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Ethical aspects of the sustainable architectural design

The idea of sustainable development has been reflected in numerous declarations, documents, laws and regulations. However, its realization still has the character of a challenge – architecture seeks a concept of environmentally friendly and socially responsible design, referred to as balanced or environmental design¹. Unfortunately, the social and ecological issues of design are not the centre of attention, they are trivialized or even ignored, while the native design-realization practice does not meet the standards of the developed countries. If we were to treat the challenges of balanced development seriously (there does not seem to be an alternative for the future), the seriousness of the problem becomes meaningful – the sustainable architectural design would have to be treated as a direction in the theory evolution and the design methodology [2, p. 156]. The questions of ethics play an important role in this concept. Their specificity concerns the environmental ethics (in axiological realm as the ideological basis of design) and the problems of social recognition (in practical and methodological realm).

Sustainable design (as well as sustainable development) is not a uniform concept, but rather a trend of ideas and solutions which depend on a given social, cultural, economic, etc. context. Yet it is possible to define its common feature – the fact that it is based on the principles of environmental ethics. This is a viewpoint of, inter alia, A. Baranowski, who explicitly defines balanced design [2, p. 96]. Environmental ethics is not uniformly understood or defined, thus, it is appropriate at this point to remind of the essence of the theoretical dispute it has been subject to.

We can distinguish three basic standpoints within the environmental ethics: (1) – biocentrism, which underlines the fundamental role of single biological entities; (2) – ecocentrism, which refers to what single entities create as

a whole; (3) – anthropocentrism, which points out to the benefits mankind derives from preserving nature [9]². As Pawłowski observes, biocentrism acknowledges that all living creatures have a right to live, underlying the meaningfulness of entities, not what they create as a whole – as a population. A. Schweitzer was a supporter of this idea and its radical representative is P. Singer. Ecocentrism is defined as an ecological, systemic and holistic approach, where special attention is paid to what single entities create as a whole, e.g. the biosphere. The forerunner of this concept is A. Leopold and one of its representatives – J. Lovelock with the Gaia hypothesis. In deep ecology, A. Naess intermingles the above mentioned bio- and ecocentric approaches. Anthropocentrism basically indicates the benefits for man himself which result from taking responsibility for the environment. The radical anthropocentric standpoint presupposes that the environment serves the purpose of fulfilling human needs. A more toned down approach emphasizes the role of nature in basic functioning of human beings, recognizing responsibility to future generations. A good example here is the concept of responsibility for nature by H. Jonas. The Christian vision of preserving nature has been formulated in a similar spirit. *Within the notion of anthropocentrism only man has been given the privilege of moral entity, while consistently stating that nature cannot be the subject [nor the object – R.I.'s note] of morality – no matter whether treated in its wholeness or as its constituent elements* [10, pp. 168–171]. It is noticed, however, that acting against the environment poses a threat to man himself. This is why J. Grzesica formulates the basic postulate of environmental ethics as follows: *There is an absolute obligation to protect man's natural environment as a way of affirming human dignity. And, to put it in a negative way, there is an absolute obligation not to commit deeds*

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¹ The term *sustainable design* evolves into what is referred to as *environmental design*. For this reason, both terms are used here interchangeably, disregarding subtle differences between them as being of little importance for the subject matter.

² It is characteristic that the plural form of 'environmental ethics' is explicitly used here.

threatening man's natural environment [5, p. 88]. By comparison – A. Baranowski, after M.M. Bonenberg, takes a less anthropocentric stand: [...] *as opposed to the traditional viewpoint that moral obligation is always a duty towards a person or a group of people, the fundamental thesis of environmental ethics is that there exist impersonal entities subject to morality* [2, p. 75].

As it can be seen, the differences within various ecophilosophical concepts are very significant. Although they rarely refer to the design directly, however, the existing conflict can reveal itself very clearly³. A sample of this could be seen during protests against the planned location of Augustów ring road, which was to run across Dolina Rospudy (Rospuda Valley). Such differences in opinions are quite natural – what should be rather noted is *unity in variety*⁴. It seems that instead of cultivating theoretical arguments, we should focus on common and constructive elements resulting from environmental ethics. As W. Tyburski observes – the basic task of environmental ethics is to create a catalogue of values and rules which describe the practical shape of relationships between man and his natural surrounding. He mainly points out to the three values which create favourable conditions for natural environment protection: responsibility, moderation (self-restraint) and commonness (solidarity). Responsibility accompanies the accomplishment as well as observation or negation of other values. It is perceived as a personal, social or intergenerational value. When the principle of moderation and self-restraint is referred to, it underlines the fact that natural environment protection cannot be put efficiently into practise without deliberately imposed limitations on goods consumption. We already see the need for a change in the way we perceive economic growth (quality-of-life orientation instead of quantity expansion). It postulates a change of the lifestyle, restrained consumptionism, rationalization of needs and standing up against wastage. In the hierarchy of values propagated by environmental ethics, the idea of commonness (solidarity) occupies a high position. It reflects the

sense of togetherness between the world of man and the world of nature⁵. Similarly to the above mentioned values, the idea of togetherness and unity with the surrounding nature has a prescriptive and persuasive character the purpose of which is to change our attitude towards the world we live in. But – and it should be emphasised – it also sets the foundations for the development concept [...] *that incorporates both human and non-human interests, treating them as mutually related. Therefore, we must agree with the opinion more and more frequently expressed that any reasonable concept of civilisation development must take into consideration the axiom of man's relationship with nature* [11]⁶.

Moral duties and standards of conduct resulting from environmental ethics are formulated with their application in mind. H. Skolimowski considers as the most principal such values as: respect for life, responsibility, moderation, modesty of needs, diversity, compassion and equal rights for all. On the basis of eco-ethics, he tries to shape a general life attitude, being the foundation of eco-praxis formulating the rules of individual conduct and decision making in conflict situations [2, p. 76]. In designing it can be used to evaluate a technological process from the point of view of its ecological consequences [2, p. 79].

Another specific aspect of ecological design, having numerous ethical implications, is its public recognition. According to A. Baranowski, in balanced architectural design this issue assumes the proportions of fundamental mode of operating. *It stems from the very essence of the sustainable development paradigm: it is quite commonly assumed that the sine qua non condition for its successful realization is public acceptance and participation in its accomplishment, including preliminary steps, through strategy planning until the designing stage* [2, p. 109].

Publicising the process of designing requires, above all, social participation. Its methodological origins are earlier than the concept of sustainable development. It has its source in the criticism of the so called 1st generation design methods developed in the 1960s – utilising elements of the systems theory and concentrating on algorithmisation of the designing process [7, p. 128]. It was noted at the time that designing is not a purely sequential process and the architectural problems are *illogical* and

³ A straightforward example of relating ecophilosophy to the art of design are Gaia architectural groups. e.g. Gaia group in Norway offers buildings based solely on ecological principles. As A. Baranowski notices, this group has designed an eco-cycle house tuned to biological needs utilising local *low-tech technologies*. *In an eco-house the hygroscopic materials such as wood, clay, plaster and plant fibres help to regulate humidity. The 'dynamic insulation' of the construction shell uses the same porosity properties to provide controlled ventilation through permeable structure and to eliminate condensation. Heating and cooling are based on self-regulating thermodynamic phenomena, reducing to the minimum the number of complicated technical devices. Biological processes in plants are used to refresh the air inside and to purify and recycle grey water. [...] The house is a part of a larger system of permaculture integrating recycling and reclamation of wastewater and sewage. In Poland, since 1980s, the ideas of Gaia group in environmental shaping have been implemented by Janusz Korbiel and his Studio for All Creatures in Bielsko-Biala* [2, p. 61].

⁴ It has to be added that apart from ecophilosophy there are personal systems of values, a subjective ecological wisdom called *ecosophy*. A. Naess makes a distinction between *ecosophy* from *ecophilosophy* (ecological philosophy) and encourages everyone to work on the former one. He himself created his own *Ecosophy T* (from Tvergastein – the place he was emotionally attached to) [8].

⁵ *Not disregarding the obvious differences between us and other species [...], we should perceive ourselves in unity with them, to become conscious [...] of a sense of togetherness, not to see oneself and others as belonging to two different worlds. [...] The problem of man's identity, his unity with the world and the idea of compassion are strongly accentuated in Buddhism and Taoism. Man is not estranged from nature, he is its integral and most important element. [...] From the values of brotherhood, kinship and community of interests a demand has emerged to respect and protect everything that exists: man, animals, plants and all the remaining part of natural world. The idea of man's solidarity with nature was propagated by Saint Francis of Assisi, who understood the bonds between human beings and other elements of nature in terms of brotherhood and sisterhood* [11].

⁶ According to A. Leopold, the object of moral obligation is the ecosystem as a whole, because man is a part of the biotic community. He says: *The object is good (right) if it strives after integrity, stability and the beauty of life in unity, it is bad (wrong) if it goes in the opposite direction* [2, p. 75].

wicked [1, p. 77]⁷. Thus, 2nd generation methods focused on ensuring that future users will participate in the designing process; it was clearly seen that the information used – obtained not only from the professionals – had ethical values bound by moral responsibility [7, p. 114 and 128]. Participation in the design can have a varying degree of involvement. The first and the lower one is participation understood as methodological acceptance of the intention, a limited influence of the user and various forms of passive and indirect participation. The second and the desired degree is the participating design (approval of specific solutions from a system perspective)⁸. Within this, the third degree can be differentiated – the participating design based on consensus (working out unanimous consent and agreement reached through dialogue, consultation and compromise).

As S. Wrona observes, the experience gathered during design participation shows that the main satisfaction does not result from meeting particular needs, it is rather the influence one has on the decisions that are to be made. Unfortunately, this fact is often used to create an illusion of participation (at this point the ethical aspect of the problem comes to light). He also adds that non-systemic attempts at participating in the design usually significantly reduce the achieved effects. At the same time, he admits that the system concept of design participation is an idealised model very difficult to put into practice, the reason behind it being, apart from economic and organizational-methodological issues, questions concerning ethics (e.g. is the influence of each of the participant on the decision-making process commensurate with the degree the decision applies to him/her? and who is the right person to assess that degree?) [13, p. 101–102].

The specificity of publicising the environmental design processes is based on the acceptance of a system of values, which breeds further moral dilemmas. We cannot, for example, accept the thesis that the participants involved in a certain design are always right (as far as the question of ethics is concerned the majority is of no significance). Creating the needs, not only reacting to them, shaping attitudes and behaviours is not only possible but highly desirable – at this point

⁷ Rittel defines the term 'wicked problems' as a category of problems within the scope of social systems which are hard to specify because of chaotic nature of information processes, where there are many decision-makers and participants representing conflicting systems of values, the problem has many sub-branches and the framing of the whole is chaotic [1, p. 77].

⁸ It means, among other things, designing 'with' the user, his direct and multilevel participation, organised in an open form with the help of active participation techniques [13, pp. 57–67].

the educational aspect of designing appears [2]. It seems possible, not to say essential, to expand the circle of participants. What matters is direct involvement of people representing qualities important for the sustainable development. There is a necessity to protect weaker social groups, very often poorly represented (e.g. the elderly, the poor or the disabled) – it can be achieved by encouraging participation of these groups and experts [4]. It would be a token of intra-generation justice. Nonetheless important is the rule of inter-generation justice. M. Dutkowski says that, having to face the multitude of goals and different interests, the main task of a planner is to organize the communication process and to negotiate between the conflicting sides. *In a situation of partial interests conflicting with general goals it seems that the most important thing is to make the sides realise their common objectives, so that they can be included in their calculations. [...] The duty of a planner as a mediator is to engage the people, organisations and institutions representing the interests of future generations into the dispute* [3]⁹.

Sustainable design seeks solutions which are good for both people and the natural environment. Expanding and deepening the moral reflection have a significant influence on the methodology of design. Moral obligation towards social and ecological environments forces, as a consequence, reinterpretation of the semantic and aesthetic aspects of architecture [2]. The search continues for aesthetics rooted in the established system of values, which, on the one hand reflects pro-ecological attitude and, on the other, can be co-created by the users of architecture.

To sum up, in the light of above reflections, it is worth pointing out to specific ethical issues that result from the environmental approach. From the point of view of architectural practice (especially the decision-making process), the problem of environmental design necessitates asking a few basic questions regarding the ethics [12, p. 101]:

What is good for the environment (what should the designers aspire to achieve)?

When making a choice, how should we decide which of the options is the right one?

When considering various options, how to make the right decision (in the context of justifying, variety of opinions, controversies)?

What process or method should be applied while making a choice of the ethical nature in a dilemma situation involving a number of people and a variety of interests?

⁹ Although the author's deliberations concern spatial planning, they are also applicable to a smaller-scale environment or architectural design.

Summary

In the face of sustainable development, the architectural practice undergoes a transformation. More and more emphasis is put on social and ecological issues. Environmental ethics, whose main object of reflection is man and natural environment, is the basis of philosophical concept of sustainable architectural design. In the process of shap-

ing the surroundings, there appears one essential question – what is good for the environment? One of the problems of architectural design, which brings about numerous ethical implications, is the question of its publicizing and responsibility for design decisions.

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References

- [1] Bańka A., *Psychologiczna struktura projektowa środowiska. Studium przestrzeni architektonicznej*, Wydawnictwo Politechniki Poznańskiej, Poznań 1985.
- [2] Baranowski A., *Projektowanie zrównoważone w architekturze*, Wydawnictwo Politechniki Gdańskiej, Gdańsk 1998.
- [3] Dutkowski M., *Rewitalizacja obszarów miejskich jako źródło konfliktów społecznych*, [in:] A. Baranowski (ed.), *Rewitalizacja zdegradowanych struktur osadniczych w warunkach zrównoważonego rozwoju*, Research Project No 7TO7F 011 12 KBN. Agencja Promocyjna WENA S.C., Gdańsk 2000, pp. 53–56.
- [4] Dymnicka M., *Spoleczne aspekty rewitalizacji zdegradowanych struktur miejskich*, [in:] A. Baranowski (ed.), *Rewitalizacja zdegradowanych struktur osadniczych w warunkach zrównoważonego rozwoju*, Research Project No. 7TO7F 011 12 KBN. Agencja Promocyjna WENA S.C., Gdańsk 2000, pp. 41–52.
- [5] Grzesica J., *Ochrona środowiska naturalnego człowieka*, Wydawnictwo Księgarni św. Jacka, Katowice 1993.
- [6] Idem R., *Procesualne kryteria oceny zrównoważonego projektowania architektonicznego*, [in:] A. Baranowski (ed.), *Sustainable Development and Renewal of Urban Structures*, International Workshop, September 29–30, 2005. Centre for Urban Construction and Rehabilitation CURE, Gdansk University of Technology, Gdańsk 2005, pp. 11–16.
- [7] Lenartowicz K., *O psychologii architektury. Próba inwentaryzacji badań, zakres przedmiotowy i wpływ na architekturę*, Politechnika Krakowska, Kraków 1992.
- [8] Naess A., Rothenberg D., *Ecology, Community and Lifestyle*, Cambridge University Press, Cambridge 1989.
- [9] Pawłowski A., *Ekologia–kultura–rodzina*, [in:] J.M. Dołęga, J.W. Czartoszewski (eds.), *Rodzina w nauce i kulturze*, Episteme 8 (2000), Wydawnictwo Wszechnicy Mazurskiej, Olecko 2000, pp. 311–316.
- [10] Pawłowski A., *Odpowiedzialność człowieka za przyrodę*, Humanizm ekologiczny vol., 5. Politechnika Lubelska, Lublin 1999.
- [11] Tyburski W., *Aksjologia ochrony środowiska przyrodniczego*, [in:] J.M. Dołęga, J.W. Czartoszewski (eds.), *Ochrona środowiska w filozofii i teologii*, Wydawnictwo Akademii Teologii Katolickiej, Warszawa 1999, pp.153–169.
- [12] Wasserman B., Sullivan P., Palermo G., *Ethics and the Practice of Architecture*, John Wiley & Sons, New York 2000.
- [13] Wrona S., *Participation in architectural design and urban planning*, Wydawnictwo Politechniki Warszawskiej, Warszawa 1981.

Etyczne aspekty środowiskowego projektowania architektonicznego

Wobec wyzwań rozwoju zrównoważonego praktyka architektoniczna ulega przeobrażeniu. Coraz wyraźniej akcentowane są kwestie społeczne i ekologiczne. Etyka środowiskowa, której przedmiotem refleksji jest człowiek i środowisko, stanowi podstawę filozoficzną koncepcji zrównoważonego projektowania

architektonicznego. W kształtowaniu przestrzeni pojawia się podstawowe pytanie – co jest *dobrze* dla środowiska? Problemem projektowania rodzącym wiele implikacji etycznych staje się kwestia jego uspołecznienia i odpowiedzialności za decyzje projektowe.

Key words: environmental ethics, sustainable design in architecture, responsibility

Słowa kluczowe: etyka środowiskowa, zrównoważone projektowanie architektoniczne, odpowiedzialność