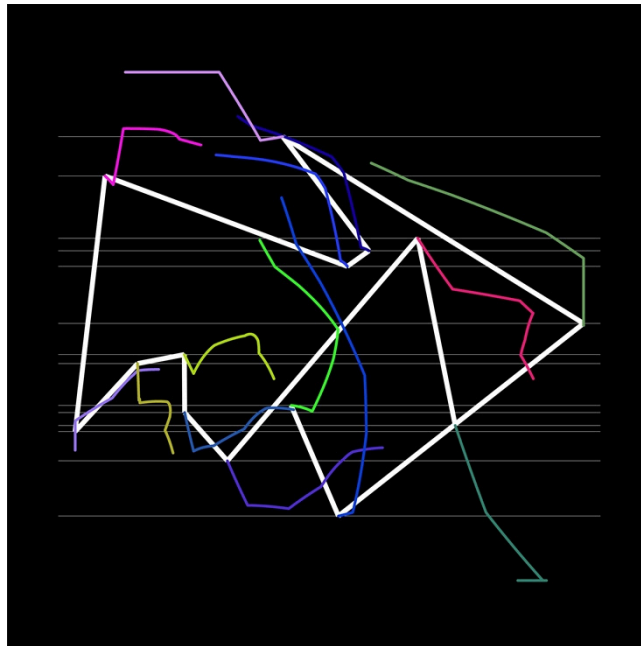


SATURATION POINT

Manfred Mohr | Artificiata II | Carroll / Fletcher, 56 - 57 Eastcastle Street, London W1W 8EQ

By Laura Davidson

Manfred Mohr's 1969 artist book, *Artificiata I*, is positioned as an opener to *Artificiata II*, his first solo show at Carroll/Fletcher since 2012. Descending the stairs of the Fitzrovia space, the viewer encounters hand-rendered black shapes undulating above a double layer of flattened concertina folds. Intriguingly, the age of *Artificiata I* is betrayed not by the date on the accompanying label, but by the sporadic and meticulous applications of white paint, evoking Tipp-Ex, around the edges of shapes in need of additional perfection. In our cut-and-paste screen culture, these stark white corrective marks have become obsolete. There are hints of the compositional, exposed by the decisive black marks across the concertina folds; marks leap and expand across carefully measured grids. A background script is to be brought to life; a rhythm is running across the paper here. The year 1969 reveals *Artificiata I* as a modulation in Mohr's practice; this was the same year he outsourced making with his hands to the machine. An earlier encounter with the composer Pierre Barbaud, the founder of the Groupe de Musique Algorithmique de Paris (GMAP), led Mohr into working with the computer to generate drawings. The mark-making in *Artificiata I* has apparent aesthetic overlaps with the late John Cage, who would have been re-imagining the musical score around the same time, and brings to mind the piece *Visual Score* (2012) by Aura Satz as a contemporary comparison.



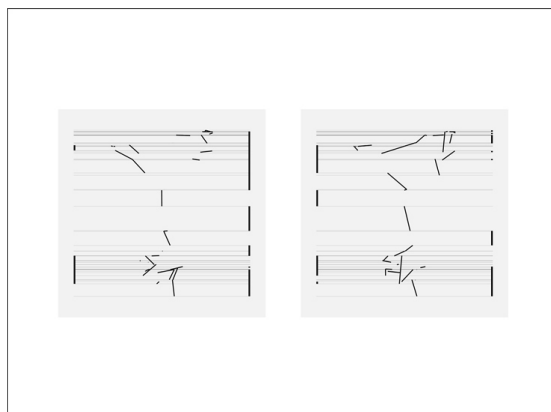
P2200_1932. P2200_1932 (2014-5) Pigment ink on paper. Image courtesy of the artist and Carroll / Fletcher.

Moving on from *Artificiata I*, within the gallery space, we find four output drawings from computer program *P2200*. A thick white line traces across the black background of the quartet of prints, interspersed with more disparate mark-making in vibrant neon tones. Looking at *P2200_1932* (2014-15), the white line is bold and distinct, a heavier weight than the dissonant colours that share its trajectory. The colours appear to be focused on marking out a restriction on the movement of the white line through the black. On a screen next to the prints, *P2210-C* (2015) enacts what has just been recount-

ed: the white line is frozen in motion to allow the coloured lines to trace its journey. On screen and in print, the coloured lines work both as barriers and trajectories. Grey lines resembling staves run as a latent element in the background, as the white and vibrant lines wrestle over and beyond them, apparently defying 2D geometry while being simultaneously flattened onto a print. These four prints are a visualisation of the *P2200* algorithm deliberating over the dimensions of a hypercube, a mathematical preoccupation that began for Mohr in 1978. Although the majority of the pieces in *Artificiata II* were conceived between 2012 and 2015, none of these works are conceptually unfamiliar to those acquainted with Mohr's extensive repertoire. This is merely a present harmony of the preoccupations that have been apparent in his practice for decades, migrating from the algorithm to the flatbed plotter, and now to the screen.

Widely recognised as one of the pioneers of computer-generated art, Mohr originally trained as a painter. In London two of his earlier paintings, *Bild-1968 [24/768]* (1968) and *Bild-1968 [26/768]* (1968), recently appeared in the exhibition *Software, Hard Problem* (2015) at Cubitt Gallery. The paintings reveal that he had already begun working with the concepts of abstraction and reduction prior to his work with computers. Described simply as a set of instructions, algorithms allowed Mohr to generate artworks with an element of rationality, free from the whimsy of human thought. Rather than Mohr himself running through all the possibilities for forms, the machine was given parameters to determine the manifestations of line, colour and space. Mohr taught himself one of the first high-level programming languages, FORTRAN (taken from 'formula translation') developed by IBM in the mid-1950s. Before the arrival of high-level programming languages, explorations in computing were limited to machine code, a slow process in which creativity was seemingly limited. FORTRAN was a conceptual leap for engineers and scientists as it supplied a platform (a compiler) to send instructions, written in a thin layer of English, to the machine. The compiler acted as a translator between human language and computer logic.

Ultimately, FORTRAN provided a layer of sophistication on top of the machine that hadn't been available previously. The language is credited with enabling the pace of technological change in the West after World War II. Most famously, it is known for supporting the Apollo 11 American lunar landing. And it is worth noting that FORTRAN was born during the first rumblings of the Cold War. Mohr's work draws on an older tradition of abstract painting, and the aesthetics of *Artificiata II* betray this history. However, it is interesting to scrape away the aesthetics to reveal a technology bursting with ideologies and cultural signifiers. Relating Mohr's practice to the history of computing is what makes it so compelling - it has ridden the wave of a great societal shift, from the analogue to the digital, and to the ubiquity of computing in our daily lives in the West. Mohr's early dabbling in FORTRAN gives his practice a certain historical position, and thus a particular outlook. In the late 1960s his practice looked towards the future, and it has been rewarded by becoming embedded in mainstream computational culture.



P1682_1435 739 (2014) Pigment ink on paper. Image courtesy of the artist and Carroll / Fletcher.

Artificiata II is a symphony bursting with colour and movement, and almost completely lacks the monochromatic lines of Mohr's earlier, better-known plotter drawings. But his explorations of linearity are resolute throughout the show, and the aforementioned bold white line rotates and slides across blocks of colour, on screen and in print. The works that resonate most with his plotter drawings are three prints, along the wall from the quartet of prints described above. In one of this trio of prints, *P1682_1435* (2014), black lines jeté over irregular staves printed on white paper. These lines also feature as animations on screens in the centre of the exhibition space. Seeing the lines undulating on screen has the effect of turning the prints into obsolete memories of the algorithm performing. In fact, it raises the question about how a particular configuration is chosen to be printed from the algorithm, when the creation of these forms is rational. Perhaps the choice of print is driven by a more 'human', irrational, aesthetic sense. Further, it asks timely questions about the need to visualise the omnipresent algorithm which runs parallel with the long-held human desire to materialise the intangible or ubiquitous.

Mohr first started using colour in 2002, and the rhythms expressed across the colour fields of screen-based *P1660-C* (2015) realise the musical ambitions of Artificiata I without the addition of sound. The animated version of this trio of monochrome prints appears on a screen to the rear of this piece. In *P1680-C* (2015) the black lines, slipping up and down the screen, are a literal suggestion of musical notation, but this does not undermine the work's intrigue. In fact, it functions as a key for the work, using colour. At first glance the flat blocks of colour in *P1622-G* (2015) seem to be pushing the bold white line around the screen, and then it becomes apparent that the white line is in fact controlling the relationship of the colour blocks. The line flips away from, and towards, the viewer, while moving between 2D and 3D instantaneously. The assembled colour parts follow this lead, expanding and contracting in its wake. Next to this screen is a large pigment ink print on canvas. *P1611_65-60* (2012-13) looks like a capture of one movement of many from *P1622-G* (2015), yet it dates from the beginning of the Artificiata II algorithm cycle in 2012. So, as in Mohr's practice, painting is just the beginning. There is an ambivalence to this; the algorithms in abundance in Artificiata II are dynamic, challenging and exciting, and yet a static object - a painting - remains a central concern. The entwined histories of geometry, mathematics and canvas are made explicit here. They push and pull against each other, in much in the same way as the colours in Mohr's programmes.