European Design Guide for Tensile Surface Structures

Brian Forster Marijke Mollaert
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Brian Forster  Marijke Mollaert
Foreword

FINDING FORM

Frei Otto
ON THE WAY TO AN ARCHITECTURE OF THE MINIMAL

Primitive architecture was an architecture of necessity. It used nothing to excess, no matter whether it was stone, clay, reeds or wood, animal skins or hair. It is minimal. Even in poverty it can be very beautiful and is good in the ethical sense. Minimal primitive architecture can be structure and ornament at the same time. Decoration makes sense if it is essential.

Good architecture is more important than beautiful architecture. Beautiful architecture is not necessarily good. The ideal is ethically good architecture that is also aesthetic. Buildings that achieve this ideal are rare. Only they are worth keeping.

We put up too many buildings. We squander space, land, mass and energy. We destroy nature and cultures. Buildings are an exercise of power [by changing the existing environment and using materials and energies], even if we do not intend it, because we cannot do otherwise. The contrast between architecture and nature is getting bigger and bigger.

Our times demand lighter, more energy-saving, more mobile and more adaptable, in short more natural buildings, without disregarding the demand for safety and security. This logically leads to the further development of light constructions, to the building of tents, shells, awnings and air-supported membranes. It also leads to a new mobility and changeability. A new understanding of nature is forming under one aspect, the high performance form (also called classical form), which unites aesthetic and ethical viewpoints.

Tomorrow's architecture will again be minimal architecture, an architecture of the self-forming and self-optimization processes suggested by human beings. This must be seen as part of the new developing ecological system of the people who have densely and peacefully settled the surface of the earth.

NATURAL CONSTRUCTIONS, A SUBJECT FOR THE FUTURE

Construction means bringing things together, building them. All material objects are constructions. They consist of parts and elements. This is true for the whole cosmos, and for all natural and manmade objects.

Natural constructions are not just any objects of infinitely variable diversity for us. We are looking for those constructions that show with particular clarity the natural processes that create objects. We are looking for essential. We even speak of the "classical" when something that cannot be improved becomes visible.
**The Architects’ Task**

The biotope building, the city as an ecological system, the way to the minimal mass building, to the minimal energy building, that is one with the landscape and at the same time architecture, is to be found. The task is a difficult one. Solutions are hardly to be expected, as there is no such thing as the building and the city. There is just an infinite number of houses and cities that can all be approximately optimal in terms of energy in a way that is suitable for their time.

The search for the natural in architecture does not restrict the possibilities, it extends them. Architects are pursuing the classical route of inventing, designing and developing technical objects. This way is clearly prescribed and comprehensible in every phase. It can be used to establish whether the resulting products are more energy-saving, lighter, more flexible and closer to human beings. This way can sometimes lead to products that are both high-performance technical products and, as they frequently contain an aesthetic component, also represent a link with the art of building.

Architects hope that their urban architecture will give the new ecological system of the human beings’ city a basis for long-term survival.
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