

unmistakable and easily recognized, with a sense of being home. This is a difficult set of phenomena to describe, and has something to do with the spiritual quality of a place, defining life and movement, which is something that water can convey directly like no other element. Interdisciplinary work and thought are needed to link themes together. The questions posed and the themes addressed go beyond the bounds of a single subject as far as the qualities of water are concerned, and this requires a new planning strategy.

Planning instruments and planning culture

Even since people have organized their surroundings, tilled fields, founded villages and settlements, they have had to make water into something they can use, and regulate water management. Thus water planning is one of the oldest driving forces in urban development, and gave rise to important engineering constructions at a very early stage in history. But these were always an expression of an attitude as well, of philosophy, myth and religion, they were presented aesthetically. Today it is scarcely possible to understand any longer how closely the fields of art, architecture and engineering were linked until the late Middle Ages: they formed a unit. An outstanding example of this kind of interdisciplinary work with water is an artist like Leonardo da Vinci.

In the course of history these fields have developed, become more specialized and moved apart. A real interplay of planning disciplines is rarely found, if at all. Architects like using choice sites near water, but it is exceptional for them to address other water themes and they usually see water as a hostile force that damages their buildings. Engineers are inclined to find purely technical solutions to questions about water, and often seem to be following a marked urge to convince others and themselves that those solutions are indispensable. Artists seldom make reference to this element that determines life and the environment. They often use water decoratively, as part of their own self-presentation system.

But water problems in town and in the countryside, which are increasing the world over – problems like surface and groundwater pollution, floods, drought and climatic change require holistic strategies and planning. Causes can often be found in the fact that such problems are linked with our social values and customs. Isolated repairs are of limited use only, in terms of both space and time. We are becoming increasingly aware of the necessity to work sustainably and far-sightedly with water. In the future planners will be increasingly required to put water itself back in a consistent context. This is the only appropriate way for dealing with its qualities and diversity. And here are some ideas for a start on integrated planning:

Global and local: Water always creates a relationship between detail and the whole. Each individual drop contributes to the balance of the earth's climate. Water projects become valuable when they help this process and can show that the place is being addressed, and how it is connected with the world around it.

Social significance: Water always stands for exchange and openness as well. It reflects fairness or injustice between human beings. Planning is successful if the cultural and social needs of the individual users are met and societies are regulated communally, and are expressed correctly.

Citizen involvement and participation: The way the most important substance for life on earth is handled is determined in many democratic countries by the priorities set by citizens. Water projects should include citizens and later users in planning and decision-making to as large an extent as possible.

Commitment and participation: It is important to promote and stimulate people's own creativity, as water is full of imagination, and a water-playground is one of the most popular places there are, and not just for children. Planning should offer people a chance to exert their influence and to suggest and agree to open possibilities for play.

Demonstrating sustainable environmental technologies: This means that processes for purifying and treating water, for avoiding floods and other such things should not be concealed, but wherever possible be presented openly and creatively. Retaining and managing rainwater in a new residential area can be integrated into open spaces within the planning process and become part of the architecture.

Admitting multi-functionality: This can be seen everywhere in nature. Why must a rainwater retention facility be used for this purpose only? Skilful planning means that play and sunbathing areas can be built in for when the weather is dry, as they won't be used for those purposes when it is raining anyway.

Integrated planning will always combine several water themes where possible. There are many of these, and they often do not exclude other types of use. But this can only succeed when everyone involved in the planning process really does use interdisciplinary working practices. Tolerance alone is nothing like sufficient here. The specialist disciplines should overlap in every individual involved, and every individual in a team should be aware of at least some elements of the others' specialist fields.

To do justice to water we have to go into the waterworld ourselves, experiment with it and learn to think in an integrated and interdisciplinary way about its flow and flexibility.