

## Chance and Order

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When thinking about the moment of random chance and the state of order, these two terms seem to contradict one another. Wherever order prevails, uncontrolled chance must be eliminated so as not to endanger the order. An ordered system cannot exist in a place affected by chance. They seem to cancel each other out: the more ordered a system is, the less chance is involved, and vice versa. Chance and order as methods and principles pervaded modern art in the twentieth century and persist in contemporary art, which is marked by the constant questioning and discussion of these terms and processes.<sup>1</sup>

At the beginning of the twentieth century, Marcel Duchamp let a one-metre-long thread fall to the ground from a height of one metre and captured the resulting curve on a strip of canvas. He repeated the procedure three times and so let chance design the piece *3 Stoppages Étalon* (1913/14), which is considered a “pioneering work in the aesthetics of chance”.<sup>2</sup> Later on, the element of chance took effect again in the work of André Breton and Max Ernst in the form of automatism, which refers to the Surrealists’ attempts to write, draw or paint spontaneously without the exercise of the rational mind. This method confers artistic authority on blind coincidence and the unconscious.

A painter like Gerhard Richter likewise values chance, which he claims is often so much better than his own efforts, declaring it to be a key element in his art.<sup>3</sup> Accordingly, he let chance decide the order of colours in the colour panels he began producing in 1971, and in his *Abstract Pictures* of the 1990s his palette knife blends the layers of paint seemingly arbitrarily, as is apparent in the painted study *Untitled* from 1991 (fig. 1) in the collection of the Department of Prints, Drawings and Photography.

However, when the artist Sandra Boeschstein chooses to make the main subject of her “drawing” for her 2014 film *Besuchte Linie auf Granit* (Visited Line on Granite, fig. 2) a live pin worm, which writhes uncontrollably and, from the viewer’s perspective, randomly as it moves forward, we are reminded of Marcel Duchamp: 100 years after his *3 Stoppages Étalon*, the question presents itself again as to what drawing or even art really consists of, and what roles are played therein by the artist and by chance.

When we consider the chronology of artistic styles, we often find order and control applied as principles in art following phases dominated by artistic “chaos” and impulsiveness. Constructivism reacts with cool austerity to the wild, emotional and intuitive Expressionism of the first decade of the twentieth century, while the spontaneous Abstract Expressionism of artists such as Jackson Pollock or Willem de Kooning

was followed by the Conceptual Art of the sixties and seventies, which imposed strict rules on painting, drawing, sculpture and installation. The rule is the determining factor in the conceptual piece, to the exclusion of spontaneity and subjective emotions.

Today, elementary artistic issues are still debated under the premises of chance and order: questions of artistic authority versus subjectivity; creativity versus spontaneity; confidence versus uncertainty; unpredictability versus control. The question of whether chance and order are mutually exclusive in art guides the following examination of contemporary drawing, which focuses on the collection of the Hamburger Kunsthalle's Department of Prints, Drawings and Photography.

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."<sup>4</sup> 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.”<sup>5</sup> 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).”<sup>6</sup>

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”.<sup>7</sup>

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.”<sup>8</sup>). 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.<sup>9</sup> Zeilinger argued for not trying to banish chance from our world but to see it as “the source of innovation *par excellence*”.<sup>10</sup> 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.<sup>11</sup>

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 Boeschstein.<sup>12</sup>

Bettina Munk's fascination for quantum physics is shared by Malte Spohr,<sup>13</sup> 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”.<sup>14</sup> 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.<sup>15</sup> 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.”<sup>16</sup> 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.

When the New York artist Jill Baroff makes the form of her *Tide Drawings* (fig. 6, fig. pp. 128 f.) dependent on the water levels in port cities, then, just like Bettina Munk or John Cage, she surrenders her artistic authority with respect to the composition of her images to indeterminacy. However, her decision is incumbent upon the choice of location and the limited timespan, which are crucial factors in the form taken by the drawings. The *Tide Drawings* are concentric circles that Baroff draws with a compass, usually with red, blue or black pigmented ink on gampi paper. The line spacing of the circle

formations, their colour concentrations and size are irregular, depending on the observed period of time as well as intractable parameters such as weather conditions and the geological character of the chosen sites. The lower the water level, the closer together the circles are and the more concentrated the colour appears. A regular ebb and flow of the circle density in *Tide Drawing: Hamburg (autumn)* (fig. p. 129) reflects the regular rhythm of the tides of the Elbe River, a cycle of about six hours. In contrast, in *Tide Drawing: Hamburg (surge)*, dense dark passages that disrupt a steady cycle document the arrival of the hurricane Xaver in 2013, which caused a storm surge in Hamburg.<sup>17</sup> For Baroff, the process of drawing already starts with deciding the where and when, long before anything is visible on paper; the conceptual phase is in full swing before drawing even starts.

The artist then torpedoed the regularity of the circles again when she cuts out individual fine lines with a scalpel and breaks them out of the circular shape, as she did in *Tide Drawing: Hamburg (winter)* (fig. p. 128). The water bath the artist soaks her drawings in before mounting them on white paper separates single lines from the round shape, twisting them into playful contortions and leading to suspenseful bends in the paper strips that confound the regular concentric order. *Tide Drawing: Hamburg (bud)*, finally, displays nothing but a small, concentrated jumble of lines. It was created when Baroff crushed the circular web of lines and crumpled it into a ball in the water bath, afterward spreading it out and mounting it flat on white cardboard. Thus, an active, almost destructive act brings forth a drawing, and Baroff undermines her own rules by destroying a shape determined by empirical data. How the lines deform during such an act is scarcely controllable; the results are “formed from the interplay of chance and control”.<sup>18</sup>

This breaking with the ranks of order can likewise be seen in Spohr and Munk – it's human, some might say. Spohr allows himself the freedom to respond to imponderables, and Munk gives herself a bit of wiggle room to place the stippler in her system of coordinates, just as she chooses the pigment density of her ink. The relationship of law to lawlessness and to freedom fascinates Munk. She describes it as an “open system”.<sup>19</sup> Baroff, too, operates in an open system when she frees the defined lines with a scalpel.

Bereft of any spontaneity and far from random are the drawings on graph paper (fig. 4) by Gabi Steinhauser. And yet they, too, harbour an elementary freedom within them: the freedom to decide from one moment to the next that the drawing is complete. This point in time is not established beforehand but only becomes known during the process.

Steinhauser's choice of graph paper as picture support can be explained by her artistic practice, in which she requires exact measurements. At face value, it is also an expression of precision, rigour and order. The grid sheet offers a structure that can be negotiated with. In modern abstract painting, the grid

(created by artists such as Piet Mondrian) resonated with great symbolic power. Its non-hierarchical structure, the fragmentation of the surface and its uselessness for representational imagery made it interesting for artists searching for a means of expressing content without relying on traditional symbols or other image references.<sup>20</sup> Steinhauser for her part selects starting points or centres on the predetermined grid from which the lines radiate outwards, striving towards the edge of the page in unchanging, uniform increments – millimetre by millimetre. The structure of the composition grows from this systematic approach. Patterns emerge that convey a sense of dynamic motion despite the practical rigour, suggesting depth. The production process is prolonged, similar to that of Malte Spohr, who is well aware of the high degree of concentration it takes to fill an entire page line by line. Whereas Spohr concedes the right of random “mistakes” to remain in the picture, for Steinhauser every line must have its place. In the face of this relentless precision, Steinhauser relates, one begins to question oneself during the drawing process. What drives me to undertake such an effort? What kind of order is it that I am imposing on myself? How do I deal with the existing conditions? In the end, working with graph paper is also working with a predetermined gauge that wants to either be denied and thwarted or confirmed and elaborated upon. The static, reddish grid has a different character than the drawing applied to it, but together they form a synergy that melds the paper support and drawing into one dynamic unit.

There shouldn't be many surprises while drawing, one would think. But Gabi Steinhauser says that she curiously watches each stroke to see what the line will do, that she enjoys her own surprise at what is happening with the drawing, exploring what a single line can lead to up until the moment when she spontaneously decides that the last line she drew will be the last change made to the drawing.<sup>21</sup>

As with Spohr, the drawing *Line of Beauty* from 2012 (fig. p. 105) by Lothar Götz has as its only element the horizontal line. And as with Spohr and Steinhauser, the artist's technique is exceptionally labour-intensive, moving Charles Darwent to remark: “It's hard not to feel that there's something perverse about this way of drawing, something Sisyphean, self-defeating.”<sup>22</sup> With Götz, who is best known for his wall and room murals, one can't help but think how much easier it would have been for him to just paint the picture.<sup>23</sup> Yet he does not paint it. He draws it. In contrast to his extensive paintings, the line rules in his drawings, lending the page its divergent vectors, in which tension builds. Horizontal lines are crossed by vertical apparitions, which are revealed by a common value shared by the start and end points of the lines on the ordinate axis. Although the sheet actually only shows horizontal lines, the start and end points merge in their multitude to become a vertical line. The horizontal lines end irregularly between two such vertical lines. This creates a clear grid division by horizontal and vertical lines on the

page, bound to a chaotic moment that makes the gaps vibrate, making multiple levels seem to open up simultaneously.

Gudrun Piper, like Gabi Steinhauser, also draws on graph paper now and then, but when she does, her drawings serve as studies for her painting.<sup>24</sup> Plain white paper is usually the basis of her constructive-concrete drawings, on which she constructs the grids herself. She lives in Wedel near Hamburg with her husband, Max Hermann Mahlmann, in a small living and working community, where she studies methodological and aesthetic principles of constructive art in order to develop them further. The grid is a fundamental pictorial element that is rehashed over and over again. Piper uses “the network as a symbol of order, openness and clarity. But the grid does not remain just a grid! It is changed, dissolved, darkened, brightened, shifted, rotated, mirrored, sculpturally structured. Time, light, colour, space, number, relationships ... these dimensions are determined by their indeterminacy.”<sup>25</sup> Piper’s works in the collection of the Department of Prints, Drawings and Photography display the typical strictness of geometric compositions in which not even a stroke dares step out of the right-angled line. In *Serielle Strukturen* (Serial Structures) from 1975 (fig. pp. 60 f.), blue and red lines establish an order in which the red basic grid structure is crossed by blue lines. The pulse of the blue lines with their intermittent densification and accumulation determines the rhythm of the drawing, which is sometimes faster, then grows slower, without apparent dissonances. An opponent of a chaotic world view, Piper says in the catalogue of her exhibition in Kiel in 1974 that she is searching for an order dictated by rules;<sup>26</sup> as if she were following John Dewey’s idea that “Order cannot but be admirable in a world constantly threatened with disorder.”<sup>27</sup> Dictated by this desire for order, Piper’s formal vocabulary is clear and simple; it is based on a geometric technical design principle of pure colour areas, straight lines and basic geometric shapes.

At the heart of Piper’s work is the regular form of the square, reflected both in the use of the square shape as a design feature and technically in the paper format. She herself describes the square as “the purest of symbols. It is the essential means of expression in Concrete Art. Through horizontal and vertical thinking, the laws behind the system are rendered visible. The harmony of big and small – juxtaposed – superimposed – the square within the square – from this realm into the infinite. The square is always a fascinating design principle. Simplicity stands opposed to complexity – clarity against mere appearance. Design against chaos.”<sup>28</sup> No room is left for unpredictability; a clear systematic order stands up against chance.

The Hamburg artist Hanne Darboven's structural drawings on graph paper (fig. p. 42) also follow a lucid underlying system. Darboven follows in her drawings a set of self-imposed instructions, noting the sequences in her process on the margins of the page. In contrast to Gudrun Piper, Darboven's priority in her conceptual drawings is less the end result of the form or structure produced than the process itself, which includes both the drawing process and the thought process.<sup>29</sup>

The process aspect occupies a special place in contemporary drawing. Conceptual artists like Hanne Darboven and especially Sol LeWitt devoted special attention to the artistic procedure, establishing it in advance of beginning a work. The younger generation, including Jill Baroff, Malte Spohr and Bettina Munk, both integrate the process in the work and make it patent to the viewer. However, they seem to be even more interested in processes whose unfolding cannot be influenced or controlled by the subject, or if so, then only to a limited degree.

Another such artist is Katharina Hinsberg. In *Nulla dies sine linea* (#4) from 2001 (fig. 5), she draws a line through the centre of a white sheet of paper with a ruler, places another sheet on top, and traces the faintly visible line underneath freehand as accurately as possible. She then removes the first sheet and now uses the new line as the template to be traced on the third sheet, again trying to trace the line as accurately as possible. She repeated this procedure for the fourth version of *Nulla dies sine linea* a total of 931 times, so that the stack of sheets became a cube measuring 21 cm in height, width and depth. The course of the line is exactly defined, because tracing the line underneath allows for no creative leeway whatsoever; as the line is drawn freehand, though, the expectation cannot exceed an "as accurately as possible". Ultimately, no copied line is identical with the template. Small inaccuracies and aberrations are barely noticeable on two consecutive sheets and hardly of any concern when examining such a limited section. But due to the repetition, over time, and with increasing mass, their import grows. The line stopped aligning with the original long before the last sheet; it wandered far towards the edge and displays jagged and wavy deformations. On the one hand, the line has become autonomous. And on the other, since the 931 sheets are stacked atop one another, a new line has been created, visible along the side of the stack of paper. There, the start and end points of the line drawn on the sheet form another line which – similar to the work of Lothar Götz – is not actually a line but the summation of individual points, which our eye only perceives as a continuous line.

In her *Diaspern* work group, Hinsberg approaches the drawing ex negativo. First, she draws strokes on the paper, which interweave to form a fabric of lines branching out like tendrils across the page. She then cuts out this original drawing – in other words, the line, the very thing art theorists debate whether it is the core of drawing<sup>30</sup> – with a scalpel and removes it. A second drawing is created by the cut of the scalpel, because Hinsberg puts a sheet of equal size under the original drawing, which gets cut as well.



She takes the same approach for the piece *Netz* (Net) from 2003 (fig. p. 121), except that here, the focus is not on the sheet with its empty space but on the pencil drawing cut out from the sheet. The extracted web of lines, delicate and fragile, is affixed to the wall with fine pins. Despite the creative process being the same, the pieces *Diaspern* and *Netz* are utterly different in character: while *Diaspern* is relief-like due to the two levels and reveals architectural properties, *Netz* approaches the quality of sculpture as a tangible line in space. The varying planes in the two works map the different levels of time and thus the process of drawing. Every moment, every action leaves a trace.

Through her work, Hinsberg poses fundamental questions about drawing and takes notions of what drawing is to their logical conclusions. She extends drawing to include silhouettes, expansive structures and even spatial installations. Hinsberg thus advocates abolishing the boundaries of what is considered drawing and provides the strongest arguments with her own work.

After examining drawing as process, it is possible to come full circle to where this text began: with Marcel Duchamp and his three threads. Chance and order not only suppress the artist's individual handwriting, as with Duchamp, undermining the cult of personality surrounding the artistic genius; they simultaneously move the aspect of drawing as a process to the foreground. We find this phenomenon in Hanne Darboven's marginal notes as well as in Bettina Munk's time stamps. But even the small-scale precision of drawings by Malte Spohr, Gabi Steinhauser, Lothar Götz and Gudrun Piper credibly demonstrate the lengthy process involved in producing a drawing. Drawing brings about a deceleration; a personal perception of time takes hold. This is how Gudrun Piper explains her quest for order: "The person striving for silence finds in constructive-concrete art the insight to shun a spectacular world."<sup>31</sup>

Chance and order are not necessarily contrary elements in art. The works examined above demonstrate causal connections where the random element subsequently constitutes order, and in the process of drawing in particular we can find correlating interactions that maintain the tension. The interplay of chance and order gives the arts greater flexibility "in the age of uncertainty relations", offering "possibilities for experimenting and discarding, puzzling and permutating".<sup>32</sup>

- 1 Cf. exh. cat. *Purer Zufall. Unvorhersehbares von Marcel Duchamp bis Gerhard Richter*, Sprengel Museum Hannover, Hanover 2013; *Drawing as Process. Current Trends in Graphic Art*, Museum Folkwang, Essen, Heidelberg 2008; exh. cat. *Gegen den Strich. Neue Formen der Zeichnung*, Staatliche Kunsthalle Baden-Baden, Nuremberg 2004.
- 2 Herbert Molderings, *Kunst als Experiment. Marcel Duchamps "3 Kunststopf-Normalmaße"*, Munich/Berlin 2006, p. 7.
- 3 Cf. Gerhard Richter, interview with Benjamin H. D. Buchloh, 1986, in: Gerhard Richter, *Text 1961 to 2007. Writings, Interviews, Letters*, ed. Dietmar Elger and Hans Ulrich Obrist, Cologne 2008, pp. 164–189, here p. 184. English: Gerhard Richter, exh. cat., London (Tate Gallery), 1991, pp. 123–124.
- 4 Richard Kostelanetz, *Conversing with Cage*, New York/ London 1987, p. 16.
- 5 Gerhard Richter, notes from 1990, in: Richter 2008 (see note 3), pp. 252–254, here p. 252.
- 6 Ibid.
- 7 Bettina Munk in an interview with the author, 16 December 2015.
- 8 John Cage, *For the Birds: John Cage in Conversation with Daniel Charles*, London/New York 1981, p. 55.
- 9 Cf. Bettina Munk, *Im Orbital*, <http://munkmovies.de/cage/> (accessed 15 January 2016). Prof. Dr. Anton Zeilinger, born in 1945, studied mathematics and physics in Vienna, earned his post-doctoral degree in 1979, and held posts as professor in Munich, at the Technical University of Vienna and at the University of Innsbruck. His research subjects were quantum physics, quantum optics, quantum teleportation and cryptography.
- 10 Anton Zeilinger, "Der Zufall als Notwendigkeit für eine offene Welt", in: *Der Zufall als Notwendigkeit*, ed. Hubert Christian Ehalt, *Wiener Vorlesungen im Rathaus*, vol. 132, 2<sup>nd</sup> ed., Vienna 2008, pp. 19–24, here p. 23.
- 11 Kostelanetz 1989 (see note 4), p. 124.
- 12 On the website *Lines Fiction. Zeichnung und Animation*, <http://linesfiction.de/> (accessed 3 February 2016), there are examples of animated drawings by Bettina Munk (founder of *Lines Fiction*), Sandra Boeschstein and many other artists. *Lines Fiction* unites artists who use both drawing and animation on an equal basis in their creative work to mutually inspire and enhance one another.
- 13 Cf. Anne Buschhoff, "Das Geheimnis entsteht Linie für Linie. Zu den Zeichnungen von Malte Spohr", in: exh. cat. *Malte Spohr – Am Horizont. Zeichnungen und Fotografien*, Kunsthalle Bremen/ Staatliche Kunsthalle Karlsruhe, Heidelberg 2007, p. 8 f., here p. 8.
- 14 Ibid.
- 15 Cf. *ibid.*
- 16 Freya Mülhaupt, "Zwischenzustände. Freya Mülhaupt im Gespräch mit Malte Spohr", in: *Malte Spohr. Zeichnungen und Photographien*, Bonn/Berlin 2002, p. 59–62, here p. 61.
- 17 The *Tide Drawings: Hamburg* by Jill Baroff were commissioned by the Hamburger Kunsthalle for the exhibition *Lichtwark revisited. Artists' views of Hamburg* (Hamburger Kunsthalle, 23 May to 14 September 2014). See exh. cat. *Lichtwark revisited. Artists' views of Hamburg*, ed. by Hubertus Gassner, Ute Haug, Merle Radtke and Petra Roettig, Hamburger Kunsthalle, Hamburg 2015.
- 18 Peter Lodermeier, in: exh. cat. *Jill Baroff. Ausgewählte Arbeiten 2012–1992*, ed. Galerie Christian Lethert, Cologne/ Manchester 2012, p. 10.
- 19 Bettina Munk in an interview with the author, 16 December 2015.

- 20 Cf. Tiffany Bell, "Glück ist das Ziel", exh. cat. *Agnes Martin*, ed. Frances Morris and Tiffany Bell, Tate Modern, London/ Kunstsammlung Nordrhein Westfalen, Düsseldorf / Los Angeles County Museum of Art/ Solomon R. Guggenheim Museum, New York, Munich 2015, pp. 18–31, here p. 26.
- 21 Gabi Steinhauser in conversation with the author, 16 December 2015.
- 22 Charles Darwent, "Off the Wall. The Drawings of Lothar Götz", in: *Lothar Götz. Line Drawings. 2009–14*, London 2015, pp. 7–11, here p. 11.
- 23 Ibid.
- 24 Cf. Karl-Achim Czemper, "Für Gudrun Piper", in: exh. cat. *Gudrun Piper. Improvisationen. Neue Farbmalerieen auf Papier*, Galerie Renate Kammer, Hamburg, Hamburg 2014, pp. 3–9, here p. 9.
- 25 Klaus Staudt, "Konstruktion und Programm. Zum Werk von Gudrun Piper und Max H. Mahlmann", in: exh. cat. *Max H. Mahlmann, Gudrun Piper. Konstruktion und Programm*, ed. Richard-Haizmann-Stiftung Niebüll, Richard-Haizmann-Museum Niebüll, Niebüll 1990, pp. 9–11, here p. 10.
- 26 Cf. *ibid.*
- 27 John Dewey, *Art as Experience*, New York 1934.
- 28 Gudrun Piper, quoted in <http://www.kunst-konzepte-realisation.de/navigation/gudrun-piper.html> (accessed 27 January 2016).
- 29 See also the article by Miriam Schoofs in this catalogue, pp. 31–41.
- 30 Cf. Matthias Bleyl, "Zeichnung – Was ist das eigentlich? Oder: warum die Linie nicht wesentlich ist", in: *Zeichnen zur Zeit, Kunstforum International*, vol. 196, 2009, pp. 72–79.
- 31 Gudrun Piper, exh. cat. Niebüll 1990 (see note 25), p. 48.
- 32 Werner Hofmann, "Geplante Zufälle, gestörte Konzepte", in: *minimal – concept. Zeichenhafte Sprachen im Raum*, ed. Akademie der Künste, Berlin, compiled by Christian Schneegass, Amsterdam/ Dresden 2001, p. 251–267, here p. 266.