

RESIDENCE OF THE ELDERLY

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Abstract. *Residence of the elderly is analyzed in this work. Experiences of the developed world in this field can be extremely beneficial to the housing policy in Serbia. The elderly are facing serious facility shortages for living compared to the actual demand. The subject-matter of this work is to carry out research into the institutional forms of taking up residence of the elderly in Serbia and France, since France is a welfare state. By analysing French pattern, some useful recommendations can be found for the development of the Serbian pattern.*

Key words: *residence of the elderly, old people's home.*

1. INTRODUCTION

1.1. Residence

Taking up residence is one of the most important things in a series of complex social phenomena. It is the inevitable segment of life since it reflects the culture and the level of civilization of a nation. The act of taking up residence itself symbolizes the evolutionary difference between the humans and other living creatures and that difference is visible in the materialistic nature and spirituality of the people. 'In that respect it is the result of the general social culture and the economic progress of people, and it has an immediate influence on the human, family and social community progress. These mutual influences are regarded relative to the accomplished level of hygiene, technology and living standards' [1].

The research of the European experts for gerontology shows that there is population explosion of the elderly. Their estimates show that in 2050 for the first time in the history of mankind the number of the elderly in the world will surpass the number of the youth [2]. The age group depending on the capacity for work encompasses *dependants* (until 16 years of age), *skilled labour* (from 16 to 60 or 16 to 65 years of age, relative to the rules of some countries) and *senior citizens* (over 60 or 65 years of age). According to the data of the Republic fund for the statistics in Serbia in 2009 there were 1 675 649 (22.8%)

residents over 60 years (senior citizens) and 1 250 818 (17%) residents over 65 years [3]. In the same year it was recorded that there was 7.5% people that are over 65 years [4].

1.2. The research steps

The subject-matter of this work is to carry out research into the institutional forms of taking up residence of the elderly in Serbia and France, since France is a welfare state. By analyzing French pattern, some useful recommendations can be found for the development of the Serbian pattern.

Separate elements of systematization are to be analyzed for the sake of comparative analysis. *Local elements* refer to descriptive notions: city-suburban, center-suburbs. *Social demographic features* refer to the homeowners: their education, incomes, individual and social activities and social contacts. *Architectural elements* refer to the projects, they provide information about the occupants, the size, furnishings and quality of the premises.

1.3. The forms of residence of the elderly

'Due to the structural changes within a family, the most natural family form of protection of the elderly wears off, so it is indispensable for the society to take over the role of protecting the elderly, especially when it comes to living standards improvement.' [5]

B. Anđelković named three forms of residence of the elderly: *old people's home*, *protective residence* and *residence with occasional help*. Institutional residence in people's home provides protection, stay and care for the elderly within closed space. In this way the old people become separate from the normal human surroundings and they get acquainted with each other, thus creating the feeling of uselessness. The alternative forms of residence are to be explored where not only protection, nutrition and maintenance but also active relation between the occupants of different age groups is achievable.

The most efficient form of taking care of the elderly is to provide the center for the help offering. Many experts believe that old people's homes that already have that function should also give their services on the ground, and community should lend a helping hand as well. [6]

According to the data gathered in 2006 there are 45 state institutions [7] that are equipped as old people's home while 60 thousand people are in a home care. There are only six legal private institutions. The issue of the existence and development of suitable gerontological facilities is essential not only for the elderly but their children and the ones who take care of them as well. [8]

According to the research conducted by the private enterprise *Margi Park*, Serbia has a shortage of more than 60 000 places in old people's home, but only 10 000 places in a home could help avoid the long waiting lists. The number of beds needed is 4% of the total number of senior citizens. Last year a preliminary design of the program intended for the emotional and physical recovery and rehabilitation of the elderly near the town of Ču-prija was made. This is the latest housing situation in Serbia.

2. RESIDENCE OF THE ELDERLY

2.1. Example from Serbia regarding residence of the elderly

2.1.1. Local elements

Example from Serbia, Margi park, is planned to be constructed in Čuprija, at the entrance of the town, on a building plot on the outskirts with the size of 3.35 ha. It is envisaged as several buildings that would be built in two stages. They are to be accessed by two approach and one service entrance. In front of reception building a parking lot is envisaged for the inmates, employees and guests. One of the approach entrances would be controlled, and the other one would lead to the main square which would enable the pedestrians to access all the individual facilities.

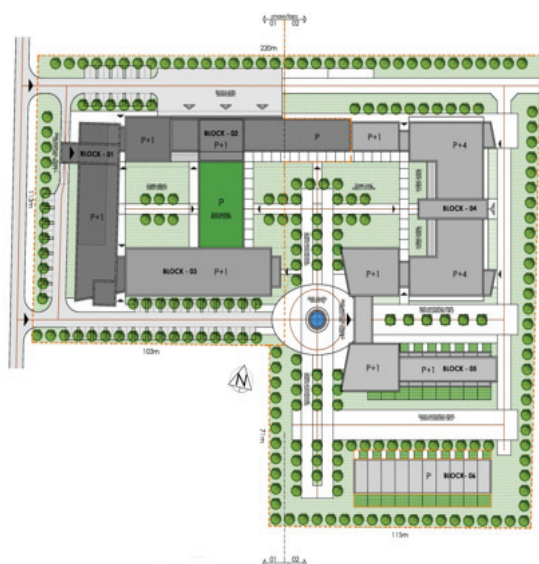


Fig. 1. Example from Serbia regarding residence of the elderly, situation plan

2.1.2 Social demographic features

There are about 250 000 people in this part of Pomoravlje. Since only the town of Jagodina has gerontological center, Arhi.pro made the design for the test project *Margi park* in Čuprija for 248 inmates.

99 inmates are to be sheltered in the planned *accommodation with medical attention and rehabilitation*. This programme is aimed for physical and emotional recovery of the elderly that are in various stages of dementia, and its goal is to achieve the higher levels of independence. A special stimulative and security surroundings are to be built for the demented.

Accommodation with nursing (110 beds) is intended for the elderly that cannot take care of themselves at home, but they do not need medical care during the whole day. Capacity of all the inmates determines their independence, and help in carrying out everyday activities is provided for. 19 units with 38 beds are planned for *independent life* that in-

volves a combination of private home and senior citizens' home. There is also call for help, maintenance, cleaning and using of different common services, as well as taking part in social activities. One part of the buildings intended for independent life would become *motel* with 52 beds in the second phase.

Types of services and accommodation are divided into the next groups: *accommodation for independent life, accommodation with nursing, medical attention and rehabilitation, accommodation for the demented and nursing at the end of their lives.*

2.1.3. Architectural elements

Margi park consists of two parts. The first part is the set of contents and functions that are embraced by one open block of buildings, being the combination of corridor and gallery type. The width of corridor is determined by room dimensions, and its depth by the size of atrium and the plot. The atrium is divided into two parts by *the therapy and rehabilitation building: green atrium* (specially designed for the demented) and *green yard* (in the middle of the plot and connected by the green walk with the main square and with the other aspects of pavilion). There are *programs open to the public, central kitchen, technology and common services* in the north. *Common space and accommodation with nursing* are in the west, east contains *the main entrance and accommodation for the demented* while the south has *accommodation with medical attention and rehabilitation.*

The second part consists of two rows of buildings, intended for *independent life*, each with separate entrance, divided into day and night activities in the south-north direction. Motel is located above one of the buildings. They are separated from the first part by *the main pedestrian walk.*

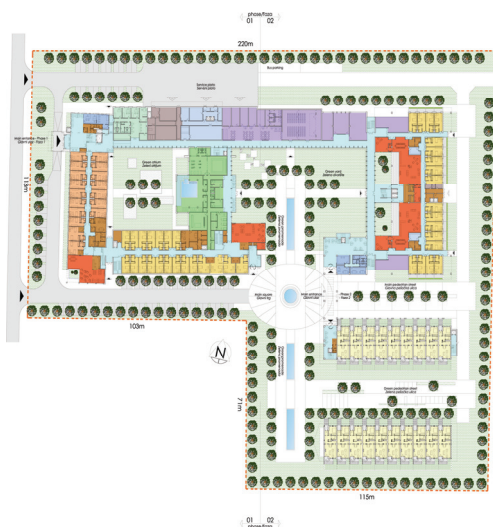


Fig. 2. Example from Serbia regarding residence of the elderly, ground floor plan

By studying this test project, W. D. Christ and D. Stankovic [9] have grouped the results of research into guidelines for the practical use of project principles with the aim of living up to European standards in this field.



Fig. 3. Example from Serbia regarding residence of the elderly, 1st floor plan

Architecture is supposed to bridge the gap between generations by designing comfortable living for the old and the young. A specific way of life is gaining momentum, and a new type of accommodation with the name *The House of Generations* befits it.

One should bond with nature as much as possible by going to the parks, using common space where everyone can relax and enjoy themselves, building transparent roof structures and spacious living rooms where the old and the young can spend time together.

2.2. Foreign example regarding residence of the elderly

2.2.1. Local elements

Maison de Retraite du CCAS de Tours (France) is located on the 6000 m² ground within a block of flats enclosed by three streets. In the south of the plot green area is visible. Big decorated garden is envisaged to be built on that same plot, and Alzheimer's patients have separate garden in the vicinity of their residence. There are two entrances for the employees in the north and west, and the main entrance is in the south. Near the service entrance there is a parking lot for 14 vehicles, and 6 near the main one. This facility consists of two buildings with the total area of 4500 m². In the south and north there is a corridor type of building with 3 levels. A single-storey atrium building is in the north.

2.1.2 Social demographic features

According to the data in 2006, Tours has population of 136 942. There are three state old people's homes (271 inmates) and seven private ones that are investment of shareholders. Social workers' surveys show that it is indispensable to upgrade the capacities.

Representatives of the board of directors, managers, social workers and family representatives whose older members live in the homes have worked on the new program of old people's homes since 2003. At the same time a working group of architects and gerontologists has contributed to the formation of a final program based on the experiences and the latest researches. Regional committee for healthcare and social protection has adopted a positive stance towards building the fourth home and the competition was

in June 2005. 75 working groups from all around Europe entered the competition, but only five propositions were on the shortlist. The winning agency Zundel Cristea from Paris designed the main project. The costs of construction amounted to 10 million euros, 90% of which financed the town of Tours while the other 10% came from the region. Proportionate to the invested money a daily price of 72 euros is estimated (100 euros a day in the private homes). If the inmates are on the breadline, their children are legally obliged to support parents financially. In keeping with the social protection and sources of income for French residents, funds are earmarked by the town.

In order to provide the best service to the inmates it is decided that the building be middle sized, neither too big neither nor small. Capacity of 84 beds is chosen: 60 beds placed in *the traditional form* and 24 ones for *Alzheimer's patients*.

The part that is *traditional* has two levels and implies taking up residence of the elderly that are in *constant need of nursing*, but also the ones that are determined to stay in the home and use its services despite being in a good shape (*occasional nursing*). The part for the Alzheimer's patients has a yard in the middle and they can circle it, due to the inexplicable need to walk and run away from the home at some point of the sickness.

There are only single rooms with separate toilet facilities and in some rooms it is possible to join beds to cater for the couples. In addition, there is an *accessory living room* for 6 Alzheimer's patients that they use only during the day when their families are busy (mainly from 9 to 18 p.m. working hours). Snug common rooms include: multi-purpose hall for 200 people, hair dresser's, family restaurant and rooms for *occupational therapy and balneotherapy*.

2.2.3. Architectural elements

Key characteristics of the project are defined by project tasks:

- The unit for Alzheimer's patients has to be separate from the one with the elderly.
- Each and every inmate has to have a view to a green area or a plant.
- Area organization has to be clear.
- Humane conditions similar to the peaceful and comfortable conditions at home have to be created.
- A huge amount of daylight has to be provided for.
- Traditional materials should be used.
- Rain-water should be used to irrigate the garden.
- Solar water heating system has to be installed to deliver sufficient hot water.
- Insulation is to be provided with green roofs.

Old people's home in Tours is divided into two functional parts. The demented are on the ground floor and it has a central garden tailored to the patient's needs. The second part has three levels: the administration and common premises are on the ground floor, while the first and second storey are for the old that depend on the others.

All the rooms are the same size, they have one bed and bathroom. Toilet facilities do not have windows, and instead of usual tiles there is waterproof material *taradouche* that coats the wall and floor. In order to enable a free access to the wheelchairs the facility is empty of shower cubicle. The rooms do not have ventilation because *Ventilation Mechanique Controle* covers all parts of the building. Above every window a slot enables the fresh air to come in. There is also central heating. Green roofs several purposes for a building, such as absorbing rainwater, providing insulation and creating good visual ef-

fect. A solar thermal collector designed to collect heat by absorbing sunlight provides 45% of hot water.

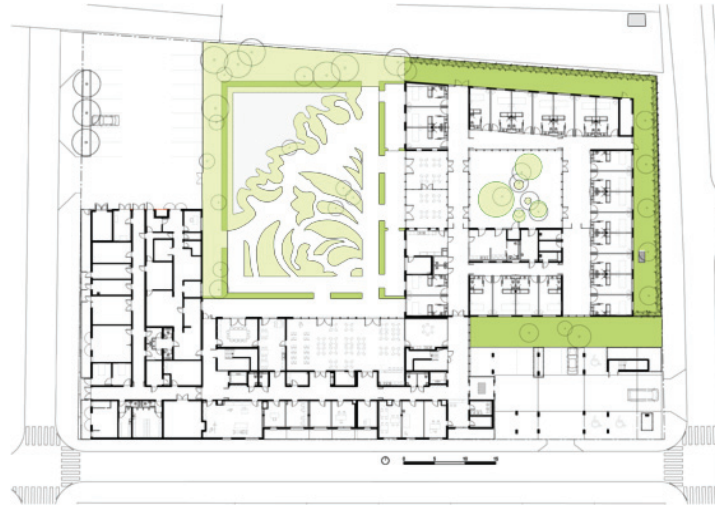


Fig. 4. Maison de Retraite du CCAS de Tours, ground floor plan

Each storey has a dining room as well as kitchen. There are also special rooms where the patients can get together with their families and keep in touch with them by preparing food and different sorts of celebrations. Laundry along of all the common services falls under the service of other agencies.

In addition to rooms for *occupational therapy and balneotherapy*, the patients can also recuperate in the premises specially designed for emotion stimulation by using light effects, colors, music and scent (*Snoezelen*- controlled multisensory stimulation).



Fig. 5. Maison de Retraite du CCAS de Tours, 1st floor plan



Fig. 6. Maison de Retraite du CCAS de Tours, 3D model



Fig. 7. Maison de Retraite du CCAS de Tours, members of head office at building site



Fig. 8. Maison de Retraite du CCAS de Tours, green roof and garden



Fig. 9. Maison de Retraite du CCAS de Tours, garden for demented patients



Fig. 10. Maison de Retraite du CCAS de Tours, silk pattern on facade



Fig. 11. Maison de Retraite du CCAS de Tours, 'witness' room

3. CONCLUSION

In addition to the general pattern of residence of the elderly, an interdisciplinary approach of finding new typological forms of residence is needed. "An interdisciplinary approach should include by interacting findings that are new and thorough (for instance connection of social demographic data with projects; interlocking biological, psychological, social and medical aspects of ageing with diverse technical disciplines as it is within gerontological pattern) the tenets that enable the lost roles from youth to be substituted (job, family, social contacts) and human and social being of each every old person to be continued (personality, feelings, wishes, interests and needs). The possibility of carrying out the principle of collective residence of the elderly should also include the elements of individuality, so as not to regard this lifestyle as compulsion but need especially with regard to the permanent stay without limits in a certain space." [10]

According to the displayed analysis of residence of the elderly, it can be safely said that contemporary European type of residence is not planned in Serbia, while the adopted strategy of 2007 remained a failure. Local and architectural elements are the result of social program of residence of the elderly. Application of new materials and construction is also the result of social standards. In accordance with all the facts this research should be understood only as one aspect of a complex problem of residence.

"The aim of this problem is to give it more breadth and flexibility without being too general and tending to find a unique and perfect solution. This also calls for a need for the other organizations and different forms of residence to be present and their variants will shape specific needs." [11]

The conditions, environment and community of the elderly shape their vitality. At the same time economic and psychological needs should be satisfied and a growing appreciation of these conditions represents correctly defined problem of taking up residence of the elderly. Appropriate program in France is made according to the amount of money available and it belongs to a larger social scale; in that respect the price is largely dependent on site investment. It is current trend to avoid the separation of the elderly from the other communities and to integrate them in the neighbourhood with different age groups. The analysed homes are outside of town centers, which can lead to a negative feeling of being hospitalised. Since it is not pursuant to the law that every town should have some form of residence of the elderly, the construction of such homes should be regarded as a political issue. Design problems are in such a way transformed from architecture into society.

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STANOVANJE STARIH OSOBA

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U ovom radu je analizirano stanovanje starih osoba. Iskustva u razvijenom svetu na ovom polju mogu biti veoma korisna za politiku stanovanja u Srbiji. Stare osobe su suočene sa ozbiljnim nedostatkom objekata za stanovanje. Tema ovog rada je sprovođenje istraživanja institucionalnih formi za stanovanje starih osoba u Srbiji i Francuskoj, zato što je Francuska socijalna država. Kroz analizu francuskog modela mogu se dati korisne preporuke za razvoj srpskog modela.

Ključne reči: *stanovanje starih osoba, dom za stare.*