

INFORMED ARCHITECTS = HEALTHY ARCHITECTURE

Lucie ZEMENOVÁ

Faculty of Architecture, CTU Prague, Czech Republic, lucie.zemenova@centrum.cz

Summary

Why is now in the Czech Republic still building so called “sick buildings”? One of the reasons can be that clients and architects in the Czech Republic aren't informed about the impact of physical environment and architecture on human health, although making of healthy environment is now one of the sustainable trends in world architecture. Health, well-being and life in harmony with nature are now one of the most important personal and social values! And because of people spend about 90 % of their time in buildings, which undoubtedly affect their physical and psychological health, architects could be very important persons in the process of making healthy buildings today. When students of architecture know about the impact of physical environment on human health, they can become informed architects. And informed architects mean more healthy buildings.

Keywords: healthy building, education, building biology

1 Healthy buildings

1.1 Healthy buildings in the Czech Republic

Health and living in a healthy environment appreciate almost all people in the Czech Republic (CR). And although is during time visible some slight decrease in ranking of values of Czech society, they are still between first ten! [1]

Design and construction of healthy buildings relate with environmental friendly or sustainable buildings. But in spite of the results of many researches made all around the world, which say that physical environment really affect human health, professionals don't give much importance to this problematic of healthy buildings here in the CR and also in Czech university education (I focused on the Faculty of Architecture, Czech Technical University in Prague – FA, CTU Prague). WHO estimate something about 24 % of the global disease burden and 23 % of all deaths can be attributed to environmental factors. From the unhealthy environment suffer mainly children, which are much more sensitive and vulnerable than adults. Various risk environmental factors like water, noise, chemicals, radiation or air pollution can cause children various diseases like asthma, allergies, cancers or congenital anomalies (It was estimated that 5 % of all congenital anomalies were attributed to environmental causes). [2]

1.2 Healthy buildings in the Czech university education

Generally we can say that both, lay and professional public, don't realize the impact of physical environment and architecture on human health. First step for more healthy buildings could be more informed students of architecture, because they can become informed architects. And informed architects mean more healthy buildings. When analyzing

the study plan of the FA, CTU Prague, it's seen that design of sustainable building become very popular, but design of healthy buildings is still out of interest. Some of principles for healthy buildings can be find in compulsory courses like Ecology I-II, Building Physic I-II or in optional courses like Building Constructions VI, Building Service Systems III, Sociology and Psychology II, The Theory of Microenvironment, and also in some Design Studios. But there is no special course for design of healthy buildings. [3] All problematic about healthy buildings and their designing should be solve more complex, because this problem isn't only about indoor environment. Is necessary to design and construct buildings according generally valid criteria and comply with Czech legislation and standards which public health protection is partly part of, but it's important to think about other factors which affect human and his environment. Multidisciplinary science, Building Biology, have holistic approach to this problem, so its 25 rules could easily come to the process of making healthy buildings today. [4] Like between Czech architects and engineers also between Bachelor's and Master's students in the FA, CTU Prague is this science quite unknown yet. But compulsory course for first year Bachelor's students named Ecology I, that was integrated to study plan about 2 years ago and should be introduction to sustainable construction, could be very important for future education. One of its lectures is dedicated to healthy buildings and Building Biology. It is first time when students can get complex information and no just fragments about what's important for design of healthy buildings. It's useful to have course like this at the beginning of studies because knowledge can be later deepened in various courses. This first step may be help in making healthier environment in the future.

References

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