

Sustainable architecture : from theoretical principles to innovative practices

Emmanuel REY

Abstract

The field of sustainable architecture is viewed today in a general context aiming at contributions to the sustainability of the built environment, with a simultaneous consideration to environmental, socio-cultural and economic issues. This research of quality in the broad sense aims especially at stimulating the generation of new ideas and identifying modalities that optimize the management of resources (energy, water, material, biodiversity), the minimization of environmental impacts, the reinforcement of community identity and the efficiency of building construction. Through the presentation of various projects and researches, the lecture will show how the integration of a holistic, interdisciplinary and evaluative approach into the design process can translate the general concept of sustainable development into concrete terms and stimulate the emergence of innovative practices.

Short biography

EPFL architect (1997), European postgraduate degree in Architecture and Sustainable development (UCL / EPFL / AASA London / EA Toulouse 1999) and Doctor of Applied Sciences (UCL 2006), Emmanuel Rey is an associate of Bauart Architects and Planners Ltd in Bern, Neuchâtel and Zürich. He is involved in a wide range of projects, competitions and buildings, for example the development of the Ecoparc district, the conversion of the old Cadolles Hospital into flats in Neuchâtel or the intercommunal Masterplan for Malley area. He is also active in various research projects concerning the sustainability of the built environment and teaches regularly as lecturer, supervisor or expert in various universities and institutes of technologies. His research titled "Regeneration of urban wastelands and sustainable development : towards an evaluation integrated as part of the project dynamics" has been recently awarded by the European Gustave Magnel Prize for Sustainable Construction.