TRANSFORMATION

VADIM KOSMATSCHOF

One of the most significant achievements of modern sculpture since the 1920s has been the introduction of motion into the sculptural object. Up to that time, static sculpture, mainly with figural subjects, represented a sculptural tradition that had endured for thousands of years, and the idea of periodic changes of form in sculpture was an absolute terra incognita. László Moholy-Nagy, with his "Light-Space Modulator" and Alexander Calder, with his mobiles, were pioneers in this new territory. Whereas the 1960s saw a predomination of kinetic sculptures on technology-critical themes, which satirized technological perfection with their no-tech construction (Jean Tinguely), Kosmatschof deliberately follows up on the high technological standards of the kinetic objects of early modernism.

This also applies particularly to his work with the elements of nature. Just as Moholy-Nagy planned the modulation of light-generated forms, and Calder envisaged wind-generated constellations of his mobiles as the intangible consequence of their basic artistic physical construction, Kosmatschof often uses light as an energy source for the powering of his objects. The integration of the natural elements is an important characteristic of early kinetic art, in which high technological standards were demonstratively contrasted with the elemental powers of the universe.



Apart from the aspect of using technology to integrate the powers of nature into works of art, the formal aspect is also of significance in the two projects "Unfolding Square" and "Moving Cylinders". A change of outer form in kinetic art can be effected in various ways: The initial object can be linearly transformed from one form to another without ever returning to its original form, or it can continue changing form indefinitely. A third possibility is periodic transformation, which, because of its cyclic character, gives rise to certain associations with the cycles of nature. And if the transformation of the object follows a regular rhythm and, moreover, makes use of solar energy, a kinetic artwork of this kind enters into complete harmony with the processes of the universe. None of the possible forms which these objects assume are ever the result of coincidence; all the constellations are planned.





The two constantly transforming objects "Unfolding Square" and "Moving Cylinders" are conceived as large-scale sculptures for public spaces, a genre in which Kosmatschof has worked since the beginning of his career. They demonstrate both natural as well as artistic and technological achievements. The square is a construction comprised of a frame made of steel tubing, connecting hinges, and steel sheets which are intended to be coated with an organic photovoltaic layer that will provide the necessary energy for the movement of the object. The square slowly folds up, pauses while the accumulator recharges, and then unfolds again. A similar transformation cycle can be seen in the four hydraulically powered cylindrical columns which oscillate between two end positions, in each of which one of the columns is fully extended in the vertical direction and another is fully retracted, while the other two are in the one-third and two-thirds positions respectively.

The transformation of the square is extremely complex, since it involves having five mainly triangular steel sheets follow an intricately designed and calculated line of movement in order for the object to achieve its flat, folded-up position and unfold to its vertical position again. The transformation of the four cylinders, on the other hand, is less complicated – they "only" move vertically up and down. The link between the two works is their slow, rhythmic oscillation between an initial and a final form, and the fact that the largest change in form is shown by the height of the respective object. Their tranquil expansion and contraction suggests a somewhat uncanny animation and yet, at the same time, the gentleness of a breathing creature. On the other hand, the clearly technical character of the objects is unmistakable. One might say that these works illustrate the answer to a basic question regarding the use of technology in artistic works: beauty is created when artworks take on a "life" that moves in harmony with the rhythms of nature but nevertheless shows that it has been created by human beings.



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