

ETHICS AS THE FUNDAMENTAL OF SUSTAINABILITY AND SUSTAINABLE ARCHITECTURE

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The adjective sustainable, both in general and when applied to architecture, involves the consideration of environmental, economic and social aspects. However, advances in research on sustainability in the last decade have confirmed the need to incorporate a new approach to what we understand as basic: Ethics.

The dimensions of current approaches in sustainable architecture widely surpass those usually analysed which are based on time and space. The definition of sustainability in itself, as a link between generations, expands the time coordinate: the research and activity of architecture includes much more than the project itself or a building's useful lifespan. The space coordinate has also widely surpassed the limits that have been used up to now: the idea of thinking globally and acting locally expands the locus of architectonic design on to the planet as a whole. These new limits of building horizontally—the whole planet, and vertically—throughout generations to come, makes ethics the base, the fundamental and the field from which we should study sustainability. First, we must establish the rules that will guide the analysis: Ethics are understood as the study of what is good and bad, proper and improper in accordance with the norms set by society at a given time.

Sustainable architecture and methods of evaluating the environment's behaviour of current buildings is moving towards this field, even though unconsciously. It is important to think about sustainability's reasons and original framework in order to exactly understand what are the aims and scope in which it is developed. The study of sustainability in architecture from an ethical point of view determines the criteria under which the evaluative methods should evolve, noting the ways for proper development.

THE 'URBAN METABOLISM' AS A BASIS FOR INTEGRATION STRATEGIES OF RENEWABLES IN URBAN AREAS

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The absence of a general theory of sustainability is also a topical problem. Particularly, the role of spatial planning in this respect: the connection between local, communal and global sustainability is characterized by uncertainty, ignorance and inexperience. Composite measures of sustainability provide useful insights to the environmental impacts associated with human activities, but, in themselves, are not the solution for abandoning traditional paradigms. Spatial planning must be able to conduct the spatial consequences of these developments. Especially the principles of "clustering" and "integrality" (physically and administrative-organizational) are of importance here. Therefore, it is necessary to look beyond boundaries: finding a new approach to clustering. This implies a totally different approach of the networks, also described as the pursuit of a different network architecture or geometry on the one hand and different network control or network constitution on the other. It induces the explicitation of the 'urban metabolism' with underlying social needs and the finding of instruments and strategies that allow the spatial planning and renewed infrastructure to fit the changing social objectives, especially as for sustainability, and another way of dealing with "public affairs" better.

The presented approach promotes sustainable management of the environment and its resources through a renewed focus on existing, mostly ignored resources and local 'quality-cascading' (exergy), together with strategic niche planning to improve knowledge on the interactions between natural resources, human activities and environmental impact and in doing so, facilitate continuous urban change. Especially the introduction of solutions on an intermediate scale-level of the neighbourhood or city district offer opportunities.