

Water

Rhythm, movement, glare, reflection, colour, sound, and transparency are all expressions of water's properties. Many materials have one or more of these properties, but water has them all. Yet one never knows the order and quality in which they will become visible. Many of these properties can also be found in architectural objects: in the rhythm of the masonry, the movement of the windows, the glare of polished stone, the reflection of glass, and the different colour schemes of the various facade elements – but never with a combination of all of these characteristics. There is a constant wish to develop a material that provides all of these properties. Water is not so much a 'material' in the traditional sense; it is not a building material in the way that stone or glass is. Water is much more of a substance that one works with, that one embraces, and that inspires the architectural object. In particular, this applies to the visual qualities and effects of water as a source of inspiration, and to its possible use in architecture.

The tangible architectural properties of water are many. First of all is water's degree of translucency and transparency, which is largely dependent on the number of organisms in the water, on the depth of the sea floor, and on the composition of the soil. The water's glare and reflection are themselves influenced by the movement in and on the water, caused by the wind and by the presence of direct (sun)light. The water's rhythm and texture are highly dependent on the speed and direction of the wind, on obstacles in the water, on the composition of the soil, and on the type of sea floor. The sound of water is strongly influenced by the strength of the wind and the obstacles located in and around the water, and the hardness of the water largely determines how the sound is carried. Finally, water contains an amount of solid matter in suspension, as well as bacteria, algae, and organic materials that can lead to a certain taste and smell. The wind and the increase in temperature are responsible for amplifying and spreading the smell. Depending on the time of day, the temperature, the incidence of light, the wind, and the type of precipitation, water will change from liquid to solid, and from light to dark. The seasons of the year illustrate this well.

In the winter, the sun is low and the days are short. During the day, the water makes a major impression. It appears sluggish; everything seems to be moving more slowly, but the movements that the water makes are often rough and fierce. There is no smell. The sound of water can be overwhelming and rhythmical. In the form of ice, it immediately takes on another dimension. It has a dull lustre, and often takes on a deep black colour. And in transitional zones between liquid and solid, magnificent rhythms are created: from smooth and unruffled to turbulent divisions along the surface, formed by the wind. When it is dark, the water is often dominated by the local artificial light, which makes the reflection of water static. On a clear night (with a full moon), the water assumes a beautiful dark blue colour.

In the spring, everything seems to be lighter. The movements of the water are velvety soft and rhythmical, almost impalpable. By day, the colour is often a golden yellow, and the sunlight can be sparkling and bright. This brilliance characterises the season. The contrasts are less sharp than they are in the winter, although the play of shadow is still substantial. A certain degree of smudginess characterises the texture of the water, which alternately reflects black and silver. The smell reveals a bright freshness. The sound of rippling can often be heard, and is sometimes very sharp and shrill. When it is dark, the local artificial light does not make much of an impression on the water. On a clear night, the water has a soft and dark colour.

In the summer, the water makes a viscous impression. The sun is high in the sky, and the hardness has disappeared. The reflection is often golden, and in a certain sense lacks sharpness. On the horizon, it takes on the colour of the air; there is hardly any separation. Due to the high temperatures, the presence of smell may be considerable, while the sound of the water disappears as if it had never existed. When it is dark, the local artificial light has no significant influence on the water. On a clear night, the water can take on a beautiful dark green colour.

In the autumn, the sharpness returns. At times, the water is frighteningly rough and unreliable. The incidence of light has less of an effect on the water. The contrast between dark and light is overt, and quickly changes form. There is hardly any smell to speak of. In the late autumn, the sound of the water can come across as devastating; the sound comes from all sides, and smashes against the solid form. When it is dark, the local artificial light has an effect on the rhythm of the water; it reinforces the elusiveness of the reflection. On a clear night, the water can take on ominously dark colours.

All of these effects of water are not only tangible, but are also very useable across the whole breadth of architecture. An object that is on or alongside the water is embraced by the water; its volume is reflected in the water. Water reflects the borders of the object, and the object sinks into it. The water makes everything bigger, and higher. It makes the object abstract. It has its own order. It makes movement visible; it is not the object itself that is moving, but rather the reflection of the object.

The reflection of the water can also take over an object's interior. Every movement that the water makes, and every disturbance of the water's rhythm, can immediately be seen on the walls, floors, and ceilings. A beautiful game of movement, rhythm, and structures gives the interior an extra dimension, and unfolds like a movie on the screen.

When one considers these special properties of water, and watches current events, then water clearly plays a key role. Not only because of its poetic and architectural qualities, but at least just as much because of the dangers that water can bring about. After all, water does not only have positive properties and applications, but can also cause enormous amounts of trouble.

In recent decades, many parts of Europe have been hit by flooding. And as a result of increasing urbanisation and climate change – in which both the intensity as well as the frequency of peak rainfall continues to increase, and sea levels will rise – flooding will happen more frequently in the future. And this calls for a new approach when it comes to living on or alongside the water, for which the architectural characteristics of water can be an important source of inspiration.

‘I try to capture the beauty of water, but as I am waiting, it changes.’

Henri Snel, March 2010