Urban design in the age of the anthropocene: Facing demographic shifts, climate change and finite resources

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A close look at the urbanization of the planet today reveals that most people live in sub-, peri- and exurban areas. Complex infrastructural networks interweave villages, agricultural areas, cities and commercial parks and dispersed settlements into urbanized territories all over the countryside. With the transformation of contemporary urbanization had never come to existence without the extensive individual mobility that emerged in the second half of the 20th century on the basis of low priced and seemingly inexistable fossil fuel. This is the urban form one is dealing with when discussing future challenges for urban planners and designers. Extension commuting, the fusion of rural and urban as well as superimposed scales of interrelationships make the situation even more complex. And the demographic and socioeconomic changes of an increasingly cross-linked global society additionally amplify this process of urbanization.

The urbanization of the landscape

Considering their ecological footprint, developed nations of the West claim a bigger part of the planet's surface per capita than they are entitled to. Consequently, land use needs to be thought of in a more integrated way. In the case of Switzerland, were successful to apply the principle of induced, every square meter is crucial for the preservation of the whole ecosystem. It is crucial for the existence of all species.

The urban fabric, its starts at the local level, it is the local level which is crucial for the future success of any project. Local knowledge has to be part of the evaluation.

The scenario development process will have to be conducted for the entire territory, including the uninhabited areas, in the future.

The Swiss condition

Due to its topography, a wide area of Switzerland is not habitable. And while the population is still growing (although all forecasts for the developed world point to a stagnation in middle terms), high prerequisites are necessary for the future urbanization. The so-called ‘Mittelland’, that comprises a vast hilly zone between the Lake Geneva and Lake Constance, for instance, as well as the big valleys that stretch far up into the Alps are excellent examples of the medium dense urban territories mentioned above. The few larger cities like Zurich, Geneva or Basel are all located in this ‘Mittelland’ and have developed into a large polycentric urban network over time. The majority of Swiss economical, agricultural and leisure activities have been concentrated here. The headquarters of big companies, most of the educational, cultural and administrative facilities as well as the most fertile land are concentrated on this third of the country’s surface. The Swiss government assumes that four fifth of the population live in these urban territories. Besides those, peripheral settlements are dispersed. But even there, urban living conditions shape the daily life of most people. As in many wastes and trails, the agricultural production in Switzerland is not profitable and depends on high subsidies or the maintenance of economic and ecological diversity. For food production, these reasons, development and feedback over the past decades and became a widely perceived issue, first only among planners, but little by little also for large parts of the general public. This continuous reclamation of land is attended by the sensibility of a general loss of nature. The desire for being part of nature and its rule at the same time, and the resulting loss, turns out to be a fundamental contemporary dilemma. However, the landscape has always been more consciously in the future, especially for the production of renewable energy, and its value.

Implementing robust long-term strategies

To steer and orchestrate upcoming tasks such as infrastructure renewal, settlement densification and self-sufficient energy and resource supply, long-term strategies are needed. The overall system of Switzerland and the municipalities enjoy large autonomy with respect to spatial planning. Taking this into account, the following potential in quality develop-ment of the ‘Kulturlandschaft’ is one of the main reasons why the country is so attractive for many visitors and immigrants. And its suc-

A ubiquitous understanding of today’s territory

Everything shaped by humans is culture; this includes the territory. Cultured landscapes emerge through medium dense form of interaction with nature. Their regional differences are due to natural conditions and increase with growing tech-
nological development. With this holistic concept of the ‘Kulturlandschaft’ we envisage to consider for the whole as non-built areas as ONE continuous culturally shaped landscape.

The challenge in the future is to design and develop sustainable concepts based on the implementation of renewable energy and resources. This is in order to provide enough living space, employment and a high quality of life for the entire population. Thereby architects, planners and urban designers play an important role. The building stock in Europe is accountable for a major share of the energy consumption with construction being the most resource consuming human activity. The orientation versus regeneration principles is therefore not just a marketing strategy but rather a social necessity in the long run. Additionally, spatial and strategic design is a powerful tool to test and negotiate future developments with the various players involved.

A ubiquitous design approach

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