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Plenum 2: The Built and the Natural

Innovation and Tradition

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On the one hand, we face a wealth of global phenomena like climate changes, population growth, worldwide migration movements, food scarcity, energy supplies ...; with world championships, Olympic Games, world trade and worldwide communications ...; with scientific communities, the UN and UNESCO, the WHO, with GPS and our own UIA ...

On the other hand, there are thousands of different languages and dialects spoken around the globe, thousands of different everyday and public holiday traditions and we perceive differences in our environment over short distances. In mountainous regions densely populated east-west valleys run into north-south valleys with another topography and a distinctly different climate. This generates cultural characteristics, even in relatively small areas, so that individuals and communities who live there develop a sense of belonging, of homeland, from their specific features.

Architecture has to deal with the one and the other, with local dwellings built of local materials, with creating shelters and living space in different climates and regions: in deserts, on sea shores, in the mountains, on the plains and on hillsides, in the natural jungles and those of the megacities.

Yet architecture is also concerned with internationally marketed high technology. The buildings on the Nile, built of hand-formed unfired loam bricks—an age-old traditional construction method—rise up and finally crumble again next to modern industrial plants manufacturing flat glass or anodise huge steel sections for assembly lines which produce prefab prestressed RC trusses. Alternatively such products are imported.

The results are often material gains as well as cultural losses. After thousands of years of balance between the great river of Egypt and the

people living from and on it, there are now other ‘crops’ growing up on its banks that change the proportion of things: multi-storey skeleton structures with fired brick infills that sprawl out from Cairo in their thousands.

The production of entire non-structural facades and their details, of solar collectors for roof installation, of built-in luminaries, suspended ceilings, movable partitions, floor coverings and media units matches the technologies used in other areas of industrial production in terms of engineering and logistics, conversion technology, surface finishing, high-end precision and control.

Yet there is an additional problem arising from the fact that, similarly to cars, houses are being built the world over to almost the same typological design, with architects and builders persuing only the technically and economically feasible without considering either the ridiculously, irresponsibly high energy input required to operate them or the parallel destruction of the values which influence and generate architectural identity.

Talking of cars, i.e. the means of mobility, in the same breath as buildings, by nature stationary, i.e. immobile, is highly questionable. Just as living creatures are able to live in certain regions because they are exactly suited to the conditions prevailing there, buildings, too, must relate to their surroundings to function efficiently and to use the potentials offered there.

The polar bear cannot subsist near the equator, despite all its strength, and the gazelle has no chance of surviving in the Arctic Ocean, despite its speed.

Innovation should neither only differ from what has existed before, nor make us just expect partial success in certain separate areas. It should lead us to new holistic qualities in an interplay between all the material and immaterial givens. The criteria for such qualities must first and foremost be human criteria.

Human existence, in its material aspects, depends on nothing else so much as on the availability of energy. Where energy is available in sufficient usable quantity, civilisations can develop: water for drinking and watering crops, for heating and cooling, trade and transport, health

services and education—in short, everything that makes the building of a city possible as a rich and complex space for life.

In the past, people and communities left a region when natural forces proved uncontrollable by man and made subsistence impossible. This phenomenon has been changed radically in crucial areas by the technological developments of the past decades, especially by the new potentials for using solar energy which is available in immeasurable abundance every day all over the world. This creates the prerequisite for the development of civilisations.

Architects like to talk of their responsibility towards society. In this country this has even been encoded in our professional ethos.

Yet neither our universities nor professionals take note of this responsibility and the activities of architects which are life-giving for humanity as a whole. Migration movements towards the industrialised countries and the unspeakable daily sufferings of people in Third-World countries due to lack of food and safe drinking water can only be stopped if and when

1 technical and functional knowledge is made available to them, and
2 the architectural models followed in developing countries are suited to the respective region instead of being reproductions of the fun-society, of abundance and utterly inappropriate symbols, as well as an often extremely arrogant over-estimation of our own abilities. (The politicians, self-declared democrats, who demand a royal palace for this city —if not the whole, then at least the aristocratic symbol of the facade—even though it may cost many hundreds of millions, are in fact declaring our cultural bankrupcy. Considering the above, it is the exact opposite of what should be demanded and would be right and proper in view of public impact.)

It is only when we accept the challenge and opportunity, the artistic stimulus of new means and, at the same time, aim to create a subtly adapted, materially and aesthetically varied architecture that we will generate a modernism that deserves this designation as a cultural goal.

The attached graph presents some of the important elements in building today. It shows how much more diverse the technological repertoire has become over the past few decades.