches in order to deal effectively with an increasingly diverse and complex urban society.

1. Introduction

Driving into the Jane-Finch 'neighbourhood' the first thought that springs to mind is "Where is it?". Driving on a highway, passing creeks, bridges, big intersections, waste green space and low-density, almost empty strip malls, and finally high-rise apartment buildings in-between, one can't help wondering what makes this place one of the most diverse and socially organised 'neighbourhoods' in Toronto. The feeling of 'being lost' in this waste space with unidentified empty areas merely reinforces the image of Jane-Finch as perhaps the most stigmatised area in the city. It is hard to imagine that anyone could define the boundaries of this space, let alone develop a sense of 'belonging' (figure 1). Yet, there are people in Jane-Finch who feel a very strong bond and even talk about the Jane-Finch community with passion. How can one develop a sense of belonging and community in this vast area of 21 square kilometres with a density of about 4 persons per kilometre [Census, 2008a] and no physical infrastructure to bring people together? Looking deeper at this complex neighbourhood, which is a product of modernist planning, one realises soon enough that community means a lot to the residents of this area, which seems 'borderless and meaningless' to an outsider. This article tackles the challenge of accommodating a highly diverse population in a space originally designed for a homogeneous population and the questions surrounding the transformation of planning in this new social setting of urban diversity.

Modernist urbanism aimed to create 'the ideal city' by adopting rigid, abstract, geometric patterns and functional land uses [Talen & Ellis, 2002]. Although this era also produced scholars, such as Louis Wirth and Lewis Mumford, who raised concerns about the practice of defining cities on the basis of the principles of an ideal society, to this day the modernist planning approach still envisions cities through the design and organisation of space. The places created by this approach throughout the 20th century, either in the inner city or on the outskirts, have a tendency to deteriorate into zones of poverty, crime, and social deprivation, so much so that most of them have undergone redevelopment. As the housing in most of these stigmatised and isolated areas is cheap and affordable, they have attracted a broad mix of disadvantaged groups, consisting largely of immigrants and newcomers, single mothers, and low-income households. Saunders (2011), who focuses on new, less-organised immigrant communities in such areas, or 'arrival cities' as he calls them, takes a different and positive stance by showing that the high levels of social mix actually confer rich potential for innovation and creativity. These areas, according to Saunders, provide an easier environment for starting small businesses for immigrants, especially newcomers, as the networks in these areas and outside the country offer easy access to information [Tasan-Kok, Kempen, Raco, & Bolt, 2013].

Saunders (2011) also highlights the connection between the success and failure of these people and the physical design (layouts of streets and buildings, transportation links to the economic and cultural core of the city, direct access to the street from buildings, proximity to schools, health centres and social services, the availability of high-density housing, the presence of parks and neutral public spaces, the availability of space to open a shop, etc.). Keeping this in mind, and like Saunders, taking a positive stance, this article argues that these areas hold enormous potential for the future of cities to become centres of social self-organisation, community building and participation. This article shows that spaces created by modernist planning approaches may turn into new zones of diverse forms of social organisation even though they lack the catalysts that bring people together. The article cites cases to illustrate how these modernist spaces are now accommodating communities and self-organisation initiatives. And finally, it questions the approach and place of urban planning in this era of increasingly complex and diverse urban societies.

I will first briefly underline the principles of modernist urban development that are dominant in Jane Finch and many other neighbourhoods in Toronto. After explaining what makes the Jane-Finch neighbourhood an 'in-between city' [Boudreau, Keil, & Young, 2009], I will focus on Jane-Finch as an 'arrival city' [Saunders, 2011] in which communities organise themselves without having the required spatial infrastructure and space.

2. Modernist principles of the organisation of space: What went wrong?

"Modernity […] not only entails a ruthless break with any or all preceding historical conditions, but is characterized by a never-ending process of internal ruptures and fragmentations within itself"

(Harvey, 1989: 12)

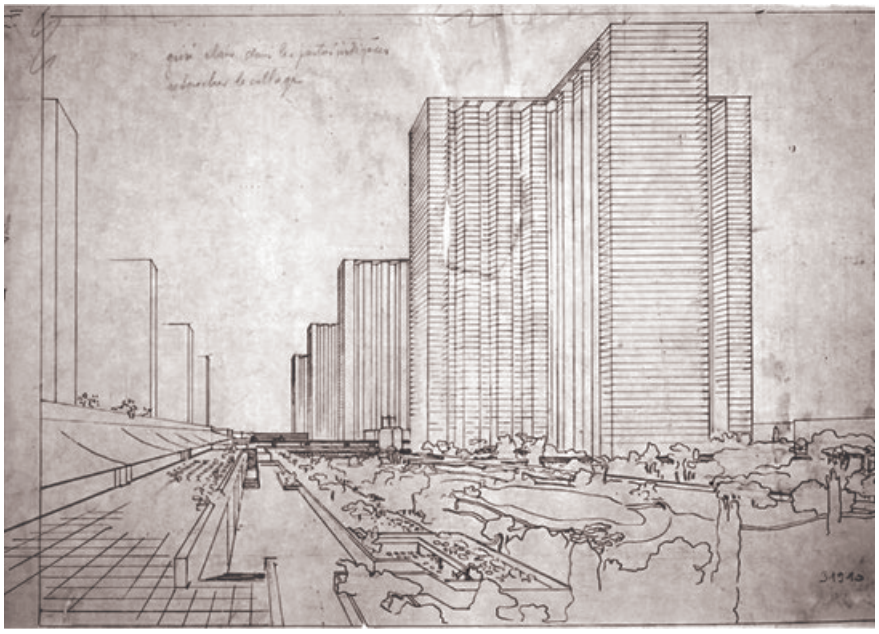
Interpreted as an extension of the 18th century 'Enlightenment' [Mautner, 1996] and as a positive movement that seeks alternatives to the classic understanding of every aspect of life via "rational planning of ideal social orders and the standardisation of knowledge and production" (Harvey, 1989), the modernist planning

Slika 1: Pogledi na sosesko Jane-Finch, Toronto, Kanada.
Figure 1: First impressions of the Jane-Finch neighbourhood, Toronto (Canada).

projects that emerged in the first half of the 20th century [Beauregard, 1989] focused primarily on achieving an ideal society by applying design-based planning interventions in urban space along the lines of positivistic, technocentric, and rationalistic universal modernism [Harvey, 1989]. Starting out from this perspective, modernist planning emerged as a design-oriented approach to urban development and resulted in the development of new towns and neighbourhoods, mainly in the suburban zones of cities [Fainstein, 2000], spearheaded by the principle of large apartment blocks isolated in an expansive green setting.

In this article the 'design-oriented planning' refers to the practice of plan-making in which the organisation of space is the main goal of developing (or re-developing) an urban area based on clear principles of physical organisation defined by the designer (architect, planner, or urban designer). As Fainstein (2000) puts it, this model of planning aims to use spatial relations as a tool to create an interactive urban community. The designer takes the advantage of his/her position to decide what is best for the people living in this area and uses special design techniques to define the characteristics of an ideal urban space. Design-oriented planning is totally different from communicative and participatory planning practices that aim to understand people's needs and demands to put these at the centre of the plan-making process. In these collaborative models of planning, participation in decision-making is part of the ideal of the 'just city' [Fainstein, 2000]. Thus, planning processes that put people at the centre of plan-making also include people directly or indirectly in the process of spatial organisation and use design as a tool to reach community targets in a collaborative way. As it focuses on creating ideal spaces with physical elements in perfect order, design-oriented planning can be seen as a product of modernity which has produced classic examples on diverse scales (buildings, neighbourhoods and entire new towns) across the world. These places are criticised for their lack of social amenities (such as retail, healthcare, leisure) and sense of belonging and safety, both on the scale of an entire suburban town (like Milton Keynes in the UK) and the scale of a neighbourhood (like Bijlmermeer in Amsterdam, the Netherlands).

A few urban designers and architects left their mark on this era. The first name that comes to mind as the founding father of the modernist movement in urban development is Le Corbusier (1887-1965), who came up with ideas to create liveable spaces in the heavily industrialised, overcrowded and polluted cities of the early 20th century. Le Corbusier was following in the footsteps of Ebenezer Howard (1850-1928), creator of the concept of the garden city where people could live



Slika 2: Poustvarjanje Le Corbusierovih načel na primeru soseske Jane-Finch.
Figure 2: Realisation of Le Corbusier's principles in the case of Jane-Finch. Source: (Left) Foundation Le Corbusier Paris (www.fondationlecorbusier.fr); (Right) Author (Jane-Finch, Toronto)

in harmony with nature. Both were trying to address the ills of industrial cities, such as poverty, density, lack of infrastructure, pollution, disease, and a desperate shortage of open space, by setting the principles of an ideal city. Their contemporary, another modernist architect, Frank Lloyd Right took yet another path to the ideal city. However, they were all searching, each in his own way, for the principles of an ideal space where society could thrive and people could even be happy [Habermas, 1983; Harvey, 1989]. In Howard's garden city shops and single-family houses formed the centre of a carefully designed geometric pattern with farmland-like surroundings; Wright created the suburban Broadacre City, based on accessibility by car; and Le Corbusier projected Ville Radieuse, a city of skyscrapers set down in open green space [Fishman, 1982].

The influence that these new approaches to spatial development had on the creation of new spaces was immense, visible, and widespread, especially on the edge of cities where land was freely available for new development. Everywhere in the world suburban new towns emerged, especially during the post-war period. The earlier suburbs that followed low-density garden-city models were replaced by large-scale public housing estates [Kostof, 1992]. Believers in low-density suburban development such as Raymond Unwin stressed the importance of streets, squares and avenues to shape the urban form: stately squares, radial streets, straight avenues and rond-points as elements of the urban fabric within a system of narrow streets [Kostof, 1992: 232]. Criticising Unwin's narrow street system for being "unhealthy and airless" Le Corbusier set very different principles for the design and organisation of urban space: high-rise apartment blocks overlooking large green spaces raised on stilts (pilotis), connected by a network of elevated highways and ground-level service roads [Kostof, 1992: 233]. His vision was simply one of skyscrapers on a grid street setting where cars could drive fast: "A city made for speed is made for success" [LeGates & Stout, 2011] (figure 2).

The basic principles of Le Corbusier's city included decongesting the city centre; increasing the density of the residential suburban areas by building skyscrapers; providing more means of transport in the form of elevated roads and railways (with a station in the centre); and large expanses of parks and open spaces [LeGates & Stout, 2011]. Le Corbusier also imagined a 'homogeneous' society that would differ only on the basis of work and residential location: 'citizens proper', 'suburban dwellers' and 'mixed kind'. His static vision also included where and how people would live and work in different parts of the city:

- Citizens are of the city: those who work and live in it
- Suburban dwellers are those who work in the outer industrial zone and who do not come into the city: they live in garden cities
- The mixed sort are those who work in the business parts of the city but bring up their families in garden cities] [Corbusier, 1989; LeGates & Stout, 2011: 338, ref. to Le Corbusier, 1989]

Le Corbusier's obsession with creating the 'perfectly functioning space' constricted his view of the people for whom he designed the city in the first place. However, modernism also produced scholars who expressed concerns about the well-being of urban society in increasingly crowded, complex, and problematic cities. Scholars such as Louis Wirth, Ernest Burgess, Robert Park and St. Clair Drake of the Chicago School of urban sociology looked at the city as a 'living laboratory' and tried to imagine the needs of a heterogeneous urban society that differed in terms of race, language, income and social status during the pre-war period. Wirth (1938) defined the city as a "relatively large, dense and permanent settlement of socially heterogeneous individuals". For him, the characteristics of the city included the size of the population, the density, and the heterogeneity (social diversity of the population), with no specific physical principles of spatial organisation, as he saw urbanism as a form of social organisation. Others such as Kevin Lynch and William Whyte had similar societal concerns and tried to improve the comfort level of the city residents by proposing design strategies for various elements [LeGates & Stout, 2011]. These rationalist planners were criticised by Jane Jacobs during the 1950s and 1960s for rejecting the importance of people and communities in cities that were characterised by complexity and seeming chaos [Jacobs, 1992].

Efforts by all these scholars, and many more, have contributed to design-oriented planning principles, some of which are still influential in planning schools today, and implemented on different scales at street and neighbourhood level and sometimes extending even to entire settlements and cities. What went wrong with those spaces? Although they offered affordable housing solutions, they did nothing to help the residents develop a sense of attachment and belonging. Lacking the spatial qualities to encourage social 'encounter and recognition' [Fincher & Iveson, 2008] between different groups, most of these areas share a common destiny as centres of alienation, social exclusion and even crime[2]. The Jane-Finch neighbourhood in Toronto, selected in this article as a case study to illustrate the failures of modernist planning, explains the fall and rise of 'spaces of modernity' in cities and their transformation with the new social composition of contemporary urban society. Here 'failures' refer both to the social problems in areas that are products of modernist planning and the lack of community involvement and democratic participatory plan-making processes. The following sections, after briefly introducing the problems of the Jane-Finch neighbourhood, focus on the changing social dynamics in this area to illustrate how this modern neighbourhood, which failed to create spaces for social organisation, community building, and a sense of belonging in the first place, started to generate opportunities for bottom-up initiatives and self-organisation dynamics by drawing on its own resources.

3. Jane-Finch neighbourhood: Story of an 'in-between city'

By 1914 the modernist ideas in urban development were clearly visible in Toronto and in the suburbs of many

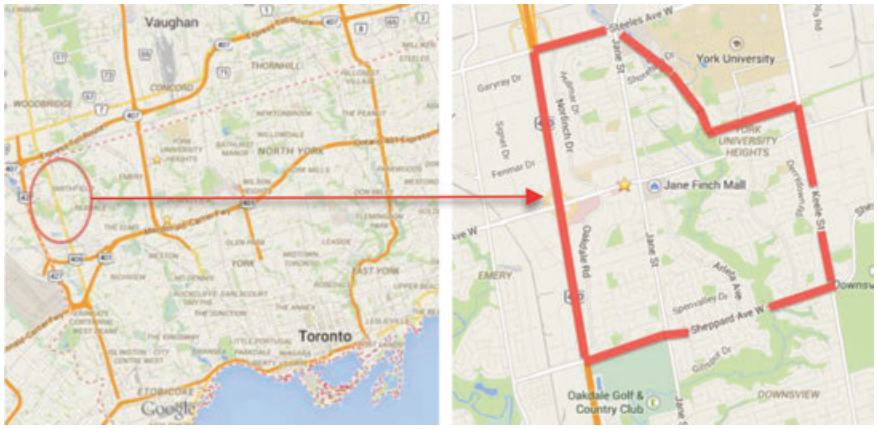
other Canadian cities [Sewell, 1993]. Examples of new modernist ideas, such as Lawrence Park in Toronto, were already appearing in the early 20th century (1909) [Sewell, 1993]. Jane-Finch is one of the many areas in the city that were developed as a result of modernist planning exercises.

Jane-Finch is an area in the north-west corner of Toronto around the intersection of two large roads, Jane Street and Finch Avenue (figure 3). It is home to approximately 80,000 people and accommodates two neighbourhoods: Black Creek, which extends from Finch Street North to Steeles Avenue; and Glenfield-Jane Heights which stretches from Finch Street South to Sheppard Avenue.

Developed as a modernist suburb during the 1960s, based on principles of large green space, wide avenues and high-rise apartment buildings, Jane-Finch was reporting community problems as early as the 1970s. Today it is one of the most stigmatised neighbourhoods in the city (see figure 4) with the largest concentrations of criminal gangs of any area in Canada. Jane-Finch is also one of the most diverse neighbourhoods in Toronto, although this does not get as much media coverage as the crime rates.

Boudreau, Keil and Young (2009) define Jane-Finch as an 'in-between city'. They describe it as "an area in need of some rebuilding" between modernity and post-modernity and explain what defines the Jane-Finch neighbourhood on the basis of three modernist ideas (p. 124-125): public housing, experimentation in planning and urban design, and immigration policy. This analytical framework is useful for explaining the social and spatial characteristics of the area.

Public housing was the main driver for planning and developing this area throughout the 1960s. By the mid-1970s about 22.5% of the Jane-Finch corridor consisted of public housing units built by the Ontario Housing Corporation (OHC), which was doubling the number of social housing units in the city at the time [Boudreau et al., 2009: 125]. Today, most of the housing consists of apartment blocks of five or more storeys, 66% of which is rented and 34% is privately owned [Census, 2008b]. Statistical data on the Black Creek area indicates that the number of tenants, lone parents, and multi-family dwellings is higher there than in the rest of the city [Census, 2008b]. Moreover, most of the units are in a worse state of disrepair than units in the rest of the city.



Slika 3: Soseska Jane-Finch. Vir: Google 2014.
Figure 3: Jane-Finch neighbourhood in Toronto. Source: Map Data 2014, Google.

As illustrated by Boudreau et al. (2009) experiments in planning and design principles influenced the development of Jane-Finch. The official District Plan of 1962, though it never became binding, dictated the main development style in the Jane-Finch area by stating that more than 50% of the buildings would be high-rise [Boudreau et al., 2009]. The 1962 plan was drawn up by Eli Comay, the planning commissioner for District 10 (which covered the Jane-Finch corridor) [Sewell, 1993]. There are many similar cases of modernist development that were initiated in the 1960s as part of planning experiments and which have since undergone redesign and redevelopment. Edgeley Village and San Romanoway are just two examples (see figure 5).

The 1962 Master Plan for District 10 aimed to transform this agricultural land (with scattered farms) into an urban area that focused on employment, servicing and equity. It would take the form of a residential strip with industrial employment zones and commercial areas at the intersection of wide avenues, and include schools, community centres and green space in the interior [McClelland & Steward, 2008]. The District 10 Plan was prepared by several planning organisations (Metropolitan Planning and North York Planning) and school boards (the North York Public School Board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News / GTA
Black Creek neighbourhood deemed Toronto's least livable
Black Creek, home to the intersection of Jane and Finch, is considered the least livable neighbourhood under the city's new system.
By: Zoe McKnight Staff Reporter, Published on Thu Mar 13 2014

Slika 4: Spletna stran z najmanj priljubljenimi soseskami Toronta.
Figure 4: Toronto's least liveable neighbourhood? Source: The Star (http://www.thestar.com/news)

and the Catholic School Board) under the auspices of the Federal Provision Partnership [Rigakos, Kwashie, & Bosanac, 2004]. The Partnership had expropriated the land on which the Jane-Finch neighbourhood would be developed in 1965. There have been many attempts since then to redesign and change the spatial setting of the area. In 1987, for instance, the Metropolitan Toronto Housing Authority (MTHA) searched for ways to reshape parts of the area. Architects (Alan Littlewood and later A.J. Diamond) worked on alternative forms of development to change Edgeley's setting and create more public control in open spaces [Sewell, 1993].

More comprehensive (and less design-driven) ideas began to appear in the 2000s, with the idea of 'Tower Neighbourhood Renewal', which was a joint effort by different stakeholders including planningAlliance, E.R.A. Architects (who were influential in the development of the Jane-Finch) and the Cities Centre at the University of Toronto (in the form of a report Tower Neighbourhood Renewal in the Greater Golden Horseshoe), and was commissioned by Ontario's Ministry of Infrastructure [Stewart & Throne, 2010]. Several regulatory arrangements were made which included zoning revisions, tax arrangements and loan guarantees at no net cost to the city to encourage landlords to consider redesigning buildings with green systems and allow commercial and institutional uses to develop between and in the towers[3]. Several pilot renewal projects were initiated under this scheme, including the San Romanoway Revitalisation project in Jane-Finch.

The third modernist idea referred to by Boudreau et al., (2009) is the federal government's immigration policy, which increased the flow of immigration to Canada from across the world. The immigrants ended up mainly in the modernist spaces that offered affordable housing. Jane-Finch has always been a very popular destination for newcomers to Toronto. The 2011 Neighbourhood Improvement Area Snapshot shows that more than half of the population (56%) living in Jane-Finch speaks a non-official language (other than English and French) [Census, 2013]. According to the 2006 census, 70.6% of the population in Jane-Finch belongs to visible minority groups[4]. The black (20.2%) and South Asian (18.2%) groups are more dominant than other visible minority groups such as Chinese, Filipino, Latin American, Southeast Asian, Arab, West Asian, and Korean [Census, 2008a]. Census information [Census, 2003] shows that this area has a larger number of visible minorities, immigrants and recent immigrants, more non-official home languages, and a larger population with no knowledge of official languages than anywhere else in Toronto. At the same time, the percentage of the population of aboriginal origin and with Canadian citizenship is lower than in the rest of the city.

Slika 5: San Romanoway (levo), Edgeley (desno).
Figure 5: San Romanoway (left), Edgeley (right).

This information suggests that Jane-Finch residents with their multi-ethnic, multi-cultural, and multi-lingual background live in an area which lacks a physical infrastructure to bring these diverse groups together. On the contrary, open wasteland with no social control and no connection to other land uses has provided an excellent breeding ground for activities. Gangs and criminals have claimed territories in the area, instilling fear and disconnection in the process. Yet, despite the spatial limitations and societal challenges, there are many community initiatives, civil society organisations, NGOs and other social organisations that are exerting an influence in Jane-Finch [Ahmadi & Tasan-Kok, 2014]. How does this area create and accommodate these communities?

4. Towards an 'arrival city'? Communities and social organisation in Jane-Finch

Saunders (2011) defines arrival cities as areas on the outskirts of cities where 'ex-villagers' cluster and struggle in 'hidden pockets' to "establish a new life and integrate economically and socially". They may fail or succeed, but Saunders sees opportunities in these areas for innovation, creativity, employment, social connectivity and transformation. Although it is not possible in this article to provide a full analysis of the success or failure of the Jane-Finch neighbourhood as an arrival city, this section will focus on how, during its transformation from a 'space of modernity' into a 'space of diversity', a social infrastructure of community and self-organisation managed to develop despite the absence of the necessary spatial setting and infrastructure.

At this point we need to draw attention to the meaning and importance of 'communities' in North American cities. Unlike the welfarist models of European social organisation, where the needs of the citizens are covered by state-funded social services at local and national level, the North American system works through community services that expect self-organised citizen initiatives, NGOs, and specialised neighbourhood or community initiatives. With the aid of service workers, the residents in an area can reach services or make their voice heard. In Toronto, community means a lot to urban residents from different ethnic, social and cultural backgrounds. Communities in Toronto are organised not only through ethnicity but also through other commonalities such as sexual orientation and gender, disability, employment, homelessness, age, language, health conditions, religion and economic opportunities. There are many community initiatives in Jane-Finch that provide services for diverse people in need.

As the primary community centre in the area, the Jane and Finch Community and Family Centre (JFCFC) is a very well-established organisation which plays a crucially important role in the success of the initiatives, since it functions as an umbrella organisation that provides support for the otherwise independent initiatives [Ahmadi & Tasan-Kok, 2014]. Most of these communities in Jane-Finch aim to create and cultivate 'inclusive spaces' and to build opportunities for encounters between diverse groups and collaborations among community members who differ not only in terms of ethnicity but also in terms of economic status or cultural background [Ahmadi & Tasan-Kok, 2014].

Communities are very important elements of urban governance in Canada and are becoming more visible and active in Toronto. These neighbourhood-based initiatives, says Brenner (2004), address the regulatory deficits and crises [Boudreau et al., 2009]. In fact, they fill the gaps in the system when it comes to the provision of social services. Our field study in the Jane-Finch[5] neighbourhood accentuated the influence of economic crises on the form and function of these communities. Financially dependent on federal, city and private resources, the communities are facing severe budget cuts and uncertainty and are suffering from a lack of administrative staff [Ahmadi & Tasan-Kok, 2014]. Moreover, in almost every case, it is very difficult to find the right location and space to accommodate the community activities. In a context characterised by vast stretches of empty wasteland, the need to use – sometimes unaffordable – public transport, fear of gangs, lack of space, and many other negative influences, these communities are turning some spaces of modernity into community spaces that provide an inclusive space for people to express their needs and receive services. Malls that underperform commercially, basements in residential towers, hidden in-between locations, warehouses, and anywhere that is cheap, central and easy to reach are used by the communities as places of self-organisation. (figure 6)

Since 1999 an active community-initiated rebuilding programme has been underway in Jane-Finch, following the shooting of a little girl in the area. The Black Creek West Community Capacity Building Project (BCWCCBP) was launched with participation by Jane-Finch residents and locals. Its aim was to build on 'the area's strengths' and it resulted in an Action Plan approved by the City Council in 2005 [Boudreau et al., 2009]. Moreover, following on from the work of United Way of Greater Toronto, a national organisation based on voluntary NGOs, a new

Ontario Early Years Center at Jane Finch Mall

The Spot (Where YOU(th) Wanna Be) at Yorkgate Mall

Women Moving Forward at the ground floor of a residential building

Jane Finch Community and Family Center meeting room in the basement of a residential building

Slika 6: Prostori raznolikosti in samoorganizacije.
Figure 6: Images of spaces of diversity and self-organisation.

strategy document was issued (Strong Neighbourhoods: A Call for Action) in 2005 which resulted in the definition of 13 neighbourhoods in need, including Black Creek and Glenfield-Jane Heights (Jane-Finch). These and many other federal, city and neighbourhood services are manned by volunteers, social and community service workers in the area, who are basically helping the community to keep functioning. Although these efforts seem 'responsive', rather than 'pro-active', and as argued by Boudreau et. al. (2009), are subject to state interventions, the Jane-Finch neighbourhood accommodates many community efforts that are designed for the needs of diverse ethnic, age, economic or gender groups, the youth, one-parent families, refugees and immigrants, people without a high-school diploma, low-income groups, and public housing tenants.

Our fieldwork uncovered a strong sense of belonging among the community members in this area and active participation in the community services not only as a user but also as a volunteer. Those communities, especially the ones that support disadvantaged groups, helping individuals to gain strength, self-confidence and skills and find employment opportunities include Women Moving Forward, PEACH (Promoting Education and Community Health), the COSTI specialised housing programme, the Learning Enrichment Foundation (LEF), and the Youth Enterprise Network (YEN). And there are others, such as Black Creek Farm, Aging at Home, Black Creek SNAP, Jane-Finch Action Against Poverty (JFAAP) that target harmony, social cohesion and the sense of belonging in the community [Ahmadi & Tasan-Kok, 2014]. All these efforts make Jane-Finch a special 'arrival city' where newcomers find themselves in a strong community setting without the spatial infrastructure that – ideally – should be there to support it.

5. Conclusion

Referring to modernist experiments, Jane Jacobs [Sewell, 1993] says in her foreword to John Sewell's book The Shape of the City: Toronto Struggles with Modern Planning that "planners did not know what they were doing". Although she was very positive about the modernist planning experience in Toronto compared with the US experience, she criticised modernist planners for being "artificial, simple-minded, and incautious". The obsession with creating the 'perfect place for an ideal society' was obviously shared by the architects, urban designers and planners of this era. Society is not homogeneous, nor are the needs of people. Society is diverse, even hyper-diverse [Tasan-Kok et al., 2013], which makes place-making a complex task.

Planning has been, slowly but surely, transforming. Toronto provides an excellent laboratory for understanding the main characteristics and challenges of this transformation. First of all, planning in Toronto has been moving away from the obsession with design. Nowadays, Toronto's approaches to community and social planning use design as an instrument instead of a target. They are open, participatory, and community-driven. Diverse players, such as community service providers, community representatives, social workers, school boards and academics, take part in the decision-making process, along with the planners. Many other organisations, social groups and individuals can make their voice heard. In contrast with classic metropolitan planning approaches, joint and bottom-up attempts initiate the programmes that influence urban plan making (for example, the Strong Neighbourhoods programme or the Tower Neighbourhood Renewal programme). Although the academic community is not yet satisfied with the degree and direction of this transformation [Boudreau et al., 2009] and some major challenges – not least racism – are still high on the agenda, the planning in Toronto has definitely shifted towards community-driven social policy that accommodates the needs of the diverse urban society better than elsewhere. The Jane-Finch neighbourhood shows how this transformation takes place in the space and society. Despite the physical and fiscal limitations, communities survive and not only make their voice heard in the higher echelons of government, they also provide platforms to give voice and support to diverse people in need. The unprepossessing malls, basements and warehouses provide support services for the community. People, even though they may not have $3 for a bus ride, use these unattractive places, the leftovers of modernity, to find comfort, support, training and jobs. Spaces that are designed by the modernist planners and designers for community use (large green areas, parks, commercial centres, etc.) do not fulfil their original purpose. Their functions are modified and reorganised by members of the community to create places that will accommodate community activities, initiatives and social and commercial services.

This positive stance, however, does not imply that what happens in the background of these developments is always fair. The global economic agenda on the one hand, and the crises of state-regulated capitalism on the other, have nudged Canadian economic policy towards a more competition-oriented agenda in recent decades. Toronto, as the main economic driver of the country and the target of international immigration, is affected most by this tendency. Increasing privatisation and the devolvement of responsibility to communities on the one hand, and the success of conservatives on the political scene on the other, have reduced national/federal financial support and led to less immigrant-friendly policies. Hence, communities are being left to solve their problems on their own with less staff, fewer resources, and lower budgets.

Some private attempts began appearing on the Toronto community planning scene as success stories, replacing the missing elements to make 'things happen'. In Regent Park, another product of modernist planning in downtown Toronto, a private company (Daniels Corporation) is cooperating with Toronto Community Housing, the City of Toronto, and the communities to revitalise this degenerate urban neighbourhood with a 'zero-displacement' policy for community needs. In Jane-Finch another private company, Greenwin, is involved in a public-private partnership to revitalise the San Romanoway area (Chalkfarm)[6], which is stigmatised for its heightened

levels of crime, violence and poverty. Both projects are being celebrated in the media for their innovative, collaborative public-private approach to community revitalisation, but the academic community is still sceptical as to whether including 'profit' in community planning is the best approach. Even if both these projects are successful in terms of community satisfaction and space, the question remains whether public interest can always be achieved fairly with private sector involvement, especially when the community is increasingly diverse.

Spaces of modernity will not turn into places of social interaction, cohesion and mobility in an increasingly diverse and complex society. This article, by focusing on the failure of the design-oriented modernist planning and the success of community-friendly social and spatial policy, underlines not only that new planning approaches are needed to deal with the needs of an increasingly complex and diverse urban society, but a new understanding of the place of planning in the urban policy making is also necessary to deal fairly with these complexities. Spaces of modernity, as in the case of Jane-Finch, may turn into successful arrival cities, but more effort is needed on the planning theory side to accommodate people's imagination, innovation and creativity into place-making.

Notes

1. The research carried out for this article is supported by the DIVERCITIES project, which is funded by the European Union under the 7th Framework Programme; Theme: SSH.2012.2.2.2-1; Governance of cohesion and diversity in urban contexts, Grant agreement: 319970.
2. Spaces of modernity and their impact on society are illustrated in visual media such as movies and documentaries. A good example is The Architect (a film directed by Matt Tauber, 2006) which illustrates a dispute between the designer and the community on the meaning and use of space in a high-rise housing estate in the United States..
3. http://urbanspacegallery.ca/exhibits/jane-jacobs-urban-ideas/toronto-idea-tower-neighbourhood-renewal
4. According to the Employment Equity Act of 1995 of Canada: 'members of visible minorities' means persons, other than aboriginal peoples, who are non-Caucasian in race or non-white in colour.
5. Carried out jointly by Donya Ahmadi (PhD student/researcher TU Delft) for the DIVERCITIES project.
6. http://www.thestar.com/news/crime/raceandcrime/2010/02/07/troubled_neighbourhood_desperate_for_change.html#
7. ACKNOLEDGMENTS: This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under Grant Agreement No 319970 – DIVERCITIES. The views expressed in this publication are the sole responsibility of the author(s) and do not necessarily reflect the views of the European Commission.

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PRISPEVEK SLOVENSKIH ARHITEKTOV V OBDOBJU MED LETI 1960 IN 1990 V ARHITEKTURI ČRNE GORE

CONTRIBUTION OF SLOVENIAN ARCHITECTS TO THE MONTENEGRO ARCHITECTURE IN THE1960-1990 PERIOD

Ključne besede
Črna gora; Edvard Ravnikar; Marko Mušič; Janez Kobe, Jugoslavij

Key words
Montenegro; Edvard Ravnikar; Marko Mušič; Janez Kobe; Yugoslavia

Izvleček

Prispevek predstavlja izbrane arhitekturne projekte realizirane med leti 1960 in 1990 v Črni gori, ki so jih zasnovali slovenski arhitekti. Izbrano obdobje zaznamujejo kvalitetni projekti in objekti izvedeni na območju Črne gore. Značilna za ta čas je intenzivna gradnja kulturnih in turističnih objektov. Rešitve so bile izbrane z natečaji, dobitniki le-teh so bili pogosto tudi slovenski arhitekti.

Najpomembnejše slovenske projekte v Črni gori so izdelali Edvard Ravnikar, Marko Mušič in Janez Kobe. Ti projekti so močno vplivali na drugo porajajočo arhitekturo Črne gore. Raziskava objektov in projektov je pokazala, da so izbrani projekti slovenskih arhitektov obogatili arhitekturno dediščino Črne gore. V prispevku uporabljamo izraz "architecture in Montenegro", kar zajema tudi te arhitekture, saj so postale del arhitekturne baze Črne gore. Avtorja izpostavljava, da pri tem ne gre za črnogorsko arhitekturo, saj nima sestavin, ki bi jo umeščale v ta kontekst.

Abstract

This paper examines the contribution of Slovenian architects to the architecture of Montenegro in the period of 1960-1990. This is a period of construction of more quality architectural objects on the territory of the Republic of Montenegro, from the end of the World War II up to the disintegration of the common state of Yugoslavia. The observed time period is characterized by intensive construction of objects intended for tourism and culture.Introduction of an institution of the architectural competition by the Association of Architects of Montenegro, has allowed the arrival of new ideas by architects from other republics of former Yugoslavia. This chance was considerably utilized by Slovenian architects Edvard Ravnikar, Marko Mušič and Janez Kobe, and with their works they have made significant contributions to architecture on the Montenegrin area. The time distance shows that the architectural works of Slovenian architects realized in Montenegro have significantly and permanently enriched the architectural heritage and influenced the development of the architectural thought in the local environment. This study uses the term "architecture in Montenegro", according to the authors' point of view that the architectural opus in this area doesn't have the necessary attributes in order to use the qualification "Montenegrin architecture."

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1. Temporal, spatial and cultural context

In order to consider all the facts, it should be borne in mind that Montenegro is the smallest of the former Yugoslav republics with an area of 13,800 km2, and in the analyzed period had a population of approximately 530.000 (according to the Census of 1971). In economic terms, it was one of the underdeveloped republics of the former state.

Architecture in Montenegro, for the first 15-20 years after the World War II, bears characteristics of accelerated construction of industrial facilities and residential areas for the working class, which was otherwise typical for the post-war Yugoslavia. The capital of Montenegro, Titograd (now Podgorica) was completely destroyed in the World War II, and the primacy of the developments were the capacity needed for the republic's administration and modest housing needs of the newly formed working class. Insufficient number of local architects, who were creating intensely, was offset by qualified personnel from other Yugoslav republics, mainly from Serbia. What can be said about the architecture of that time is that it was on the line of ruling modernism and has avoided the socrealism influences [Mrduljaš & Kulić, 2012].

The second wave of intense construction starts from 1960 when, after the first industrialization of Montenegrin towns, emphasis was being placed on touristic facilities, and later also cultural objects. Montenegrin coast, as an important resource in the development, was placed in focus and that required significant planning procedures and hiring of reputable designers, either via direct orders of the project or through architectural competitions. This period, with more or less intensity, lasted until the dissolution of Yugoslavia, and in this period some of the most important architectural works were created. It is important to note the development of the spatial plan "South Adriatic" in the period of 1963-1968, led by renowned urban planner Adolf Ciborovski (author of the urban plan of postwar Warsaw), with whom local urban planners were educated [Belousov, 2009].

Urban plan of Skopje, which was given through the competition solutions to Kenzo Tange in 1965, as well as the establishment of the prizes from the daily paper "Borba" (same year) had had a significant effect on raising not only professional, but also general cultural awareness on architecture in former Yugoslavia, and so in Montenegro as well. In order to understand the factors that influenced the creation of a positive climate for architecture, it is important to mention the significant echo of the "Borba" prize awarded to an architect in Montenegro, Svetlana Radević, for the building Hotel Montenegro realized in 1967. The project of this hotel represents a winning solution of the anonymous architectural competition which didn't lack influence among the workmen of the profession.

The cultural context created in such a manner had a significant impact on the profession. Union of Architects of Montenegro (SACG), encouraged by such positive developments in the Yugoslav and Montenegrin architectural scene, had promoted the anonymous architectural competitions as the best way to reach high-quality architectural solutions.

Creating such a positive atmosphere had resulted in the fact that it was exactly these architectural competitions that led Slovene architects on the professional scene in Montenegro.

The devastating earthquake that hit the coast of Montenegro in 1979 bore with itself the potential renewal upon modern principles, which gave results on the architectural scene, and prompted the Slovenian architects to contribute [Belousov,2009].

2. Works of Slovenian architects in Montenegro

Three architects from Slovenia, with five works, gave a significant contribution to architecture in Montenegro with four realized works and one that has not yet been completed and put into operation (House of the Revolution in Niksic).

Multidimensionality in the rhetoric of architectural works [Eisenman, 1987], that exceed the functional-structural and aesthetic dimension and interpret new ideas about space and meaning, are presented in this paper. Complex treatment of the architectural form, which according to Rudolph [2006] includes six determinants: local context, functionality, regional context, choice of material, psychological aspect and spirit of the time, are strongly interpreted through analyzed modern urban artifacts and advanced architectural ideas.

The fact that all the works were selected as winning on the competition for solutions is an argument in favor of their authors.

Edvard Ravnikar started the presence of Slovenian architects in Montenegro with his winning solution for Hotel Maestral in Pržno (Municipality of Budva) in 1965.

Marko Mušič realized the Memorial House and Cultural Center in Kolašin based on the first prize winning design solution done in 1975. The same year, he provided for an internal competition the construction of Lovcen restaurant. His third object, House of Revolution and Cultural Center in Niksic was provided with the competition solution in 1977. [Košir, 2010].

Janez Kobe is the author of the hotel complex Slovenska Plaža in Budva, which is also a product of the first prize winning design solutions in 1980. The building was realized in 1984 in the first phase and the second one was realized in 1989. He received a federal award of the "Borba" paper for the first phase of realization.

3. Edvard Ravnikar : Hotel Maestral, Pržno.

Hotel Maestral (figure 1) in 1965 won the anonymous Yugoslav competition, and its realization was achieved in 1971. The hotel was primarily designed as a touristic type object. Unpretentious ingrowth into the present neighborhood is the essence of the concept of this solution, as the author himself states: "Finally this position in Pržno allows us to think about the character of the park-hotel . The concept of the hotel is articulated (guest feels more in the space and in nature)" [Ravnikar, 1971:8].

Ravnikar has with this project promoted a caring attitude towards

touristic development, where he rejects the concepts applied in Nice, St. Tropez or Rimini, turning towards the landscape and the promotion of local life [Stiller, 2013].

Although uncommon, the application of red brick facade combined with reinforced concrete elements, characteristic of a particular phase and objects of Edvard Ravnikar, in time it has taken the benchmark effect that is comparable with the red-tiled roofs as on traditionally covered buildings in Sveti Stefan. This contrast of red bricks with greenness demonstrated to be an archetypal moment for this object [Vuksanović &Popović, 2006].

4. Marko Mušič: Memorial House and Cultural Center in Kolašin, Restaurant Lovćen, House of Revolution and Cultural Center of Nikšić.

Memorial House and Cultural Center in Kolašin(figure 2, figure 3) represent the most successful and to this date unsurpassed example of transposition of vernacular architecture in a modern creative expression, not only in Montenegro, but also beyond. The essence of the concept is based on distinct respect for the identity of the environment, both at the micro level and beyond. The urban context has been met with adequate scale and classified masses so that the architectural composition is unpretentious, even though, given the program content that could be expected.

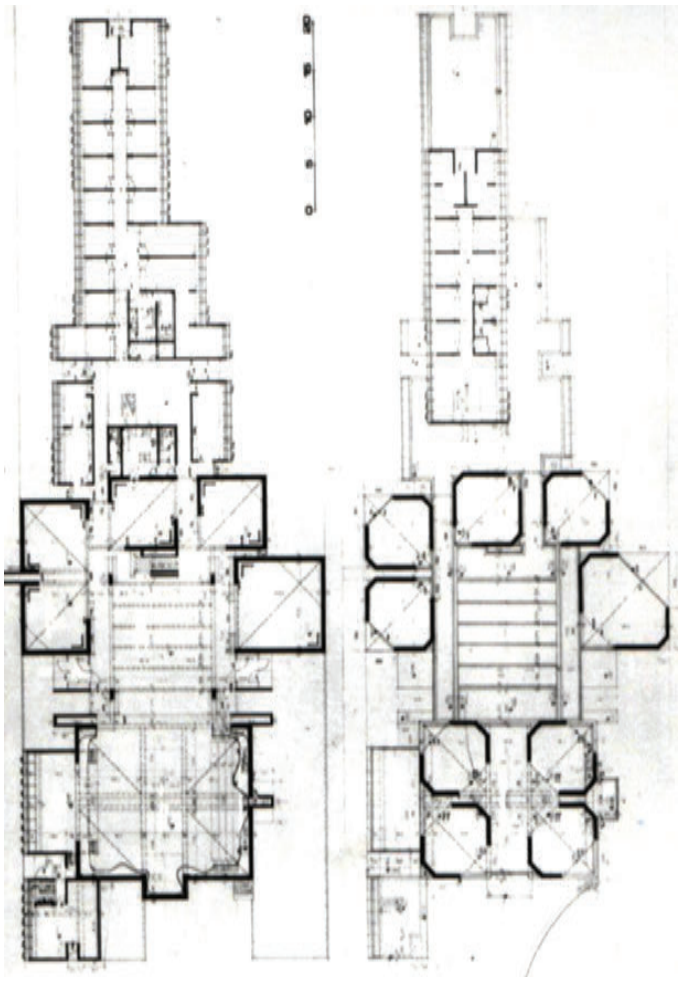
The roofs on Dinaric type of houses that is dominant in the north of Montenegro served as an archetype of architectural composition [Tokarev, 2006], [Vuksanović &Popović, 2006].

Drawing out the corps of administrative part of buildings had exempted the form of cultural content that is composed by nine differentiated cubes which allowed the essence of architectural expression. By placing the ridge on the cubes diagonally, instead of parallel pages, and indentation of these gave an original and unique solution [Vodopivec & Znidaršič,2010]. Avant-garde and bold use of white waterproofed mortar on all planes, gave the building a sculptural character amidst the surrounding greenness. Even with no direct influence, the Memorial

Slika 1: : Hotel Maestral, Pržno, arh. E. Ravnikar.
Figure 1: Hotel Maestral, Pržno, arch. E.Ravnikar.

Slika 2: Spomenik in kulturni center Kolašin, arh. M. Mušič [Košir, 2010].
Figure 2: Memorial House and Cultural Center in Kolašin, Arch, M. Mušič [Košir, 2010].

Slika 3: Spomenik in kulturni center Kolašin: tloris in prvo nadstropje [Košir, 2010].
Figure 3: Memorial House and Cultural Center in Kolašin, ground floor and first floor plan [Košir, 2010].



Slika 4: Risbe, M. Mušič. Andrijevica: dinarski tip hiše [Košir, 2010].
Figure 4: Drawings, M. Mušič. Andrijevica: Dinaric type of houses [Košir, 2010]

Centre's ultimate effect leaves a similar impression that the viewer gets from the Sydney Opera with its scattered nuclei within a singular mass. In both cases there is the principle of "group form" which was later defined Fumihiko Maki.

Restaurant Lovćen is built on the way to the cult mausoleum on Lovćen (figure 5).

It is dedicated to the bishop and poet Petar II Petrović Njegoš. Micro-location of the mausoleum was expertly chosen because it dominates the surrounding. Object of multilayered complexity achieved in an unobtrusive form, which is accessed quite deliberately so as not to, in any way, compete with the mausoleum as the primary goal.

To achieve unobtrusive position, the object is extremely reduced and spatially constrained. Doubly encoded, it is both resting on the mystique and tradition. Traditional gathering place in Montenegrin settlements (threshing floor) (figure 6), is an obvious inspiration to Mušič's work and a strong connection with the local tradition. This space is in addition to being a possible gathering site, has a lookout on the rich landscape and is also the roof for restaurants contents (figure 7).

Restaurant area goes far beyond mere utilitarianism of the facility and it represents a connection to a mythical shelter or the cave as the first human habitat[Košir, 2010].

Use of the material on the part that makes the façade represents a blend of traditional and contemporary. Dry-wall of stone is contrasted with natural concrete and glass, which gives a great effect in the ambient, confirming the importance of the past and giving the object a time stamp of an era in which the architectural work was created.

House of Revolution in Nikšić (figure 8) is the third work of Marko Music in Montenegro, also acquired by a first prize in a tender decision. Initial solution, given in the competition, was significantly expanded with new content and entered into an unrealistic investment which needed approximately 24.000m^2 area for construction. This resulted in the building still not being finished, and its fate still uncertain. Its demolition was even proposed, but the Ministry of Culture strongly opposed this, trying together with the architect Music to provide the object with an adequate function with respect to the oversized space for which the author of the project cannot be held responsible.

Designed far ahead of its time, considering its architectural composition and also by the applied materials, though unfinished, the building represents a significant emphasis of the city of Nikšić. Blue reflective glass proved to be a successful solution in the rich greenery that surrounded the building. Although incomplete in functional terms, it operates with its full capacity in the urban environment as an architectonic form. Dom

House of the Revolution in Niksic is an example of ambiguity in architectural form that has a character which is

Slika 5: Lovćen, mavzolej posvečen škofu in pesniku Petru Petroviču Njegošu II.
Figure 5: Mausoleum on Lovćen. It is dedicated to the bishop and poet Petar II Petrović Njegoš.

Slika 6: Tradicionalno zbirališče v črnogorskih ruralnih naseljih (gumno).
Figure 6: Traditional gathering place in Montenegrin settlements (threshing floor).

Slika 7: Restavracija Lovčen, pogled na strehe, arh. M. Mušič.
Figure 7: Restaurant Lovćen, roof for restaurants contents, arch.M. Mušič.

not relative or accidental, but basic and essential [Quatremere de Quincy, 1788].

5. Janez Kobe: The hotel complex Slovenska plaža in Budva

After the devastating earthquake in Montenegro in 1979, numerous hotel facilities were torn down. It was a chance to build more modern catering facilities. Without a doubt, the hotel complex Slovenska Plaza built in Budva was a totally new concept of a hotel-town, which secured its first prize at the Yugoslav competition,1980. [http://www.lba-arhitektura.com/dokumentacija.html]. It was realized in two stages (first in 1984 and second in 1989).

Integration into the structure of Budva old town is primary quality of the architectural design of the complex Slovenska plaža. Including the spatial concept of Mediterranean streets and little squares made the effect which can be characterized as an example of respect for what is familiarized as the "Genius loci". Visually, the old town of Budva and the Slovenska plaza complex integrated a much wider area that in this space suggested interpolation of the future structures of the same scale of architectural design [Tokarev, 2006] ,[Vuksanović &Popović, 2006]. Hotel Slovenian beach at the time of construction, represented a "new science of space" [Hillier, 1984], a new paradigm that interprets humanity, dialogue, scale, and complexity of urban processes.

6. Conclusion

Analyzing the previous elaboration it can arguably be concluded that the Slovenian architects in the observed period gave significant contribution to architecture in Montenegro. One of the most significant facts is the information that all objects deserved their construction with first prizes from competition solutions. Four objects were realized due to anonymous competition solutions at the Yugoslav (federal) level and one had won the internal-call contest (restaurant Lovcen).

Four of the five facilities are in operation while the House of revolution and the cultural center in Niksic are not active because of additional, unrealistic requires from investors to significantly increase the size and investments. Although incomplete and functionally non-engaged, this facility is an important city mark with its avant-garde form, so there are increasing efforts being made to put the object into operation.

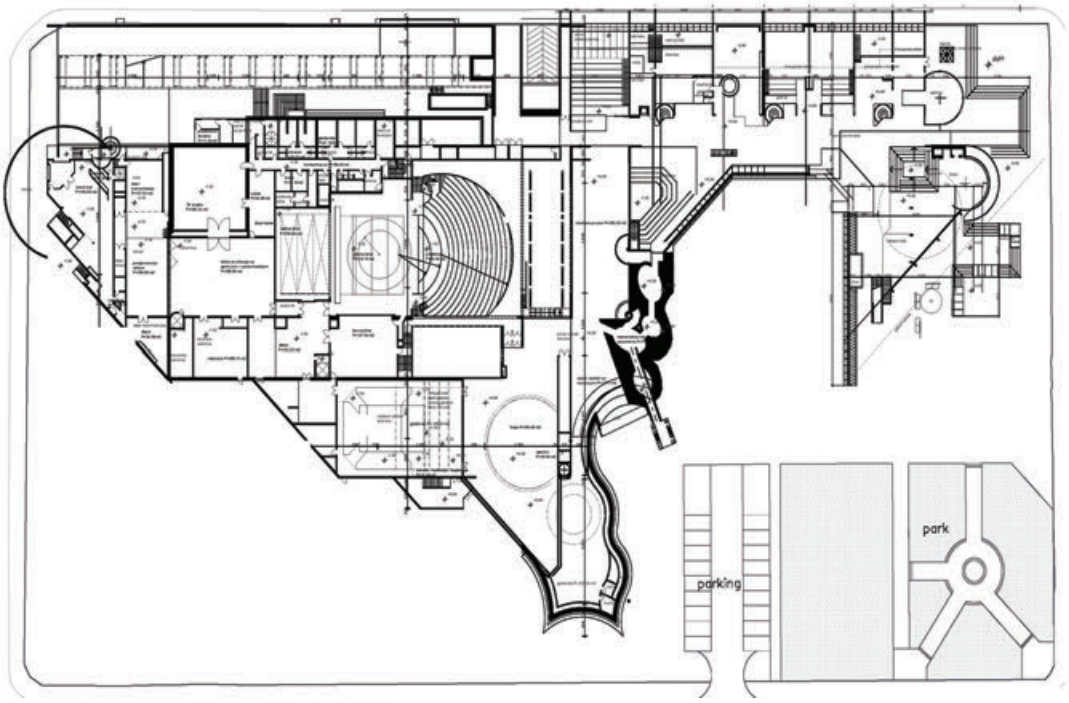
With the time distance, as an important determinant for the evaluation of architectural structures, it can be argued that each of the five buildings bear their particularity that was favored by the jury who selected them in competitions.

Hotel Maestral in Pržno still demonstrates its responsible relation toward the environment landscape, which has made it one of the architectural paradigms on the Montenegrin coast.

Memorial House and Cultural Center in Kolasin is a so far unequaled example of transposition of dinar houses in the north of Montenegro and a good fit into the existing urban milieu. By the same principle, the Restaurant Lovcen was created, and its essence is based on local traditions in terms of memory, treating the spatial patterns and use of materials. Memorial Centre and Cultural Centre in Niksic was conceived and built as a town house of great importance, as its form and structure demonstrated.

The hotel complex Slovenska Plaza in Budva, in the period of its design and construction, was an avant-garde return to composing hotels on the principle of Mediterranean settlements and integration in the old city core with its composition and urban characteristics. This building

Slika 8: Hiša revolucije, Nikšić, tloris, arh. M. Mušič.
Figure 8: House of Revolution in Nikšić, ground floor plan, arch. M. Mušič.



still persists in the area as a modernly treated extension of the existing in Budva before its construction. Complex Slovenska plaza, next to Hotel Podgorica, is the only facility that has received the prestigious "Borba" award at the federal level because it previously earned the same award in Republic of Slovenia.

If there is a common qualitative benchmark to be pointed out in all five objects then it could be characterized as high respect of the context in which they were built. Meanwhile there is not the principle of mimicry but deeply thoughtful creative process, always different for each of the objects.

For a relatively small area of Montenegro and the period under examination, five built facilities designed by Slovenian architects are an important contribution. Their treatment in professional and cultural public shows that they are among the most valuable pieces of architecture in Montenegro, not only in the observed period, but in general. House of Revolution and Cultural Center in Kolasin, by Marko Music should be pointed out in this, as ones of the top architectural achievements in Montenegro, which have overcome spatial and temporal boundaries.

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RAZLOGI IN POSLEDICE POMANJKANJA ODGOVORNOSTI PRI GRADITVI ENOSTANOVANJSKIH OBJEKTOV

REASONS AND CONSEQUENCES OF RESPONSIBILITY LACK DURING CONSTRUCTION OF SINGLE-FAMILY HOUSES

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Ključne besede
arhitekt; odgovornost; investitor; uporabnik

Izvleček

V prispevku smo osredotočeni na odgovornost na področju arhitekture, še posebej pri graditvi enostanovanjskih objektov – enostanovanjskih hiš. Odgovornost je razdeljena na dve področju: odgovornost pri projektiranju enostanovanjske hiše in odgovornost pri gradnji enodružinske hiše. Seveda je odgovornost razdeljena med tri glavne akterje: arhitekta, investitorja in/ali uporabnika in izvajalca. Izpostavljena je aktualna problematika na tem področju, in sicer: upadanje števila investicij na področju nepremičnin od 2008 do 2014, nelojalna konkurenca, zakonodaja in neskladne ter nelegalne gradnje.

Na koncu prispevka se osredotočimo na možnosti sanacijskih ukrepov izpostavljene problematike. Možnost sanacije področja izpostavimo z izobraževanja, vpeljave novega akterja/arhitekta-skrbnika s primerno izobrazbo, aktivnega medsebojnega sodelovanja med stroko, kot tudi med stroko in investitorji/uporabniki, zavedanja vloge/odgovornosti in poudarka na končnem uporabniku objekta tudi v zakonodajnem smislu.

Key words
architect; responsibility; investor; user

Abstract

This paper focuses on the responsibility in the field of architecture, more specifically in the field of construction of single family houses. Responsibility is discussed in two sections - Responsibility during designing a single-family house and responsibility during execution of a single-family house. The three main participants, on whom responsibility lies, are: architect, investor and/or user and the contractor.

Paper also discusses four issues: decline of investments in real estate between 2008 and 2014, disloyal competition, legislation, and inconsistent and illegal building.

In the end are presented possible solutions for the mentioned issues including raising awareness of person's responsibility, different sanctions for offenders, change of current legislation, active collaboration, awareness of individual's role in the process and the necessity of legally differentiating between the investor and the final user.

1. Introduction

This paper focuses on responsibility in the field of architecture and civil engineering, with emphasis on the less demanding facilities/single family houses, which are the most common type of new construction in Slovenia [STAT, 2014], see Figures 1 and 2. In this case we are discussing possibilities to find solutions, which can be applied for the position of architect and for protecting his role in the whole construction process.

The word responsibility is very genuine and frequently used in many areas, and it is misinterpreted many times. Responsibility is a composed word: response + ability. The meaning of responsibility represents a moral obligation to behave correctly towards or in respect of something or someone [Oxford dictionary, 2014].

2. Research problems and aims

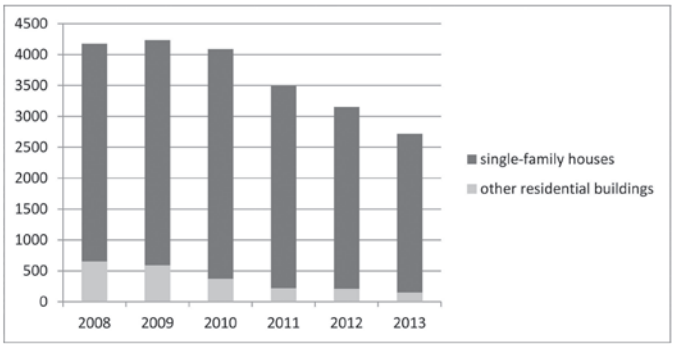
Main focus of the article is set on responsibility in case of design and execution of single family houses, which are defined as less demanding works by the Decree on the introduction and application of uniform classification of facilities and on the designation of facilities of national importance [OG RS, No. 109/11]. In case of single family houses construction the following issues can be highlighted:

- Decline of investments in real estate between 2008 and 2014
- Disloyal competition, as a consequence of investments decline
- Legislation, with ineffective instruments for supervision
- Inconsistent and illegal buildings, which are partly also consequence of legislation.

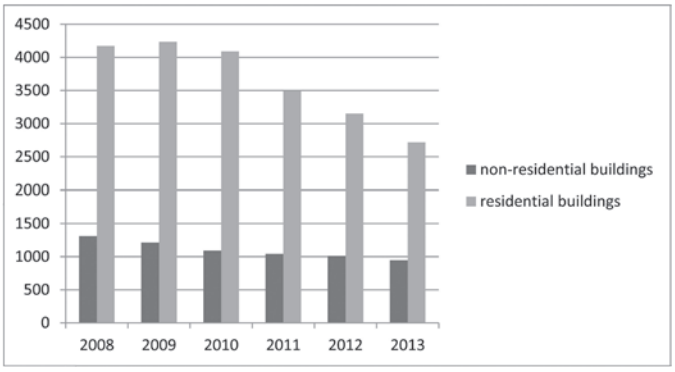
In this paper the last three listed topics are being discussed. Within these topics there are possibilities for improvement by proper amendments of the laws which are being presented in this paper.

Decline in the number of new buildings, as well as in case of single-family houses, is a result of general economic crises. Reduction of economy is having a significant impact on building sector; since the number of investors is decreasing, there also is less of inquiries for architectural work. As a consequence so called disloyal competition was launched. The exposed problem present mostly other engineers (especially the ones with completed technical secondary schools), that interfere to the area of architecture and have less knowledge about the responsibility towards profession and environment. This problem is specific for Slovenia and it is in Slovenia a given right, that cannot be just taken away, but it needs to be handled in future. Slovenian legislation, unlike for example German legislation (where the owner of an architectural studio has to be an architect), does not require that the owner of an architectural studio is a professional in the field of architecture or spatial planning. That allows formation of companies with a designing service also for informal educated person, although they still have to collaborate (in most cases over contract) with architects or spatial planners. This way engineers of other professions in the desire for work opportunities intervened to the field of architectural designing and to other related areas. The problem is as well in ethic of some architects, as they get payment only for lending the seal for project. This can be problematic as well in the case of problems during designing or construction. So the problem lays as well on the architects; as architecture is a contractual business although its performer needs special qualification and professional exam his main focus could not be in the income and profit but in the quality of his design, works, satisfaction of users, and in compliance with the environment.

Mentioned problematic of unprofessional designers is wide and



Slika 1: Prikaz dokončanih stavb v Sloveniji po letih, ločenih na stanovanjske stavbe in nestanovanjske stavbe.
Figure 1: Tabular presentation of completed buildings in Slovenia by years, separated to residential buildings and non-residential buildings [source: Andreja Benko].



Slika 2: Prikaz števila dokončanih stanovanjskih objektov, ločenih na enostanovanjske objekte in ostale stanovanjske objekte.
Figure 2: Tabular presentation of completed residential buildings in Slovenia by years, separated to single family houses and other residential buildings [source: Andreja Benko].

can be detected all over Slovenia, above all in the region of Pomurje. There it can be seen that newly built single-family houses are in many cases not designed by architects. Upon the interaction with the Chamber, the analysis for the region of Pomurje was made in year 2014 and outcome is problematic for the profession, for the architectural landscape and as well for the user of the facility (whole analysis is accessible on page: http://www.zaps.si), Figure 3.

During designing process, architects are representatives of institutional knowledge. They supervise over the interventions in space, either directly by taking part in the process via their personal practice or indirectly by affecting it through their professional organisations. The role of professional ethics in architecture should be limiting and leading this power through describing architect's responsibilities and also should be preventing unethical attitudes in all kinds of spatial practices by using this power and knowledge [Sadri, 2012].

All mentioned shortcomings in the implementation process of building a facility at the end mostly experience the facility users. Deficient legislation and loose Article (for example Articles 2, 5 and 79) have effect on quality of designing and execution[1]. And to that we can as well add the anomalies from economy and result is problematic that is seen in the built environment and landscape.

Current construction and spatial planning legislation [Construction Act, OG RS, No. 110/02] allows diverse interpretations of some specific articles and also opportunity to misuse them. The result of the amount of unprofessional workforce, legislation and disrespect of law of investors, are non-professional, non-conforming and illegal buildings which are not controlled by the competent authorities. The lack of control is determined with the lack of safety mechanisms and as well the lack of proper records about newly built objects that could activate their interference or work on their own.

3. Research questions and methods

Above mentioned issues led to the two main research questions:

- What is the responsibility of individual participant in the construction procedure defined by law?
- Who and how is he responsible for specific interventions?

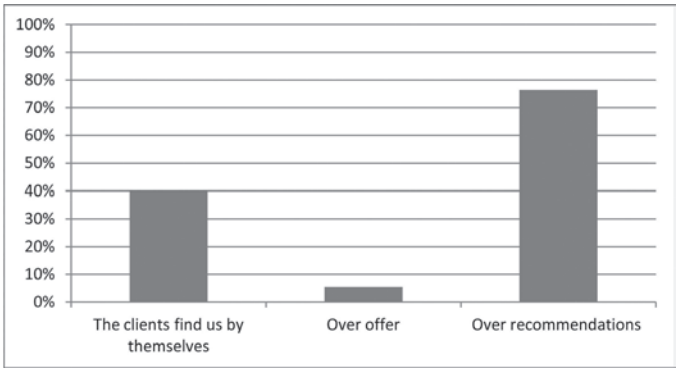
In the paper we use different research methods to answer the above mentioned research questions. Firstly, current legislation was gathered and analysed from responsibility point of view. In the whole article descriptive method is used, in some parts also interpretation of survey results. Research conclusions were made by using descriptive and synthesis methods.

4. Responsibility

The landscape is an assembly of living and inanimate nature. An inanimate nature represents that element, which provides opportunities and frameworks and living one exploits all that in the given possibilities. The cultural landscape is the result of the abovementioned: nature has made the possibilities; human capabilities are then the framework for the use thereof. When these interventions are harmonized, an optimum is achieved [Juvanec, 1993]. Spatial planning, should manage a land use in and for the future. This definition seems self-evident and universally acceptable. But also professional discussions sometimes surprisingly forget the time factor as an essential dimension of planning. The spatial planning they primarily see as an activity that regulates space [Kos, 2002].

Mentioned knowledge is also crucial part when designing and constructing of residential architecture. Architect needs to consider in every single design project many aspects; laws of nature, climate, culture of specific space, identity of landscape and identity of population. Also appropriate opportunities of building expansion, upgrading of space and spatial infrastructure in the future, and above all also the needs and desires of the client and/or user should to be considered when designing. All exposed criteria have to be part of the architect's service. Larson [1977] describes professions of architects as a systematic attempt to delimitate a non-competitive area and protect it from market forces. She [Larson, 1977] adds that the rules and regulations of a profession protect the privileged status of the profession and prevent outsiders from penetration.

The construction of a facility after Construction Act [OG RS, No. 110/02] comprises the design, execution and maintenance of the works. All this in a predetermined time frame which is in many cases set unrealistically, which is the issue of project and investment management. As such, it brings forward the delays and economic losses for the investor and/or user. At this point, search for person who is responsible for mistakes (design or execution phase) starts.



Slika 3: Prikaz deleža objektov projektiranih s strani arhitektov na območju Pomurja [vir: www.zaps.si].
Figure 3: Amount of designed objects by architects in Pomurje [source: www.zaps.si].

Responsibility during the construction process in Slovenian law is determined in different legislative documents. In this article, we mainly focus on three of them:

- Construction Act [OG RS, No. 110/02]
- Special construction usances [OG SFRY, No. 18/1977].
- Code of professional ethics of architects, landscape architects and spatial planners [OG RS, No. 6/05]

Upon them, we can divide the area of responsibility in construction into three fields:

- Responsibility during designing a single-family house.
- Responsibility during execution a single-family house.
- Responsibility during maintenance of single-family house.

In the article we will focus on the first two as they mainly concern the work of professionals.

The responsibility during designing single-family houses

The responsibility is in the field of residential architecture designing mostly defined by the Construction Act [OG RS, No. 110/02] and Code of professional ethics of architects, landscape architects and spatial planners [OG RS, No. 6/05] in the case of problems, mistakes or arguments between the participants.

Construction Act [OG RS, No.110/02] defines the responsibility by the individual roles in the design:

- the investor;
- the project designer;
- the responsible project designer;
- the responsible design manager.

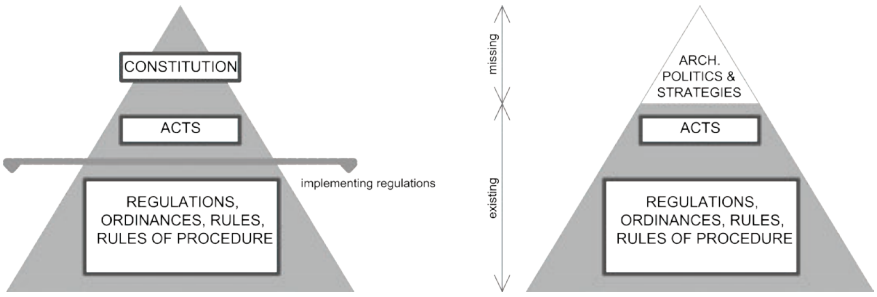
Code of professional ethics of architects, landscape architects and spatial planners [OG RS, No.6/05] sets out more detailed obligations and responsibilities of the architect. We can implement the Code not just as rules for the service but as well as a guide for ethical and quality work. Thus, in addition to the ethical responsibilities in their personal practices, architects should be sensitive to the ethical responsibilities of all actors and feel responsible for others' work as well as their own. Collective power and responsibility of architects require them to prevent and stop unethical acts in architecture [Sadri, 2012].

By professional Code and Construction Act, the architect is obliged by the acceptance of project to conclude a contract with an investor and/or user, which clearly and unambiguously defines the relationship between them, particularly the scope of work obligations of both parties, the fees, limitation of responsibility and the deadline for the commissioned service. An architect is also obliged to inform investor and/or user of the fact that he must operate in accordance with the applicable provisions of Code and other general acts of the Chamber at the conclusion of the contract (to inform the investor and/or user with the fact that he must operate in accordance with the provisions of Code and other general acts of the Chamber) or to decline the project, if he has no adequate knowledge or he has not adequate human, financial or technical capabilities. Other obligations of architect upon the Code are:

- To assume business execute regularly and without delay within the contractual investment value.
- To inform the investor and/or user in possible ways, with all the facts which might affect the anticipated volume, structure, quality or value of his work.
- To allow the investor and/or user to allow the insight into the solutions and in scope of performed work. Before starting the execution of a new work phase, the architect should require from contracting authority regular and timely confirmation of the phases of work already done.
- To respond immediately to comments or complaints by user about his work and (to try) to regulate the situation with additional notes or coordination. Complaints must be treated kindly, sympathetically and within reasonable time frames.
- Provided that there is no consensus solution to conflict situation between the architect and the investor and/or user, may the architect and the client apply to the competent Chamber to assist in resolving the dispute or to decide the argument between them [Code, OG RS No. 6/05]

Comparing the obligations and responsibilities of the designer and architect, the investor has less obligations and responsibilities. His obligations are:

- To attend all the necessary applications, orders and registrations defined by the Construction Act.
- To appoint a responsible project manager among the responsible project designers



Slika 4: Hierarhija slovenske zakonodaje [vir: Andreja Benko].
Figure 4: The hierarchy of Slovenian legislation [source: Andreja Benko].

[Construction Act, OG RS No. 110/02].

- To conclude a written contract of the contract services, which are assembled on the basis of project assignments for the design, auditing, implementation and control of execution. Contract is an important key factor in any later subsequent finding of responsibility by a problem.

At that point, we can see that the obligations and responsibilities of the architect in the design are extensive. As an expert he has to set priorities of wellbeing of investor and/or user, to realize at least prescriptions written in "Rules on minimum technical requirements for the construction of apartment buildings and apartments [OG RS, No.1/11]" and as well all other prescriptions from spatial planning acts for the region etc. In case of a conflict a competent institution for its solving is Chamber of Architecture and Spatial Planning of Slovenia. The Chamber is in a role of mediator when there is a conflict related to architectural designs and plan (between architect – investor, architect – contractors).

In any case relations between the involved participants as well as the responsibility of them is in detail set in Obligations Code, which contains the basic principles and general rules for all obligations [OC OG RS, No. 97/07]. Also in this Act the contract between the participants, which defines the role of the individual in the process is heavily exposed, as it also summarizes the Code.

5. Responsibility during execution a single-family house

Beside predominant responsibilities for the architects, there are also defined responsibilities which need to be implemented during the execution of works. In addition to the above-mentioned Construction Act [OG RS, No. 110/02] and the Code [OG RS, No. 6/05], in this case there are as well valid the Special construction usances [OG SFRY, No. 18/1977].

In addition of above mentioned responsible participants, in construction of works, the legislation, adds some more actors to the process:

- the contractor;
- the responsible executor of works;
- the responsible construction site manager;
- the supervisor;
- the responsible supervisor;
- the auditor.
- The responsible auditor
- The responsible leader of auditors.

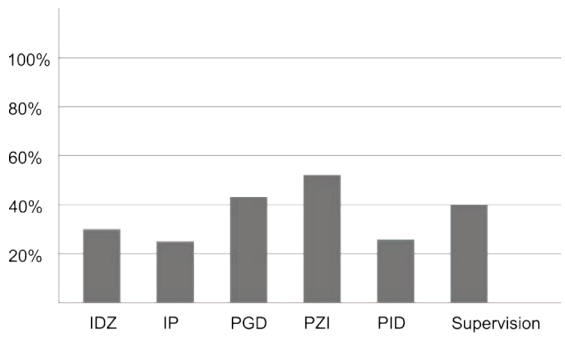
Contractor builds the facility after the architectural plans under the supervision; in rare cases it is the architect who is responsible design manager. It is clear that in this case there is no official demand of mutual communication between the investor, architect and contractor. Control of execution is delivered by supervisor (Articles 2, 30, 32 and 33), but again many times there is lack of control over his work. Often, the contractor is the one who hands over the completed house. Since there is possibility of mistakes during execution (hidden mistake) the guarantee in case of hidden mistakes must be as well included in the contract.

The greatest importance is again the contract highlighted by the law between the involved participants. The Special construction usances [OG SFRY, No. 18/1977] regulate the relationship between clients and contractors in the execution of construction works; however, they can be used only if all contractors agree with the usage of them, what is inscribed at the beginning of the act. In this way we can see the Usances as the recommendations for the quality work between the investor and the contractor. The Usances are nowadays replaced with the so called FIDIC contracts which are internationally acknowledged.

6. Discussion

According to presented facts and the analyses of the legislation, we can determine that the building legislation in Slovenia is properly set. Although the responsibilities of key participants and resolving disagreements options are defined, the situation in praxis is reverse. Nowadays often seems that the profession of architect lost his reverence, although the architect remains a key link in the design process. Slovenian architects acquire basic knowledge about designing in college and additional knowledge is achieved in practice.

Upon the analyses of mentioned problematic, we can clarify that it arises from:



Slika 5: Odgovori na vprašanje Kako [arhitekti] navežete stik s strankami, iz ankete izvedene v l. 2012 [n = 55] [vir: Andreja Benko].
Figure 5: Answers on the question How do you as an architect contact/reach your clients? From the survey in year 2012 [n = 55] [source: Andreja Benko].

- Non-compliance of the built object with planning permission.
- Lack of control by the competent authorities (inspection services).
- Indefinable responsibility of unprofessional or improper interventions.

High-lightened problems mostly affect users of the buildings. The result is as well environmental degradation and the depletion of traditional architectural landscape. Because of this, it is necessary to point out that contemporary architecture reflex the technological point of view, and in terms of comfort. That is why it is desirable, but only if it is in accordance with the requirements of the terrain, the landscape and not unprofessionally copied from foreign architectural magazines and interposed in a foreign environment. In this way, a remarkable object could be accepted as a striking - foreign object in area. The object that is properly designed in most cases reflects the surrounding architectural landscape and is designed upon the conditions of that environment. Rarely all the conditions of a copied object fits in the landscape where we want to build (a copy), but the adaptation of the object to the new building environment, according to all the conditions and requirements is a domain of the architect. In this way we cannot agree with the expression, that a good copy is better than a poor original; as this expression also argues with the serious question of architects' ethical work and the question about the authorship. Spector [2001] in his work The ethical architect: The dilemma of contemporary practice, exposes that the Codes of ethics prove that profession is committed to higher forms of behaviour, and strive to sustain the market of proffesion and architectural landscape.

In most cases, the architect has to be the strongest link on one side between all engineers, officials on relevant administrative body and on the other side with investor and/or user. Apart from designing the building, he has to coordinate all processes, which are at that time active in certain phases of designing. He has to be able to coordinate them in the way that they come to the end in the shortest time [Benko, 2013]. Due to the emphasised problems, especially economic and time perspective, it is evident that new key participant in the process of building construction in Slovenia could be needed. This role could be assigned to an architect/trustee, who would coordinate and oversee the entire process of construction, and would have certain authorisations and responsibilities including moral and ethical principles. By this means, the architect would be involved also in an execution phase of construction, as the praxis nowadays is different. "Gutachter/Sachverständiger" is an expert from particular field of expertise (also architecture, civil engineering, etc) and can with this field help in problem solving. His opinion is as well used for free evaluation by the court in the case of mistake and can in that way help court with his expertise [Kochendörfer, et.al, 2010]. The figure of German Gutachter could be a role model. In Germany he is a legal person and is in many cases as well active figure in the process of building construction in most cases hired from the investors site.

Upon that we believe that architect with his education, experience and knowledge must remain the linking point of the construction process, as he is also aware of the consequences of inappropriate interventions and is as such really the key figure of construction process. Therefore he should present them to the investor and also to contractor. In this context, some upgrades of existing articles are needed. Also the sanctions for the violations are defined, but the supervision of building sites is weak. Saying this, we encourage more strict supervision over the practice. Legislation defines many compulsory parts or phases in the process of construction, but they are in case of less demanding works optional, for example technical inspection, which is a condition of the operating permit of the facility [Construction Act, Article 5] or size of self-managed construction [Construction Act, Article 79]. The problem in this case appears, when the investor is not also the user of the house – with operating permit the guarantee for the materials used in execution starts.

Practice shows that most of the investors of single-family houses are also the dwellers of the designed building. In many cases, an architect is chosen on the basis of collected recommendations, see Figure 5.

Average person/user is confronted with building procedure only once in a lifetime. Therefore it is crucial that the investor and/or user, actively participates with the chosen architect and as well trust them. The architect as an expert with experience on this field, must guide and advice the investor and/or user throughout the entire process of design. Phases of scheduled work procedure in connection with the phases of design procedure can be problematic for the investor and/or user, if he does not have already some experience about it [Benko, 2013]. The procedure must be transparent for both sides, but above all understandable.

Although the investor has to bear some responsibility towards the architect and his work, he has to provide for that the contractor builds the house in accordance with the architects' plans. The investors' duty should be to notice and consult the architect about any additional changes during the construction of the house. In this case all the changes are noted and the responsibility for the changes and mistakes can be as well traced. Investor and/or user has to be aware of the consequences of changes in architectural plans, and what this intervention means from the view of spatial intervention, additional changes of the building permit, and particularly from the time planning and economical point of view. These are in many cases key factors for the investor and/or user. Although in the last phase (maintenance) the most responsibility lies on user, and he has to be aware of that fact.

The contractor has to be responsible and take the job for which he knows that he is able to complete. He is obliged to execute the building in accordance with building permit. Therefore, the investor also authorizes the responsible executor of works on a building site [Construction Act, OG RS, No. 102/04]. Responsible supervisor ensures control of the works. A single operator is hierarchically accountable for the work that he performs.

Determination of individual responsibility is crucial. Legislation defines primarily the responsibility and duties of the architect, supervisor and the responsible executor of works that are included in Construction Act [OG RS, No. 102/04], Spatial Planning Act [OG RS, No. 110/02], Code of professional ethics of architects, landscape architects and spatial planners [OG RS, No. 6/05] and Special construction usances [OG SFRY, No. 18/1977] set out in detail. However, the obligations and responsibility of investor and/or user and the contractor are less determined then legislative duties and responsibilities of an architect. This is the area which we have to focus on in the future with the legislation changes. With these minor changes, better results would be achieved as the whole new building act.

Not only legal definition of individuals' responsibility, of great importance is as well raise of awareness of the responsibility. With greater awareness of responsibilities of the key participants involved in spatial interventions there would be significantly less non-conforming works and also less of technical problems in the case of natural disasters, which would be as such avoidable. In future, that should be as well one of architects' goals – raising awareness about the built environment and personal responsibility towards it.

Unfortunately, the search for the responsible one in the construction starts with delay or mistake during the construction process. The exposed can cause several factors and can be the problematic of poor architectural plans (investor orders only the legally necessary plans), problem of unqualified designers, disrespect of the legislation (the built object is not the same as the plans), lack of the control, lack of the building skills etc. All this can result in losses in time and economy, due to search and argumentation for responsible participant.

Respect of legislation and tradition, the relationship and sensitivity towards the space are related to our common level of culture and knowledge that we have about the space. On this influences the culture of society that is fundamentally formed during the time of compulsory education [Rožman, 2013]. Because of these facts we expose the basic need for actions to improve the current situation. A preventive arrangement of early education is set as a key arrangement for the architectural literacy of investors and other participants included in the construction process. The architectural literacy is necessary for the comprehension of consequences of improper space interventions and also for the acceptance of participants' responsibility in the process.

The financial compensation for the damage is a common practice, when dealing with the responsibility. In most cases the mistake is not eliminated, and result requires compromise in the execution. Therefore in the search of responsibility from a formal point of view and in the case of potential mistakes, the contract between the main participants plays the key role, which regulates responsibility from legal perspective. It as well extends the area of responsibility and shows a tendency for good mutual cooperation, trust between the participants and the need for changing the established way of performing architectural practice at present time.

7. Conclusion

With the use of different work methods within this article, the problematic in this field was outlined and discussed. With the method of synthesis in conclusion of the article some mechanisms for improvements was suggested.

Work process of design needs to be optimized also with amending the legislation which requires more motivation, initiative and also will from individuals and as well form competent chamber, as this requires more time. The highlighted issues, especially lack of effective safeness mechanisms which are important for the copyrighted work of architect for the protection of investors, contractors and users. Therefore, we propose special intermediate conclusions of different phases in designing and execution which could be coordinated by architect/trustee. This participant would have the overlook over the whole procedure and enough of the professional knowledge for the supervision of it. In this way, the buildings would be executed in accordance with the issued building permit. As well his first task would be to compose the project assignment (which should become obligatory) with the full time-table, budget, limitations etc. The main contribution of architect/trustee would be in this case in time saving, time organisation, optimisation of project budget and also the quality of the designing and construction phase, as this participant would take over the phase of acquaintance the investor and/or user with the design procedure and with the special issues that could appear. Architect/trustee would respond to the investor and/or user and as well to the architect.

An important step is also some minor changes of current existing spatial legislation. With small changes of the existing Articles the result could be visible in new realisations of projects. This changes are meant in especially for Article that owner of the architectural studio needs to be an architect and for more jurisdiction of inspection services. We have to bear in mind as well, that new act about the illegal buildings is until year 2020 under moratorium, what can bring Slovene built environment in this years to even worse conditions.

All key participants, investor, architect, contractor should be more active, collaborative and present in construction process. Proper collaboration and especially open and transparent communication, strives to the effective work, optimisation of participants' time and as well to the economy of procedure and sources by the maximum performance. With that we mean as well the representative of the administrative authority which issued the construction permit and a representative of the consents. At the meetings the participants should confirm the compliance of the changes of designs with the issued building permit. In order to obtain a better and more transparent oversight of construction, compliance and quality-built facilities this would be a reasonable upgrade of legislation and practice – execution.

It is important that every participant knows his role (duties, obligations

and responsibilities) during the construction process. By following the tasks there is higher safeness of project and easier, cleaner and successful execution of project secured. Responsibility means to take over the project and qualitative, ethical and moral execution of work from the start until the end. The quality of works execution offers to the users better living conditions, longer usage of the object and smaller operational costs. But responsibility lies on the user and/or investor as well, although it seems that there is none or little awareness about that. Looking towards the future, these elements are key factors for every user of the house. At this point it is important to include the end user as one of key participants also to the current construction legislation, as up to now, there is still not defined difference between investor and users are different person.

Last but not least the remaining topic which is as well outlined in this article is personal ethics of all participants. The ethics in architecture, in-depth professional knowledge in the field, upgrade of legislation, cultural aspirations, new key participant, and education of users about interventions and proper maintenance of constructed object could in future prevent many illegal and inconsistent buildings and preserve quality architectural landscape. Moreover we must not forget the main task of our profession and must act and work in a coherent manner. That is why we need to clarify the communication protocols and collaboration between the profession as well as between all participants involved in the construction process. It is never too late to start.

Notes

1. Article 2 defines the basic terms that are in use. Article 5 defines the terms for the building usage, which is problematic for single-family houses. Article 79 defines the terms for Self-managed construction.

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ARHITEKTURA OBREDNEGA POSODJA
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Ključne besede
sakralna arhitektura; liturgija; liturgično posodje; kelih; piksida; monštranca

Izvleček

Prispevek tematizira razkorak med prevladujočo prozaičnostjo sodobnega obrednega posodja in njegovim mestom v krščanskem sakralnem kompleksu. Na splošni ravni se kaže obredno posodje kot pomembna sestavina obredja, ki zaživi šele v 'resonanci' s sakralnim prostorom. V krščanstvu pa postane, kot substancialni nosilec transcendentne kakovosti, arhitekturno jedro sakralnega kompleksa. Njegova arhitekturna narava postane posebej očitna s pomočjo arhetipske analize krščanskega sakralnega kompleksa.

Key words
sacral architecture; liturgy; liturgical vessels; chalice; pyxis; monstrance

Abstract

Paper deals with gap between prevailing prosaism in design of the contemporary liturgical vessels and their important role in the christian place of worship. In general, liturgical vessels are important component of ritual. They begin to live only in 'resonance' with place of worship. As the substantial carrier of the transcendental quality liturgical vessels become the architectural core of the sacral complex. Importance of their architectural nature becomes even more obvious through archetypal analysis of the christian sacral complex.

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1. Problemsko polje obrednega posodja

V umetnosti, neglede na današnjo prislovično nezmožnost splošnega soglasja o tem kaj naj bi ta oznaka pomenila, prepoznavamo posebno področje sakralne umetnosti. Ob pahljači dilem koliko in na kakšen način je umetniško delo sploh lahko sakralno moremo v ožjem smislu s táko oznako opredeliti kompleksno in raznorodno umetniško produkcijo, preko katere različne religije, tako v preteklosti kot tudi danes, na njim lasten način nagovarjajo človekovo religioznost. Rimskokatoliški Cerkvi (v nadaljevanju 'Cerkev') sta se zdeli učinkovitost in izpovedna moč sakralne umetnosti tako dragoceni za njeno pastoralno poslanstvo, da jo je vključila v zanjo enega najpomembnejših (konstitutivnih) dokumentov drugega Vatikanskega koncila – Konstitucijo o svetem bogoslužju. V dokumentu ne ostaja zgolj pri načelnih ugotovitvah o edinstveni moči umetnosti temveč zariše znotraj 'prostorja' sakralne umetnosti koordinate istovetnosti krščanske umetnosti z opredelitvijo njenega smotra, z določitvijo njene notranje dihotomičnosti in posebnih vrednostnih kriterijev za presojo ustreznosti umetniških del [prim. Koncilski odloki, 1980]. Dihotomičnost krščanske umetnosti, ki jo določata cerkvena in verska umetnost, vzpostavlja polje napetosti med na eni strani zavezanostjo verodostojnosti 'transkripcije' metafizičnih vsebin v čutnozaznavno realnost prve in umetniškimi izrazi druge, prepoznavnimi po subjektivnem ter zato nujno raznolikem razumevanju sicer nespremenljivih teoloških vsebin. V cerkvenih dokumentih, nanašajočih se na ureditev sakralnega prostora oziroma obredja, se pojavlja obredno posodje – tema pričujočega prispevka – med nalogami cerkvene umetnosti. Rimski misal mu namenja posebno poglavje. V njem Cerkev poudarja, da so med predmeti, potrebnimi pri evharističnem obredu, "v posebni časti svete posode, med njimi zlasti kelih in patena" [Cerkveni dokumenti 94, 2002: §327]. Zato naj bodo izdelane iz plemenite kovine oziroma drugih, trdnih snovi, ki po splošnem mnenju v določenem okolju veljajo za plemenite [prim. Cerkveni dokumenti 94, 2002]. Glede oblike obrednih posod je po prepričanju Cerkve naloga umetnika, da jih izdela takó, da čim bolj ustreza značaju posameznih pokrajin. Posamezne posode naj bodo primerne za liturgično rabo in naj se jasno razlikujejo od tistih, ki so namenjene vsakdanji rabi [prim. Cerkveni dokumenti 94, 2002]. Ob tem nedvomno privilegiranem položaju obrednega posodja pa kaže motrenje sodobne 'produkcije' na tem področju precej drugačen obraz. Ob sicer zanimivih dosežkih arhitektov, kiparjev in oblikovalcev, pa tudi nekaterih samostojnih poskusov (sicer redkih) obrtnih mojstrov prevladuje serijska proizvodnja v najboljšem primeru povprečne kakovosti. Kričečo odsotnost kreativnega napora v oblikovanju najpogosteje neuspešno zastira izdelovanje 'kopij' kakovostnih historičnih izvirnikov, praviloma nerodno poenostavljenih zaradi na pol avtomatizirane serijske izdelave in (zlo)raba prestižnih materialov. Diskrepanca med izvorno odličnostjo obrednega posodja in prevladujočo plitko prozaičnostjo sodobnih rešitev zarisuje problem njegovega razumevanja v odnosu do sakralnega kompleksa kot celote, oziroma odpira vprašanje zakaj je (lahko) obredno posodje arhitekturna tema. Da bi mogli na kratko osvetliti zastavljeni problem, je potrebno najprej spregovoriti o vlogi sakralnega kompleksa in obredja v človekovem stegovanju k transcendenci.

2. Obredno posodje v koordinatah človekovega odnosa s transcendenco

Arhitektura, razumljena kot veščina reševanja prostorskih problemov, spremlja človeka domala že od praga njegovega samozavedanja. V rešitvah, ki so zmogle poleg solidnosti in učinkovite uporabnosti tudi iskreno, predvsem pa trajno, navdušiti človeka oziroma skupnost, kateri so bile namenjene se je pričela jasniti moč arhitekture kot umetniške discipline. Ta laskavi status ji je bil včasih dodeljen le v primerih, ko se je lotevala posebej zahtevnih problemov, kot na primer v antični Grčiji, kjer je veljal za arhitekta le tisti mojster, ki je gradil templje, drugič se je raztezal čez celotno pahljačo tem njene obravnave, tako rekoč od 'stola do mesta'. Med redkimi izzivi arhitekturnega ustvarjanja, ki po svojem bistvu ne glede na kulturni oziroma zgodovinski okvir neprekinjeno predpostavlja najvišjo umetnostno raven arhitekturnih rešitev je sakralni prostor. Slednji namreč opraviči svoj smisel le tedaj ko se, sicer trdno zasidran v imanentni stvarnosti (materialnosti), s svojo umetnostno 'potenco' dotika realnosti transcendence s tako močjo in prepričljivostjo, da v uporabniku prebudi kontemplacijo. Če moremo v sakralnem kompleksu prepoznati materializacijo prostorske koordinate človekove potrebe po odnosu z njega presegajočo transcendentno realnostjo se izkaže, da je edinstvenosti tega odnosa domislil tudi časovno koordinato. Slednjo prepoznavamo v ritualu – negibni artikulaciji časa – brezčasju znotraj vsakdanje minljivosti. Bistvo rituala, kot od posamezne Cerkve predpisanega skupka pravil in določil, po katerih se opravlja 'javno versko dejanje' [prim. SSKJ, 1997], je namreč ravno v njegovi ustaljenosti in določenosti, zaradi katerih postane brezčasje dobesedno otipljivo. Slednje poleg predpisanega sosledja dejanj, obrednih obrazcev, in natančno določenega gibanja po sakralnem prostoru pomembno soustvarjajo tudi obredna oblačila in posodje. Medtem ko je funkcija obrednih oblačil v vseh religijah ista; namreč da zmanjšajo spremenljivost (nepredvidljivost) subjektivnih telesnih in značajskih potez oseb, ki vodijo obred na najmanjšo možno mero v prid učinkovitosti obredno vzpostavljenega brezčasja, pa se nabor in funkcija obrednega posodja od religije do religije spreminja. Glede na omejen obseg razprave bo v nadaljevanju predstavljena vloga obrednega posodja v krščanstvu.

3. Podkožje arhitekturne narave obrednega posodja

Najpomembnejše obredno dogajanje v krščanskem sakralnem kompleksu je evharistija. V njej vstopa po nauku Cerkve skupnost verujočih v intimno (neposredno) razmerje s transcendenco. Medtem ko je navzočnost slednje v sakralnem kompleksu pri različnih religijah (tako antičnih kot sodobnih) najpogosteje izražena v likovno (kiparsko, slikarsko) upodobljenem 'liku' – podobi božanstva pa osredinja

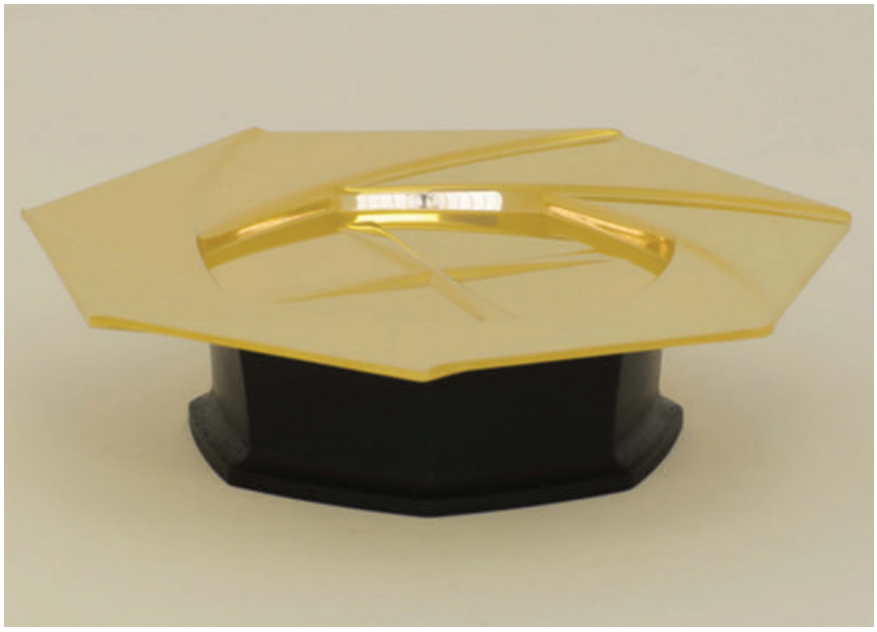
krščanski sakralni kompleks misterij transubstanciacije [prim. Katekizem katoliške Cerkve, 1993]. V obzorju čutnozaznavnega se kaže v podobah kruha in vina, položenih v obredni posodi kelih in pateno. K pomenu keliha in patene kot arhitekturne teme pa se je mogoče učinkovito približati šele z razumevanjem arhetipskega 'podkožja' sakralnega kompleksa, ki dobi ob vsaki uresničitvi (konkretizaciji) edinstven arhitekturni izraz. Kompleksnost njegovega ustroja določa napetost med dvema radikalno različnima stvarnostma. Na eni strani imamo neoblikovano in človeku domačo profanost, na drugi pa misterij navzočnosti transcendence. V učinkovitih dosežkih človekovih vekotrajnih iskanj ustrezne arhitekturne podobe predstavljene napetosti se kažejo prostorske rešitve, ki jih zaradi njihove brezčasne učinkovitosti, pogostosti in splošne uveljavljenosti moremo označiti za arhetipske. Ne glede na njihovo abstraktnost in izmuzljivost slehernim oblikovno fiksiranim predstavam, jih moremo razvrstiti v tri tipološke skupine; skupino arhetipov, povezanih s strukturo prostorskih ovojev, skupino takih, ki določajo meje med njimi ter slednjič skupino arhetipov, vezanih na njihova medsebojna razmerja. Tako določajo prostorske ovoje arhetipi kot so: 'mreža', 'lokacija', 'fanum', 'bogoslužni prostor', 'sveto', 'presveto' in 'transcendenca'. Arhetipske meje med naštetimi ovoji določajo: 'dostop' (mreža – lokacija), 'obod' (lokacija – fanum), 'arhitekturna lupina' (fanum – booslužni prostor), 'pregraja' (bogoslužni prostor – sveto), 'podnožje' (sveto – presveto) in 'lik' (presveto – transcendenca). V tipološki skupini arhetipskih razmerij pa so najočitnejši: 'liturgična os', 'hierarhija', 'selektivnost dostopnosti', 'orientacija' in 'odličnost'.

Po notranji logiki tipološke strukture arhitekturnih arhetipov sakralnega ustreza obredno posodje, v njihovi krščanski interpretaciji, 'liku' iz skupine arhetipskih ločnic med ovoji in se nanaša na razmejitev transcendentnega jedra krščanskega sakralnega kompleksa – kruha in vina kot substancialnih 'nosilcev' transcendentne kakovosti – od njemu najbližjega 'presvetega', ki ga krščanstvo arhitekturno interpretira kot oltar. Kelih in patena tako nista le drobni pritiklini, občasno vključeni v obredje, temveč najbolj neposredni arhitekturno artikuliran lik, s katerim dobi krščanski sakralni kompleks njegovo dokončno osmislitev. V nepreglednem bogastvu arhitekturnih interpretacij zgoraj naštetih arhetipov se kot rdeča nit kaže princip 'alikvotnosti', po katerem ima učinek posamezne arhetipske prvine sicer lastno istovetnost, a je hkrati v edinstvenem harmoničnem sozvočju z vsemi ostalimi. Tako mora tudi oblikovanje keliha in patene, če naj v polnosti uresničita oziroma opravičita njun smisel, računati na vidik njune vpetosti v arhitekturno celoto sakralnega kompleksa. Njuna občasna

Slika 1: Kelih, last Nika Čuka, 2009.
Figure 1: Chalice, owner Niko Čuk, 2009.

navzočnost v sakralnem prostoru (med evharističnim bogoslužjem) je že v zgodnjekrščanskem obdobju pobudila izoblikovanje njima sorodne posode pikside [pyxis, turris, turriculum]. Oblikovana je bila za stalno hrambo posvečenega kruha v zgodnjekrščanskem bogoslužnem prostoru. Na ta način je Cerkev olajšala duhovno oskrbo zunaj sakralnega kompleksa, namenjeno bolnikom, onemoglim in med pogostimi preganjanji tudi številnim zapornikom. Za pričujoč prikaz je zlasti pomembno, da so bile take pikside, ob redkejših upodobitvah v obliki goloba, najpogosteje oblikovane kot stolpič, torej z arhitekturnimi prvinami. Taka posoda je bila obešena pod ciborij, ki je praviloma pokrival oltar zgodnjekrščanske bazilike in tako na svojevrsten način nadomeščala odsotnost evharističnega keliha. Razmah evharističnega češčenja v srednjem veku, kateremu je dala pomembno vzpodbudo razglasitev cerkvenega praznika Svetega Rešnjega Telesa leta 1264 je odločilno prispeval k oblikovanju monštrance [ostensorium], še ene obredne posode iz najožjega 'sorodstva' s kelihom in pateno ter izrazito arhitekturnim karakterjem. Če je šlo pri piksidi v prvi vrsti za vidik dostojnega shranjevanja, je bilo pri monštranci v ospredju izpostavljanje in prenašanje. Prvo je povezano z naraščajočim pomenom češčenja, zaradi česar je monštranca v tedanji srednjeveški zagledanosti v relikvije prevzela marsikatero arhitekturno potezo relikviarijev, drugo pa je izraz bogatega obredja, povezanega z množično obiskanimi procesijami.

Slika 2: Patena, last Nika Čuka, 2009.
Figure 2: Paten, owner Niko Čuk, 2009.



Končno nam razkriva arhitekturno naravo obrednega posodja tudi pogled nanj s stališča zgoraj naštetih arhetipskih razmerij. Tako se na primer pri motrenju krščanske arhitekturne interpretacije liturgične osi pokaže, da le-ta doživi njen pomenski zenit prav v obrednem posodju, pogosto pa je tudi tópos njenega izteka. Podobno je s hierarhijo. Med obredno rabo zavzame obredno posodje v arhitekturnem pogledu najodličnejše mesto. Njegov primat v hierarhičnem smislu dodatno poudari duhovnik z dvigom keliha in patene med najsvetejšim delom evharističnega bogoslužja. Poseben vidik hierarhije nam razkriva oblikovanje baročnih oltarjev. Zavezani določilom Tridentinskega koncila, da naj bo posvečeni kruh shranjen v tabernaklju sredi glavnega oltarja, so umetniki namenili posebno (zgornjo), umetelno oblikovanemu baldahinu podobno, 'etažo' tabernaklja za postavitev monštrance, kjer je le-ta skupaj z njenim transcendentnim jedrom zaživela v domišljeni prostorski prepričljivosti. Na arhitekturno poreklo obrednega posodja kaže nadalje njegova vpetost v vzpostavljanje selektivne dostopnosti. Na to moremo sklepati že na podlagi do nedavnega uveljavljene prakse, da so smeli take posode prenašati samo predstavniki posvečenih cerkvenih stanov: duhovniki in diakoni. Pred zadnjo cerkveno prenovo liturgije na drugem vatikanskem koncilu je vernik mogel videti kelih in pateno med bogoslužjem samo dvakrat: med povzdigovanjem in med obhajilom, sicer pa sta bili pokriti z dragocenim pregrinjalom [velum] oziroma ju je zakrival mašnik. Oblečen v bogata liturgična oblačila je učinkoval kot nekakšen ikonostas pred Najsvetejšim. Končno nam tudi materialna in oblikovna odličnost govori o arhetipski vpetosti obrednega posodja v arhitekturo sakralnega kompleksa. Uporaba žlahtnih materialov ni zgolj njegova pomembna značilnost temveč s strani Cerkve že od najzgodnejših časov predpisana praksa. Oblikovanje praviloma prevzema slogovne značilnosti sakralnega prostora

kateremu je namenjeno in se enkrat v večji drugič v manjši meri navdihuje ob arhitekturnih prvinah.

4. Diskusija

Razprava zarisuje nekaj potez na področje obrednega posodja, ki na eni strani osvetljujejo njegovo edinstveno zraščenost s krščanskim sakralnim kompleksom, na drugi pa določajo smeri možnega nadaljnjega proučevanja. V tem pogledu se zdi pomembno podrobneje pojasniti tipološko raznolikost obrednega posodja in iz nje izhajajoče raznolike vpetosti le-tega v krščanski sakralni kompleks, kakor tudi predstaviti razvojne premene v arhitekturnih interpretacijah posamezne, v razpravi predstavljene obredne posode. Take raziskave bi dodatno utrdile postavljeno tezo o arhitekturni 'naravi' obrednega posodja.

Razprava je hkrati pokazala na sicer ozkem segmentu sakralnega prostora učinkovitost arhetipske optike v proučevanju njegove arhitekturne logike. V analitično arhitekturno 'branje' sakralnih kompleksov vnaša preglednost, z njo pa tudi sledljivost. Ob prevladujočem poenostavljenem razločevanju med profanim in sakralnim, med svetnim in svetim kaže na nujnost zavedanja o notranji strukturiranosti slednjega v vsaj tri hierarhične in med seboj razločljive stvarnosti – svetost kot izraz najbolj neartikulirane osebne religioznosti, svetost kot izraz istovetnosti posamezne religije in končno svetost kot s strani Cerkve institucionalno opredeljena razsežnost stvarnega. Uspešnost ustvarjanja na obravnavanem področju je tako poleg nenadomestljive kreativnosti arhitekta in upoštevanja arhetipske logike sakralnega kompleksa odvisna tudi od njegove sposobnosti razločevanja v kateri od naštetih plasti korenini posamezni arhitekturni problem.

Na silvestrovo, nekaj dni pred smrtjo, je mojster Plečnik v nekakšnem samogovoru razmišljal: "Ko je moj brat Andrej bil še kaplan, in je toliko prištedil, da je mogel misliti na en kelih, mi je pisal, naj mu ga naredim. Je bil tako neumen, da je mislil, da jaz to znam. Začel sem pa študirati in je nastalo nekaj poskusov." Po kratkem premoru je dodal: "Vztajenje cerkvene umetnosti na Slovenskem se je s tem začelo." [Krečič, 1992: 408]. Zanimivo je, da mojster ni pripisal vstajenjskega 'vzgiba' v cerkveni umetnosti na Slovenskem kateri od njegovih zgodnjih cerkva temveč ravno kelihu. S tem se hote ali nehote uvršča med tiste ustvarjalce, ki razumejo obredno posodje kot nenadomestljivo arhitekturno sestavino krščanskega sakralnega kompleksa. Ne zgolj razumejo marveč na táko prepričanje opirajo tudi svoje arhitekturno ustvarjanje. Obredno posodje mojstra Plečnika, ki se ga je sodeč po citiranem razmišljanju loteval z največjo resnostjo in spoštljivostjo je brezčasen izraz takega prepričanja. Shematski oris arhetipske utemeljenosti krščanskega obrednega posodja kot arhitekturne teme želi biti ob nesporni avtoriteti mojstrovega opusa vzpodbuda tako ustvarjalcem kot tudi naročnikom k zavedanju o prostorski kompleksnosti in nujnosti harmonične uglašenosti vseh arhitekturnih prvin sakralnega kompleksa kot nenadomestljive razsežnosti njegove učinkovitosti.

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DRUŽBENO ODGOVORNA STANOVANJSKA ZAZIDAVA V ZGODOVINSKEM SREDIŠČU VALENCIJE V ŠPANIJI

SUBSIDISED HOUSING UNITS IN THE HISTORIC CENTRE OF VALENCIA, SPAIN

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Ključne besede
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Izvleček

Družbeno odgovorna stanovanjska zazidava 23 bivalnih enot v središču Valencie združuje oblikovanje prostora z upoštevanjem konteksta lokacije. Dvajset stanovanj je bilo zasnovanih na novo, tri pa so bila predmet konservatorskih posegov in celostne obnove. Stanovanja so datirana v 16. stoletje, a so bila v 18., 19, in 20. stoletju spreminjana in prezidana. Izvedene predhodna raziskava objekta je omogočila določitev ključnih dejavnikov (smernic) razumevanja mestnega tkiva. Ugotovitve raziskave smo vključili v zasnovo novih enot: uvedba skupnih komunikacijskih prostorov, notranjih naravnih prezračevalnih vertikalnih prostorov, niše v ravnini fasad (učinkovito senčenje). Zasnova temeljča na predhodni raziskavi omogoča prodor sončne svetlobe globoko v notranjost notranjega dvorišča in senčenje bivalnih prostorov. Nastala je bioklimatska stavba, ki ne potrebuje dodatnih prezračevalnih naprav (poletje), saj je gibanje zračnih mas v objektu izvedeno po naravni poti. Objekt zaradi ekonomičnosti izkoriščanja klimatskih pogojev mediteranskega podnebja generira manjše obratovalne stroške. Varčnost pri obratovanju objekta je del družbeno odgovorne stanovanjske politike. Projekt je primer preslikave nekdanjih (16. st.) zakonitosti gradnje v sodobno arhitekturo.

Key words
social housing; historic centre; urban context integration; reinterpretation; bioclimatism

Abstract

Twenty of these housing units were new constructions and three were part of the restoration of an existing building initially scheduled for demolition which originally dated from the 16th century but had been repeatedly transformed over the 18th, 19th and 20th centuries. The preliminary study carried out for the restoration of this existing building and the project for the twenty adjoining new housing units offered the key points for the reinterpretation of the city's built fabric. This reinterpretation of the constructed grammar of the local buildings was more filters was not an impediment to the introduction of ample common spaces and terraces for the housing, the controlled introduction of solar capture to the heart of the building or the creation of cross-ventilation into the housing to prevent the use of air conditioning in summer and much of the heating in winter in the warm Mediterranean climate of the city of Valencia. In addition, in the restoration of the historic building attempts were made to transform it into merely another phase of its life without eliminating prior phases, and joining the ranks of transformations from the 16th century to our days.

This project is part of a wider action on the historic centre of Valencia. Project objectives included the restoration of existing buildings, widening the narrow calle Recaredo, renovating urban installations and paving and creating new public gardens and spaces for this district of the city. AUMSA (Actuaciones Urbanas Municipales S.A.), a municipal company which specialises in projects of this sort, was in charge.

This project aims to heal a wound in the urban landscape caused by the demolition of several historic buildings, in part due to the work of widening calle Recaredo in the traditional neighbourhood of Els Velluters in the historic centre of Valencia. The project focused on three buildings: the design of two buildings for even numbers (building A) and odd numbers (building B) with a shared underground car park in this street, and the restoration of an existing building (building C) which gives out onto calle Maldonado 33 [Murad, Arraiz 2011].

The area of action features several buildings dating back to the 1960s and 1970s and even later, which were designed independently from their historic setting and have created major distortions with respect to the architectural interpretation of the historic centre. Buildings A and B, of new construction and small compared with their respective façade perimeters of 33 and 50 m, stand out and have a major visual impact on their surroundings. The 6 m wide façade of building C onto calle Maldonado, resulting from the late 19th-century realignment of façades on the street, in fact hides a large 16th-century house extended in the 18th century.

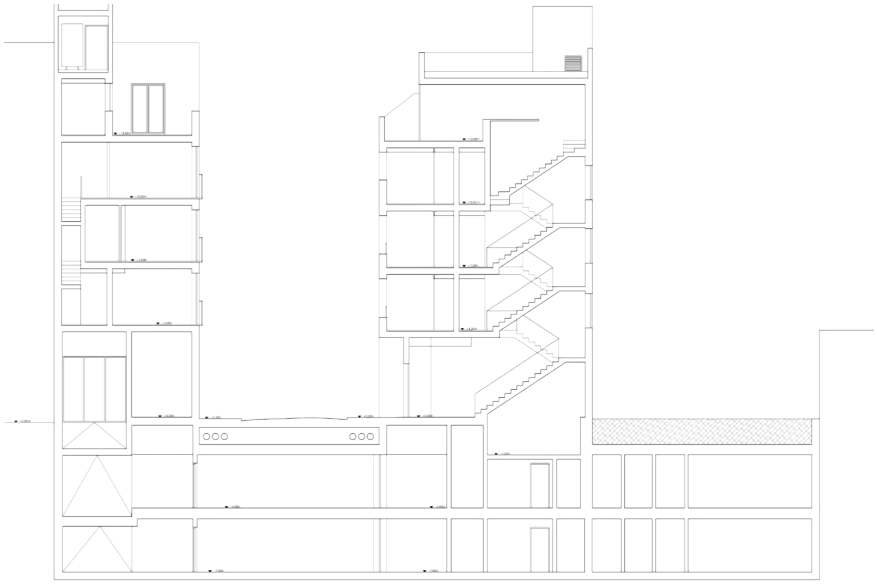
Firstly, a detailed preliminary study was carried out on building C, consisting of research in the Municipal Historical Archives, the detailed survey of the existing building and the study of the chrono-typology of the different walls, floors and ceilings, as well as other characteristic features. Additional studies included a Carbon 14 analysis of the main beams, sample tests on original decorative features, stratigraphic analysis of the walls, structural analyses of the constructions, etc. [Mileto,Vegas 2009].

The study of the formation and the constructive evolution of the pre-existing construction to be restored (building C), with an organic growth of extensions and staggered terraces in the back courtyard in the progressive building up of available space frequently found in the historic city centre of Valencia, on a narrow plot which barely allows for the presence of two openings per floor, has mainly conditioned the design of the recent construction in buildings A and B [Mileto,Vegas 2014].

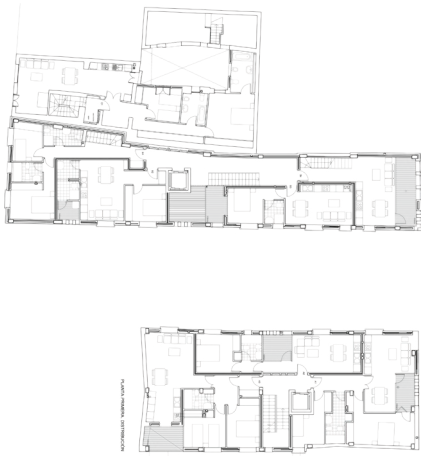
Building A, 10 m deep with a façade to a back courtyard, has housing units with spacious terraces dug out from the building's volume. Building B, 7 m deep with poor orientation to the west and no back façade, was designed with a sloping interior courtyard creating staggered terraces. This interior landscape of spaces dug out from the main volume lets sun in to the entire building down to the ground floor during most of the year, as well as generating natural ventilation.

This staggered indoor courtyard, not strictly necessary according to regulations, provides continuous cross-ventilation from the external façade, which includes windows stipulated by regulations, to the inside of the building. This is absolutely necessary given the excessive heat due to orientation to the west. It also generates longitudinal cross-ventilation between the different open courtyards in the building, in turn ventilating residential units and stairwells.

The sloping courtyard with staggered terraces was planned following a solar chart designed specifically for building B in order to ensure the best use possible of morning sunlight. Not only does the sun stream through the building and over the successive terraces of the different floors, but it also reaches the ground floor in the morning for most of the year, lighting up people entering the building or waiting for the lift. A wood pergola supporting a sheet of glass acts as a visual filter and provides the privacy needed to separate the ground floor for public use from the staggered upper floors for private use.

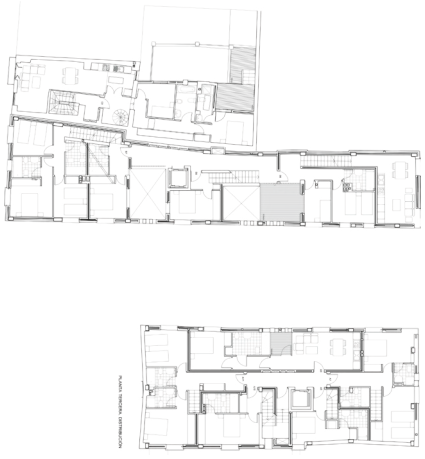


Slika 1: Prečni prerez objekta A in B ter ulice Recaredo.
Figure 1: Transversal cross-section of facing buildings A and B through calle Recaredo.



Slika 2: Zgradbe A, B in C. Prvo nadstropje.
Figure 2: Buildings A, B and C. First floor.

Slika 3: Zgradbe A, B in C. Drugo nadstropje.
Figure 3: Buildings A, B and C. Second floor.



Slika 4: Zgradbe A, B in C. Tretje nadstropje.
Figure 4: Buildings A, B and C. Third floor.

The cross-section of building A and especially that of building B resemble a large Gruyère cheese with courtyards, terraces and garden spaces dug out from the building's volume. With the correct orientation these spaces provide exceptional sunlight inside the building and allow strategic cross-ventilation which counters the excessive heat caused by the sun inciding on rooms in the south and west facing façades. Nevertheless, in both buildings A and B, the continuous skin of the façade deliberately built 40 cm thick to accommodate the sliding shutters inside, towers over these terraces, perforating spaces following composition guidelines suited to the historic narrowness of the plots in the neighbourhood to avoid an excessively uniform and homogeneous horizontal interpretation which would alter the scale of the building in the urban landscape. Following local building tradition, the louvered shutters have moveable slats in all their sections and allow a nuanced and suggestive regulation of the strong Mediterranean daylight in the city ([Vegas et al. 2014]. Like an onion skin the façade can be divided into independent strata with tilt and openable windows, sliding louvered shutters whose textural variations depend on slat angle, and the lime mortar render of the outer façade which provide the building envelope with interesting architectural variations.

Most of the housing units were designed as interlocking duplexes with staggered upper and lower floors, which fitted better into the building as a whole while respecting and improving the respective terraces. As regards the buildings of new construction A and B, the carefully thought out crowning on façade A, the sloping courtyard following the south orientation of sunlight, and the incorporation of overlapping duplex housing units, as well as the changing composition of the openings on both façades have dictated a distribution of floor plans which change from one level to another and have prompted a painstaking execution of the project in all its details and electric, gas and heating installations, but above all the supply of drinking water, drainage and forced ventilation shafts in kitchens and bathrooms. Even though they are different, all the housing units have a characteristic terrace surface of over 20 m2, a tradition in the historic centre of Valencia dating back to at least the 16th century.

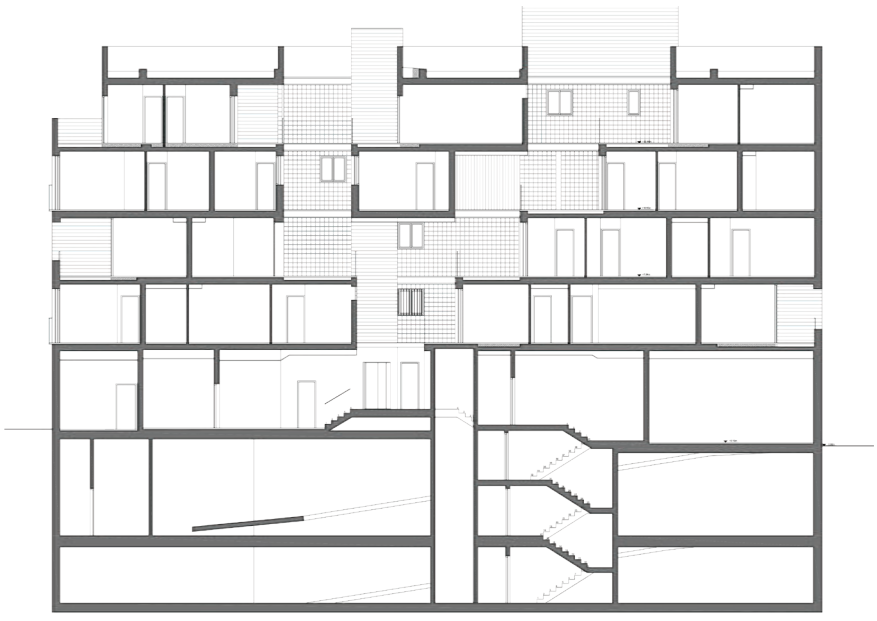
The filtering paving of the terraces is all at the same level as the indoor flooring of housing units. In fact, the terraces make their presence felt in the housing surprisingly and unexpectedly by continuing the horizontal plane of the interior paving. Waterproofing and drainage are resolved by staggering the floor structure in a way that is not noticeable in lower housing units. In the case of building B, these staggered levels have been used simultaneously to accommodate the hanging beams which cover a single porch 7 m long, given that the construction of a double structure porch would have dotted the distribution of the housing units with useless intermediate pillars.

The crowning of new construction buildings A and B was resolved with a kind of inverted cornice consisting of a U-shaped stone channel at the top of the wall, creating its own clearly visible shade and acting as a continuous gutter which avoids rain splashing or running down from the top of the façade. The shade created by this inverted cornice is not a literal reproduction of the construction tradition of this historic building, but its abstract quality is perfectly in keeping thanks to the shadow echoing the upper crowning of the building.

However, restored building C, originally due for demolition, was studied and its lineal structure dating back to 1580, its 18th-century annex buildings characterised by sgraffito relief unseen to date, its carpentry from 1864 and its paving and façade from 1901 detached from the original were all restored. The building owners were granted permission to gain surface by extending the original façade to the street for realignment purposes. In fact, the building housed an interesting collection of historic floors and roofs, the earliest of which dated back to 1580, with subsequent additions from circa 1750, 1864 and 1914. The floors and ceilings from 1750 featured decoration

Slika 5: Pogled na fasadni ovoj, razvidna je raznolikost osno pozicioniranih odprtin.
Figure 5: Elevations of all the compositions studied to provide varied and heterogeneous vertical readings of the narrow plots in the historic centre.

Slika 6: Vzdolžni prerez objekta B.
Figure 6: Longitudinal cross-section of building B.



characteristic of the period which helped fix the dating and which have been restored, despite their poor condition. The 1750 terraced roof summarily became a floor when the back of the building was built up in 1914 [Mileto, Vegas 2015].

Unintentionally, the historic building to be restored became a sort of museum for the evolution of housing in the historic centre of Valencia, with multiple interesting phases of construction, building up and transformation. The project for the restoration of these three residential buildings has attempted to adapt to their past history, without destroying any of their construction phases. In keeping with the philosophy of organic growth observed throughout the history of the building, the aim was for this intervention to become yet another life phase for future generations to study and recognise [Doglioni 2008]. The generosity of the resulting spaces and the warmth of the recovered historic construction have resulted in three magnificent examples of subsidised residential housing dating back to the 16th century, a rare situation which ought to be far more common.

The entire project resulted in 23 subsidised housing units in the form of 90 m2 residential units with the maximum usable surface contemplated in current Spanish regulations. 20 of these housing units were new constructions (buildings A and B) while the other 3 were restored (building C). In addition, the two-storey underground car park below buildings A and B, the courtyard of building B and the street between them provides 42 parking and storage spaces. 23 of these belong to the subsidised housing units while the rest benefit the neighbourhood, which is very short of parking. This two-storey underground car park below local water ground level, which is shallow in this coastal city, was a feat of engineering. This work also had to take care of the construction of floors below street level, calculating 3,000 kg/m2 of static load, and studying dynamic loads to allow road traffic. The total cost of the underground engineering work was high for this reason, but the work on restoration and new construction was much lower at a

cost of approximately 1,000 €/m2.

The ground-floor commercial premises have been rented out to local associations among others. The housing units, which are municipal property and are currently being leased to low-income tenants, are proving their efficiency as regards sunlight and cross-ventilation. This makes it possible to avoid the use of air conditioning and heating during most of the year, as well as showing off the extensive outdoor surfaces in the form of continuous terraces and permeable paving, and the capacity of the architecture (particularly in building B), to provoke and generate social relationships for neighbourhood collaboration.

Slika 7: Notranje terase v zgradbi B – notranje dvorišče stanovanjske enote (Photo: Tato Herrero).
Figure 7: View of the interior sloping courtyard in building B, staggered into terraces. (Photo: Tato Herrero).

Slika 8: Pogled na restavrirano stanovanjsko enoto v tretjem nadstropju v zgradbi C.
Figure 8: Third floor of building C, after restoration.

Credits

PROJECT: 23 subsidised housing units, Valencia.

FUNCTION: Housing.

AUTHOR: Camilla Mileto and Fernando Vegas.

LOCATION: C/Recaredo between C/Roger de Flor and C/Maldonado, Valencia.

DATE (PROJECT AND EXECUTION): Basic project: 2005.
Final project design: 2007.
Execution: 2008-2010.

PHOTO CREDITS: Fernando Vegas and Camilla Mileto.

CLIENT: AUMSA (Actuaciones Urbanas Municipales S.A.)

BUDGET: 3.605.211 € (PEM)

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KONGRESI
CONGRESSES

HARANGLÁB, ZVONIK, HOLZGLOCKENTURM

HARANGLÁB, ZVONIK, HOLZGLOCKENTURM

Recenzija / Review
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Pomurski muzej Murska Sobota
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Borut Juvanec, Andreja Benko:
Harangláb = Zvonik = Holzglockenturm
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ISBN 978-961-6823-62-3

Študija o tako imenovanih lesenih zvonikih na panonskem območju danes treh držav: Avstrije, Madžarske in Slovenije obravnava tematiko, ki do sedaj v našem prostoru v osnovah ni bila niti obdelana in prezentirana. V tem primeru gre namreč za arhitekturo, kajti glede umetnostnozgodovinske podobe bilo nakazanih zgolj nekaj namigov, prav tako z etnološkega vidika. V pričujoči študiji je okvirno zelo lepo predstavila to temo, vlogo in pomen etnologinja Jelka Pšajd. Stroge državne meje v dvajsetem stoletju so do nedavnega nekako zameglile naše razumevanje tega prostora kot celote, saj je bil dolga stoletja ta prostor brez meja in zato tudi na skoraj vseh področjih v nenehnem pretoku vplivov.

Zvoniki v panonskem prostoru so imeli skozi zgodovino v funkcionalnem pogledu pomembno vlogo, posebno v ravninskih predelih. Zvonike, ki so še ohranjeni, je bilo potrebno evidentirati in popisati. To sta avtorja tudi opravila. V opisu je po krajšem zgodovinskem pregledu predstavljena oblika zvonika. Avtorja izhajata iz dejstva, da v tej arhitekturi nastopajo trije ključni elementi, in sicer uporabnik, graditelj in avtor. Iz tega seveda izhaja oblika zvonika in njegovo proporcioniranje. Po obliki in konstrukciji razvrstita zvonike na pet tipov, in sicer z enim stebrom, dvema, tremi, štirimi in z zaprto obliko.

Avtorja izpostavljata dejstvo, da ti zvoniki, ki so predmet raziskave in obdelave, ne pripadajo cerkveni, ampak profani kulturi vsakega naroda. Dalje, da je zvonik družbeni objekt, zato je tudi pomembna sama postavitev, lokacija.

Ugotovitve te študije kažejo, da je veliko zvonikov žal že propadlo zaradi neprimerne, nestrokovne, nepremišljene in čim bolj cenene prenove, v kolikor jih niso po drugi strani zaradi zoba časa in dozdevne nepomembnosti povsem zbrisali.

Sestavni del študije je slikovno gradivo, pomembno in zanimivo. Gre za pregledno karto zvonikov na tem območju. Fotografije sedanje podobe zvonikov kažejo podobo tega, kar jih je še ostalo in kako je vzdrževano. Nekateri zvoniki so celo vzorčno izrisani s skico in dimenzijami. Kritine kot takšne ostajajo problem.

Študija prav tako ponuja (slikovni del) primerjavo med posameznimi zvoniki v teh treh (štirih) državah v panonskem prostoru. V študiji se seveda postavlja vprašanje, kako obstoječe zvonike ohraniti? V ta namen je zapisanih nekaj predlogov.

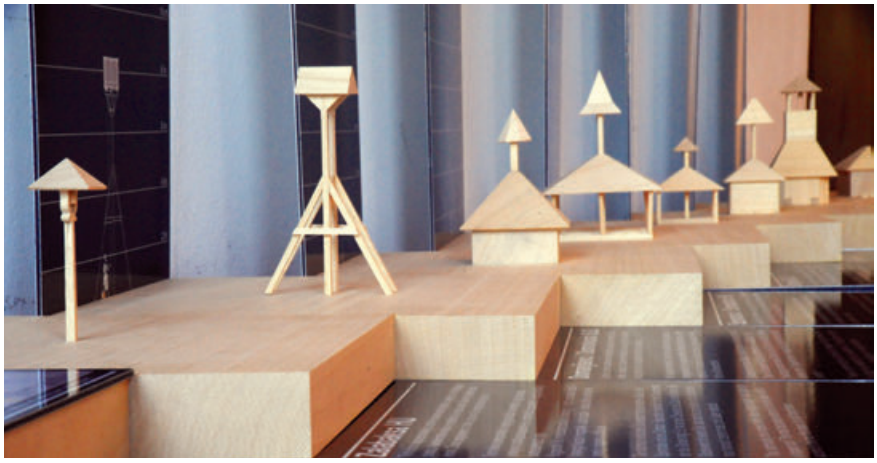
Veliko bolj pa se seveda bomo zavedali te kulturne dediščine, v kolikor bomo poskušali v prihodnje najti kulturne, turistične, politične in ekonomske komponente.

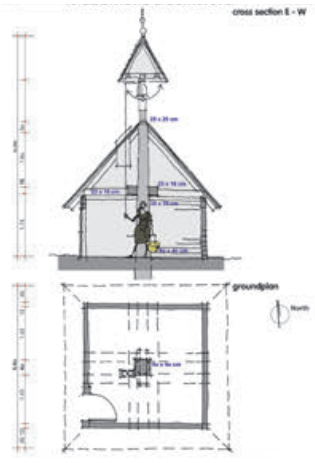
Avtorja navsezadnje ugotavljata še, je na Slovenskem zaslediti nestrokovno prenovo zvonikov.

Skratka, pričujoča študija želi prikazati nujno potrebo po evidentiranju in obdelavi tudi tam, kjer to še ni bilo opravljeno in spodbuditi k strokovnemu restavriranju in konserviranju te kulturne dediščine, k čemur so zainteresiranim uporabnikom (ohraniteljem) dolžne pomagate ustrezne strokovne inštitucije. Po drugi strani pa se avtorja zavzemata, da je tudi takšno kulturno dediščino potrebno prezentirati v turistične namene.

Slika 1: Makete na razstavi (izdelava mojster Jože Šimenc, FA) kažejo sistem zvonikov od enostrebrnega do najkompleksnejšega. Vrstni red sledi preprostosti: najprej ima zvonik le steber brez podpor, dva stebra zahtevata podpore v vzdolžni smeri, spodnje telo pa ščiti podpore in je lahko odprto ali zaprto z deskami [foto Borut Juvanec].
Figure 1: Models on the exhibition (master Jože Šimenc FA), showing the system from the one-column belfry to the most complex one. It shows simplicity in the beginning to complexity at the end with enclosed body [photo Borut Juvanec].

Slika 2: Szomoroc / Somorovci HU: zvonik ima en sam steber, z nosilno konstrukcijo na višini 175 cm, s katere visijo stene vse do tal. Enostebrni zvonik z zaprtim telesom je redkost, v obdelovanem območju sta le dva.
Figure 2: Szomoroc / Somorovci HU: the belfry has the only column with horizontal bearing construction on the height of 175 cm, with curtain walls to the ground. On the treated region there are only two belfries of this type.





The study about the wooden bell towers in the area of Pannonia lies nowadays in the area of three countries: Austria, Hungary and Slovenia. The research is about a theme, which until now in our country was not researched and properly presented. In this case the main idea is in the architecture of the wooden bell towers. From the art-historian point of view there were only minor researches as well as from the ethnological point of view. In this book the introduction was written by ethnologist Jelka Pšajd, who really nicely introduced the meaning of the wooden bell towers to the reader. Until few years ago, really strict country borders in 20th century cloud our understanding about this place as wholeness, as for a several centuries this area was without borders (as it belonged to the same country Austro-Hungarian Monarchy) and because of this it was in all areas under different influences.

The researched bell towers in Pannonia area had through history an important role, especially in the plains of Pannonia world. It is the duty of the researchers to register and inventory the bell towers that still exist. That did the authors of the book.

In the book it is presented the shape of bell towers after a short historical overview. Authors proceed out of the fact that in this kind of architecture there are three key elements: the user, the builder and the author. From that point of view follows the form of the bell tower and its proportions. They construct a system based on shape and construction deriving into five different types of bell towers: with one pillar, two pillars, three pillars, four pillars and with closed body.

Authors expose fact that the wooden bell towers, which are subject of the research, do not belong to sacral but to profane culture of each nation. Then, they present the bell tower as a social object, with a special location and meaning of the object in the settlement.

Conclusions of this research show that many of these bell towers do not exist anymore because of inappropriate, improper, reckless or cheap renovation. On the other hand, this can be as well because of the passage of time or they were torn down because of alleged irrelevance.

A very important part of the research, partly presented as well in the book Harnaglab, zvonik, Holzglockenturm, is the graphic material, which is important and interesting as well. There is a special map of the bell towers on Pannonia area and a map of the main concentration of bell towers in other countries. The photos of temporary appearance of bell towers show the image of what remained from the past and is still maintained. Some of the bell towers are even sketched and measured. But anyway the big problem still remaining in most cases is covering of bell towers. The study also shows (the graphical part) the comparison between individual bell towers in these three (four) countries in the Pannonia area.

The authors in the research deal with the question of how to preserve existing bell towers. For this purpose authors suggest some concrete proposals. Much more we can realize and respect this cultural heritage, if we try to find in future cultural, touristic, political and economical components with it. Authors note that the biggest problem lays in Slovenian area, where we can find many unprofessional renovations of bell towers.

Anyhow, the study and research shows the necessity to make an inventory of bell towers in a place where that was not done yet. Authors suggest more professional restoration of this cultural heritage and preservation also for the future. They expose as well the need for different professional institutions to help users (preservers). On the other hand authors suggest that some or more of bell towers should be shown and presented as cultural heritage for touristic purposes.

Slika 3: Najzanimivejša je izvedba zaprtega telesa z osmerokotnim tlorisom, Kamovci / Kamahaza SI [foto Borut Juvanec].
Figure 3: The most interesting construction with the octagon groundplan [photo Borut Juvanec].

Slika 4: (desno) Zgibanka projekta zhh Zvonik haranglab holzglockenturm.
Figure 4: (right) Leaflet of the project zhh Zvonik haranglab holzglockenturm.


zvonik
haranglab holzturm
research project
borut juvanec
ljubljana university slovenia
institute of vernacular architecture
andreja benko, marta bujanda
models: Jože Šimenc
zvonik
haranglab holzturm
research project
EXHIBITION
contents:
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15 techn. plans 5ox5o
5o photos 5ox5o
in total 65 plates 5ox1oo
and 16 plates 3ox6o
15 photos details 1ox1o


Etzersdorf - Roolsdorf
Schallendorf bei St Michael (in: Stuebing bei Graz, mus)
Gerersdorf (mus)
Graz / Gradec >
Wien >
Avstrija
Madžarska
Oriszentpeter
Hodoš/Hodos
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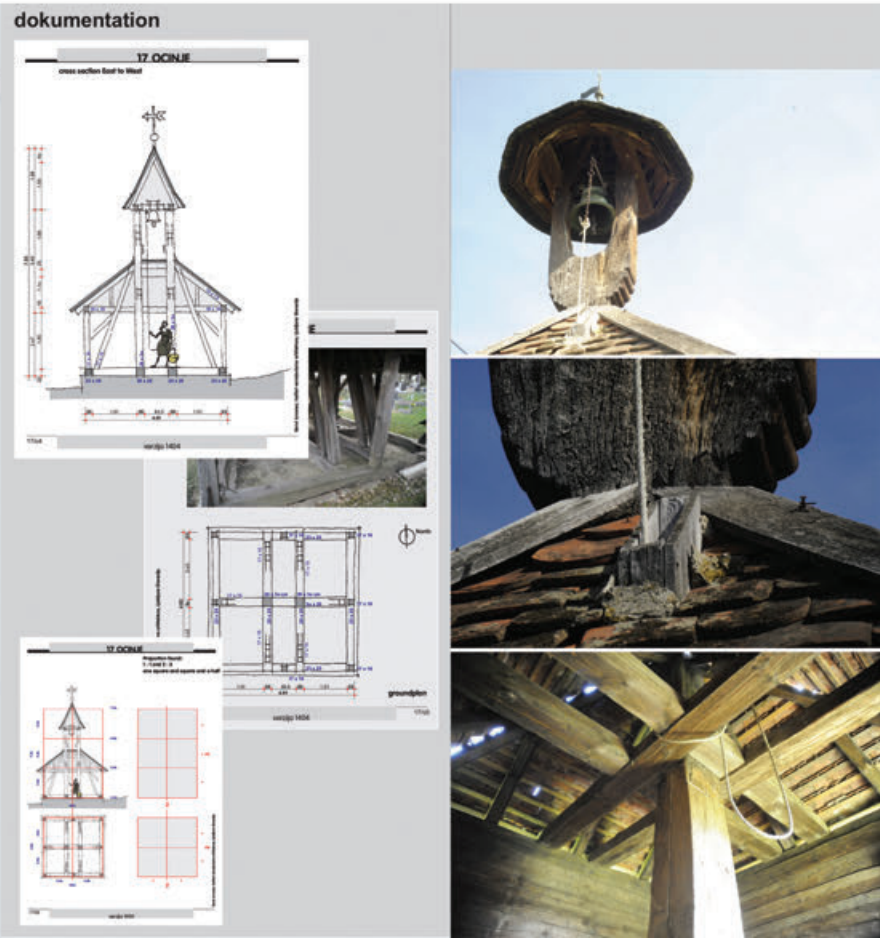
dokumentation
17. OCINJE

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MEDNARODNA ARHITEKTURNA DELAVNICA "MELFI – EXPANDING ART"

INTERNATIONAL ARCHITECTURAL WORKSHOP "MELFI – EXPANDING ART"

UKD 72.02: 001.83
COBISS 1.04
Prejeto 23.04.2015

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Key words
architecture; theater; stage scene; workshop; urban degradation

Abstract

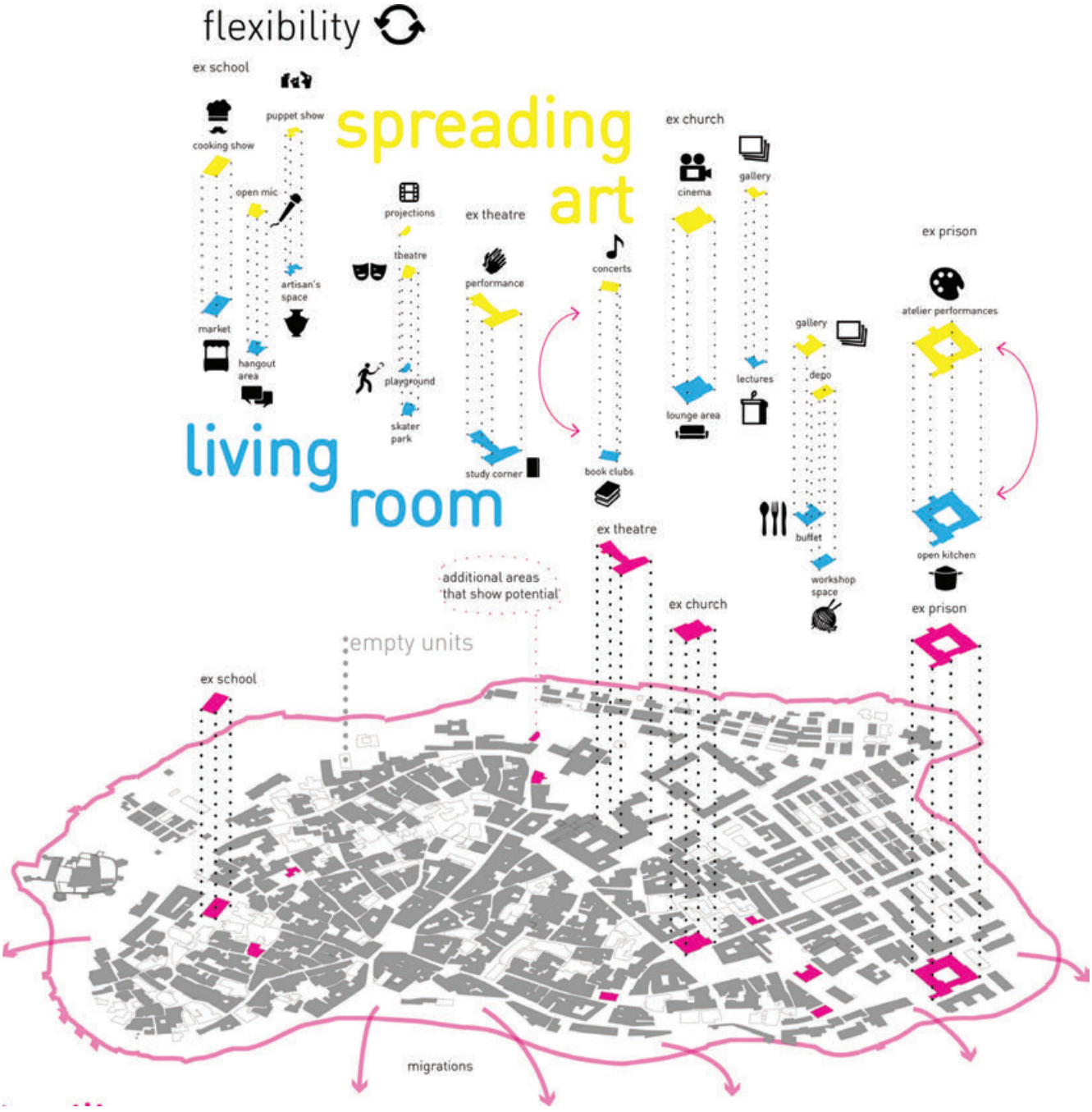
Students and professors from United States, Slovene and Italian schools of architecture were invited to contribute ideas for the revitalization of the abandoned historical center of Melfi. As art, and artistic production, have successfully contributed to the revival of disenfranchised urban districts, the workshop organizers used the theme of 'art' as a vehicle to generate concepts for the reinvestment of positive urban activities. Four degraded buildings sites were used as project sites: the former prison, a school, the former theatre and the former church/cinema. With common approaches in mind, our group was divided and worked on three of the sites. It was the group's consensus that artistic enterprises not only act as a "tourist attraction", but also as an integrated part of daily life for the local inhabitants. A network of flexible interior/exterior public spaces was suggested that would function at two levels and within which additional sites could always be added following critically consistent approaches.

The conclusion of the workshop included an exhibition, a public hearing and discussion and the selection of the most successful projects. Slovenia's design was selected as the best solution in the "former theatre" category.

Glavni namen delavnice je bilo pridobiti idejne rešitve za obuditev zapuščenega historičnega dela kraja Melfi, ki leži na jugu Italije, v provinci Potenza, regiji Basilicata.

Temeljni problem bi lahko pripisali geografski legi mesta. Melfi je namreč mesto na vzpetini, ki omogoča širitev mesta le do določenega obsega. S povečevanjem števila prebivalcev se je torej gostota poselitve na omejenem prostoru intenzivno povečevala in vplivala na strm padec kakovosti življenja. Velik delež dotlej pretežno s poljedelstvom ukvarjajočega se prebivalstva se je v začetku 90. let preselil bližje novo zgrajeni tovarni Fiat. Naglo rastoče razpršeno predmestje, ki je prebivalcem nudilo več prostora, žal ni uspelo ohraniti pravega stika s starim delom. Danes tako stari del mesta definirajo prazni objekti (ocenjeno 40% objektov) in ulice brez življenja. Ironično pa nekajkrat letno mesto poka po šivih zaradi enormnega števila turistov, ki obiščejo tradicionalne kulturne prireditve. Kot "sredstvo revitalizacije" je bila s strani organizatorja predlagana umetnost. Znani so različni primeri, kako lahko umetnost prispeva k oživitvi mesta

Slika 1: Shema lokacij s programsko razporeditvijo.
Figure 1: Sheme of sites and program distribution.



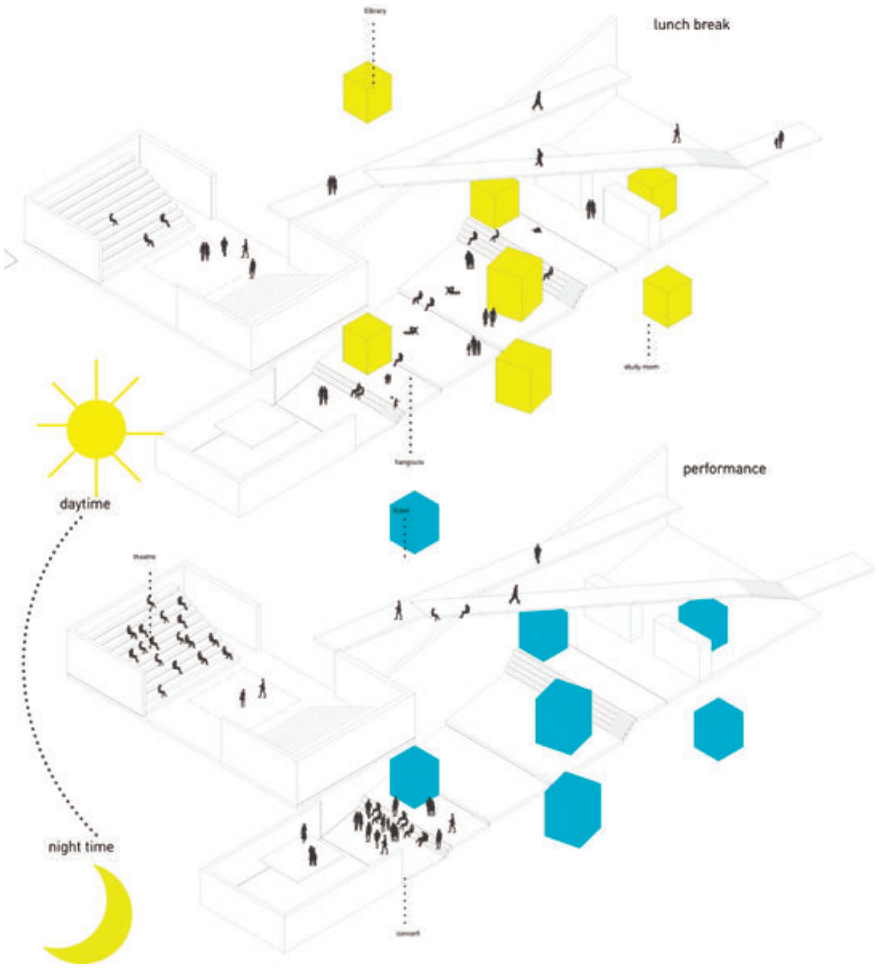
ali mestnega predela. Če omenimo le dva primera: kot vsebina tesno povezana z novo zgrajenim objektom (Centre Georges Pompidou v Parizu v 70.letih zasnovan kot gonilna sila revitalizacije dela mesta); ali pa kot načrtna naselitev umetnikov v prazno mesto (staro istrsko naselje Grožnjan postane "mesto umetnikov" oz. turistična atrakcija, ko v zapuščene hiše naselijo umetnike).

V okviru delavnice so bile izbrane 4 zapuščene, neizkoriščene ali drugače degradirane lokacije za obdelavo: zapuščeni zapor, šola, zaprto gledališče in cerkev.

Študentje FA so se sicer razdelili v tri skupine in tako na nivoju arhitekture obravnavali tri različne lokacije, vendar smo hkrati skušali poiskati in predstaviti tudi skupno strategijo. Nastal je sistem fleksibilnih javnih, zunanjih in odprtih prostorov, kjer vsak funkcionira na dveh nivojih. Na nivoju vsakdanje rabe, ki smo ga poimenovali "Living room", gre za privabljanje lokalnih prebivalcev oz. vzpodbujanje k preživljanju prostega časa v starem delu mesta. Drugi nivo – "Spreading Art", pa predstavlja uporabnost v primeru odmevnejših, "globalnih" dogodkov, ki se v mestu zgodijo zgolj nekajkrat letno ali začasno. V tem primeru mora biti mesto opremljeno z ustreznimi prostori za organizacijo obsežnejših raznolikih dogodkov in pripravljeno na sprejem večjega števila ljudi in drugačnih načinov uporabe. Zavzeli smo namreč stališče, da zgolj novo "mesto umetnikov" torej umestitev umetniškega programa, ki bi privabljal kot turistična atrakcija ni dovolj. Bistveno je vključevanje in zadovoljevanje potreb lokalnih prebivalcev.

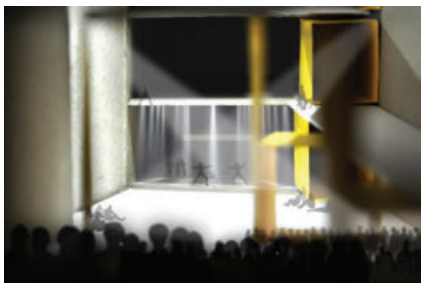
Na podlagi izdelanega koncepta celote je sledilo oblikovanje sistema – "recepta", za pristop k prenovi katerekoli lokacije. Razbrani potencial prostora, ki ga določa tudi obstoječa zasnova pripelje do izbora optimalnega namena prostora. Ta izhaja in se navezuje na smiselne programske vsebine v okolici. Intervencije omogočajo različne načine uporabe prostora. Zasnova in materialnost sta spoštljiva do obstoječih kvalitet in dosledna. Predlaga se uporabo lokalno prisotnih materialov, obdelanih s sodobnimi postopki - obiskovalec naj jasno loči med novim in starim in se na podlagi ponavljajočih se materialov v mestu zlahka orientira.

Tako bi denimo nekdanji zapor v nadstropju večinsko funkcioniral kot študentski dom, ob potrebi pa kot namestitveni objekt, bodisi za turiste, bodisi gostujoče umetnike. V pritličju bi s pomočjo pomičnih panelov ustvarili manjše najemniške pisarne ali delavnice za gostujoče umetnike in lokalne obrtnike. Osrednje dvorišče bi postalo prostor, kjer bi se vsakodnevno lahko srečevali lokalni prebivalci, obrtniki in umetniki pa bi lahko prodajali svoje izdelke in pridelke. Zapuščeni prostor manjše cerkve bi prebivalci lahko uporabljali kot večnamensko dvorano primerno za družabna srečanja ali rekreacijo. Parternemu prostoru dodana raztegljiva tribuna bi ob posebnih priložnostih omogočala transformacijo v prostor primeren za



Slika 2: Aksonometrična predstavitev intervencije (projekt "nekdanje gledališče" : Špela Hafner, Jona Rak Koceli, Barbara Trunkelj, Maja Volk).
Figure 2: Axonometric projection of intervention (project "ex-theatre" : Špela Hafner, Jona Rak Koceli, Barbara Trunkelj, Maja Volk).

Slika 3: Prostorski prikaz dogodka (projekt "nekdanje gledališče" : Špela Hafner, Jona Rak Koceli, Barbara Trunkelj, Maja Volk).
Figure 3: Model with example of space use during events (project "ex-theatre" : Špela Hafner, Jona Rak Koceli, Barbara Trunkelj, Maja Volk).



projekcije, koncerte ali konference. Dvorišče zapuščenega gledališča bi z umestitvijo manjših volumnov (knjižnica , prostori za učenje) lahko na vsakodnevni bazi postalo zbirališče šolarjev z bližnje šole. V notranjosti objekta umeščena nova pomična ploščad , na novo ustvarjeni padec dvorišča proti objektu, preplet nivojev in odpiranje notranjega prostora na dvorišče bi postali zanimivo prizorišče raznovrstnih umetniških dogodkov, ki bi lahko zavzeli celotni teritorij ali pa le njegov majhen del.

Javna predstavitev meščanom ob koncu prvega dela delavnice (31.10.2014) je potekala v prostorih Mestnega sveta kraja Melfi. V začetku decembra t.j. ob zaključku delavnice, so bili vsi projekti razstavljeni v mestnem arheološkem muzeju. Otvoritev razstave z okroglo mizo in izborom najboljših projektov je potekala 5. in 6.12.2014.

Izoblikovane variantne rešitve na danih lokacijah predstavljajo nabor možnih pristopov k revitalizaciji kraja Melfi in usmeritve za nadaljnje korake. Gradivo, program, seznam sodelujočih in rezultati so objavljeni na spletni strani https://www.workshopmelfi.com

V izdelavi je publikacija s predstavitvijo rezultatov delavnice in potujoča razstava projektov po različnih lokacijah širom Italije. Ob zaključku delavnice je komisija izbrala najboljše predloge za posamezno lokacijo. Na lokaciji nekdanjega gledališča je bil kot najboljši izbran projekt študentk Špele Hafner, Jone Rak Koceli, Barbare Trunkelj in Maje Volk.

Mentors and organizations

Mentorji

prof. Jurij Kobe

prof. Miloš Florijančič

asist. Mina Hiršman

Organizacija

Občina Melfi in Universita degli Studi della Basilicata, Dipartimento delle Culture Europee e del Mediterraneo: Architettura, Ambiente, Patrimoni Culturali; Matera, Italija

K sodelovanju so bili povabljeni predstavniki z 8. univerz oz. arhitekturnih šol:

Universita degli Studi della Basilicata, Dipartimento delle Culture Europee e del Mediterraneo: Architettura, Ambiente, Patrimoni Culturali; Matera;

Universita degli Studi di Chieti-Pescara, Dipartimento di Architettura, Pescara;

Universita degli Studi di Camerino, Scuola di Architettura e Design, Ascoli Piceno;

Universita Politecnica delle Marche, Dipartimento di Architettura Construzioni Strutture, Ancona;

Universita IUAV di Venezia, Dipartimento di Culture del Progetto, Venezia;

Universita degli Studi di Genova, Scuola Politecnica, Dipartimento di Scienze per l'Architettura, Genova (vse ITA);

University of Florida, School of architecture, Gainesville (ZDA)

Univerza v Ljubljani, Fakulteta za arhitekturo, Ljubljana (SLO).

Skupina "nekdanja cerkev" - mentor: prof. Jurij Kobe; študenti: Andraž Gorup, Metka Lozej, Katja Marinič, Jure Ule

Skupina "nekdanje gledališče" – mentorja: prof. Miloš Florijančič, asist. Mina Hiršman; študentke: Špela Hafner, Jona Rak Koceli, Barbara Trunkelj, Maja Volk

Skupina "nekdanji zapor" - mentorja: prof. Miloš Florijančič, asist. Mina Hiršman; študenti: Kristina Capuder, Alja Leskovar, Maja Likar, Jan Tinunin.

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Andreja Benko

INTERNATIONAL SCIENTIFIC CONFERENCE ON SOCIAL SCIENCES AND ARTS

Albena, Bolgarija
2. - 9. september 2014

V mesecu septembru 2014 sem se udeležila znanstvene konference v Albeni, Bolgarija z naslovom Mednarodna, multidisciplinarna znanstvena konferenca s področja družbenih ved in umetnosti. Organizatorji konference so bili: Bolgarska akademija znanosti, Češka akademija znanosti, Latvijska akademija znanosti, Poljska akademija znanosti, Ruska akademija znanosti, Srbska akademija znanosti, Slovaška akademija znanosti, Narodna akademija znanosti Ukrajine, Narodna akademija znanosti Armenije, Znanstveni svet Japonske, Svetovna akademija znanosti (TWAS), Evropska akademija znanosti, umetnosti, Akademija likovne umetnosti Zagreb – Hrvaška, Hrvaška akademija znanosti in umetnosti, Akademija znanosti Moldavije, Črnogorska akademija znanosti in umetnosti, Akademija likovne umetnosti in oblikovanja Bratislave, Ruska akademija umetnosti in Turška znanstvena akademija.

Konferenca s področja umetnosti je bila sestavljena iz petih različnih sklopov:

- Zgodovina umetnosti;
- Sodobna umetnost, upodabljajoča umetnost;
- Vizualna umetnost;
- Oblikovanje;
- Arhitektura.

Znanstveni odbor konference so sestavljali:

- Prof. Lidia Cristea, Romunija
- Prof. dr. Petras Grecevičius, Litva
- Prof. dr. sc. Sanja Nikčević, Hrvaška
- Prof. dr. Mark Meerovich, Rusija
- Prof. Lucio Altarelly, Italija
- Prof. dr. Arch. Sofia Letelier Parga, Čile
- Prof. David Bershad, Kanada
- Assoc. Prof. Eleni Lapidaki, Grčija
- Assoc. Prof. Malvina Russeva, Bolgarija

Konferenca je potekala skupno dva tedna, od katerega je sklop arhitekture časovno zajemal pet dni, od tega vsak dan med 9. in 17. uro. Konference se je udeležilo mnogo strokovnjakov in znanstvenikov s področja arhitekture in ostalih umetnosti, kar je omogočalo navezavo različnih stikov in mreženja. Organizatorji so poskrbeli za skupne dogodke za mreženje in večer, ko smo spoznavali bolgarsko kulturno dediščino s področja prehrane, plesov in običajev.

The issue of responsibility, collaboration and communication in the design process of single-family houses.

For designing process in single family houses many think that is the simplest thing in designing. But they often do not bear in mind that the architect has to collaborate with the potential user of the house. This collaboration must be effective, so that the process continues in the desired direction.

In this sphere the architect has to think about the user's needs and wishes and the architectural landscape where the object will be placed, as well as on the spatial legislation in that area. Combining all that in one process can be problematic, that is why the process needs to be well organized and coordinated by one person, who has the most experience in that field. In most cases, this person is an architect.

Architect and user have to collaborate and communicate in the proper direction to achieve the common goal – that is the building permit and the final erection of the object. In many cases the architect also has to educate the user about the process of designing and constructing and to lead him through it to the goal.

This paper is focused on the main things where architects and potential final users have the biggest problems; these are the area of responsibility, collaboration and communication.

Slika 1: During the presentation at the SGEM conference 2014 in Albena, Bulgaria.
Figure 1: Med predstavitvijo na konferenci SGEM 2014 v Albeni, Bolgarija.

BENKO, Andreja. The issue of responsibility, collaboration and communication in the design process of single-family houses. V: Arts, performing arts, architecture and design : history of arts, contemporary arts, performing and visual arts, architecture and design : conference proceedings. Sofia: SGEM, cop. 2014, str. 1047-1053. [COBISS.SI-ID 37604613]

Andreja Benko

PROTESTANTIZEM VČERAJ, DANES IN JUTRI

Radenci, Slovenija
16. - 17. oktober 2014

V mesecu oktobru sem se udeležila mednarodnega simpozija Protestantizem včeraj, danes in jutri, v Radencih, Slovenija. Simpozij je bil pripravljen ob 15. letnici prvega simpozija USF o protestantizmu, 20. obletnici ustanovitve in delovanja Protestantskega društva Primož Trubar in 500. obletnici Lutrove dekade. Simpozij so pripravili:

- Ustanova dr. Šiftarjeva fundacija;
- Slovensko protestantsko društvo Primož Trubar;
- Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti.

Na simpoziju smo se sodelujoči seznanili z napredkom zadnjih 15 let pri raziskovanju področja protestantske kulture. Ob tem smo prvi dan opravili strokovno ekskurzijo po Prekmurju, Štajerski in Avstriji, kjer smo si ogledali spomenike protestantski kulturi, imeli vodenje po avstrijskem delu Radgone in zaključili z druženjem v Radgonski kleti z ogledom načina pridelovanja šampanjca.

Udeležba na simpoziju je bila vabljena, glede na aktivnost raziskovana s področja protestantizma. Sama sem bila vabljena zaradi raziskovanja področja evangeličanske arhitekture. Na simpoziju smo sodelovali:

- Akademik dr. Anton Vratuša, Slovenija
- Walter Brunner, Avstrija
- Žiga Oman, Slovenija
- Gene S. Whiting, Hrvaška
- Robert Hajszan, Avstrija
- Miloš Klatik, Slovaška
- Klavdija Sedar, Slovenija
- Franc Kuzmič, Slovenija
- Vincenc Rajšp, Avstrija
- Boštjan Zajšek, Slovenija
- Marko Kerševan, Slovenija
- Geza Erniša, Slovenija
- Cvetka Hedžet-Toth,Slovenija
- Violeta Vladimira Mesarič Jazbinšek, Slovenija
- Viljem Kerčmar, Slovenija
- Stanko Jambrek, Hrvaška
- Ivanka Huber, Slovenija,
- Kozma Ahačič, Slovenija
- Marko Jesenšek, Slovenija
- Polonca Šek Mertük, Slovenija
- Mojca Horvat, Slovenija
- Andreja Benko, Slovenija
- Simona Menoni, Slovenija
- Franci Just, Slovenija
- Evgen Balažic, Slovenija

V letu 2015 bo izšel zbornik znanstvenih prispevkov sodelujočih na simpoziju.

Arhitektura evangeličanskih cerkva v Prekmurju. Prikaz tipike na primeru lesenega zvonika v Šalovcih in cerkve v Puconcih.

Trenutno je v Sloveniji več kot 10 registriranih aktivnih verstev in posledično tudi njihovih sakralnih objektov. Z vidika verovanj in sakralnih objektov je v Sloveniji že od nekdaj največ zastopanih verstev v Prekmurju, kjer so v preteklosti izstopala štiri verstva: katoliško, evangeličansko, judovsko in kalvinsko. Temu primerno je tudi število sakralnih objektov, med katerimi nekaterih nekdaj evidentiranih ni več, mnogi pa še v sodobnem času potrjujejo pomembnost vere na tem področju.

Tudi v Prekmurju je največ katoliških sakralnih objektov, predmet obravnave pa so drugi najštevilčnejši, evangeličanski objekti, med katere štejemo tudi samostojne lesene zvonike (ki jih nekateri prištevajo k evangeličanski kulturi) in 14 evangeličanskih cerkva.

Prispevek se osredotoča na izpostavljene objekte. Lesene zvonike in njihove specifike na Prekmurskem področju na primeru zvonika v Šalovcih na Goričkem. Na enak način je z arhitekturnega vidika analizirana evangeličanska cerkev v Puconcih iz lete 1784. Osredotočeni smo na zadnjo večjo prenovo le-te z začetka 20. stol., v stilu madžarske secesije.

Andreja Benko

ISG SYMPOSIUM 2014: IM ZENTRUM WOHNEN

Gradec, Avstrija
12. - 14. junI 2014

V Gradcu v Avstriji se je odvijal 5. mednarodni simpozij ISG Graz, namenjen arhitektom in urbanistom. Simpozij je bil razdeljen na: strokovno ekskurzijo, mednarodni posvet s predavanji in strokovnim arhitekturnim ogledom mesta Gradec (UNESCO zaščiteno mestno središče) in Celja v Sloveniji.

Udeležila sem se drugega dneva, ki je bil namenjen predavanjem na temo problematike življenja v spomeniško zaščitenem mestu. Čez dan se je zvrstilo precej predavanj:

- Lernen von New Lumpur und Sao Angeles/Learning from New Lumpur and São Angeles;
- Im Zentrum wohnen: ALLEIN! Thesen zur Zukunft von Haus, Straße und Quartier/Living in the Centre – ALONE! Hypotheses on the future of houses, streets and districts;
- Wohnen im Mittelpunkt/Living in the centre;
- POTENTIAL DICHTE Leben in gründerzeitlichen Stadtquartieren/ THE POTENTIAL OF CONCENTRATION Living in districts built at the end of the 19th Century;
- Weiterarbeiten am historischen Stadtkern/Continue working on historic centres Stadtbaurätin von Ingolstadt;
- Sanierungsoffensive "Neues Leben im Ortskern" /Housing renovation offensive New Life in the Centres of Towns and Villages;
- Mit dem Genius loci unter einem Dach / Under one and the same roof as the "genius loci"
- Belebtes Weltkulturerbe/Revitalised World Heritage Sites;
- Urbane Wohnqualitäten neu entdecken: Identität, Atmosphäre, kurze Wege/Re-discovering the quality of urban living: identity, atmosphere, short distancesOberbaudirektor der Freien und Hansestadt Hamburg;
- Smart City Graz: Vom Industriegebiet zum lebenswerten Stadtteil/Smart City Graz – from an industrial area to a district worth living;
- Urbanes Leben/Urban living.

Predavatelji so mnogokrat izpostavili problematiko etike v arhitekturnem načrtovanju in predvsem neprimerne posege v prostor in s tem rušitev tradicionalne arhitekturne krajine. Namen simpozija je bil tudi navezava kontaktov, med udeleženci, čemur je bil namenjen čas med različnimi predavanji. V reviji ISG Magazin je bil objavljen prispevek:

BENKO, Andreja. Die Gestaltung slowenischer Stadt- und Ortszentren = The design of Slovenian towns, cities and villages. ISG Magazin, ISSN 2309-1215, 2014, 3, str. 8-11, ilustr. [COBISS.SI-ID 37590021]

Domen Zupančič

ISG SYMPOSIUM 2014: IM ZENTRUM WOHNEN

Gradec, Avstrija
12. - 14. junI 2014

Mednarodno združenje zgodovinskih mest in občin je strateški forum strokovnjakov na področju vodenja mest in upravljanja s prostorom. Združenje povezuje stroke na področju urejanja prostora na območju Avstrije, Slovenije, Švice in Nemčije. Poleg arhitektov aktivno sodelujejo še prostorski načrtovalci, raziskovalne organizacije in zgodovinarji. Cilji združenja so usmerjeni k temu, da promovirajo procese oblikovanja prostora po načelu soodločanja z upoštevanjem zgodovinskih danosti okolja.

Slika 2: Pogovor med pavzo simpozija Protestantizem včeraj, danes in jutri.
Figure 2: The talk during the pause of sypmosium Protestantizem včeraj, danes in jutri.

Združenje se ne ukvarja zgolj z grajenim mestnim prostorom, posega tudi na področje urejanja naselij in prostora med naselji – krajino. Vsako letno organizirajo večdnevni tematski simpozij in ob tem izdajo tematsko številko ISG Magazin (ISSN 2309-1215) z izbranimi prispevki. Besedila so praviloma dvojezična: NEM in ANG. V letu 2014 je bil simpozij posvečen tematiki bivanja v mestnih središčih. Simpozij je slonel na ključni besedni zvezi: urbana renesansa: združenje mestotvornih načel in renesančnega duha z odkrivanjem zakonitosti ustvarjanja pogojev kvalitetnega bivanja v mestnih središčih. Vabljeni predavatelji na simpoziju so predstavili teoretične in praktične primere udejanjanja načel celostnega načrtovanja.

Ljubljana – Stadt vieler Potentiale. Der öffentlichen Raum

Der offentliche Raum, der im Stadtzentrum von Ljubljana oftmals mit der Architektur von Plecnik gleichgesetzt wird, steht heute unter der Schirmherrschaft des Stadtarchitekten Prof. Dr. Janez Koželj. Zurzeit wird in der Stadt der Platz trg republike renoviert. Die Arbeiten werden posthum nach den Planen von Edvard Ravnikar durchgefuhrt und ehren damit spat seine architektonischen Leistungen. Die Stadtgemeinde Ljubljana verfugt auch bereits uber die Plane fur die Renovierung der Uferpromenade Cankarjevo nabrežje, rechts des Flusses Ljubljanica; dieses Projekt der Renovierung und Neugestaltung des offentlichen Raumes im Zentrum der Stadt soll aus Mitteln des Europaischen Fonds fur regionale Entwicklung finanziert werden. Doch neben den offentlichen Raumen wie Strasen, Platze, Parks und Fassaden benotigt die Stadt vor allem Wohnraum und Arbeitsmoglichkeiten fur die Menschen.

Die strukturalistische Sicht auf das urbane Gewebe einer Stadt, wie von Catells vertreten, wonach die Stadt ein Raum kollektiven Konsums sei, lasst den Schluss zu: Eine Stadt entwickelt sich aufgrund des Konsums ihrer Bewohner und aller anderen Menschen, die mit ihr uber den Konsum verbunden sind. Ohne Kapitalfluss kann eine Stadt nicht bestehen. Die Wirtschaftskrise lehrte uns anderes.

Reference: Castells, M.; Local and global: Cities in the network society. Tijdschrift Voor Economische En Sociale Geografie, 93, 2002, 548–558.

ZUPANČIČ, Domen. Ljubljana, Stadt vieler Potentiale = Ljubljana, a city with great potential. ISG Magazin, ISSN 2309-1215, 2014, [H.] 2, str. 19-22, ilustr. [COBISS. SI-ID 3044484]

Domen Zupančič

USMERITVE IN PRIPRAVE TRAJNOSTNIH URBANIH STRATEGIJ

Novo mesto, Slovenija
8. december 2014

Ministrstva za okolje in prostor RS je organiziralo strokovni posvet priprave trajnostnih urbanih strategij (TUS), ki jih spodbuja EU in Direktorat za prostor z Operativnim programom finančne perspektive 2014-2020 za izvajanje ukrepa trajnostnega urbanega razvoja v Sloveniji.

Slika 3: Primer upodobitve Emonike, Ljubljana in upodobitve nakupovalnega središča Cairo, Egipt. Projekta na različnih celinah, z različnim programom in zelo sorodnim oblikovanjem. Identiteta lokacije je v obeh primerih izločena iz načrtovanja. Ignoranca potrošništva je dosegla novo prevojno točko, saj je projekt nakupovalnega središča prejel nagrado Global RLI Awards 'Future Project Award'. Vir 1: Emonika http://trigranit.com/images/awards/jok/16-euromoney <december 2014>. Vir 2: Cleopatra Mall Cairo. http://designinternational.com/themes/di/open-pdf.php?file=sites/default/files/CleopatraMall-best-retail-worldwide.pdf <maj, 2015>.
Figure 3: Emonika (Ljubljana) and Cleopatra Mall Cairo (Egypt), two examples of architectural ignorance of genius loci and identity of location. Emonika and Cleopatra Mall are examples of misuse of Catells idea. Source 1: Emonika http://trigranit.com/images/awards/jok/16-euromoney <december 2014>. Source 2: Cleopatra Mall Cairo. http://designinternational.com/themes/di/open-pdf.php?file=sites/default/files/CleopatraMall-best-retail-worldwide.pdf <maj, 2015>.

Osnutek besedila TUS (vir: MOP RS http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/urbani_razvoj/trajnostna_urbana_strategija_osnutek.pdf <dec. 2014>):

7. člen Uredbe o Evropskem skladu za regionalni razvoj (ESRR) določa, da se trajnostni urbani razvoj izbranega urbanega območja lahko financira le na podlagi sprejete celovite strategije trajnostnega urbanega razvoja.

Projekti, ki jih za financiranje iz evropskih sredstev izbere urbano območje morajo izhajati iz strategije. Izkazovati morajo celovitost, kar pomeni, da morajo v strategiji identificirane probleme obravnavati na povezan način, to je, izvajati morajo cilje najmanj dveh prednostnih osi iz Operativnega programa kohezijske politike. Lahko se nanašajo na del mesta ali na celotno (mestno)urbano območje.

1. Prikaz urbanega območja za izvajanje trajnostnega urbanega razvoja.
2. Analiza ali opredelitev specifičnih družbenih, gospodarskih, okoljskih in s tem povezanih prostorskih izzivov posameznega mesta (urbanega območja).
3. Opredelitev vizije ter strateških in operativnih ciljev razvoja mesta (urbanega območja), s katerimi mesto (urbano območje) naslavlja v analizi opredeljene izzive.
4. Predvidene aktivnosti za reševanje opredeljenih izzivov in način doseganja opredeljenih ciljev.
5. Nabor finančno ovrednotenih celostnih urbanih projektov, ki jih mesto (urbano območje) predlaga za sofinanciranje iz evropskih sredstev s prioriteto njihovega izvajanja.

Na posvetu je sodelovalo več strokovnjakov in tudi predstavniki občin. Na posvetu so bila izvedena vabljena predavanja:

Celovite urbane prenove, Prostorož

Izkušnje iz projektov ETS, Mestna občina Velenje. Prenova Doma za starejše občane Ljubljana - Šiška, doc. dr. Domen Zupančič, UL FA. Pripravo TUS so predstavili predstavniki Mestne občine Koper, Ptuj, Celje in Kanj.

Razprava ob koncu predstavitev je bila konkretizirana s primeri iz prakse in usmerjena k iskanju operativnih rešitev izvajanja priprave TUS, verifikacije strategij in implementacije v prostoru.

Domen Zupančič

RE-NEW TOWN CONFERENCE

Ljubljana, Slovenija
10. - 12. december 2014

The Socioeconomic value of EEE F funding. Case: THE Home for THE elderly in Siska, Ljubljana as a generator of social life.

European energy efficiency funding (EEE F) aims to improve the energy efficiency of buildings; however, homes for the elderly are not just empty spaces needing optimised energy consumption and reduced costs. The paper shows how EEE F is able to not only raise the economic value of a building, but also improve social values among residents, visitors and people in the neighbourhood. Those spaces are places for special groups of people whose adaptations to any changes are slow and quite stressful.

The application of a new thermal coating on the building was combined with some substantial changes to the spatial organisation within it. The changes were made in order to raise the social value of the building in the broader sense: the home for the elderly is not simply an enclosed space but a vital part of the community with a public restaurant, cafeteria, library, museum and a park with gym facilities for the elderly.

To achieve the end result we moved beyond the 'checklist attitude' and examined the potential of the construction combined with new approaches to services for elderly people. We overturned the logic of what was private and what might

Slika 4: Horizontala krajine s cerkveno kupolo v Xewkiji. Pogled iz Victorie, Gozo, Malta. Skica: D. Zupančič.
Figure 4: Horizontal line of the landscape dominanted by the Church of San Gwann Battista. View from Victoria, Gozo, Malta. Sketch: D. Zupančič.

become public.

The home is no longer just a 'detached' island for old people: it is a generator of social life. The cafeteria is combined with a museum, and is open to all citizens. A weekly fair for clothing attracts ever more visitors from nearby places. The outcome is not simply the smart use and re-use of energy; it is the empowerment of people.

The paper presents the results of the multi-layered collaborative design process of different organisations (the EU, Ministry of Labour, Family, Social Affairs and Equal Opportunities Slovenia, DSO Šiška) grouped with other institutions (the University of Ljubljana). The EE project is part of the EU EEE-F programme.

ZUPANČIČ, Domen. Socio economic value of EU EEE funding: case: home for elderly people in Ljubljana Šiška as centre of generator of social life. V: OGRAJENŠEK, Irena (ur.). Renewed post-socialist city: competitive and attractive: programme and abstracts of the Final ReNewTown Project Conference, UL, Faculty of Economics, Slovenia, 11th and 12th February 2014. 1st ed. Ljubljana: Faculty of Economics, 2014, str. 17. Zupancic.pdf. [COBISS.SI-ID 2979460].

Slika 5: Vertikala neba v ozki ulici. Sartene, Korzika. Skica: D. Zupančič.
Figure 5: Vertical sky in narrow street. Sartene, Corsica. Sketch: D. Zupančič.

Domen Zupančič

6. BIENALE "PO FABIANIJEVIH POTEH"

Štanjel, Slovenia
18. oktober 2014

Bienale združuje pedagoge na področju likovne umetnosti v osnovnih šolah v Sloveniji in tudi izven meja Slovenije. Bienale organizirata OŠ Dutovlje in OŠ Antona Šibelja Stjenka iz Komna. Pri bienalu aktivno sodeluje še Društvo likovnih pedagogov Primorja in Zavod RS za šolstvo. Na natečaj je pripelo sto izdelkov iz 85 osnovnih šol iz Slovenije in dveh šol iz tujine. Likoni natečaj je bil zasnovan k iskanju rešitev v dveh dimenzijah ali pa v treh dimenzijah (model, maketa, skulptura, prostorska instalacija) na izbrano temo (fasado, park, arhitekturni element) ali prostor (arhitektura, urbanizem, krajina). Geografski natečaj je iskal izvirnost pri zasnovi prospekta in predstavitvi (besedilo, zemljevid in fotografije) domačega kraja. Na enodnevnem dogodku se odvije več aktivnosti: odprtje razstave nagrajenih izdelkov, serija javnih predavanj in podelitev priznanj in nagrad udeležencem bienala. Letošnji vabljeni predavatelji smo bili:

Vabljena predavanja v Viteški dvorani:

- doc. dr. Beatriz Tomšič Čerkez, Oddelek za likovno pedagogiko Pedagoške fakultete Univerze v Ljubljani: Arhitektura kot vir medpredmetnega povezovanja
- doc. dr. Domen Zupančič, Fakulteta za arhitekturo Univerze v Ljubljani: Skica, medkulturni grafični jezik
- izr. prof. dr. Stanko Pelc, Fakulteta za humanistične študije Univerze na Primorskem: Zemljevid kot abstraktna podoba stvarne pokrajine.

ZUPANČIČ, Domen. Skica, medkulturni grafični jezik : predavanje na odprtju 6. bienalne razstave otroškega prostorskega oblikovanja "Po Fabianijevih poteh" in 3. geografske razstave "Prospekt mojega kraja", Štanjel, 18. oktober 2014. Štanjel, 2014. [COBISS.SI-ID 3147396]

Domen Zupančič

EU PROJECT LIVING LANDSCAPE

Park Škocjanske jame, Slovenija
1. Februar 2014

Prednosti kraške suhozidne gradnje danes in možnost njene vključitve v sodobno arhitekturo Krasa.

Zid na suho je gradnja, pri kateri ima razum glavno vlogo, razmišljanje, rokovanje s kamnom in vgradnja so logični koraki. Izkušnje pri gradnji olajšajo delo, saj so nekatere problematične točke lažje obvladljive. Projektno snovanje med udeleženci projekta se ustvarjalno vključuje v prenos teorije v prakso s privlačnim, dejavnim razvojem deficitarnih poklicnih profilov. Mojster za suhi zid je poklic, ki na trgu poklicev še nima prepoznavne vloge, vendar je povpraševanje po takšnih mojstrih veliko.

Odvečni kamen na polju moramo odstranjevati, pri čemer ga ne moremo spravljati v kupu, temveč ga moramo sestavljati v konstrukcije. Če ga že

konstruiramo, naj bo vsaj uporaben. Najbolj preproste konstrukcije kamna so zidovi, ki na terenu s padcem tvorijo terase. Arhitekturna krajina je zavestno oblikovana prostorska enota in je del identitete območja. Zavestno oblikovanje bivalnega prostora pomeni, da prostor oblikujemo vsi, ki v njem živimo in delamo. Zato še bolj drži teza, da je identiteta krajine odraz kulture ljudi. Morda se zdijo zgornje besede namenjene ljudem iz prejšnjega stoletja. Kras ni namenjen množični kmetijski dejavnosti in takojšnjemu spreminjanju krajine zaradi tehničnih sprememb v kmetovanju. V osnovi je Kras izredno občutljiva pokrajina, ki zahteva počasne korake v prostoru in velike v utrjevanju vrednot kulture.

Prvi korak h krepitvi kulture in pripadnosti okolju je vzgoja in izobraževanje. Učenje o arhitekturi kamna na Krasu se začne s preprostimi tehnikami gradnje, kot je zid na suho. Ta gradbena tehnika zahteva samo en material – kamen. Kamen je osnovno gradivo kraške arhitekture. Kot gradnik ga najbolje spoznamo v praksi, z delom, rokovanjem z njim in s spoznavanjem njegovih lastnosti. Poleg teh lastnosti je pri vgradnji kamna na suho velikega pomena tudi druženje ljudi, pogovor med njimi in značilen zvok udarcev kamna med kamni med zidanjem.

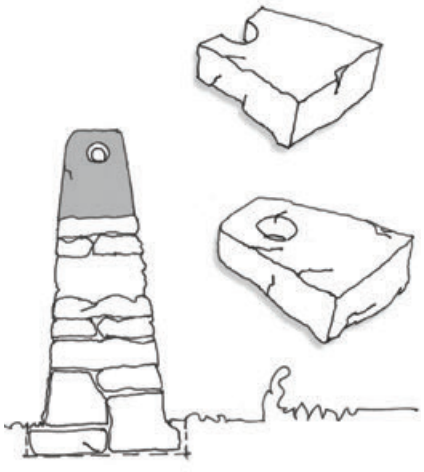
Tehnika gradnje na suho je osnovna tehnika gradnje, ki je potresno manj stabilna kot vezane konstrukcije v betonu ali zidanje z vezivom. Gradnja brez veziva zahteva pogostejše vzdrževanje kot druge konstrukcije, torej zahteva čas. Prednosti zidanja s kamnom brez veziva so naslednje:

1. Zmanjšana poraba vode, saj ni potrebe po izdelavi vezne malte;
2. Zmanjšan ogljični odtis in zmanjšana poraba skupne energije industrijske proizvodnje, saj se ne uporabljajo industrijsko pripravljena veziva;
3. Uporaba lokalnega gradiva s kratkimi transportnimi potmi, manjša poraba energentov;
4. Postopna gradnja, možne so oblikovalske prilagoditve mikrolokaciji, spoštovanje posebnosti lokacije;
5. Ohranjanje kulturne krajine kamna na Krasu, urejena podoba krajine, ozaveščanje o vrednotah arhitekturne regije;
6. Preprečevanje erozije tal, zadrževanje rodovitnih prsti in ohranitev vodnega kroga;
7. Krepitev biotske raznovrstnosti; kamniti medprostori konstrukcij so življenjski prostor žuželk in rastlinja;
8. Možno zaposlovanje težje zaposljivih skupin iskalcev dela, socialni in ekonomski vidik učenja skozi izkušnje in dela;
9. Racionalno ravnanje z naravnimi gradivi, večje ozaveščanje o pomenu lokalnega materiala v arhitekturni regiji;
10. Krepitev tehnike zidanja in razvoj novih tehnik zidanja na suho, razvoj novih krajinskih struktur v prostoru.

Vzpostaviti moramo storitev v smislu osveščanja prebivalcev (publikacije, javna predavanja, javne predstavitve načinov gradnje), izobraževanja (trajno nezaposlene skupine, osebe v programih odvajanja od odvisnosti), vzgoje in seveda tudi z lastnim zgledom.

Delo nikakor ni končano, saj je suhi zid ali zid na suho živa konstrukcija. Zaradi nepoznavanja tematike se ta gradbena tehnika odriva na stran. Poleg teh izzivov so pred nami še izzivi terminologije, saj ima vsako okolje svoje lastne lokalne izraze za posamezne elemente zidu in kamnov. Naj zaključimo z mislijo Normana Haddowa na temo gradnje konstrukcij na suho, da bi imeli hkrati potrpljenje in trdnost kamna.

BELINGAR, Eda, BRATINA, Patricija, ČOK, Boris, JERŠEK, Miha, ZUPANČIČ, Domen. Priročnik kraške suhozidne gradnje. Škocjan: Park Škocjanske jame, 2014. 34 str., ilustr. ISBN 978-961-6490-34-4. http://www.zvkds.si/sl/kulturna-dediscina-slovenije/publikacije/kategorije/16/. [COBISS.SI-ID273384960]



Slika 6: Zaključek suhega zidu - latnik. Skica: D. Zupančič.
Figure 6: Cap stones of dry wall – latnik (pergola). Sketch: D. D. Zupančič.

Lara Slivnik

36. ZBOROVANJE GRADBENIH KONSTRUKTORJEV SLOVENIJE

Slovensko društvo gradbenih konstruktorjev
Ljubljana, Slovenija
14. November 2014

Osnovne oblike tročlenskega konstrukcijskega sistema

Tudi letošnje leto je bilo Zborovanje gradbenih konstruktorjev Slovenije okrnjeno zaradi krize v gradbeništvu. Enodnevno srečanje z dvema vabljenima tujima predavateljema je bilo na Fakulteti za gradbeništvo in geodezijo Univerze v Ljubljani. Uvodno vabljeno predavanje je imel priznani profesor dr. Miloš Lazović, vodja katedre za gradbeno geotehniko na Gradbeni fakulteti Univerze v Beogradu. Naslov predavanja prof. Lazovića (s soavtorji Marijo Lazović in Jankom Radovanovićem) je bil Zaščita globokih gradbenih jam – moderne metode izvedbe in načrtovanja. Drugo vabljeno predavanje sta imela g. Želimir Bodiroga in g. Predrag Presečki, ki sta prikazala zanimivejše izvedene projekte podjetja BBR Adria iz Zagreba. Ob koncu uvodnega dela je g. Gorazd Humar predstavil novo knjigo Footbridges - Small is beautiful, v kateri je predstavljenih okoli 200 zanimivejših evropskih in japonskih mostov za pešce.

Sledilo je 17 prispevkov, ki so bili razdeljeni na štiri tematske skupine: Konstrukcije, Mostovi, Potresno inženirstvo in skupaj Eksperimentalna in numerična analiza konstrukcij ter gradbeni materiali. V sekciji Konstrukcije sem predavala o treh osnovnih oblikah tročlenskih konstrukcij, ki so: tročlenski ločni konstrukcijski sistem, tročlenski okvirni konstrukcijski sistem in tročlenski tridimenzionalni konstrukcijski sistemi. Kot del tročlenskega ločnega sistema so predstavljeni še trije podtipi: tročlenski rešetkasti, tročlenski obešeni in čisti tročlenski ločni konstrukcijski sistem. Za vsak tip tročlenskega konstrukcijskega sistema je podan prvi ali najpomembnejši zgodnji objekt te vrste, ki je prikazan s skico. V zaključku so strnjene lastnosti osnovnih oblik tročlenskih konstrukcijskih sistemov v luči predstavljenih objektov. Predavanje je objavljeno kot prispevek v zborniku.

SLIVNIK, Lara. Osnovne oblike tročlenskega konstrukcijskega sistema = Basic types of the three-hinged structural system. V: LOPATIČ, Jože (ur.), MARKELJ, Viktor (ur.), SAJE, Franc (ur.). Zbornik 36. zborovanja gradbenih konstruktorjev Slovenije, Fakulteta za gradbeništvo in geodezijo, Ljubljana, 14. november, 2014. Ljubljana: Slovensko društvo gradbenih konstruktorjev, 2014, str. 47-54, ilustr. [COBISS.SI-ID 3098756]

Lara Slivnik

ARHITEKTURNA ZGODOVINA: ARHITEKTURA IN POLITIKA

Ljubljana, Slovenija
28. - 29. November 2014

Vpliv politike na arhitekturo jugoslovanskega paviljona za Expo'67

Dvodnevni mednarodni znanstveni simpozij Arhitekturna zgodovina je potekal na Oddelku za umetnostno zgodovino Filozofske fakultete Univerze v Ljubljani. Sodelovalo je devet tujih in prav toliko slovenskih predavateljev, ki so predstavili 16 kronološko razporejenih prispevkov. Izpostavljen je bil odnos med arhitekturo in politiko skozi arhitekturno zgodovino: od srednjeveške Dalmacije preko Habsburške monarhije in Kraljevine Jugoslavije do različnih oblik socialističnih državnih ureditev in novega kapitalizma. Po vsakem sklopu predavanj je potekala razprava, ki se je dotaknila tudi današnjega razmerja med arhitekturo in politiko.

Predstavila sem vmešavanje politike v arhitekturo jugoslovanskega paviljona za svetovno razstavo v Montrealu leta 1967. Težave so se začele že pri natečaju, saj je bila žirija premalo strokovna in rok za izdelavo natečajnih predlogov prekratek. Udeleženci natečaja in arhitekturni kritiki so bili razočarani nad končnim izborom natečajne komisije in nad podelitvijo prve nagrade. V razpisu zahtevane avantgardne rešitve so bile v končnem izboru spregledane in zamenjane s povsem realistično izvedbo. Prikazana je bila nacionalna in politična sestava strokovne komisije, opozorjeno je bilo na različne kriterije, ki jih je komisija imela pri odločanju o zmagovalni rešitvi, komentirani so

bili odmevi na izbor natečajnih rešitev v jugoslovanskem arhitekturnem tisku in odmevi na zgrajeni paviljon v tujem tisku. Jugoslovanski paviljon v Montrealu ni dosegel pričakovane obiskanosti, pozornosti in odmevnosti; predvsem zaradi vmešavanja politike, omejenih denarnih sredstev in slabih povezav z industrijo.

SLIVNIK, Lara. Vpliv politike na arhitekturo jugoslovanskega paviljona za EXPO'67. V: NOVAK KLEMENČIČ, Renata (ur.), KLEMENČIČ, Matej (ur.). Arhitekturna zgodovina : arhitektura in politikat: zbornik povzetkov znanstvenega simpozija, Ljubljana, 28.-29. november 2014. Ljubljana: Znanstvena založba Filozofske fakultete Univerze v Ljubljani, 2014, str. 28-29. [COBISS.SI-ID 3098500]

Marta Bujanda Miguel

INTRODUCCIÓN A LA CONSTRUCCIÓN POPULAR 2014

ETSE, UPM
Madrid, Španija
25. September 2014 – 06. November 2014

In these conferences organized at ETSE (Universidad Politécnica de Madrid) traditional architecture was approached from a wide variety of aspects. For a month a half, one conference was held once per week where experts could present their topics related to traditional architecture, its influences, factors, consequences and construction systems among other aspects. It was an open conference where students as well as other experts could attend and later participate in a round table that followed every conference.

Varieties of maize aerial drying sheds in Europe.

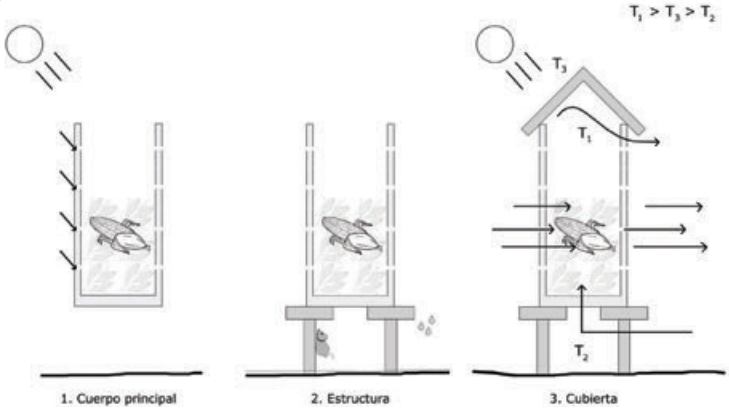
Traditional architecture seems simple but it is indeed complex and deep. There is a tacit construction knowledge attached to these constructions that has evolved together with it, and a deep understanding of local resources, efficiency and sustainability maximizing the result.

Born from the need to dry, store and preserve grain, elevated drying sheds are closely connected to local materials, construction systems, structure and form, as well as to the cultural context where they are developed. This is why it is impossible to separate each other, as the meaning of this traditional construction would be lost. But not only local resources and climate influences the choice of material, but also geography, culture and tradition play a key role in it.

The existence of this link was presented in this conference by exposing examples of elevated drying sheds in Europe which share the same principles but are particular to each region and adapted to the local culture and traditions. There are no two identical drying sheds, but they share the same proportion system that allows an individualized construction framed within a particular identity, creating a recognizable cultural landscape.

BUJANDA MIGUEL, Marta: Varieties of maize aerial drying sheds in Europe. AR 2014/1, pp. 27-36. UL-FA, Ljubljana, 2014. [COBISS.SI-ID 3123332].

Slika 7: Sestavni deli sušilne naprave in njihova vloga pri procesu sušenja. [Marta Bujanda]
Figure 7: Main parts of an elevated drying shed and their function in the drying process. [Marta Bujanda]



NAVODILO AVTORIJEM
AUTHORS GUIDELINES

NAVODILA AVTORIJEM

Seznam digitalnega in natisnjenega prispevka za oddajo v uredništvo:

1. Podatki o avtrojih.
2. Naslov prispevka (SLO in ANG).
3. Izvleček (SLO in ANG).
4. Ključne besede (SLO in ANG).
5. Seznami dežel / objektov.
6. Besedilo članka.
7. Viri in literatura.
8. Grafično gradivo z opisi grafičnega gradiva (SLO in ANG).
9. Vsa besedila morajo biti jezikovno ustrezna in **lektorirana z navedbo lektorja oz prevajalca.**
10. Če je članek v okviru doktorskega študija na UL FA, mora avtor na to opozoriti, da bo ob prispevku objavljen del recenzije.
11. **Podpisano izjavo o izvirnem avtorstvu besedil.**
12. **Podpisana dovolila za objavo grafičnih elementov.**

Oddaja prispevka (oba koraka sta obvezna)

1. Tiskani izvod + spletni prenos na e-naslov:

UL Fakulteta za arhitekturo
AR arhitektura, raziskave
Uredništvo
Zoisova 12
1000 Ljubljana
Slovenija

domen.zupancic@fa.uni-lj.si

Avtor z oddajo članka zagotavlja izvirnost in avtorstvo. Z oddajo zagotavlja, da ne tekst ne grafični del nista bila objavljena ali poslana v objavo drugi reviji (razen poročil).

Vsak avtor odgovarja za svoj prispevek v celoti. Avtorji naj upoštevajo zakon o avtorskih pravicah (Uradni list RS, št. 21/95, 9/01). Ta načelno dovoljuje objavo že objavljenega tujega grafičnega gradiva kolikor gre za ponazoritev, vendar mora biti vir vedno popolno naveden.

Avtorji prispevka predložijo pisna potrdila, da se avtor grafičnega gradiva strinja z objavo v spletni in tiskani reviji AR arhitektura, raziskave.

Elementi prispevka

Akademski naslov, ime in priimek

Naslov organizacije

E- poštni naslov

Naslov članka

Do **85 znakov s presledki.**

Naslov je v je **v slovenskem in angleškem jeziku.**

Izvleček članka

Dolžina **med 1000 in 1400 znakov s presledki.**

Izvleček naj zajema temeljne vsebinske opise iz besedila. Izvleček naj bo razumljiv, tako da bo jasno in jedrnato predstavil glavno temo in ugotovitve vašega besedila.

Besedilo izvlečka je **v slovenskem in angleškem jeziku.**

Ključne besede [ključne besede / key words]

Do **5 besed**

Zapisane ključne besede opredelijo tematiko prispevka. Izogibajte se veznikom (in, ali).

Podane so **v slovenskem in angleškem jeziku.**

Dežele omenjene v besedilu

Seznam dežel oziroma držav omenjenih v besedilu prispevka. Seznam je koristen zaradi indeksiranja prispevka.

Seznam grajenih struktur ali arhitekturnih objektov

Avtor pripravi seznam grajenih struktur ali arhitekturnih objektov na katere se prispevek nanaša. Seznam je koristen zaradi indeksiranja prispevka.

Besedila članka

Kratki znanstveni članek zajema do 3000 besed.

Daljši znanstveni prispevek znaša med 5000 in 6500 besed.

Daljša besedila v uredništvu ne sprejemamo.

Vire navajajte sproti v besedilu teksta z uporabo oglatih oklepajev [in] in jih ob koncu članka vključite v seznam virov in literature. Struktura navedbe citiranja vira [Priimek, letnica: številka strani navedbe] ali navedba vira ob povzemanju vsebine vira [Priimek, Letnica].

Primer navedbe vira v besedilu: Švicarski paviljon je bil zamišljen kot "švicarska glasbena skrinjica" [Uhlig, Zumtor, 2000].

V reviji AR arhitektura raziskave **se opombe pod tekstom ne izvajajo.** Avtorji jih lahko vključijo neposredno v osnovno besedilo. Za nazornejše prikaze razmišljanj, utemeljitev misli in metod je priporočljiva tudi uporaba **izvirnih grafičnih elementov** kot so skice, risbe, načrti, fotografije, grafikoni in tabele.

Grafični elementi

V članku je lahko **do 8 grafičnih elementov** sem sodijo tabele, slike, skice in drugo.

Napisi pod grafičnimi elementi so **v slovenskem in angleškem jeziku.**

Vsi grafični elementi naj bodo priloženi posebej. Grafično gradivo naj bo shranjeno v posameznih datotekah z imeni, ki so enaka kot so uporabljena k pripisom k slikovnemu gradivu. Vsako grafično gradivo naj ima besedilu prispevka pripadajoči opis.

Primer: Datoteka Slika_01.tif je slika 1 v besedilu članka.

Slikovno gradivo naj bo pripravljeno z resolucijo 300 dpi za fotografije in 600 dpi za skenirane črno bele načrte ali sheme. Priporočljiv format za slikovno (bitno) gradivo je TIFF ali JPG. Priporočljiva okvirna velikost gradiva je 10x15 cm. Grafičnih elementov ne vključujte v besedila članka. V članku lahko predvidite mesto grafike tako, da naredite trojni presledek v tekstu in vnesete ime grafičnega elementa in pripadajoči **opis v slovenskem in angleškem jeziku.**

Primer navedbe grafičnega gradiva v tekstu:

Slika 2: Objekt z vzdolžnim in s prečnim slemenom, Tlorisni gabariti so enaki, 6x8 m, naklon strehe je 30°, debilna zidu 40 cm.

Figure 2: Structures with longitudinal and transverse ridge. Floor plan dimensions are the same, 6 x 8 m, 30° roof pitch, wall thickness 40cm.

Viri in literatura

Vsako navajanje v prispevku mora biti navedeno v seznamu virov in literature, **omejeno do 4000 znakov s presledki oz. do 20 naslovov.**

Neobjavljene vire ali ustne vire podrobneje opišite v besedilu prispevka.

Navajanje člankov in drugih virov, ki so v postopku tiska je možno za jasno navedbo vira in pisnim dokazilom, da je navedeni prispevek v tisku.

Knjiga

Priimek, Prva črka imena. (letnica): Naslov knjige. Založba, Mesto.

Primer: Nishi, K., Hozumi, K. (1985): What Is Japanese Architecture? Kodansha International, Tokio.

Članek

Priimek, Prva črka imena. (letnica): Naslov članka. V:Publikacija, Letnik, Številka: stran članka od do.

Primer: Lah, L. (2002): Muzeji na prostem - večplastnost pomenov za ohranjanje arhitekturne dediščine. V: AR, 2002/1, str.: 64–65.

Spletni naslov

Naslov strani

navedba celotnega naslova, < mesec, letnica >.

Primer: Fakulteta za arhitekturo UL http://www.fa.uni-lj.si/default.asp, <november, 2009>.

Zakoni in pravilniki

Publikacija objave in številka publikacije,(letnica): Naslov zakona. Člen št.

Primer: Uradni list RS 96 (2002): Zakon o uresničevanju javnega interesa za kulturo. Čl. 2.

Standardi

Področje urejanja, navedba standarda.

Primer: Laboratorijske preiskave, Mednarodni standard SIST EN ISO/IEC 17025:2005.

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From 1000 to 1400 characters including interspaces.

Abstract shortly describes the contents of paper presented. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, references should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

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The list of countries mentioned or involved in the paper. The list will be used for indexing purposes.

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The list of building types mentioned / involved / discussed in the paper. The list will be used for indexing purposes.

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Short scientific paper 3000 words.

Full scientific paper from 5000 to 6500 words.

Sources should be quoted within the text as you write by using square brackets [and], and included in the sources and literature list at the end of the article. The structure of the source quotation [Surname, Year: page number of the quotation] or of the quotation of a source when its content is summarised [Surname, Year].

Example of a source quotation within the text: The Swiss pavilion was conceived as a "Swiss music box" [Uhlig, Zumtor, 2000].

In AR architecture, research magazine any footnotes should be included in the body text as quotation. For clearer presentation of thoughts, argumentation and methods, it is recommended to use **original graphic elements** such as tables, graphs, sketches, drawings, schemes and photographs.

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Books

Surname, First letter of the name., (year): Title of the book. Publishing House, City.

Example: Nishi, K., Hozumi, K. (1985): What Is Japanese Architecture? Kodansha International, Tokio.

Journal papers

Surname, First letter of the name. (year): Title of the article. V: Publication, Volume, Number: article pages from to.

Example: Lah, L. (2002): Muzeji na prostem - večplastnost pomenov za ohranjanje arhitekturne dediščine. V: AR, Let. IV, št. 1, str.: 64–65.

WWW sites

Name of the website

full address

< month, year>.

Example: Faculty of architecture UL. http://www.fa.uni-lj.si/default.asp, <November, 2012>.

Legislation

Publication and its number, (year): Title of the law. Article no.

Example: Uradni list RS 96 (2002): Zakon o uresničevanju javnega interesa za kulturo. Čl. 2.

Standards

Regulation area, quotation of the standard.

Example: Laboratorijske preiskave, Mednarodni standard SIST EN ISO/IEC 17025:2005.

Encyclopedia and Dictionaries

Publisher or editor (year): Title, Publishing House, Place: page.

Example: SAZU (1970 – 91): Slovar slovenskega knjižnega jezika, 1-5. SAZU in DZS, Ljubljana: stran 52.

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