Adaptive Architecture - a Spatial Objective

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Adaptive Architecture - a Spatial Objective !

´Architecture has always been inventive and adaptable´.

New challenges of a fast changing society with new social phenomena as well as growing environmental problems ask for rethinking our habitats on all scales and reflecting our design methods to produce them.

Many Megacities prepare with big projects against dramatic environmental threats (New York and London against flooding, Beijing and Melbourne against water lack and desertification, Tokyo and Paris against heat waves… etc.). Most of these projects are huge technical systems like gigantic flood barriers, water pipelines, desalination plants, sea water cooling systems. Very rarely, and this is also the weakest point in the development towards a more sustainable architecture on all scales, the problems and solutions are discussed as spatial challenges, including all aspects of spatial creations and spatial retrofitting.

To get to the point: The ´sustainable´ in ´sustainable architecture´ is reduced in too many buildings to implementations of new technologies, in its worst examples reduced to meaningless applications of new technologies to rather mediocre architecture. I am not arguing in general against new building technologies and I have been involved myself in developments of new building skins and systems. But I strongly oppose to the prevailing tendency of confusing architectural solutions with technical solutions. Bernard Rudofski´s postulation (written 1987) ´no new construction methods - we need a new way of life !´ seems more relevant than ever, when thinking sustainably and socially conscious. At the same time, it appears most remote to predominant architectural practice.

Even worse: some projects, which nowadays you find in almost every book of sustainable architecture (like Mario Cuccinellas Building in Beijing), produce a loud sustainable gesture. In reality, measured and in this case even proved by the users, they are the absolute opposite (!) of sustainable or energy efficient buildings. In its best, the numerous expensive PV panels compensate the orgy of thermal bridges in cold Beijing winters produced by the fixings of the panels, which still means the corrosion by extreme condensation happens extremely fast…

Architecture is an artistic discipline! This is not in contradiction that buildings have to be based on scientific principles. Architecture contains a lot of non-scientific, non-

measurable and emotional aspects. Sustainability is about resources and about the impact of buildings to our environment. It is widely measurable (though complex and measuring methods not much developed yet). While good architecture touches the heart, sustainability must be proofed scientifically and not only proclaimed. Just like a structural engineer must proof his dimensions.

There is a growing paradox: a lot of architects (some were opposing lifelong to everything in connection with sustainability as long as it was not a marketing need) see their formal solution as the one and only possible in terms of ´sustainability´, while facts of measurable aspects of environmental impacts by their project are rather diffuse or in some cases definitely incorrect. ´Increasingly misused in architecture, the term sustainability is in danger of becoming a mere label´ (David Cook of Behnisch and Partners)

Alvar Aalto wrote in 1957 :

´There are only two things in art – humanity or its lack. The mere form, some detail in itself, does not create humanity: We have today enough of superficial and rather bad architecture which is modern.´

There is nothing to add on.