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### CHALLENGES OF INNOVATIVE ARCHITECTURE: EDUCATION AND PRACTICE

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**Abstract.** The article analyzes the concept of innovative architecture, which is significant in developing the anthropogenic environment, explains the structural and systemic components that form it and the relations between them. The research focuses on the Lithuanian culture and the educational system of its architecture schools as a means contributing to the development of innovative thinking skills. On this basis, it explains what advantages and disadvantages of the education system in the country reflect the present practice of innovative architecture. At the end of the article, considering the present situation, suggestions are made on how to improve the quality of the relationship between education and practice.

**Keywords:** innovative architecture, *habitus*, structure, socium, architecture schools, education, architectural practice.

### Introduction

Architecture, as a whole of life, is the basis of civilization, recognizing and creating the consequences of its thinking. Since intellectual actions are caused by deliberately perceived thoughts, it is important to know what the determinants are, and how it affects in the mental and material discourse system. According to Pierre Bourdieu, thoughts by themselves are a metaphor of the objects of the world, reflecting in the infinite set of metaphors (Bourdieu, 1977). However, science proves that there are certain fundamental laws of logic that are necessary in order to avoid chaos in the infinity. In the article these laws are analysed using the theory of Pierre Bourdieu's *habitus* and Anthony Giddens' structuration theory, assuming that all this relates to time and space changes, as well as innovations arising in social discourse.

As the architecture provides civilization thinking artefacts with long-term results, the position and the present situation of architectural schools, how to develop the characteristics of an individual who promotes innovative attitude, is analyzed. Having assessed the factors that have been shaped by cultural and historical circumstances, which are strongly influenced by socialism, the features of the educational system of architecture schools and the connection with the actual consequences of the practice phenomena, typical of Lithuania, in comparison with the advanced world, are determined. The aim of this article is

to formulate essential objective assumptions for the improvement of the quality of Lithuanian architecture school studies, which would help initiate not only the evolution of socium to absorb innovations. They are especially important to create favourable circumstances resulting in innovations which change the quality of life and determine the destiny of civilization.

### 1. Socium, architecture and innovations

Each object by its very nature is the result of various relative cosmological laws. It can not appear and exist without them as a part of the whole. It is essentially a natural spontaneous phenomenon. Apparently, therefore, in the 18<sup>th</sup> century there was a theory that art, as well as architecture, as a creative artistic result, is “natural imitation”, i.e. consciously embodying form which reflects nature, slightly improving or replacing it (Kuzminskas, 1980).

According to cultural anthropologist Clifford James Geertz, human beings are incomplete or unfinished animals who complete themselves through culture. Consequently, it reflects the surrounding environment by taking its non-biological content, such as language, creativity tools and their meaning, norms, etc. (Robbinson & Dowty, 2017). Pierre Bourdieu calls this *habitus* – system of embodied dispositions, tendencies that organize the ways in which individuals perceive the social world around them and react to it. These dispositions are usually shared by

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people with similar backgrounds, for example, social class, religion, nationality, education, profession etc. (Lizard, 2004). As the *habitus* they are acquired through *mimesis* (Bourdieu, 1977) and reflects the lived reality to which individuals are socialized, heir individual experience and objective opportunities. Thus, the *habitus* represents the way group culture and personal history shape the body and the mind, and as the result, shape social action in the present (Bourdieu, 1977).

It is obvious that the creation of an anthropogenic environment can not be separated from nature, imitation, reflecting socially commonly acceptable idiosyncrasies and concepts of the creator. However, the artifacts of creation, named by Alfredo Gell as *indexes*, even in the unchanged form, for example, a stone, acquires the *abductive* meaning and purpose due to the developer's intentions, which often can not have a direct connection with the descriptive '*thing*', acquire an *unnatural* meaning. For example, a stone can be equated with an iconic depiction of God (Gell, 1998). Consequently, the architecture is not objective, therefore – not natural, but because of its individual and social experience, the subjective phenomenon, creating relationship with the reality – neither 'semiotic convention' nor 'laws of nature' but something in between (Gell, 1998). The improvisation potential of this phenomenon is more or less limited by the discourse of a particular habitus and deliberately predictable results, although there are a number of forms of the same concept or references to its rendering, using language, image, sound, etc. (Hasson, 2016).

Arch. Ludwig Mies van der Rohe once said, "God is in the details". It might be possible to say of Richard Meier's architecture that God is in the numbers. More than any other contemporary architect, Meyer's creative style was created to impossibly reproduce the precisely calculated proportions of the work (Jodidio, 2016).

However, according to architect Marcel Breuer, "modern architecture is not a style, it's an attitude" (Cobbers, 2017), so Richard Meier's precisely calculated proportions are just the means using white surfaces in space to perpetuate "transience symbol of permanent changes" (Jodidio, 2016), i.e. an attitude towards the ontological identity and priorities of contemporary civilization.

When forming human behavior in social discourse there is always an actual question, how much and what is the impact of a repetitive structure model that affects or limits possible choices and opportunities with the individual's ability to act independently by making self-selective choices (Barker, 2005). This can be compared with socialization and autonomy, i.e. macro- and micro-elements that are important for social structuration – *structure and agency*.

Theories of contemporary sociology by Pierre Bourdieu and Anthony Giddens prove that there is no dichotomy between structure and agency. Dualism typical of the structure shows itself as a medium and an outcome of social actions. Agents and structures interact in an equiv-

alent ontology status (D. Jary & J. Jary, 1991). The relationship between structure and agency is considered by A. Giddens as a system of norms, the reflexivity of which depends on the conscious actions of the agent, which can change the structures and agent's position on them. Social and political environment is very important because social knowledge, as self-knowledge, initiate "emancipation". It is important to note here, that while practicing a social agency there is a condition that art object *index* (the visible, physical 'thing') is compulsorily evaluated as an outcome and (or) instrument for the social agency to act (Gell, 1998). Although ultimately govern the universe as the whole, as they are the source, the origin of physical/material cause-and-effect 'happenings' they can not be interpreted as physical universe laws or accidents (Gell, 1998). For example, using the intellectual abilities and material and non-material tools and means of the external structure which surrounds it, the individual, as an *agent*, has developed parametric design programs. Although using these programs, as an instruments, agent creates artistic works (*indexes*), both they, and used tools created by them, determine the physical and mental development of the agent himself, as well as his actions and emotions. In Alfred Gell's book *Art and Agency. Anthropological theory*, the basis of the clarified theory is considered, that "other" social agents, as "things" – creative artifacts (*indexes*), interwoven into the texture of social relationships, can gain the status of the 'second level' agent and therefore be treated as agents acting in various ways and mutual relationships which determine the primary and secondary agencies (including the agent that created them) (Gell, 1998).

Disassociating from the specific ideologies, the particular individual experience of the agent and the existence of any form of social totality, it can be stated that the social theories of Anthony Giddens and Pierre Bourdieu complement each other and explain what principles are used to create fundamental domain mechanism of social scenes and how does it affect social experience, acquired over time and space, in other words, through history (Giddens, 1984). So, these are 'sterile' standards, laws of logical issues for social exercise, which, depending on specific goals and circumstances, are discriminately interpreted and applied, are universally effective in a wide range of practical models of social discourse (Cobbers, 2017). Depending on the nature of human in terms of time and space, they can not be applied independent of the principles of integrity inherent in a particular situation, i.e. 'paralyzed' in pure form or lacking the potential to adequately 'personalize' the basics of material culture theory leads to a radical discontinuity, "undecability" and conflict (Buchli, 1999). Architect Marcel Breuer emphasizes that freedom of creation lies in the transformation of existing *sterile* standards, where aesthetics is dictated by functionality (Cobbers, 2017). However, classical nineteenth and early twentieth century social theorists such as Auguste Comte, Karl Marx, Emile Durkheim, etc. in a subjective

universally unidirectional theory of socium education, envisaged the “benefits” of development of a political ideology, especially in the establishment of a totalitarian regime that influenced the culture of Lithuania and infused the resulting consciousness of the society with still relevant severe consequences. Denied individuality of the agent of the system has led to a material culture “sense embodiment in absense” with “the dust of meanings” (Buchli, 1999), which, without particular essence, left the place for interpretation so that it was impossible to realize the essence. It proves to be meaningless chaos. The lack of knowledge using material culture embodied inadequate, victimized socium identity, created by political ideology. Only individuals, who corresponded to mechanical norms and were doing automatic actions were the most useful for the mechanized culture. Uniqueness and independent thinking meant only a lack of mechanical response and lack of productivity. Due to the totalitarian regime there was no choice. An individual ‘choice’ there allowed you to ‘choose’ from two: what is “good” and what is “bad”, where “good” is what is universal, and “bad” is everything else that is different.

The social, and, therefore, the material anthropogenic environment is interactive in terms of time and space, inevitably influenced by the processes of globalization, science and technological advance. Therefore, the diversity of structures, the transposable nature of schemes, the unpredictability of resource accumulation, the polysemy of resources and intersection of structures (Sewell, 1992) naturally causes the changes. Structural diversity connections with a wide variation in resource types and quantities are never, at least all of them, homologous. Innovations occur when wise agents whose actions generate systemic production are able to use different schemes with different resources, contrary to the universal concepts of habitus (Sewell, 1992).

Vilnius Gediminas Technical University graduated architect Rūta Rakickaitė, who during her master degree studies explored models of contemporary socium crimes and their prevention models, came to the conclusion that existing prison prototypes are not in line with the concept of contemporary worldview, and that punishment, compared to education, is an ineffective means of crime prevention, in contrast to what has been thought so far. As a result, designing a *Prison and Crime Prevention Center*, she proposed a multi-storey glassy skyscraper, which in its own way formally conveyed historic gallows as a manifest saying that borders and boundaries exist only in people's minds, and no obstacles to conscious thoughts are needed (Rakickaitė, 2016). Thus, due to the change in intelligent resources, i.e., new information, in order to create a high-quality anthropogenic environment of the present situation, the agent must seek new materials for the development of new universal *habitus* patterns. Due to the regular routine, changing circumstances is one of the agents' activities to change *habitus*-initiating motivation sources (Giddens, 1984).

All changes are interrelated. Nothing itself does not develop separately. There are a lot of debates in contemporary society about the form of innovative architecture and its full integrity. From the situation that has already been clarified, it is clear that contemporary art embodies only the features required by their purpose (Kuzminskas, 1980). The progress of civilization in artistic forms reflects the perceived benefits of the object, its efficacious efficiency in assessing how much it conveys through the *habitus* of the ocular acceptable *bona fide*. For example, if a society, when faced with a fact, perceives that the transformation of a normal structure is a vitally inevitable new form, changing life habits and creating a new conception of aesthetics, which is derived from theoretical knowledge, it is practical in practice and, therefore, it is integral.

Architect Magnus Larsson during his master degree studies proposed to “sculpt the dunes with bacteria” to protect the living areas from burial under the floating Sahara desert sand (Larsson, 2008). The idea of the concept is based on laboratory tests that helped to uncover the fact that, during natural biological processes, sand is bound to a solid bone structure like limestone. This allows to create of a multifunctional and unique artistic expression of the newly interpreted physical barrier.

Another example of a rational innovative contemporary architectural form of work is the issue of burial researched by the author of the article (Augustinaite.lt, 2015). She succeeded in creating a unique and rational, unprecedented in practice and theory burial prototype in an intensively urbanized urban area. It was presented to the public at the national innovation exhibition and national radio. There were a lot of discussions. Not only the innovative burial form of expression itself, but also an attitude towards human morality was criticized. This social experiment has proven that the theory, applying practically, in the proposed context satisfies the conditions of the material discourse integrity. However, at the social level, between the global priorities of consciousness which comprise the basis of the research and local culture consciousness priorities, identified during the study, mental distance is too high, therefore, it is likely to be rejected naturally. Thus, the availability of scientific theory and the consequent advance in Lithuania exceeds local practical expectations and real implementation possibilities. It is not surprising, therefore, that the innovative ideas described in scientific dissertations are damned to decay in the drawers in Lithuania or contribute to the progress of foreign countries that acknowledge them.

In other words, it is not possible for the society to offer innovative ideas such as “to think out of the box”, if the society which does not understand what are their thoughts and the actions that are imprisoned by “box”, and how it affects the socium structure as a progress of the universe, and quality of life. The main challenge for Lithuanian culture, in order to create innovative architecture, is to purposefully and consistently develop an education mechanism that develops the skills and knowledge of independent thinking.

## 2. Educational challenges in the development of innovative architecture

According to Pierre Bourdieu's *Outline of a theory and practice* explanatory laws, human habits and actions are determined by the memory that through personal experience assesses, dictates whether the information is correct, favorable to him or not (Bourdieu, 1977). The educational model of the totalitarian regimes clearly defines the boundaries of object valuation. It points out the limits how the separate object can be embodied. This includes the definition of ethics and etiquette, visual expression, etc.

In terms of time and space, information can not, in principle, be understood as a constant, because if conditions of information assessment change, the benefits of its application in practice change as well (Bourdieu, 1977). Therefore, it is important to indicate, what are the guidelines for assessing the scope of the information and how the relationship with specific observational circumstances change the possibilities of their interpretation.

By submitting exact instructions (often with the authors of particular works) and evaluating students' knowledge in the scope of specific references, we declare the statement that important thing is what is constant and precisely limited by the *manager*, rather than the independant ability to understand the scope of the problem and the significance of its components depending on various circumstances. In such case to be evaluated, the personal input and motivation covers only as much as the ability to dispose the specified information. The benchmark of progress is always a well-understood knowledge base and there has to be clear guidelines given by the manager as well. Including the references, deliberately offered by education specialists, resulting in thinking progress of exact historical civilization. However, historical facts can only lead to historical combinations and stagnation, if an individual does not have the habit to self-seek for new information that would be perceived from experience in memory as motivating to do so (Bourdieu, 1977).

Talking about educational model of Lithuanian architectural schools, for some time in the method of informational teaching the priority of independent thinking has been more or less successfully applied in terms of possibilities. Students on their own look for information that they themselves explain to their colleagues as a study material during lectures, discussions, based on the information that has been clarified, appear. As a result, a new generation of self-sufficient society is growing, the knowledge of teachers is included in the context of constantly updated knowledge, complements the field of available information.

As a result, a new generation of self-sufficient society is growing, the knowledge of teachers is included in the context of constantly updated knowledge, complements the field of available information. An interactive educational model equals to the concept of the *internet*, which determines infinite possibilities of the cognition of the modern world that are constantly changing. Scientist Daphne Koller revealed that the *internet* is at the heart of the edu-

cation of these days. Her research revealed that access to the *internet* not only preserves human resources, but also contributes to the formation of high-quality and humane consciousness regardless of the difference between human races, economic, individual needs, time, space and difference of other circumstances (Koller, 2012). The greatest challenge to innovative thinking is to form an appropriate approach to the quality and importance of information and the consequent consequences.

Despite possible different interpretations, there are common global structures and systemic laws for effective management of actions. Being a part of this global structure and in order to achieve a qualitative integration, we must objectively evaluate the systemic basis of its operation. Based on this view, in the course of Lithuanian scientific reform, the success of the concept of education should be critically evaluated combining bachelor and master study programs into one piece. Although we are proud to succeed in destroying physical barriers, in order to get rid of totalitarianism dictated by politics, we put the education system into a closed model, which is unique in regard to the world to our own Lithuanian culture.

One of the best recognized architectural schools in the world, such as University of Cambridge, Architectural Association School of Architecture, Politecnico di Torino, Rome TRE, Israel Institute of Technology, etc., clearly understand the benefits of graduate studies (programs are distinguished for bachelor and master studies), including the fact that the quality of studies also depends on the possibility of choosing different levels of knowledge not at the same schools. This complicates the successful implementation of international student exchange programs. Encouraging self-sufficient thinking we are sort of framing ourselves, we focus on thinking in one direction.

A unidirectional study model reveals the fact that the difference between what is new knowledge and its abundance is not yet understood. It is comparable with the quality and quantity of knowledge, where the quality is identified by the objective, and the quantity – by the subjective situation. Democracy as a quality indicator is the creation of an object from the differences in the structure of similar basic properties, rather than the multiplication, division, composition, or subtraction of parts of the structure inherent in a single object. It could be assumed that this is a consequence of the political history of a cultural context, where the success of an agent's effectiveness depends on how much he was able to be universal in multi-tasking. This rule applies both to people and their used and created products.

The duty of the woman was to grow children, to do housekeeping and social works to supplement the family budget needed to survive. The position of a man was interpreted accordingly. This resulted in a slogan celebrating the ideology of socialism, calling the distinctive features of an individual "labour people". The choice of social housing varied only between "typical" or "no" well. Typical dwellings were with low ceiling, and the essentially minimum space required to survive in them deterred the fact that

they were furnished with multifunctional furniture (Buchli, 1999). This is one of the reasons why, so far, the Lithuanian educational study programme curriculum has a characteristic that reveals the still vital-to-develop attitude towards the large scale of projects per student, not their group.

We are proud that our students are able to “function” universally and deal with the inhuman scope of studies, although they often suffer not only physical but also mental health. Only highly motivated or exceptionally gifted students can adapt to such conditions and achieve good results, and the rest, who are the majority, in such circumstances associate their personality subconsciously with the “secondhands”. This often further impedes their motivation to improve and affects the quality of life in the future. Step by step, this situation is improving in Lithuanian educational system but we are still far away from the goals what is needed to understand what is participating as individuals for structure. In 2009, at the Politecnico di Torino University, study programs provided favourable conditions for group activities in dealing with professional tasks. As a result, students had more time for personal needs and personal development, social communication skills developed, studies could also be combined with practical work activities, allowing them to take care of their financial income and gain both theoretical and practical experience. Thus, students were more motivated to purposefully independently seek professional knowledge, to ask lecturers actual questions important to the progress of his practical work.

So far, it is hardly possible to reconcile study programs of Lithuanian schools of architecture with the multiple needs of living in order to achieve high-quality education, and the fact that there are few study places financed by the state or other organizations is complicated. Therefore, not all students have the opportunity not to work during their studies in order to gain higher education. In addition, due to the relatively subjective selection criteria, it may be difficult for even highly skilled youths to enter university. There is a reasonable idea that higher education in Lithuania is still a ‘luxury’ commodity, which also affects both the economic inequality of the society and the prosperity of this concept. The nature of a person determines that only the satisfaction of the primary needs necessary for him to survive, such as sleep, eating, etc., encourages the satisfaction of secondary, i.e. intellectual needs. It is unrealistic to expect that a hungry individual will philosophize about the ontological nature of the universe and will not be looking for an answer to the question of where to get bread? Accordingly, it affects university lecturers whose motivation to indulge into education is not encouraged financially. Therefore, specialists can not concentrate on the problems of mental education, but they are forced to distribute their time and orientate to work in other areas of architectural practice.

So far, only local teachers work in architectural schools, who value their input as a patriotic duty to lead the society into “bright tomorrow” by sacrificing their time on a charitable basis. There is nothing to say about the attraction of competent lecturers from abroad on this economical level where Lithuania still is.

It is necessary to have in mind that architecture is a field which requires exceptionally enormous amount of financial expenses for high-quality studies, in order to develop the architectural features that promote innovative thinking by means of modern means and tools. Considering the basis of creation of *habitus*, there is nothing to be surprised that only a pencil and paper-trained architect can not successfully integrate and compete in the modern space of mechanized creation tools. It is enough to look at the works of such architects as Zaha Hadid, Frank Gehry, who received a universal fame, it is clear that the result of these results is the ability to use both science and technology advance that has a significant influence on the development of the talent.

Undoubtedly, Lithuania has gifted students who are able to think in innovative way. However, these are the only cases that have emerged due to the individual personality development opportunities that are determined by intellectual environment in which the individual develops. After graduating from Vilnius Gediminas Technical University, architect Kęstutis Chechavičius, awarded with Arnas Dineika's scholarship, after studying in Lithuania also studied at the University of Cambridge, University of Nevada – Las Vegas. When he realized that Lithuania was lagging behind in comparison with his knowledge and skills, he emigrated to live to Las Vegas, USA. In 2007 he was the founder of architectural studio in Las Vegas, which successfully contributed to various scale innovative architectural projects, for example, Konami Gaming Corporate Headquarters, WMS Corporate Headquarters, Clark County School District, Miley Achievement Center for Special Needs Students, Robert T. Eglet Advocacy Center, numerous hotels for Marriott, Hilton, etc. The company's branch is also established in Lithuania, where innovative and creative local architects work. Their production is oriented to the foreign market. As one of the main advantages, the head of the company mentions “labour costs” lower than abroad and the time difference between the USA and Lithuania, and the ability of innovative technologies to continuously work with projects on a 24-hour basis, thus increasing their volume and speeding up the projects.

However, we have reasons to be proud of Lithuania as well. Audrius Ambrasas' architectural bureau designed “Swedbank” central headquarters building on Neris coast, the “K28” business center (authors “PLH Arkitekter”, S. E. Andersen and “Archinova”, Al. Gvildys), the “Quadrum” business center (authors “Lund + Slaato Arkitekter”, “Arches”), etc. However, large-scale objects are closely related to the financial capital of foreign companies, what not only gives our artists the opportunity to create innovatively, but also brings the foreign brands to a more successful integration into the local market due to the relation of architects who are recognized in public and who have designed their buildings.

Lithuania, which attracts more and more foreign capital, also allows local architects to contribute to the architecture of public objects. In 2012 MKIC (National Open

Access Scientific Communication and Information Center) built in Vilnius Saulėtekis valley, surrounded by a pine forest, is already known as the library of Vilnius University (authors Palekas architects studio, R. Palekas, B. Puzonas, A. Palekienė, P. Išora, M. Šiupšinskas, M. Zemlickaitė, L. Sužiedelytė, A. Barzda, J. Garsvaitė, V. Bavarskis), in 2008 the building of the Prosecutor's Office of the Republic of Lithuania (architect K. Lupeikis) was designed in Vilnius, etc. However, the latter, especially the older generation, are critically evaluated in society, as the authors of Lithuania are able to compete, "who is more curved than other". As a result, since 2015 such public events as "Open House Vilnius" are organized in Vilnius. The idea, which has been taken from the practice "Open House" since 1992 to organise events of such type in London, is currently well-established in Barcelona, Rome, New York and other cities in the world, on weekends free sightseeing tours of important architectural objects are organised around the city. Each year there is an increasing public interest in this event, which means that our approach to the surrounding environment changes accordingly.

Although we perceive the benefits of interactive communication to the perception of the significance of architectural works, the subjects taught in architecture schools are still divided into separate modules. Lithuanian students get a lot of basic knowledge not only about the design of buildings and urban structures, they are introduced to philosophy, history, ecology, etc. However, it is difficult for them to cope with the architectural design tasks, because the classified information is perceived as a typology in the same way, building design is stereotypically identified as being a "house", but not as the universe unit, which is the core of the concept of architecture. Understanding this in the first part of the twentieth century, architect John Lautner was determined to travel around the world rather than study in any traditional school of architecture, where, in his point of view, "all they do is grade, and then neat to hell with the ideas" (Campbell-Lange, 2005). When J. Lautner read Frank Lord Wright's autobiography and familiarized with the principles of his architectural philosophy, he decided to try out architectural training – he was invited to join the School of Architecture at Taliesin, which still thrives as a master's degree school of architecture. The most fascinating thing that impressed and inspired J. Lautner to follow the footsteps of architect F. L. Wright was the fact that the concept of his school of architecture was based on life rather than academic discipline: without drawing, knowing various materials, students did farm work, although they all lived together, on Sundays they were making a dinner, to which F. L. Wright was inviting even up to 50-60 guests, sometimes the string quartet was playing (Campbell-Lange, 2005).

In the case of the studies of Lithuanian architecture schools, students are given the impression that studies "end" when lecturers go out of the audience; rare student is able to realize from where lecturers are getting the ideas, how the relationships for lifelong learning are being built. While studying architecture we have the opportu-

nity to choose some of the study modules, but they are related to one school, sort of emphasizing that students have "boundaries" to create and be interested. Due to the relatively small number of students, we do not have the opportunity to differentiate purposefully study programs that help to create exceptional talents without encouraging students to know how music, dance, medicine, etc. works, the creation of architecture is limited to the concepts of typological buildings, rather than the art of forming them by specific means, which is more than substantial building materials.

Collaboration in sciences is especially important in developing new non-standard connections between existing structures, which determine not only qualitative adaptation and in essence creating a new approach to quality of life. Benedetto Croce describes the division of the artwork into separate parts by explaining that "the division of the piece into distinctive parts, is like the division of the body into the heart, head, nerves, muscles, etc., the living body is transformed into a corpse" (Kuzminskas, 1980). If the education system in essence is lacking in vitality, one has to admit that in the case of Lithuanian context for innovative phenomena to appear, accidental features are more typical than deliberately targeted features of their management.

From the discussed situation we see that we still have great challenges in the system of the basic education system to develop an innovative social and anthropogenic environment that is able to evolve out of it. The philosopher René Descartes said: "Cogito ergo sum" ("I think, therefore, I am"), confirming the assumptions of Pierre Bourdieu's *habitus* theory that thinking is the basis of human existence and their other actions. Only the intentional actions of a person, albeit one, can lead to significant changes in the structure, as well illustrated by the work of bishop Motiejus Valančius, contributing to the education of the Lithuanian nation and the development of consciousness. Although the Faculty of Architecture of the Vilnius Gediminas Technical University is located in architectural complex, which has only been slightly changed since Soviet times, the brightly colored cottage, which was created during the two-week workshops by the students themselves, led by the German architect Slavis Poczebutas, already appeared in its yard.

We were accustomed by the socialist policy that changes are driven not by the individual, but the structure, that is why diffidently, but we are making the first steps towards independent, creative work. Similar initiatives abroad to motivate students to create responsibly are also positioned outside the university. For example, Miami School of Architecture has created a showroom at the Brickell Metro-Rail station, Auburn University Students contributed to the reconstruction of city's The Newbern Library, designed in 1993 by Samuel Mockbee, etc. For the time being, most of the ideas of Lithuanian architecture students proposed to be implemented in urban spaces are being dumped only in the exposition spaces located in narrow corridors of universities, reflecting our society and their own attitude towards the talent of architectural creation.

## Conclusions

The development and assessment of architecture is directly related to the intellectual abilities of a person, inevitably mastered by linking it to the mental and material environment in which it develops, being a part of its unity. Therefore, the environment of anthropogenic artefacts is the equivalent of a social medium, which is equally important on the ontological basis of the information base, dictating the sets of particular *habitus* paradigms and the range of the possibilities of their interpretation. Changes in the reflexivity of this structure are possible only by the actions initiated by the unique experience of the conscious individual *agent*, the result of which is the works, acting himself and the environment as “other” *social agents*. In terms of time and space, the combination of structures initiated by various globalization phenomena brings new combinations of their basic functions, thus changing the habits of socialism adapting to new circumstances. Based on already available knowledge, environmental perception is changing, therefore, the priorities of civilization in the creation of the environment are changing as well. According to the changed mental development, the existing basic laws can no longer be interpreted or combined in the scope of existing conventional differentials, seeking for new relationships with reality. As a result, there are innovative solutions causing approach to the quality of lifestyle and the actions arisen from this. Their integrity in the environment is possible only in the medium where they are appropriate to physically adapt and deliberately perceived their practical benefit for changing activity.

The unique cultural identity due to the local situation of historical experience in the global social structure determines the differences in mental development, and therefore in material resources. Lithuania has been under the influence of the totalitarian regime for a long time, that is why the features of the one-way thinking which do not acknowledge differentials are still strongly grounded, including the universal multifunction of the individual and his works. It is reflected in the educational system of the society as a whole, as well as in schools of architecture, which promote long-term social awareness. Progress in the social space of Lithuania, which includes both schools of architecture and the results of their education, is only noticeable in those areas where there are qualitative relations with the part of the intelligent world, including the mental and material meaningful means and tools to educate it. Particular attention must be paid to the encouragement of the progress of the compatibility of the structure of Lithuanian architecture schools study stages with foreign schools. In addition, in order to educate high-quality creativity, it is necessary to reorganize existing ones and form new teaching methodological models of study program content, which develop autonomous thinking in regard to differentiations, as a *unit of the life*, dependent on time and space. Despite the disadvantages in the overall system, there are architects and students of architecture schools who are able to think innovatively due to the in-

dividual environment in Lithuania. However, their success in contributing to the development of *socium* is fruitless without a possibility to represent their own profession, not only among the representatives of the same profession, but also to publicly declare their creative innovative ideas. Only in this way is it possible to realize and to use the advantages of interaction that are significant for the fully-fledged integrity of the results of architects and their creative work in the mental and material discourse of *socium*. While positive changes are already taking place, the most decisive challenge for creating an innovative environment is always to encourage individual initiatives to shape the progress. No structure alters itself, it is only changed by actions that are initiated by the changes of the intellectual consciousness of its components – agents.

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