Chance and Order

Mechthild Achelwilm

[...] In the search for randomness in art, one is bound to encounter, soon after Marcel Duchamp, the composer John Cage. Cage deliberately used chance as an artistic method, in his music as well as in visual art. His *Ryoanji* series, which he worked on from 1983 until his death in 1992, is based on such "lucky moments". The approximately 150 drawings on horizontal sheets of paper show various circular formations which overlap one another and whose outlines are made up of varying shades of black. Cage created them by circling 15 different stones with a pencil. The extreme horizontal elongation as well as the number of stones used for the drawings refer back to the ancient stone garden of the Ryoanji Temple in Kyoto, which is rectangular and has 15 stones of various sizes arranged on its gravel surface. The "R" in the title of the work *Where R = Ryoanji (2R) 9* from 1983 (fig. p. 56) stands for the 15 stones, and the preceding digit designates the respective number of circles drawn. The next digit counts the number of pencils used. Therefore, for the drawing *Where R = Ryoanji (2R) 9*, Cage circled the stones twice and used nine different pencils of varying degrees of hardness. The artist determined the position of each stone on the paper by questioning the *I Ching*, and later with the help of a computer program, which also was charged with establishing the number of orbits and the choice of the pencil. Thus, a random number generator determines the composition.

This procedure removes the artist as the creative instance; instead, the natural principle, the value of the "chanced upon" form, is the deciding factor. However, chance as principle does not mean that the artist becomes somehow meaningless. Even though chance may shape Duchamp's threads, for example, under conditions prescribed by the laws of nature such as gravity, mass and weight, it is the artist who has the idea to drop the thread and mount it. The artist as impulse-giver remains a necessary part of creating a piece. Consequently, with John Cage it is not chance that is the aim, but rather that which is created when the artist consults chance. "Most people who believe that I'm interested in chance don't realize that I use chance as a discipline. They think I use it – I don't know – as a way of giving up making choices. But my choices consist in choosing what questions to ask."[4] The answers to his questions about

the positions of the stones, the number of times they are circled, and the hardness of the pencil are then decided randomly. Cage provides the framework in which chance can do the drawing.

For Gerhard Richter, the ultimate answer to the question of who retains authorship if the decisions are made by chance, is that he still made the pictures: "The only consolation is that I can tell myself that despite all this I *made* the pictures even when they take the law into their own hands, do what they like with me although I don't want them to, and simply come into being somehow."[5] Richter places less emphasis on the questions posed by the artist than on the decisions that he, as the artist, has no choice but to make. "Because anyway I am the one who has to decide what they should ultimately look like (the making of pictures consists of a large number of yes and no decisions and a yes decision in the end)."[6]

Bettina Munk takes a cue from Cage's thinking in deciding on the fundamental concept underlying her drawings (fig. 3); chance is for her as well the medium that determines the picture. Cage is to his stones as Munk is to her stippler, which leaves a round imprint behind when dipped in Japanese ink. The positions of these marks are determined by a roll of the dice, with each value mapped to a point in a system of coordinates. For this purpose, Munk subdivides the page invisibly into six rows and columns along the x and y axes. In the "chip", a rectangle that shows a miniature outline of the sheet in the 6/6 position, that is, the upper right corner, the positions are first recorded with a timecode stamp that includes the date and time of the dice rolls. After the concept is described in the "chip", it is extrapolated to the whole page.

A further stamp that bears the schematised profile of the German female pilot Marga von Etzdorf, her face turned left and thus toward the past, acts as the necessary "observer". Without such an observer, the drawing would have no relevance, "because if nobody asks about the information, it is not there".[7] Information arises as part of the process, in the questioning; it is not static or retrievable at all times. In these notions of information, one recognises John Cage's theory ("You say: the real, the world as it is. But it is not, it becomes! It moves, it changes! […] The world, the real is not an object. It is a process."[8]). What's more, Munk's concepts also reflect her interest in quantum physics. She invokes the quantum physicist Anton Zeilinger, who described the discovery of the role of chance in science as one of the most important discoveries of the twentieth century.[9] Zeilinger argued for not trying to banish chance from our world but to see it as "the source of innovation *par excellence*".[10] Art takes advantage of this source; using chance, artists challenge the unpredictable, forcing them to face up to new things and react to imponderables. The polar opposite of chance, rationality, is such a supervisory authority that it makes humans unpoetic and unimaginative, according to Cage.[11]

In addition to her drawings on paper, Bettina Munk also designs digital drawings, or gives the impetus for their creation: points randomly scattered by a computer program are connected with vibrating lines through deliberate programming, creating a pulsating web. These digital drawings exemplify the new direction contemporary drawing is moving in: bringing drawing to life with animation, much like the aforementioned video piece *Besuchte Linie auf Granit* (2014) by Sandra Boeschenstein.[12]

Bettina Munk's fascination for quantum physics is shared by Malte Spohr,[13] although his drawings – as chance would have it – take off in a fully different direction (fig. p 103). They build upon a sequence of horizontal lines drawn with a ruler. Through the use of varying pressure on the pencil and by means of overlaps, layers and omissions, abstract structures begin to come into view that remind one of things past, which seem familiar yet fleeting, resembling amorphous natural phenomena such as cloud formations, reflections on the surface of water or cast shadows. The starting point for these drawings is photographs that result from observing natural phenomena, which Spohr then analyses. He reduces the appearance of these first "sketches" on the computer until the photographs lose their objectivity and, with it, their frame of reference. All that remain are "shadows of memory".[14] Anne Buschhoff explains that Spohr is attempting to convey in his drawings the ambivalent feeling of recognition coupled with an inability to comprehend that observing nature evokes in him.[15] Planning corresponds with unpredictability. "I do decide that I want to draw this line, and I also decide to do it on certain paper in a certain size, with a ruler and a soft pencil. How the line decides to act, though, and what it will look like, I can't plan that entirely."[16] He only has limited control over the stroke of the soft pencil (9B), for example; occasionally he will unconsciously apply too much pressure and the line will become darker, which then steers the drawing in a different direction. Spohr does not try to rein in the piece from taking on a life of its own, but instead allows it to participate in its own creation. His defined yet undefinable drawings suggest clear parallels with quantum physics, more specifically the notion of quantum superposition, in which a quantum particle can be in more than one state at the same time. This simultaneity can also be seen in the parallelism of strong conceptualism and free randomness.