

**WELLSO 2017**  
**IV International Scientific Symposium Lifelong Wellbeing in  
the World**

**UNIVERSITY'S ROLE IN WELL-BEING ENVIRONMENT  
FORMATION FOR ACTIVE AGERS**

E. M. Pokrovskaya (a), M.Yu. Raitina (b)\*, R. Vaissié (c)

\*Corresponding author

(a) State University of Control Systems and Radioelectronics, 40, Lenin Ave., Tomsk, Russia,  
pemod@yandex.ru,+79039527947

(b) State University of Control Systems and Radioelectronics, 40, Lenin Ave., Tomsk, Russia,  
raitina@mail.ru,+79138156117

(c) Université de Limoges, 16, Rue Atlantis, Limoges, France, romain.vassie@gmail.com, +79138698030

***Abstract***

The article considers the university's role in the engineers' training in the context of silver economy. Double degree master's program of State University of Control Systems and Radioelectronics (TUSUR) and University of Limoges "Living space automation" aims at the comfortable environment formation for active agers. According to the criteria related to the quality of housing (accessibility, old age suitable design, equipment, comfort, private sphere) the modern dwelling types analysis was performed. The authors note that the lack of funding is sometimes identified as an obstacle, especially when it comes to creating housing for people with low incomes. Also, there are the legal frameworks and regulations clearly identified by many promoters, whether public or private, that hinder the development of new initiatives or limit their scope. There are difficulties in combining subsidy schemes when the project involves several dimensions and / or target audiences or the need to ensure that older people receive priority in public-housing units would be created in their commune. The authors conclude that none of the housing types meet all the evaluation criteria of building a global environment of well-being. As a result, it involves access to a semantic model of multigenerational home design that take into account the multidimensionality of social and cultural influences and vectors of human development.

© 2018 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Well-being, Third Age, housing types, University.



## 1. Introduction

Well-being environment formation for active agers is one of the current trends in the constitution of a global modern space and requires careful attention and scientific study (Billonnet et al., 2010; Meshcheryakov & Shelupanov, 2014). It should be noted the main role of universities and University community in building a comfortable barrier-free environment of well-being, which coincides with the leading objective of this work. In TUSUR there is a double degree master's program of TUSUR and University of Limoges "Living space automation" that aims at the comfortable environment formation for active agers. Using the TUSUR "know-how" group project learning (GPL) engineering master students are provided with planetary thinking, new disciplines such as system modelling, prognostics, globalistics to give them ability to understand global issues, to acquire new values based on general humanity principles.

## 2. Problem Statement

The main problem can be defined as a contradiction between the increase the social boundaries of youth, expansion the range of socially active age and the lack of a comprehensive understanding of the above trends, the linkages with the modern realities (Griffin, 2006). In this regard, with the aim of forming a comfortable barrier-free environment of well-being, we highlight as one of the leading research areas the topic of housing types for the Third Age.

## 3. Research Questions

Empowerment is the capacity of people, individually, in groups and communities, to help themselves by exercising power, taking control of their lives and achieving the goals they set or share with others and it creates ethical, moral and practical dilemmas for practitioners (Lupton and Nixon, 1999). To implement this capacity we turn to the idea of well-being environment formation.

People are becoming older and the issue of housing is a global issue and one of the most important of the silver economy. As for the problem mentioned in the article, note, the "unavoidable" elements to consider in order to achieve a decent and decent housing for aging people, which goes well beyond criteria related to the quality of housing.

The 10 Commandments:

- The sense of social utility - well being
- The need for the other while setting limits
- The link between "before" life and this life
- An easy transition between different habitats
- Be prepared - be able to choose
- The multiplicity of habitat types
- Interior fittings giving way to the difference
- The importance of outdoor space and the environment
- The place of friends and family

- Affordable

One of the socio-economic problems in this field - lack of funding is sometimes identified as a barrier, especially when it comes to creating housing for people with low incomes. The limits clearly identified by many promoters, whether public or private, are the legal frameworks and regulations that hinder the development of new initiatives or limit their scope.

Today, the challenge is just as much to think about new forms of habitat as to try to coordinate all the laws, norms and regulations that frame (but also often hamper) these initiatives.

#### **4. Purpose of the Study**

The design and composition of an environment so that it may be accessed, understood and used, we turn to the idea of universal (or multigenerational) design. The universal design is to design products and environments so that they can be used by all people as much as possible, without covering adaptations or specialized design (Alekseev and Ozerkin, 2012).

Each generational category has its own specific “tick” based upon the cultural events that shaped their childhoods. It is safe to presume, for example, that those who were born post-depression 1940s and 50s have a decidedly different outlook on life than those who were raised in the 1990s. Those who experienced life through the lens of the Cold War have a very different understanding of the world than those who were born in the 9/11 era. (World War II – 61 and older; Baby Boomers – 45-60; Generation X – 26-44; Generation Y – 25 and younger) (Chuprov and Zubok, 2011).

There are some basic principles of the approach when multiple generations live in harmony under one roof.

Principle 1: Equitable Use

Principle 2: Flexibility in Use

Principle 3: Simple and Intuitive Use

Principle 4: Perceptible Information

Principle 5: Tolerance for Error

Principle 6: Low Physical Effort

Principle 7: Size and Space for Approach and Use

The authors agree with Mary Cook (2014) who defines five essentials in multigenerational home design from interior designer:

Open Access

Multiple Masters

Suite Additions

Versatile Living Areas

Flex Potential

Comprehensive considering all these principles can be used as a foundation for the the constitution of a global contemporary space of comfortable barrier-free environment of well-being.

## 5. Research Methods

The main research tools of work are the systemic and socio-cultural approaches and methods of comparative analysis and structural and genetic synthesis. The choice of this methodological framework is justified by complexity of the subject and the diversity of tasks that determine the issue. For comparative analysis of housing types for the Third Age the authors selected criteria (comfort, private sphere, accessibility, old age suitable design, equipment), according to which they set the idea of a complex approach to the institutionalization of the global, comfortable, barrier-free environment of well-being.

## 6. Findings

In connection with the intended purpose of the work aimed at formation of the environment for the well-being of active agers the analysis of the main housing types was conducted. The results are presented in Table 01.

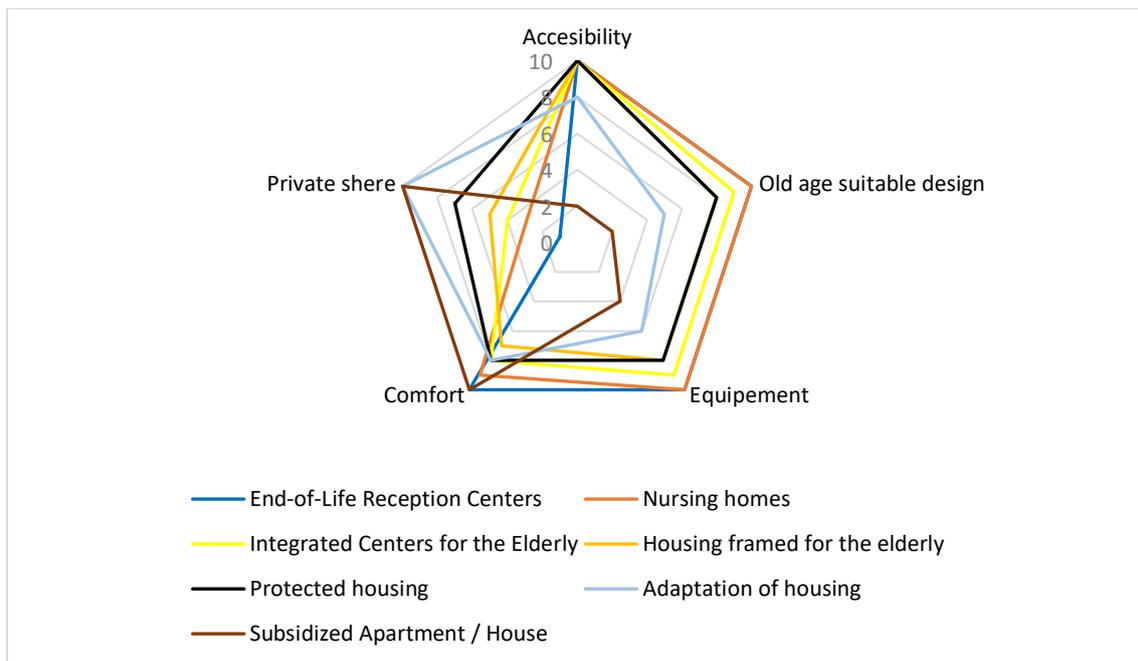
Based on the research we note, that the choice of the type of dwelling, that an elderly person can take, depends on his wish, his physical and mental capacity. The price is also important because such type of housing is expensive.

**Table 01.** Housing types for the Third Age

| Title                              | Example   | Characteristics  |
|------------------------------------|---|--|
| Subsidized Apartment / House       | The Faverges district in Lausanne, in the immediate vicinity of the Vuachère. | low income and wealth;<br>reserved for persons domiciled in the municipality concerned for a number of years.  |
| Adaptation of housing              | The HAMO modular house  | totally conceived for the elderly people with loss of autonomy and reduced mobility;<br>very easy to install;<br>all the latest equipment dedicated to the loss of autonomy combining comfort, health, safety and pleasure of living.        |
| Protected housing                  | Clos du Merisier Located in the village of Cossonay                           | apartment adapted to the architectural plan;<br>if needed, home support services can be provided;<br>individuals benefiting from supplementary healing benefits may be reimbursed for services related to security and facilitation.         |
| Housing framed for the elderly     | Wasserbillig  | many different housing structures for seniors;<br>offer very different adaptations at the level of the building, as well as the services of very divergent services;<br>infrastructure must be adapted to the specific needs of the elderly. |
| Integrated Centers for the Elderly | France  | integrated centre for the elderly, which replaced the old retirement home, is an institution that welcomes day and night old people;<br>CIPAs provide several types of benefits for seniors living there:                                    |

|                               |                                       |   |
|-------------------------------|---------------------------------------|---|
|                               |                                       | benefits withheld under the long-term care insurance; nursing, physiotherapy or other prescribed by a physician<br>the gerontological reception services.   |
| Nursing homes                 | Esternberg, Austria                   | care homes are primarily for people with severe addictions;<br>the proposed services cover the same categories as for the CIPAs;<br>persons admitted to nursing homes are more dependent than CIPA residents, geriatric care services can take on particular forms, taking into account the needs of the residents. |
| End-of-Life Reception Centers | The Haus Omega Palliative Care Center | palliative care is specific care that encompasses medical, psychological, social and spiritual aspects, begun early upon the diagnosis of a life-threatening or life-threatening condition.   |

Selected criteria for evaluating the implementation of a comprehensive approach of the well-being environment creation are presented in Figure 01.



**Figure 01.** Housing types for the Third Age criteria comparison

Obviously, the most productive types of housing of the position meet almost all the requirements of a comprehensive formation of a comfortable environment act “Nursing Homes” and “Housing framed for the Elderly”. Important advantages in the context of the study are socio-cultural focus on the interaction "individual – external social group" and infrastructure adapted to the specific needs of the elderly.

The figure shows that none of the housing types meet all the evaluation criteria of building a global environment of well-being. As a result, it involves access to a semantic model of multigenerational

home design, to take into account the multidimensionality of social and cultural influences and vectors of human development.

## 7. Conclusion

Promotion the diversity of housing supply leads to the seniors aspire to choose their way of life freely. Therefore it is important that they can benefit from it because old age does not correspond to a homogeneous public. There is not one state but the process of aging which is diversified according to several aspects:

- in terms of ages, there are coexistence of two generations retirees, people aged 60-75 and their parents aged 80 to over 90 with very diverse needs (Security, conviviality, autonomy, independence, freedom, solidarity, exchanges, and meetings);

- the degree of loss of autonomy determines the housing and services of the elderly. Even if the level of dependency is important, there is range of "housing solutions" enabling the senior reconcile his life project with his advanced age;

- the financial capacity of households which constitutes a determining element for access not only to a housing compatible with its needs but also services necessary for his or her state of health.

Thus, in the modern world as a global socio-economic space authors emphasized the role of universities, an educational trend of sustainability, including creating an environment of well-being, aimed at improving the quality of life.

As a consequence the goal is reached. The obtained results can be used in public authorities, local governments, and relevant organization.

## Acknowledgments

The authors express their sincere gratitude to Tomsk Polytechnic University for the opportunity to take part in such a valuable scientific research forum.

The work is performed at support of the Ministry of education and science of the Russian Federation, project no. 28.8279.2017/8.9

## References

- Alekseev, V., & Ozerkin, D. (2012). *System analysis and methods of scientific and technical creativity: a manual*. Tomsk, Russia: TUSUR.
- Billonet, L., Desbordes, E., Dumas, J., & Laporte, B. (2010). E-technologies for E-health and Assistance for Loss of Autonomy: The Important role of University Networks through International Joint Degrees. In *The International e-Health Telemedicine and Health ICT Forum for Education, Networking and Business* (pp. 283-287). Luxemburg: Med-e-Tel.
- Chuprov, V., & Zubok, Y. (2011). *Sociology of youth*. Moscow, Russia: Norma, Infra-M.
- Cook, M. (2014). *Art of Space*. San Diego, The USA: Cognella Academic Publishing.
- Griffin, E. (2006). *A first look at communication theory* (6th ed.). New York, The USA: McGraw-Hill.
- Lupton, C., & Nixon, P. (1999). *Empowering Practice? A critical appraisal of the family group conference approach*. Bristol, England: The Policy Press.
- Meshcheryakov, R., & Shelupanov, A. (2014). *Conceptual issues of information security of region training*. In *SPIIRAS Proceedings*, 3 (34), 136-159.