

ticles. And so it does not respond to stimuli in isolation, but always as a whole, systemically. Even minimal shifts in the equilibrium of forces within it set water in motion, and make it flow or pour. Starting at the point where this movement was provoked, fast and slow flowing areas mingle. Along curving or often rolling sections this leads to shearing, in other words partly pulling, partly pushing movements, to blockages and eddying in rhythmic sequence.

Set in motion by interplay with its surroundings, water, which is otherwise so passive, surprises us by producing a whole variety of forms like eddies and waves – and as they come into being they also immediately transform themselves. Every change of movement in water causes shapes to be formed and re-formed, and ultimately these flow away into nothing as soon as they become calm. A game that ceaselessly produces something new, transforms it and takes it back again, a continuous process without a lasting result.

In its material quality water is shapeless, it has no form of its own, but dissolves forms and changes them. It is only movement that makes it a design medium, the scene of an inexhaustible process of renewal, with shapes being ceaselessly formed and transformed, coming into being and passing away.

Many of the development stages of flow formation in water are strikingly similar to organic forms: they can be addressed as organic in terms of their forms. The formative movements that lead to the formation of such currents with their blockages and stretching, overlapping and rolling up in sections with a multiplicity of curves, obey the same laws as the formative movements in the embryonic development of organisms. But something that in an organism becomes the apparently durable condition of the form of a body and its organs through an equilibrium of flow between ceaseless new formation and simultaneous dissolution, remains a formative process in water, and does not acquire a lasting quality. Thus the formative principles of organic and living nature are reproduced as processual events in moving water under the universal conditions of weightlessness and of forces in states that are changing in an unstable fashion. Life-supporting wisdom is woven into these processes. This is – alongside the mediation of metabolism in organisms – the second major sphere in which water works to convey life. Each mingles with the other.

Recent astrophysical research has shown that the laws governing currents in moving water are part of the laws of flow that govern the entire cosmos. The ways the stars relate to each other also follow these laws. And the patterns adopted by the little floating droplets that water forms when falling provide an image of this – they reflect the whole cosmos on a small scale.

In summary: formlessly passive water, mineral according to its material quality, is opened up to the formative forces in living nature by movement. This is shown by the flow patterns that are formed. At the same time they reveal cosmic laws of order: organic laws are also cosmic. The universal laws that form the basis of all life can also be revealed in moving water, and affect it.

Water lives by coming to terms with its surroundings, though excitability, rhythmical articulation in the course of pattern-forming and pattern-changing, and by mediating metabolic processes, and it enlivens those surroundings at the same time.

These qualities of water can be seen in infinite diversity in natural watercourses: in springs and mountain streams it is largely conditions working from the outside – like the structure of the bed, the slope, the daily pattern of light and warmth etc. – that determine the behaviour of water and the absorption and transport of solid and dissolved substances. In big rivers, lakes and in the sea these processes take place to a greater extent inside the masses of water in the form of substance conversion and separation. In meandering streams and rivers on plains these tendencies to absorption, conversion and separation, to shaping and mediating, run in a flow of rhythmical equilibrium. As it comes to terms with the landscape, the course of the river itself becomes an image of these events.

If a creative artist wants to bring about cosmic and organic flow forms in water, this cannot be done in the same way as a sculpture, for example, would be created. They can only be evoked by handling water like an instrument. The creative process then takes place in the water itself. For the artist or designer working with water, this means that he or she makes only part of the work of art. The other, livelier part has to be left to the water – it is to the water that the completion of the work is entrusted. If the artist has learned how water twists and turns as it flows, how it eddies, trickles and spurts, flies and builds up, surges and sloshes, rests and reflects, then some of this can be enhanced and emphasized by creative design, and made into the theme of the joint work of art. Then the designer or artist is working in partnership with the water. This stimulates observers to become aware of the special qualities of water, to discover and experience it, to love it and to value it – and so to learn how to treat it carefully. I know of no better, more attractive and more sustainable ecological study course than this!