

## **MARGI PARK CONCEPT DESIGN: NURSING HOME FOR SENIORS AND EU- STANDARDS**

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**Abstract.** *The physical environment has a great potential for supporting resident's residual way-finding abilities. Until now little systematic research has been carried out to identify supportive architectural characteristics. The architectural structure of the buildings and the impact of the different architectural characteristics was also analyzed. Results show that people with advancing dementia are increasingly dependent on a compensating environment.*

*Our experience in design of contemporary homes and its environment for elderly persons is an example how the young generation can remain an integral part of the elderly peoples lives. Any Cooperation between Serbia and Germany is to be in accordance with European Standards and Norms.*

**Key words:** *elderly, bridge of Generation, environment, standards and norms.*

### 1. INTRODUCTION

It is considered in the research methodology of the senior persons housing, the onset of the late medium and old age is between 65 and 68 years of life, when a person ends its working career.

Those characteristics of the elderly persons, relevant to the housing issues, relate to the transformation of a person in this period. Ageing changes persons on several levels, where three of them can be singled out as dominant:

- Physiological,
- psychological and
- pathological changes.

The signs of ageing, such as the decrease of physical ability and disruption of mental ability, then aggravated and reduced ability of adaptation bring about the feeling of insecurity and helplessness.

According to the health status, the senior persons are classified in three categories:

- capable and independent, able to look after themselves without any assistance,
- insufficiently capable or partially dependent, whose health condition is such so they do not require medical assistance and
- invalids, as fully dependent [1].

Among the characteristics requirements of the elderly persons, the following can be mentioned as relevant for the design of their living space:

- due to the poor circulation, need for a warmer environment than in their youth;
- as they tend to recover more slowly from illness, they need to spend longer time in bed;
- due to insecurity in walking, reduced walking radius, or due to usage of orthopedic implements, it necessary to design handles, ramps and level floors, without steps or thresholds;
- reduced sight and hearing capacity, as well as the smelling one, necessitate caution in terms of appearance of smoke or fire;
- loss of family ties, and distancing from environment, isolation and loneliness frequently lead to depression.

The psychological problems are consequences of going to retirement, when feeling of uselessness starts to set in. A person begins to feel superficial and cast out by the environment. Those who performed physically while working seem to have more difficulties to accept the excess spare time, while women who continue to perform the domestic chores accept their situation more easily.

Therefore, the psychological problems of the older generation are numerous, the significant ones being those related to perception of the self, decrease of intelligence, of working capacity and increase of social isolation. Particular difficulties occur due to prejudices and stereotypes coming from the social milieu [2].

The mentioned factors affect the design issues of locating, designing and equipping of the housing for senior persons. This age group of people needs such living environment which will completely satisfy their physiological and psychological characteristics, as so contribute to their active old age.

The families have the key role in protection of senior citizens, but also the increase of the network of social institutions such as:

- senior people nursing homes,
- independent flats,
- grouped flats for senior persons,
- daytime activities centers and
- senior persons' clubs.

Services are needed for the existence of persons of limited financial might and specific needs in housing.

## 2. SERBIA AND ITS SITUATION WITH RESPECT TO THE ELDER GENERATION

Design Criteria of Senior Homes and its various dependencies in close relation with the specific demands of the elder Generation and with respect to the responsibility of the younger generation and the Community in general.

Congress of Gerontology was held in Vrnjacka Banja, Serbia from 21<sup>st</sup> to 23<sup>rd</sup> of May 2010 regarding the Situation of the elderly in Serbia. The results of the survey accomplished by interviewing 826 of elderly people, show that every fourth person of 70 and more years in Serbia has a need for...some kind of assistance services with a view to daily functioning at home or in local community [3]. Serbia has one of the oldest populations in Europe (Dinić D., Institute for political Studies - Belgrade) with a significant trend to its further aging. That is why the National strategy of Aging (2006-2015) clearly states, that there is a need of integration of the aged into the society. On one hand, there are hundreds of thousands of capable people who have success in labor engagement for their own existence and of their families. On the other hand, there are hundreds of thousands of retirees who also cannot take part in developmental process (Pavlović S., High Medical/Sanitary School for professional studies VISAN in Belgrade). There is a justified question how the aged population may be taken as a potential of development, i.e. in what way it is possible to use, in the sense development on the national level, just potentials offered by the aged population. As soon as local communities prepare for solving problems of elders, by supporting private initiatives as well, they will have better and more complete conclusions in this sense (Marčić B., graduate political and social rehabilitation specialists associate for local law and programs).

### 3. SENIOR HOMES

#### 3.1. Basics

We have set up a guideline which says:

*The living area and its surroundings shall be designed in such a way that nobody will be impeded in his movement.*

That is why, besides medical, psychological and social aspects, which have to be safeguarded seriously, the buildings in which elderly people are supposed to live also have to fulfill certain and very important standards with respect to the satisfactory life of the human beings concerned.

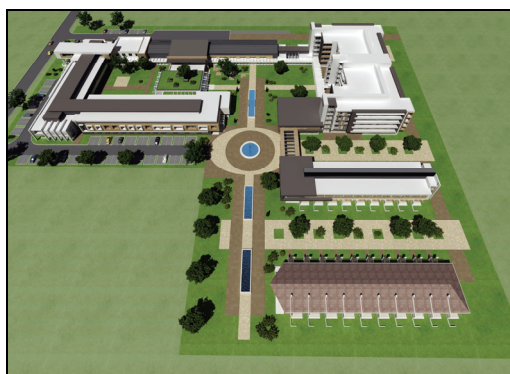


Fig. 1 A view at the model Margi Park – complex in Paraćin designed for senior citizens needs

For example, fully accessible living places, wheelchair accessibility are guarantees that people can live in accordance with their needs and requirements and which will make their lives easier. An environment without barriers will give them an adequate lifestyle, even for a number of people with dementia.

### 3.2. Room sizes in relation with "today" standards

The size of living space based on m<sup>2</sup>/ person continuously increases over years. 5 years ago it was quite common, to have a single room size of 15 to 18 m<sup>2</sup> without entrance area and bath. Nowadays it is 20 to 22 m<sup>2</sup> and it is still rising due to their standard requirements offering a variety with respect to location, standard and services as well as security and innovation.

The design of living space should be most flexible in order to provide an individual arrangement for any type of user.

### 3.3. Specific Living for elderly

Within the last years, a specific living style became more and more popular- *The House Of Generations*. Generations are supposed to live together instead of being separated. We, from our architectural point of view, in close connection with medical and psychological experts, are safeguarding the requirements of elderly persons and we are trying to *bridge the generation gap*. It is quite common today, to build housing which is suitable both for elderly persons and for the young generations.

The elderly generation, even if not the members of the same family, is taking over responsibility for babies and young children not yet going to the Kindergarten for example, enabling the young generation to go for work. Any part involved becomes more and more acquainted to each other.



Fig. 2 A view at the center of the designed complex for the senior persons housing, Margi Park in Paraćin

### 3.4. Nature and environment

The results of such projects show that there is a better understanding and tolerance among the generations and individuals which is to the advantage of everybody.

In this connection another aspect gets more and more important: Nature and environment. So the design of housings, areas and landscape has to respect the facilities available and have to be integrated in the nature as much as possible. We have to safeguard our own interest in this world, not to destroy the nature but to live with and in it.

We have to consider public parks, fully landscaped meeting zones, where everybody can relax and enjoy leisure time. Translucent roofing structures, spaciouly arranged living areas, where young and elderly generations can spend time.

There has been an excellent experience recently working on the so called "Garden of the 5 senses". One may imagine the occupants of Senior Homes, who can, with or without assistance or guidance, smell the fragrance of flowers, the aroma of spices, feel, see the nature, spend time in a shaded gardens, listen to the birds, croaking of frogs in the pond, and taste the fruits which they themselves have harvested in the garden. In this environment, the activities of their past life may return which, they have thought, were gone. One imagine how happy they become and acknowledge their life as being worth living.

If we take into consideration the mutual dependencies for housing projects and living places planned and designed for the future, people will be convinced that this is the right way and we will succeed in making the life of elder and young generation easier and more comfortable.

#### 4. CONCLUSION

The number of residents per living area, the layout of the circulation system and the characteristics of the living/dining room are significant influencing factors. Smaller units facilitate way-finding but larger entities may also provide good results, if they feature a straight circulation system without any changes in direction. Repetitive elements, such as several living/dining rooms, interfere with a resident's way-finding abilities. These and further results must be transformed into architectural policies and guidelines which can be used in the planning and remodeling of nursing homes.



Fig. 3 The appearance of the model of designed Margi Park- complex in Paraćin for the senior persons housing

Adaptation to the old age deserves due attention, however it is also necessary to point out the role of self-assistance and self-protection, but also the voluntary work, as the important preconditions for a more successful life in the old age.

The last but not the least it becomes more and more important for ourselves to find solutions and alternatives for the changing world. The next generation who will need what we are talking about today is us.

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## MARGI PARK: DOM ZA STARE PO EVROPSKIM STANDARDIMA

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*Potencijal fizičke sredine u snalaženju korisnika u neposrednom okruženju ima poseban značaj u projektovanju prostora za stanovanje starih osoba. Kako je mali broj istraživanja usmerenih ka prepoznavanju i utvrđivanju arhitektonskih karakteristika sredine, presudnih u snalaženju i korišćenju prostora u kojima stari borave, u ovom radu se na primeru pilot-projekta Margi Park, kompleksa za stanovanje starih lica, razmatraju mogućnosti i daju smernice za primenu odgovarajućih projektantskih principa u cilju višeg stepena usklađenosti sa evropskim standardima u ovoj oblasti. Ističe se da projektantski koncept i arhitektonske karakteristike prostora u kojima borave, određuju kvalitet presudan za ljude u starijem dobu, ako se zna da ih generalno odlikuje veoma izražena uslovljenost od njima prilagođenog okruženja.*

*Iskustvo nemačkih graditelja, potvrđeno realizovanim projektima savremenog stanovanja i posebno uređenja spoljašnjeg okruženja u kojem žive stara lica, ukazuje na pojavu pozitivnih kvalitativnih promena u uslovima kada postoje ili su mogući različiti vidovi njihove socijalne integracije. Jedan specifičan oblik predstavlja uspostavljanje mosta među generacijama, kada je moguće i najmlađu populaciju uključiti u iniciranje procesa aktivnog života starih.*

Key words: *stare osobe, sredina, most među generacijama, standardi.*