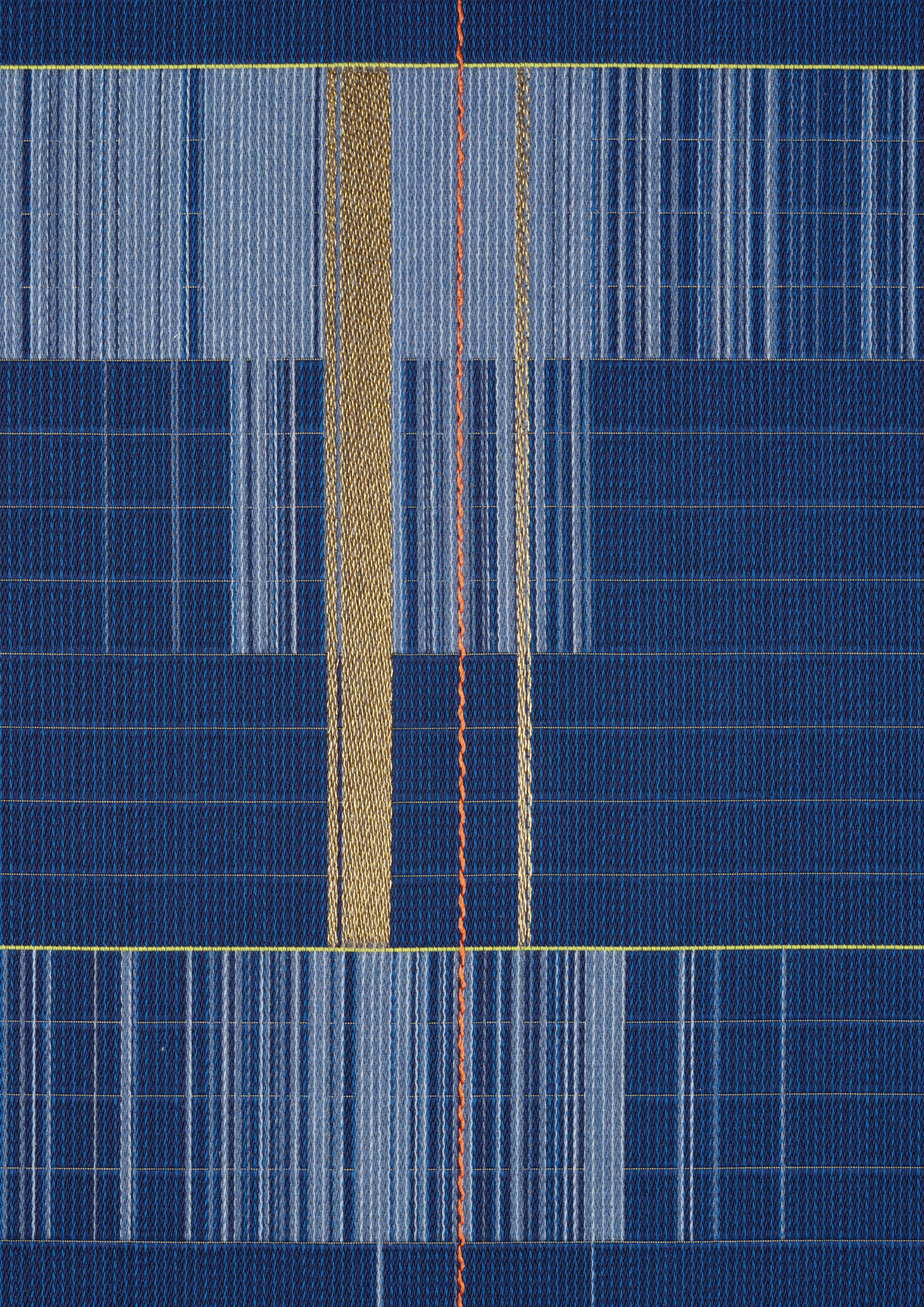
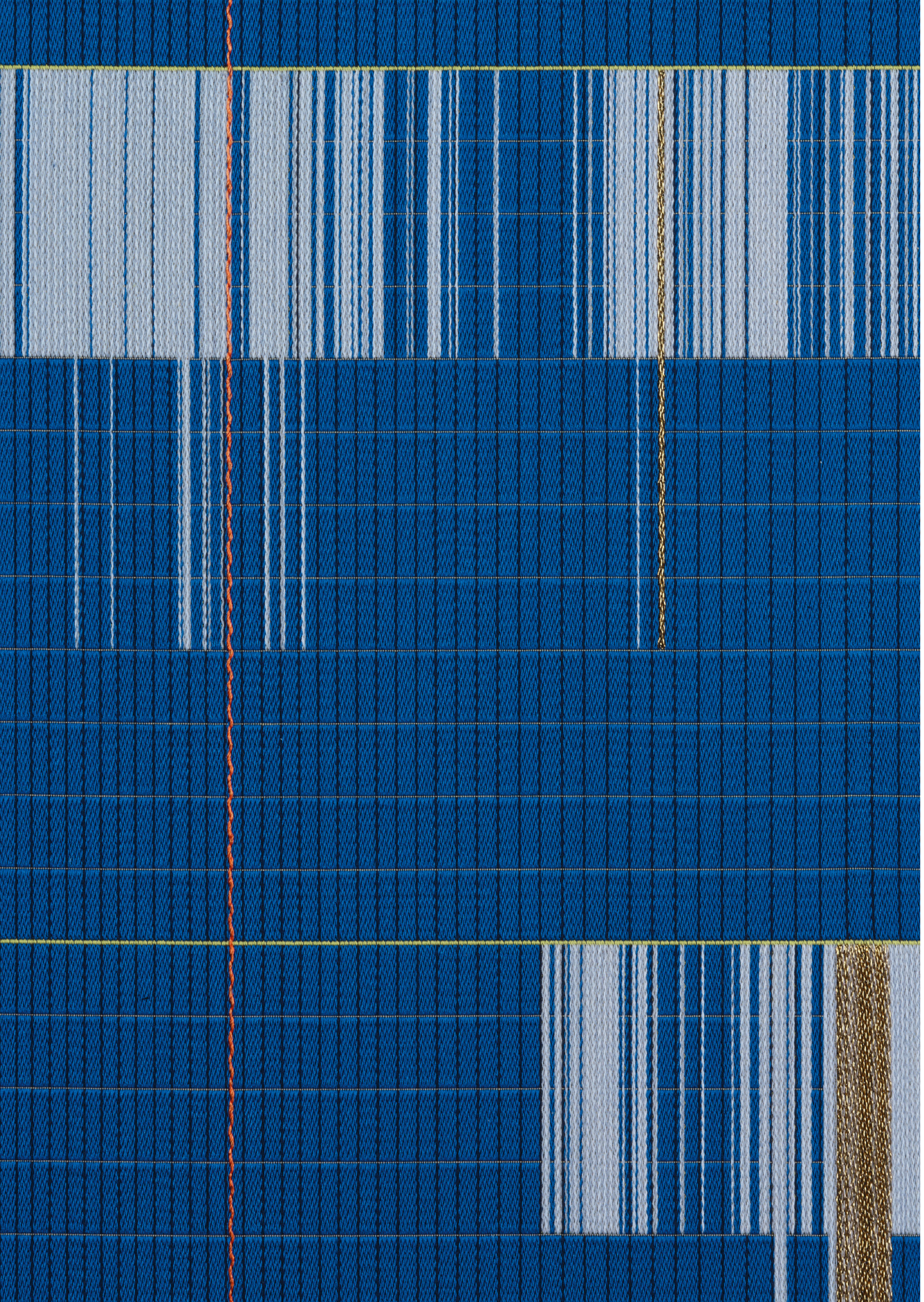
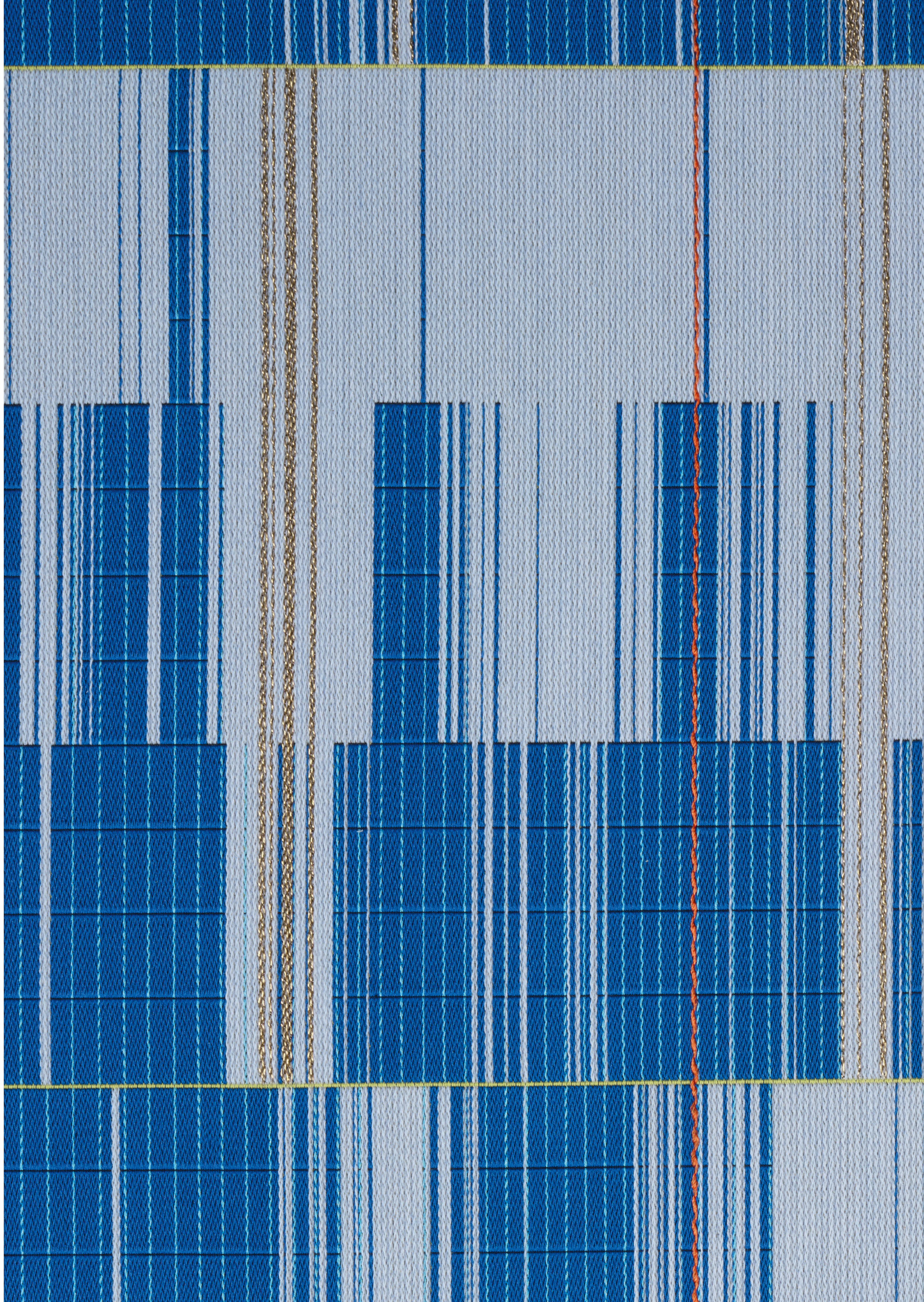




Silence (On Prepared Loom)
6 Jacquard tapestries
Cotton, silk and polyester yarn
Each 210 × 290 cm
Susan Morris, 2021

The Library and Study Centre
St John’s College, University of Oxford



Published to accompany the installation of
Silence (On Prepared Loom) by Susan Morris,
at The Library and Study Centre,
St John's College, University of Oxford, 2022

Essays by Alex Bacon and Rye Dag Holmboe
Design by Christopher Lawson Limited
Design assistant George Haughton

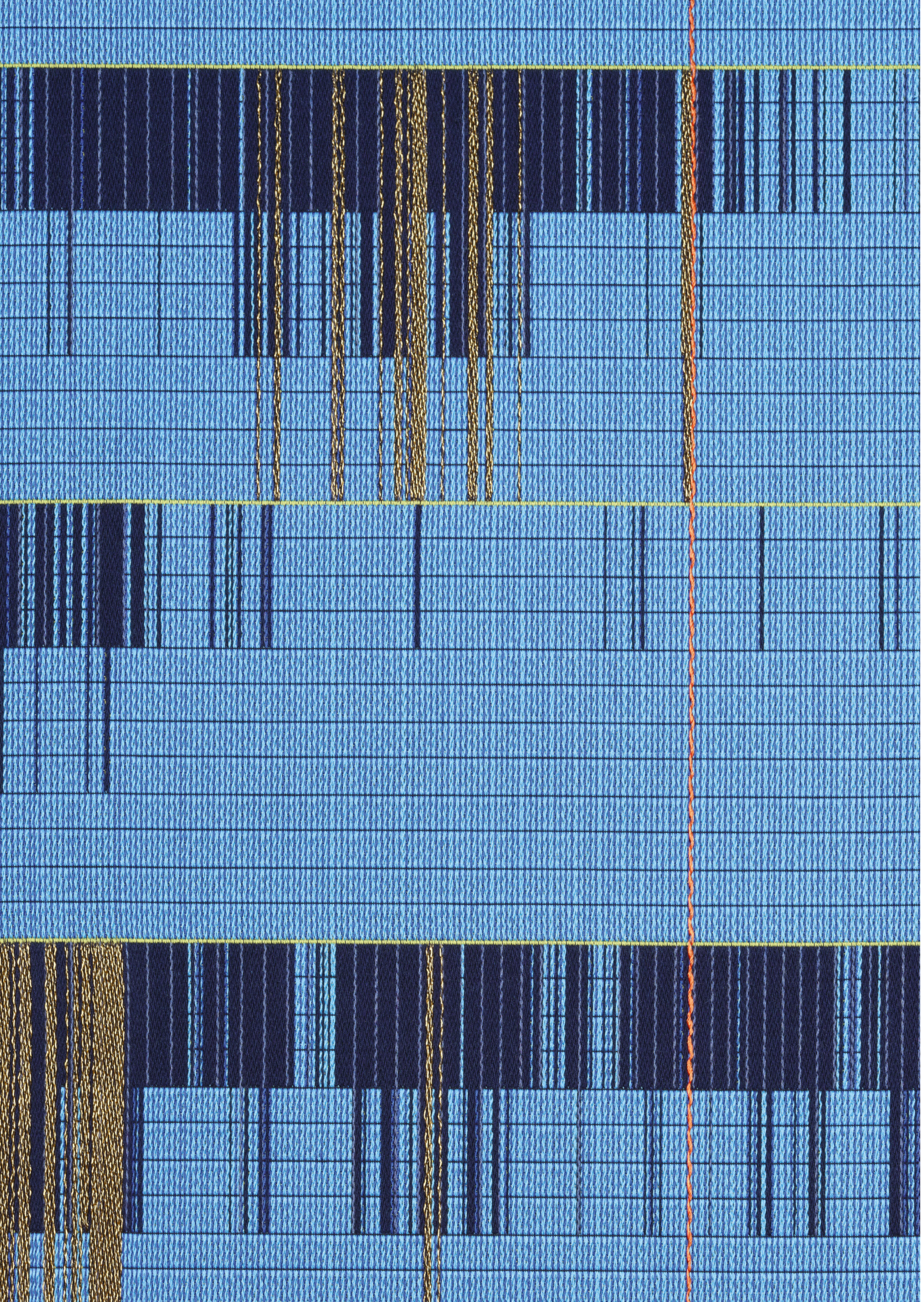
Published by Bartha Contemporary
Printed by DZA Druckerei zu Altenburg, Germany

Artworks © Susan Morris. Texts © Dr Simon Aeberhard,
Alex Bacon, Rye Dag Holmboe, Susan Morris.
Photography of Artworks © Stephen White & Co

First edition © 2022
ISBN 978-0-9933621-4-9
Edition of 250

All rights reserved. No part of this publication may be used or reproduced, distributed or transmitted in any form or by any means whatsoever without the prior written permission of the publisher, except in the case of brief quotations in critical articles and review and certain non-commercial uses permitted by copyright law.

Bartha Contemporary
7 Ledbury Mews North
London W11 2AF
www.barthacontemporary.com

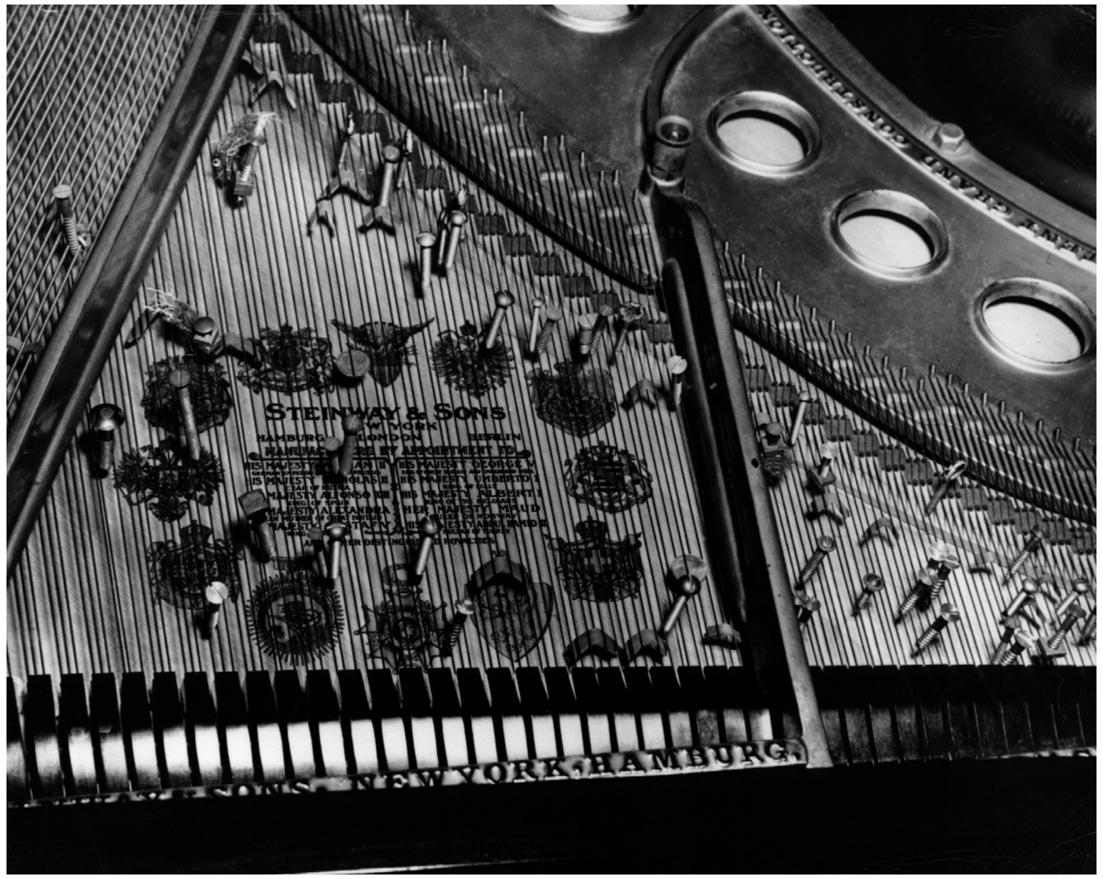


SILENCE

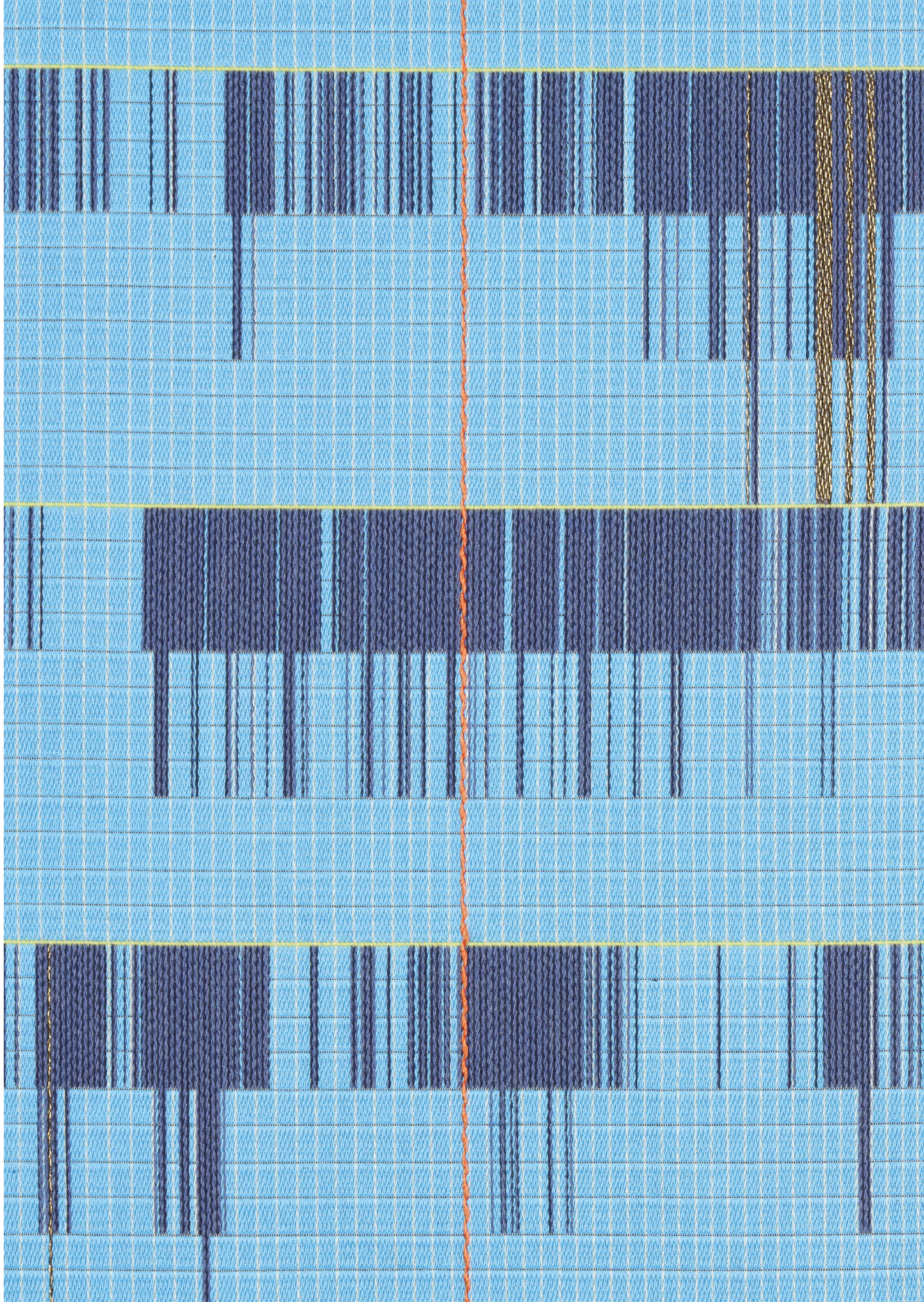
Susan Morris

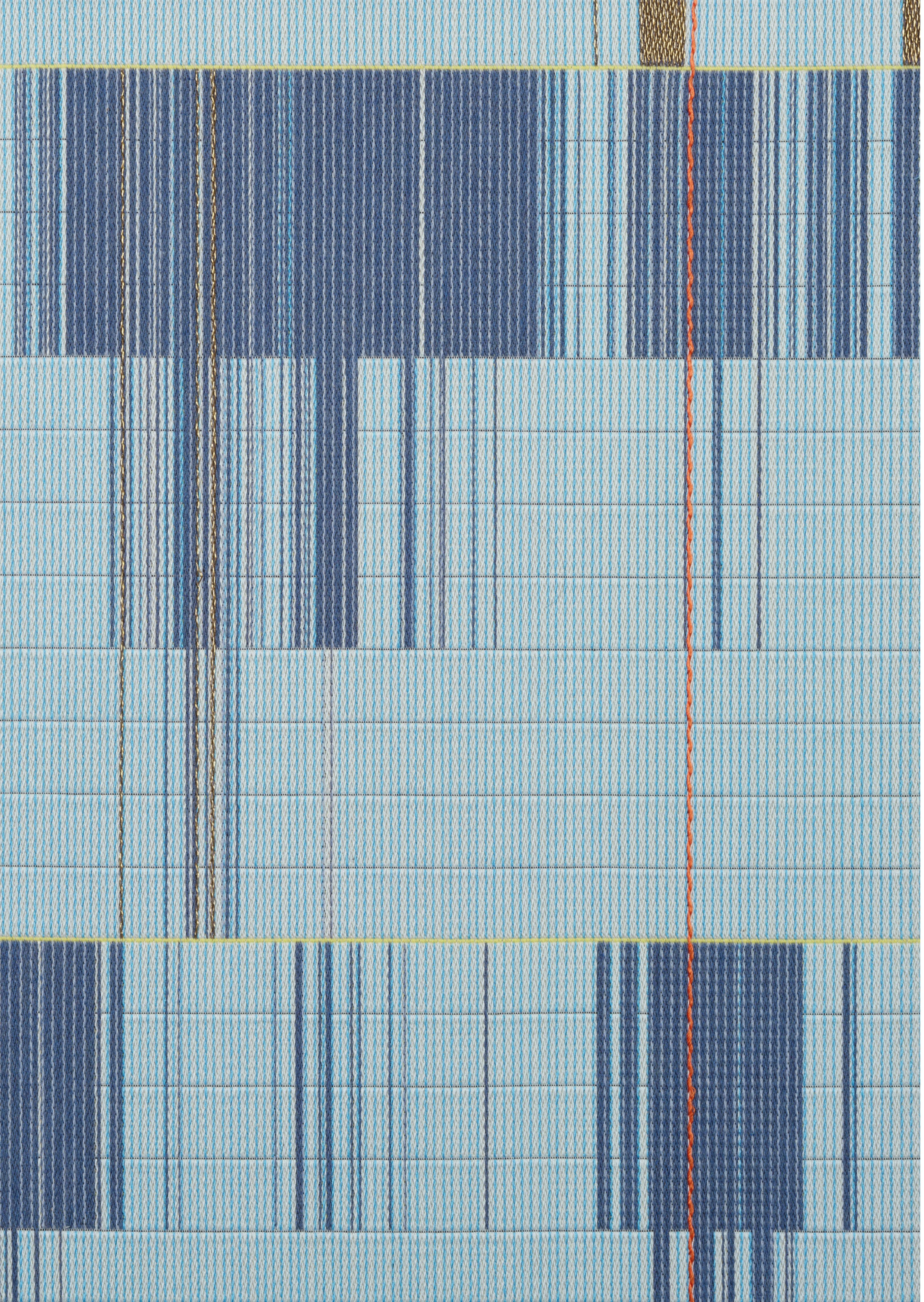
In the summer of 2019 I was invited by Vivien Lovell of Modus Operandi Art Consultants to submit a proposal to make new work for the recently completed Library and Study Centre at St John's College, University of Oxford. By the autumn, the project was proceeding smoothly. I had decided to work with sound and had made a number of recordings in the garden outside the library. With the help of my long-term collaborator Paulo Ricca, I had converted the data into a visual form that evoked the (imaginary) score for John Cage's 'Lecture on Nothing' – the logic of this is explained in 'Inlines', the essay by Rye Dag Holmboe that follows this introduction. I had also visited my weaver Marcos Ludueña-Segre in Ghent, Belgium, where the Jacquard looms I had worked with for the previous ten years are located. Then rumours started of the dangers to human life of a new virus first detected in China. This threat seemed a long way away, but of course by February 2020 the Coronovirus was very close indeed. On March 12th 2020, I gave the final presentation to the selection panel in Oxford. The following week, England locked down. Re-reading our correspondence during that time, I see how filled with fear and confusion it is, as we seemed to stumble through the days. At one point I suggested to my weaver that we communicate using this thing called Zoom that someone had told me about. Marcos hadn't heard of it, but funnily enough his wife had recently mentioned it. 'I'll look into it', he wrote. Within weeks everything was done on this platform: family birthdays, his daughter's schooling, our work. And so we continued. But then the factory closed, the looms went silent. 'We are walking around the empty streets of Ghent', wrote Marcos, and I tell him we are doing the same in London. Somehow, we completed the project. The tapestries arrived at the framers for stretching in October 2020. The stretching took some time; it was tricky because the person who does this was shielding, away from London. We couldn't install the work until August 2021. Sorting the lighting and getting a photographer into the building took a further eleven months. Visiting the library now, in 2022, the work seems altered, but what has actually changed is my relationship to the space – my knowledge and experience of the library and the gardens. It was a brand-new building, but even as the bookshelves were being filled the rooms were emptying of students. Now the students are back, the dust has settled, the building is breathing. It's full of life.

A word about the way my work engages with that of John Cage. His 'Lecture on Nothing' provided me with a way to structure the divisions across each of the six tapestries that make up *Silence*... However, I have also playfully interpreted the relation between a loom and a piano – the loom is in fact very like a musical instrument – with the suggestion that I have 'prepared' it to correspond with the way that Cage famously prepared his piano. Of course, I could not insert screws or any other such objects into the machinery as Cage did, an action that would destroy it in seconds (although this sort of thing would be possible with hand weaving). Instead, I sent the loom a set of specific instructions – data – to produce an outcome I could not entirely control or predict but which nevertheless remains true to its source: the recording of ambient sound taken in the garden outside the library. I thank Alex Bacon for his contribution to this book, 'Resistant Data', which so generously unpicks my interest in disrupting systems.


STEINWAY & SONS
NEW YORK, HAMBURG

The Interior of a Prepared Piano. Provided courtesy of the John Cage Trust.





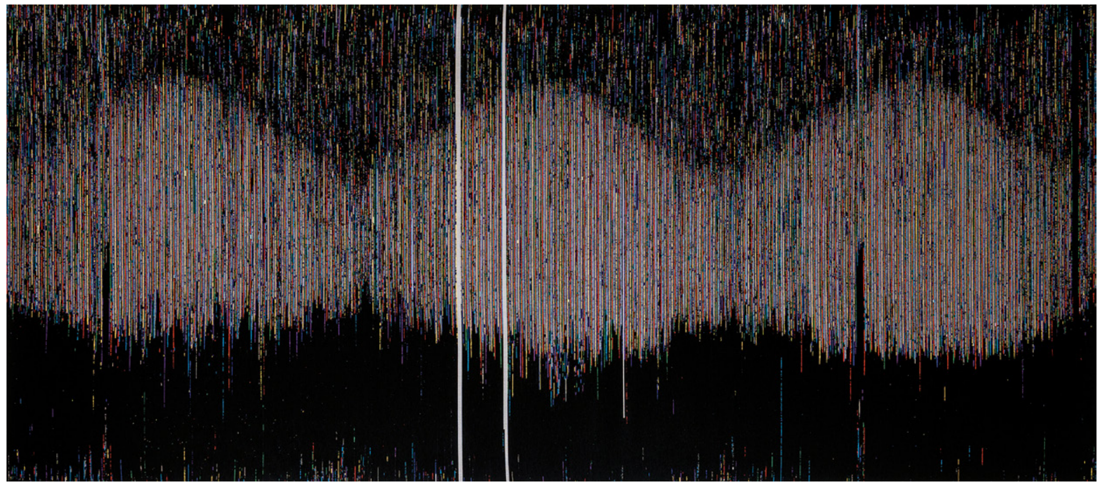
INLINES

Rye Dag Holmboe

In July 2021, Susan Morris invited me to her home and studio in London to talk about her work and the text I am now writing. We drank tea and ate pastries while her cat, Teddy, hid under the sofa – the poor thing was unused to visitors because of the lockdown. After a brief catch up, Susan showed me a group of six tapestries woven on a Jacquard loom in Belgium. The works were prototypes for a major commission from St John's College, Oxford, called *Silence (On Prepared Loom)*, a group of six much larger tapestries that will hang on the walls of its new library, designed by the architectural firm Wright & Wright. The tapestries in Susan's studio were what she called 'test pieces'[1] for this work, but they are also parts of a work in its own right, named *Silence (Project for a Library)*.

In the garden outside the library at St John's College, Susan installed an audio recorder that registered whatever sounds were produced by the surrounding environment over a period of 50 minutes. Airplanes flying overhead, birdsong, a voice, the rustle of leaves, the distant sound of traffic. These are the sorts of sounds we often neglect to listen to but almost always hear, especially those of us who live in cities; noise pollution or signs of life, depending on your temperament.

Susan made a number of these recordings. The one she chose was made during term time; precisely, at 13:40 on Tuesday 12 November, 2019. The recording was passed through a computer where a specially written algorithm translated the sounds into visual form, organising them according to how loud they were, as well as their amplitude and duration. This pattern was colour coded and sent to a Jacquard loom in Belgium, where it was woven into tapestries.



Susan Morris, *SunDial:NightWatch_Light Exposure 2010–2012*, 155 × 360 cm, 2014

In previous weaves, Susan blended colours to allow for gradation. In *Light Exposure 2010–2012*, for example, a large Jacquard tapestry that evolved out of a project for the John Radcliff Hospital in Oxford, the artist used an Actiwatch to record her sleep patterns and exposure to ambient light over a period of three years. The data automatically collected by the Actiwatch was translated into colours that were blended for use on the same Jacquard loom that wove the *Silence* tapestries.

The light areas in the weave register her activity during the day, the dark areas her activity at night, when Susan worked late, slept or dreamt. For the St John's library project, the palette was simplified so that the weave structure, the warp and the weft, was more visible. The sense of a gradient was achieved by weaving solid lines of colour at different distances from one another.

Fifty minutes, Susan explained, was more or less the time that John Cage's *'Lecture on Nothing'* took to give. Cage first gave the lecture in 1949 at the Artists' Club on Eighth Street in New York City, and then again in 1960. Apparently there was a recording of *'Lecture on Nothing'*, but the tape may have been lost. Susan described how inspired she was by Cage's text; as she spoke, I thought of her regular visits to the Buddhist Centre not far from where she lives and wondered what resonance that might have.

I had read Cage's lecture once before, as a student, but had forgotten how interesting it was, how curiously affective, given its title. For me, it reads as a kind of concrete poem. Cage spaces out words on the page in a way that is determined by a system that corresponds to the rhythmic structures he employed in his musical compositions. He describes this structure, which served as a kind of score for the performance, at the start of the lecture:

> There are four measures in each line and twelve lines in each unit of the rhythmic structure. There are forty-eight such units, each having forty-eight measures. The whole is divided into five large parts, in the proportion 7, 6, 14, 14, 7. The forty-eight measures of each unit are likewise so divided.[2]

A line of poetry is composed of words and the spaces between them. Syntax is itself a form of time; reading a process both spatial and temporal. With Cage's lecture, however, you feel the empty spaces on the page in a more pronounced way than you would a conventional text or poem, while the words accrue materiality. This is emphasised when you read the text out loud – it was of course meant to be heard, not read.

'I am here and there is nothing to say', starts Cage's *'Lecture on Nothing'*; and then, soon after:

> This space of time / is organised
> We need not fear these silences, - /
> We may love them[3]

That we might love silences and not fear them is an idea that pervades Cage's work. Silence can free you from the burden of meaning. It can help you tolerate what must also form a part of existence, namely, the absence of meaning. The difficulty lies in letting silence be, that is to say, in not possessing silence, in resisting the urge to make silence mean when it does not, or at least doesn't always.

The structure of the tapestries that make up *Silence (On Prepared Loom)* and *Silence (Project for a Library)* were loosely based on Cage's *'Lecture on Nothing'*. The 50 minutes are divided in the same proportion with the sixth tapestry looping back upon the first. Susan interpreted the structure of Cage's lecture as a series of cells in a grid, horizontal and vertical divisions across the surface of each weave. The panels that have 14 units are more compressed than those with only 6 or 7 because the data is denser there.

Looking at the smaller tapestries in the studio, my first feeling was that they were starkly beautiful – though beautiful is not a word I think Susan would use. You get a strong sense of the independent materiality of each object, of thread and colour, warp and weft. The tapestries were stretched onto wooden frames by hand. This has allowed for small irregularities and distortions to punctuate their surfaces, which enter into tension with the quantitative method that forms each tapestry's content.

It was easy to imagine how impressive *Silence (Project for a Library)* would look when scaled up. Susan showed me a carefully constructed maquette of St John's library and described how the space was flooded with natural light. This in fact proved to be an early complication because Susan wanted to work with yarns with which she was familiar, such as silk. Coloured silk fades very quickly, as does wool, so the tapestries were made mostly out of mercerised cotton instead, which would allow the colour to last much longer. Synthetic thread was used for the sound peaks because it was also more durable. These considerations led Susan to the decision that the blue which makes up most of the tapestries should gradually become paler across the six panels, as if to anticipate the effects of time and the work's daily exposure to the sun. In this way a different temporality, determined by the Earth's rotation, was inscribed upon the surface of the tapestries.

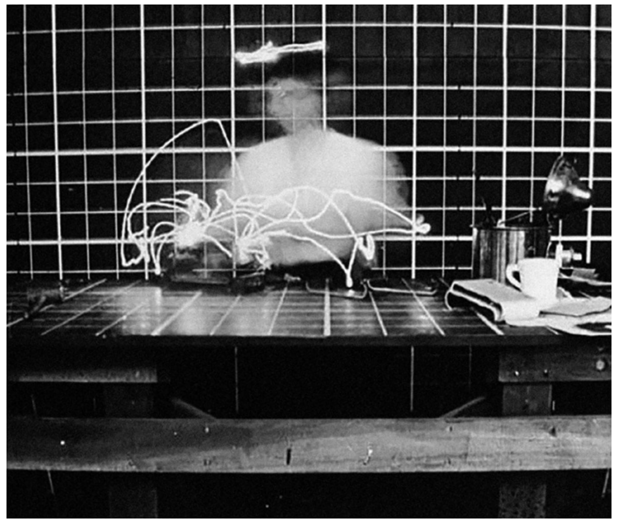
Each of the six parts of *Silence (On Prepared Loom)* measure 210 × 280 cm. This size was determined by the dimensions of the alcoves in which they will hang. Susan used a 4:3 aspect ratio, much beloved by Cage, allowing the library's architecture to function as a constraint. She showed me how the architects had converted a gate in the garden wall, against which the new extension is built, into a large window, which would allow visitors to see outside into the garden while sitting beneath or walking past the tapestries. I imagined dust motes spinning in the light.

Beautiful, perhaps, but the tapestries were also impassive. As your eyes move across their surfaces, there is a sense of rhythm, repetition, accent, as if you were reading a musical score. The tapestries are filled with data, almost like ledgers. Yet their experience is one of silence, or quiescence, to use a word that Cage liked.

Morris working in the motion capture studio, Culture Lab, Newcastle, 2009

In their examinations of the relationship between automaticity, technology, labour and the body, Susan's works make visible the often imperceptible processes – the body's exposure to ambient light, say, or its sleep patterns – that fall beneath the threshold of consciousness. A long-standing concern of hers is the measurement of time: how the length of the working day, for instance, or artificial systems of clock and calendrical time, can control our activities in daily life.

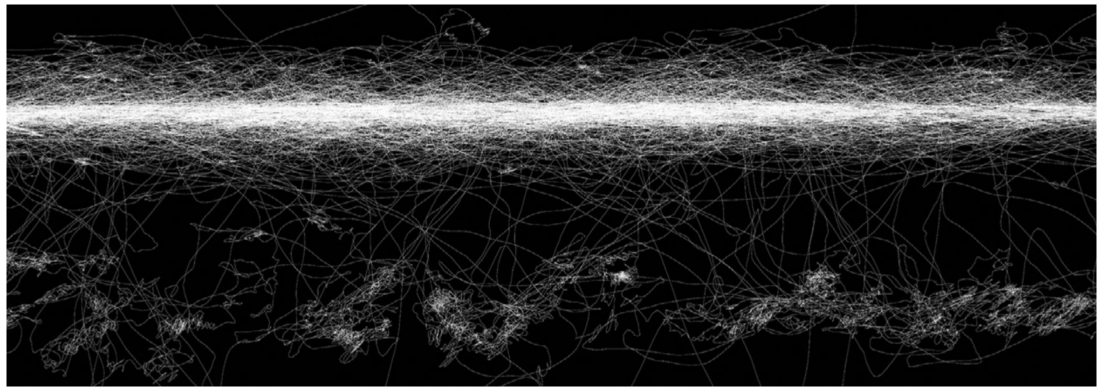
Almost a decade before producing the *Silence* tapestries, for example, Susan made a series of works called *Motion Capture Drawings* (2012). To make them, the artist was recorded in a motion capture studio in Newcastle with anodes attached to her body while drawing. A vast amount of data was collected and converted by a specially created algorithm into a line, which was then printed by an Inkjet printer onto large sheets of paper. The Inkjet used only black ink, so what you read as a white line is in fact the paper showing through; a 'no line,'[4] as Susan put it.



Motion Efficiency Study by Lillian and Frank Gilbreth (c.1914)

The *Motion Capture Drawings* drew upon the chronophotographs of Étienne-Jules Marey (1830–1904), a French scientist who used multiple exposures on a single photographic plate to represent and measure the body in action. The chronophotographs were proto-cinematic, but they were also used to rationalise the movements of the human body. Charles Fremont, a engineer who assisted Marey in his laboratory, used chronophotographs to investigate the expenditure of energy in human labour. Fremont's forgers labour before a dark field with only the chronometer visible in the foreground. The workers themselves are indiscernible, pictured as the sequential positions of hammer and hand.[5]

Equally important was Frank Gilbreth (1868–1924) and his *Motion Efficiency Study*, which included photographs of workers with anodes attached to parts of their bodies. Like Marey's chronophotographs, the images were used to make the movements of workers more efficient. A line full of twists and turns was an indication of uneconomical labour; a straighter line the sign of efficiency. Trade unions at the time saw motion study as a tool for producing automatons, but Gilbreth, who worked with Fredrick W. Taylor, maintained that motion study was designed to make labour more comfortable, reducing fatigue and helping to provide adequate rest breaks.[6] By 1915, Gilbreth had produced an alphabet of all labour motions, which he called Therbligs.



Susan Morris, *Motion Capture Drawing [Knees]*, (Detail) 61 × 272 cm, 2012

The *Motion Capture Drawings* read as unruly expressions of Susan's body, the white lines almost scribbles in which you, the spectator, can easily get lost. The motion capture software registered the myriad ways in which her body moved, involuntarily, unconsciously, usually imperceptibly, recording its every movement while she drew and, it would seem, became tangled up by her own line. The drawings invite us to think about, among many other things, how automaticity and the becoming-indiscernible of the subject can be at once coercive – the actions of the labourer are reified into second nature, their movements the expression of what could be called a capitalist unconscious – and, in the body's resistance to measure, potentially subversive.[7] Rationality is turned inside out, so to speak, in the fulfilment of its own logic.

The *Silence* tapestries are woven out of similar histories. The French weaver and merchant Joseph Marie Jacquard (1752–1834) used cards with holes punched through them in order to control the intricate manipulations of thread on silk looms. The Jacquard loom operates within a simple binary, zeroes and ones, warp and weft. What you see in a final tapestry is an oscillation within that binary.

'The horizontal steel rods with springs at the end "sense" the holes punched in a rectangular piece of cardboard. When a rod "feels" a hole it passes through and activates a mechanism for lifting the appropriate warp thread, which is then skipped in the weaving, while the other threads are regularly woven. The way the holes are punched programmes the pattern.'[8]

The invention of the Jacquard loom was met with fierce protests by silk-weavers in Paris, who saw it as a threat to their skilled labour. As did the Luddites when the instrument arrived in Britain in the 1820s.

Indeed, the relationship between the textile industry and the exploitation of labour is as old as capitalism itself and was instrumental in shaping the working day as we now know it. In *Time, Work and Culture in the Middle Ages* (1977), the French historian Jacques le Goff showed that it was during the fourteenth century, at the dawn of the industrial era, that merchants first replaced Church time with a more accurately measured time useful for profane and secular tasks. The unit of labour time in the medieval West was the day; its length was decided by agrarian rhythms and Church bells. The advent of the mercantile class changed this. Time became successive, quantitatively measurable. The 'appropriation of time [by the merchants]', wrote LeGoff, 'was made manifest by clocks, by the division of the day into twenty-four hours, and, before long, in its individualized form, by the watch.'[9]

What Le Goff called the crisis of the fourteenth century was determined by two factors, labour and time, and the ways in which competing social groups fought over units of measure. This conflict was most acutely felt in the textile sector. LeGoff recounts how, in 1355, the royal governor of Artois allowed the people of Airesur-la-Lys to construct a belfry whose bells chimed the hours of commercial transactions and the working hours of textile workers. At the end of the same year, the bailiff of Amiens allowed that "the sound of a new bell"[10] should serve as the means of regulating the "three crafts of the cloth trade,"[11] as then existed in various cities in France. Many other examples are provided.

Le Goff also described how there were strict punishments for those who tried to reclaim time or refused to obey the dictates of the clock. In Commines in 1361, for example, "every weaver who appears after the sounding of the morning bell will pay a fine of five Parisian solz."[12] And if textile workers seized the bell in order to use it as a signal of revolt, they incurred enormous fines: sixty Parisian pounds for anyone who rang the bell for a popular assembly, and the death penalty for anyone who rang the bell to call for rebellion against the king, the alderman, or the officer in charge.

In cloth manufacturing cities, then, the life of the town was determined by 'the time of the cloth makers'[13] and their 'new masters.'[14] The sixty-minute hour was firmly established. As LeGoff observed, this rationalisation of the working day long anticipated Taylorism. Already in the fourteenth century the 'infernal rhythms'[15] of capital could be felt. 'A humanism based on a [...] computation of time was born'.[16]

Look now at the *Silence* tapestries. Each weave is a mathematically divisible expression of duration, a fifty minute space of time, and each is composed of so much data. Fifty minutes is a shortened hour, which takes into account the need for rest breaks between hours and is appropriate to the average attention span. As Susan explained, it is the length of most lectures or seminars.

Meanwhile, the use of technologies including an audio recording device, a computer, an algorithm and a Jacquard loom speaks to the information age, to the computation of time and space through number. It is often said that the Jacquard loom and the binary system it first employed anticipated digital technologies by two centuries. All machine languages are made up of binary coded instructions in which there are only two possible states, off and on, states that are usually symbolised by 0 and 1. The internet is made up of the same binary system. Hence the use of weaving metaphors such as web, net and network.[17]

In this context, it is also noteworthy that St John's College was founded in 1555 by Sir Thomas White, a wealthy merchant tailor who made his fortune in the cloth trade. The college was the first to be founded by a member of the mercantile class and not by the clergy. St John the Baptist was the patron saint of the tailor's fraternity, later the Merchant Taylor's Company in London, of which Sir Thomas White was Master. It has occupied the same site on Threadneedle Street since at least 1347.

Important as these histories are, in their receptiveness to what is outside them, the *Silence* tapestries intimate a different register of experience. In *'Lecture on Nothing'*, Cage spoke of a form of poetry free from the drive to possess. 'Our poetry now / is the realisation / that we possess nothing'[18], he said. Poetry was only poetry if it was disinterested, if it unfolded in the absence of the self. 'How different / this form sense is / from that / which is bound up with / memory'.[19] What mattered to Cage was the generative potential of constraints, the creative tension between chance and structure, freedom and law.

> Pure life
> expresses itself / within / and through structure
> . / Each moment / is absolute, / alive and sig-
> / nificant. / Blackbirds / rise / from a field making / a /
> sound / de-licious / be-yond / com-pare[20]

Pure life was the name Cage gave to what he called elsewhere 'poetry without a thought content.'[21] For him, thought and cognition always stood in the way of the creative process. 'Psychology – never again?'[22], asked Kafka in one of his aphorisms. It was a question Cage was fond of citing.

During the studio visit, Susan explained that, like Cage, she wanted to make work that was 'inhuman.'[23] By this she meant work that was not an expression of the self. Hers is a poetics of self-occlusion. Just think of the various procedures that went into the making of *Silence*: first, the audio device, which recorded the world's dictation in the garden outside the library at St John's College, sounds Susan didn't make, sounds that were open to chance; second, the computer and algorithm, which translated these sounds and organised them into visual form; finally, the Jacquard loom, which wove them into textiles and turned them into something for us to see. These layers of technological mediation make the tapestries feel distant, impersonal, like the dream of a dream. They induce a small vertigo. It is as if the creative process always took place on another scene of articulation.

There has long been a connection for Susan between Cage's prepared piano and the Jacquard loom. Certainly the visual analogy between the two instruments is striking. The word 'text' stems from the Latin *texere*, to weave, which also invites a connection between weaving and writing and, by association, drawing. Like the music produced by Cage's prepared piano, the *Silence* tapestries are the products of processes akin to involuntary writing or automatic drawing. They are the cousins of dreamwork; indeed, Sigmund Freud once described the dream as a 'weaver's masterpiece', the unconscious as a 'factory of thoughts,'[24] which connects dreamwork historically to nineteenth century industrial production and to the Freud family trade in textiles.

Dreams, though, are conventionally held to be expressions of the inner world. What you see in the *Silence* tapestries is a writing of the outside, an inscription of the world's dream. As with a fold, the distinction between insides and outsides is always unstable in Susan's work. But there is, I think, a greater sense of involution to the *Silence* tapestries. Each tapestry is a kind of indrawing of the world's sounds, delineating a movement from the outside in. The outline of the work is the world's inline, to borrow a term from the philosopher Alan Watts.

Involuntary, automatic, open to chance – perhaps this inhuman aspect accounts for the starkness of the tapestries' beauty. 'One evening', Cage told an interviewer:

> Morton Feldman said that when he composed he was dead. This recalls to me the statement of my father, an inventor, who says he does his best work when he is sound asleep. [...] A fluency obtains which is characteristic of nature.[25]

Note how, in the name of fluency, or pure life, death, sleep and nature are conflated. The same might be said for *Silence (On Prepared Loom)* and *Silence (Project for a Library)*. The tapestries intimate the silence within the text, the silence around which the rest of the text has been composed. The use of brackets in both titles is significant in this regard. They suggest that the tapestries are different inflections of silence, which holds them between parentheses.

Imagine yourself now in St John's College library, sat at a desk, gathering your thoughts, allowing for that pleasurable mixture of attention and absent-mindedness that a good library facilitates. It is a place where knowledge is ordered and submitted to classification. The world is quiet here, but not completely. People cough, whisper, walk around. Books are moved, pens dropped. People who speak are shooshed. You settle down, breathe in the smell of books, glance up at the tapestries that hang nearby and, especially on a sunny day, daydream of being outside, in the garden, say.

Cage liked to recount the time he visited an anechoic chamber at Harvard University, a room free from echoes and as silent as humanly possible. In the silence he was surprised to hear two sounds, 'one high and one low'.[26] The engineer in charge informed him that the high sound was his nervous system in operation, the low one his blood in circulation. From this Cage concluded that objective silence did not exist, or rather that what we mean by silence is really related to intentionality: unintended noise is silence, and what is unintended is pure, ascetic, free from memory and desire.

The story of the anechoic chamber reminded me of a passage written by the cultural theorist Peter Sloterdijk about the acoustic life of infants before birth. 'These were the two universal factors of intra-uterine hearing', he wrote, 'the cardiac *basso continuo* and the mother's soprano speaking voice'.[27] Sloterdijk described these two sounds – one high, the other low – as 'proto-music'[28], in that they anticipated all other sounds. In the acoustic register, birth describes a loss of 'sonic continuity'[29]. In the beginning there was silence, the syncopation of two heartbeats, the chronometrics of the heart.

To me, the reestablishment of continuity between the insides and outsides of art, between interiority and exteriority, subject and object, is perhaps the most important work the *Silence* tapestries do. It is their ethic, if you like. Susan's self is effaced, her body almost completely absented from the process of making. This allows for the world's rhythms to be woven into the rhythms of the work. The tapestries are ciphers through which the world – or should I say the object? – finds its expression. One might fairly ask, as the art historian Briony Fer has done, how much of the world can the work of art contain?[30] The question is a pressing one. But to ask it implies that art is separate from the world, which is what the *Silence* tapestries make ambiguous.

There is a tension to this continuity, which I think underpins much of Susan's work. In a world in which art is so susceptible to what is outside it, perhaps even determined by what is outside it, there may be no position left for art to take, indeed no position left for us to take. In the absence of discrimination and prejudice, everything counts equally. Choice becomes meaningless. As does responsibility. This quietism may also be true of the state Cage called 'Zen No-Mind-ness'. His friend the cultural theorist Norman O. Brown, whose books on Marxism and psychoanalysis Cage greatly admired, saw this tension in his compositions and was perhaps the first to put it into words. 'Chance operations avoid real uncertainty', wrote Brown, emulating the composer's rhythmic structures, 'the negative capability of being in uncertainties, mysteries, doubts, and / darkness / The results of chance operations are always impeccable: the experiment / cannot fail / no choice no error no blame.'[31]

Towards the end of the studio visit, Susan mentioned that 50 minutes was also the length of a psychoanalytic session. The artist has a long standing interest in psychoanalysis. She recently finished an analysis herself. It was a Lacanian one in which, I imagine, sessions were rarely, if ever, 50 minutes long.

The French psychoanalyst Jacques Lacan is now notorious for how short his sessions became: many lasted only a few minutes. One of the reasons behind the indeterminate length of his sessions, the *séances scandées*, was to provoke a question in the analysand, a question that Lacan sometimes used the Italian for, *Che vuoi?* What do you, the Other, want from me? I am not sure about the therapeutic value of this indeterminacy and the paranoia it must provoke, the intense attention it gives to the moment the session ends and the words and feelings that preceded it. There seems to be a need for omniscience on the part of the analyst, absolute trust in his or her countertransference, which I for one have yet to experience. But I can see that there might be a certain poetry to the process: analytic listening would be like a form of scansion, a cut in the session the equivalent of a line break, continuity between sessions a kind of enjambment.

For those who, like me, were schooled in the post-Kleinian tradition, the idea of ending a session prematurely is almost taboo, although it is noteworthy that Freud was much more flexible than we are. His clinical diaries show that he sometimes saw his patients for one hour, sometimes for an hour and a quarter, sometimes for an hour and a half, even for two hours, with only a pocket watch to give time its measure or, as one critic has observed, his chow Yo-Fie, who could be relied upon to leave the consulting room at roughly the right time.[32]

Clearly, though, a frame is needed – although what we mean by a frame has been called into question by the pandemic and lockdowns beginning in March 2020. The frame, both spatial and temporal, functions in psychoanalysis as a generative constraint. The chronometrics of psychoanalysis, the need for measure in both time and space, serves as an instrument for the intensification of the transference and, paradoxically perhaps, for the experience of that which knows no measure, the unconscious. But clock time is not unconscious time, and when we tell our patients, 'It is time', we are also asking them to internalise a restriction that is historically specific.

The receptivity of the *Silence* tapestries took me elsewhere, however. There is a bird that used to sing in the garden outside the study where I work in London. My previous consulting room was in a part of town rarely frequented by birds. Since the lockdown I have worked on the telephone from home, where there are more trees. Each of my patients has heard this bird sing and felt differently about it. One asked if I owned a caged bird (which now makes me think of John Cage and St John's, of saintliness and desire, of communion with the object and the world, of freedom and constraints), another wondered whether I was really in England, and not in a forest, another whether I had recorded the sound of birdsong and had it playing in the background. Perhaps the most memorable association was to Lovebirds kept in different cages so as to make them sing.

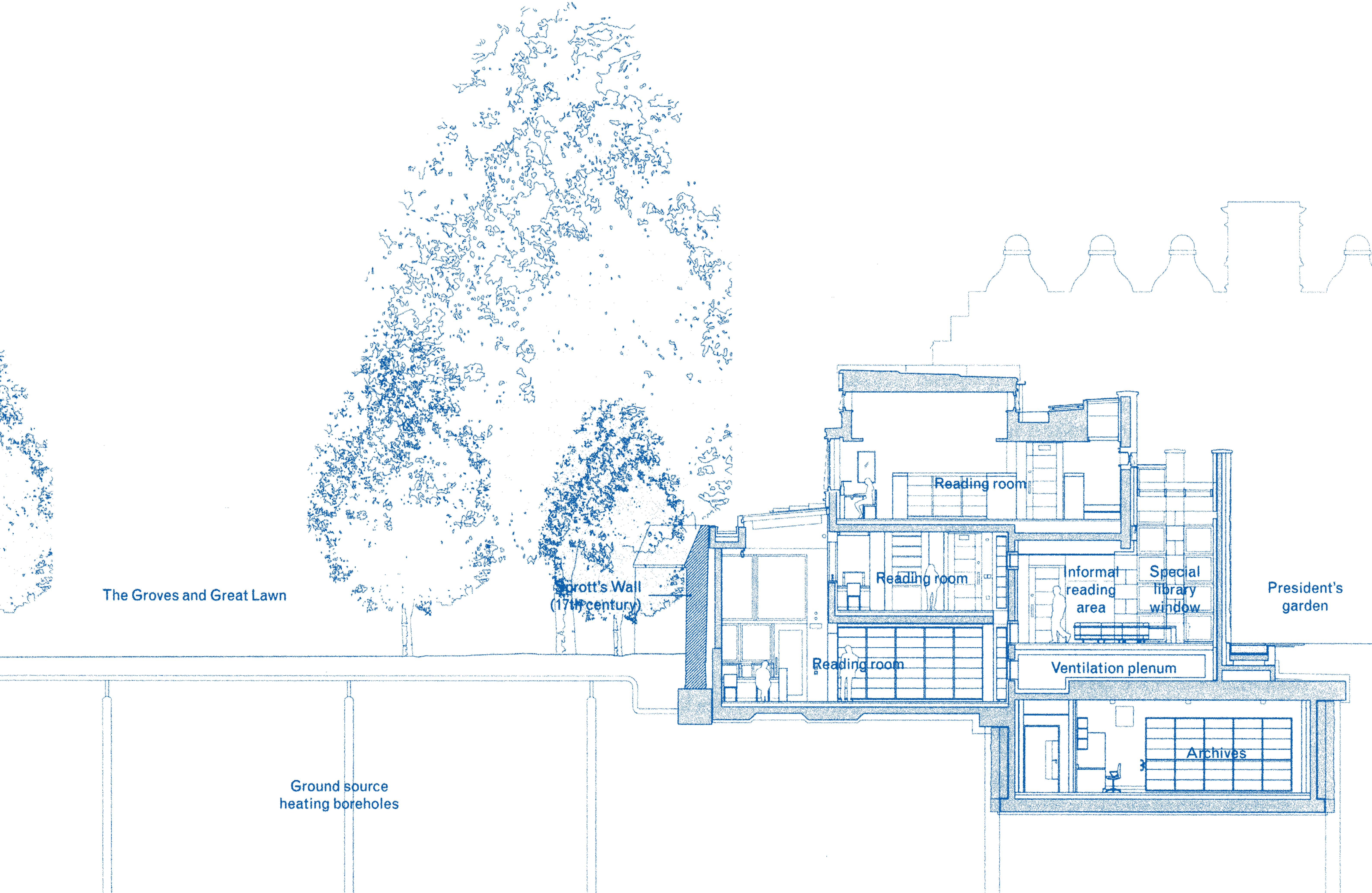
You could say that birdsong provided the sessions with silence, in the way Cage meant the word. Birdsong helped me to think about the insides and outsides of analysis, of inlines and outlines in the fold of the psychoanalytic process, which is continuous with both the world and the object. ‘The always-there is not perceived’, wrote José Bleger of the psychoanalytic frame, ‘until it is changed or broken’.[33] Or, as Cage put it in Lecture on Nothing: *‘Structure without life is dead. But Life without structure is un-seen’*.[34] Once the world is experienced as silence there appears to be no limit to what can be thought of as the world interior to psychoanalysis, or as the world interior to art.

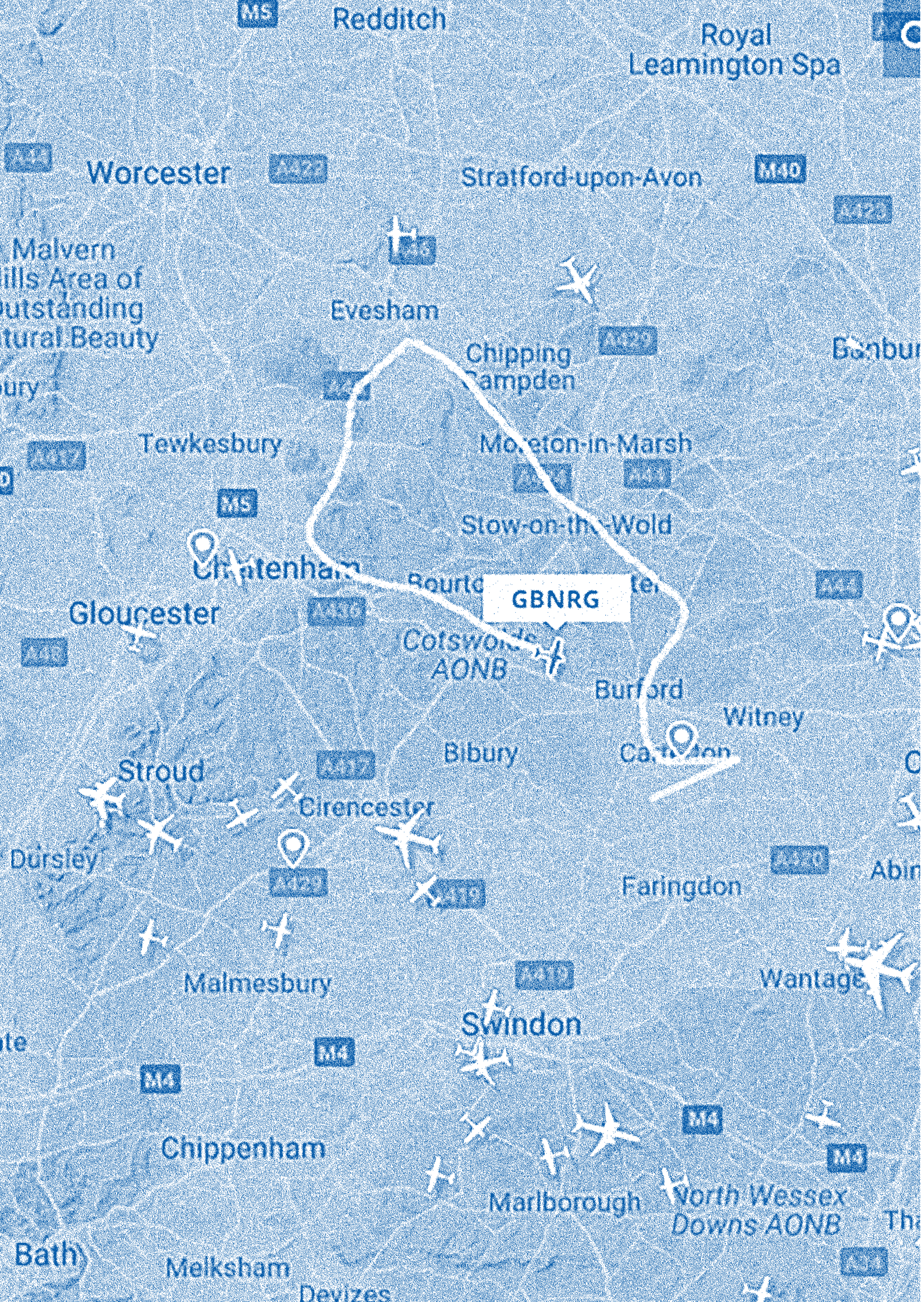
Recently the bird has flown, together with its song, replaced by a flock of green paraquets, which steal nesting holes and squawk loudly in the morning, the portents of a very different world.

---

1 Conversation with the artist, 17 July 2021.
2 John Cage, ‘Lecture on Nothing’ in: John Cage, Silence: Lectures and Writings, Marion Boyars, 2009, 109.
3 Ibid, 109–110.
4 Conversation with the artist, 17 July 2021.
5 For an excellent discussion of Fremont’s chronophotographs see: Noam E. Elcott, Artificial Darkness: An Obscure History of Modern Art and Media, University of Chicago Press, 2016, 44.
6 See: Brian Price, ‘Frank and Lillian Gilbreth and the Manufacture and Marketing of Motion Study, 1908–1924. Business and Economic History’, Second Series, Volume 18, 1989.
7 I borrow the expression from Samo Tomšič’s The Capitalist Unconscious: Marx and Lacan, Verso, 2014.
8 Daniel A. Wren and Arthur G. Bedeian, The Evolution of Management Thought, Wiley, 2020, 53.
9 Jacques Le Goff, Time, Work and the Middle Age, University of Chicago Press, 1980, xiii.
10 Ibid, 46.
11 Ibid, 46.
12 Ibid, 47.
13 Ibid, 46.
14 Ibid, 46.
15 Ibid, 46.
16 Ibid, 36.
17 For a brilliant and complete history of the Jacquard loom, see: James Essinger, Jacquard’s Web: How a hand loom led to the birth of the information age, Oxford University Press, 2004.
18 Cage, ‘Lecture on Nothing’, 110.
19 Ibid, 111.
20 Ibid, 113.
21 I have lost the source for this quotation.
22 Cage, ‘45’ For a Speaker’, in: Silence: Lectures and Writings, 164.
23 Conversation with the artist, 17 July 2021.
24 Sigmund Freud, The Interpretation of Dreams (1900) in: The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume 6, 282.
25 Cage, ‘Composition as Process’, in: Silence: Lectures and Writings, 37.
26 John Cage, ‘A Visit to the anechoic chamber’, YouTube, accessed 21/08/2021.
27 Peter Sloterdijk, The Aesthetic Imperative, Wiley, 2007, 6.
28 Ibid, 6.
29 Ibid, 6.
30 Conversation with the author.
31 Norman O. Brown, cited in: Christopher Shultis, ‘A Living Oxymoron: Norman O. Brown’s Criticism of John Cage’, Perspectives of New Music, Volume 44, Number 2, Summer 2006, 66–87, 70.
32 See: Herbert Will, ‘The Concept of the 50-minute hour: Time forming a frame for the unconscious’, in The International Forum of Psychoanalysis, Volume 27, 2018, 14–23.
33 José Bleger, cited in: Jean-Bertrand Pontalis, Windows, Bison Books, 2003, 51.
34 Cage, ‘Lecture on Nothing’, 113.

Rye Dag Holmboe would like to thank the Leverhulme Trust for its generous support of his research, which is funded through an Early Career Research Fellowship.


The Groves and Great Lawn
Sprott's Wall
(17th century)
Reading room
Reading room
Reading room
Informal
reading
area
Special
library
window
President's
garden
Ventilation plenum
Archives
Ground source
heating boreholes


Redditch
Royal Leamington Spa
Worcester
Stratford-upon-Avon
Malvern
Evesham
Chipping Campden
Tewkesbury
Moreton-in-Marsh
Stow-on-the-Wold
Gloucester
GBNRG
Cotswolds AONB
Burford
Witney
Bibury
Stroud
Cirencester
Dursley
Faringdon
Malmesbury
Wantage
Swindon
Chippenham
Marlborough
North Wessex Downs AONB
Bath
Melksham
M5
M40
M4
A429
A436
A417
A419
A420
A44
A46
A34

12.11.19: FAILED RECORDING TUESDAY MORNING

10:18: BIRDS SINGING IN AUTUMN SUNSHINE

10:20: SIREN: AMBULANCE/POLICE OR FIRE ENGINE

10:21: NOT SURE

10:24: SUDDEN GUST OF WIND: LEAVES FALLING

10:31: RECORDING STARTED. FALLING LEAF OR STICK, VERY LOUD

MORE WIND

A BLACKBIRD

A PLANE

LEAVES RUSTLE ON THE TREES, SCATTER ACROSS THE GRASS

10:32: STILL THE PLANE: LOUDER NOW, AS ARE THE TREES

10:33: A JANGLE FROM A FENCE OR GATE SHUTTING, ACROSS THE LAWN

10:34: A TRAIN SOUNDS ITS HORN

10:35: SIREN FROM THE EMERGENCY SERVICE

A VOICE

10:36: A CAR

THE BEAT OF A DRUM? OR IS IT SOMETHING FALLING?

10:37: A SMALL BIRD (NOT A BLACKBIRD)

STILL THE SIREN, CLOSER NOW

PEOPLE WALK PAST IN UNIFORM — GROUNDSMEN OR GARDENERS?

THEY EXCHANGE A FEW WORDS

10:38: SIREN VERY CLOSE

A PLANE DIRECTLY OVERHEAD … A LOUD DRONE

10:39: SIREN VERY LOUD

ALL GUSTING WINDS AND DRONING OF THE PLANE WITH THE SIREN WRAPPING ROUND

10:40: WAILING OR SINGING OR THE SOUND OF A TRAIN

10:41: BIRDSONG, VERY SUBTLE, VERY QUIET

SIREN

10:42: MANY STICKS FALL FROM THE TREE ABOVE ME AND HIT THE GRAVEL PATH

A LEAF FALLS ON MY HEAD

10:43: A FAR OFF DRONING SOUND

10:44: BIRDSONG

10:45: DRAMATIC GUST OF WIND, THE TEMPERATURE IS DROPPING

THE SQUEAL OF TRAIN WHEELS DRAGGING ON THE TRACK: OR IS IT SOME MACHINERY?

10:46: A MOTOR OR ENGINE IS OPERATING NEARBY, OR A GENERATOR

DRILLING SOUNDS?

A VOICE

10:47: FOOTSTEPS, TWO GIRLS
LOUD DRILLING SOUNDS: OR IS IT GARDENING? TREE CUTTING

10:48: RHYTHMIC DRILLING OR CUTTING SOUNDS

10:49: FOOTSTEPS, A SOLITARY MAN

THE THREE GARDENERS/GROUNDSMEN PASS AGAIN, CRUNCHING ON THE GRAVEL PATH, TALKING ABOUT THE WEATHER

A CRASH OF A GATE OR DOOR

10:50: BIRDSONG, LOUDER NOW, COMPETING AGAINST THE LOUD ACTIVITY GOING ON OUT OF SIGHT, SOME MACHINERY SOMEWHERE

10:51: BIRDSONG, MANY BIRDS

10:52: A PLANE

A NEW, DIFFERENT, BIRD

VERY LOUD RUSTLING FROM THE TREES

10:53: A TRAIN SOUNDS ITS HORN, MOURNFULLY, I HEAR IT MOVING OFF

THE LEAVES ARE SHAKING VIOLENTLY

10:54: BIRD SONG

MOTORBIKE PULLS UP

10:55: A DOG BARKING

A VOICE

STILL THE TREES, THE LEAVES

10:56: STRONG GUSTS OF WIND

A CAR

A PLANE, VERY LOUD. IS IT A HELICOPTER?

10:57: HELICOPTER DIRECTLY OVERHEAD, VERY LOUD

10:58: DRILLING OR MOWING, VERY LOUD

MACHINERY PERIODIC NATURE: IT SWITCHES OFF THEN ON AGAIN

10:59: VERY LOUD THRUMMING AND CLANGING FROM MACHINERY

LEAVES ARE SHAKING, TREES ARE SWAYING, WHOOSHING SOUNDS AND CREAKING

11:00: STILL THE ENGINE/ MOTOR, DROWNING OUT ALL ELSE

THE WIND IN THE TREES

11:01: LOUD CLANGING ENGINE DRILLING

11:02: STILL THE ENGINE, CLOSER NOW

A DOOR OPENS, OR IT'S THE MACHINERY

A LOUD GUST OF WIND RUSHES THROUGH THE TREES

11:03: THE AIR IS FULL OF THE MACHINERY SOUNDS: IS IT A LEAF BLOWER?

11:04: EVERYTHING VIBRATING WITH THE DRONING AND DRILLING: MY RECORDING IS RUINED!

11:05: NOTHING BUT THE MACHINERY

A BIRD, A ROOK MAYBE, CAWS ABOVE THE DIN

11:06: A TRAIN

A PLANE

STILL THE DRILLING OR MOWING OR LEAF-BLOWING, OUT OF SIGHT

11:07: A PLANE

A DISTANT SIREN

THE DEAFENING MACHINE SOUNDS

THE TREES RUSTLING AND SHAKING

A BIRD

11:08: THE MACHINE SOUNDS ARE COMING CLOSER

11:09: MY RECORDING IS TRASHED

THE SOUND OF RAINDROPS

I PUT UP MY UMBRELLA

THE LEAVES SHAKE AS IF IN ANGER

RAINDROPS ON MY UMBRELLA

11:10: RAINDROPS

LOUD WIND

THE MACHINERY STOPS

11:11: THE MACHINERY STARTS AGAIN, SOMEWHERE ELSE, TO MY LEFT THIS TIME

11:12: CONTINUOUS MACHINE SOUNDS

WIND

LEAVES FALL ON MY UMBRELLA

LEAVES AND SMALL STICKS SCATTER ON THE GRAVEL PATH

I DRAG MY FEET THROUGH THE GRAVEL TRYING TO SHELTER UNDER UMBRELLA

11:13: MACHINE SOUNDS VIBRATING OFF THE BUILDING

11:14: NOTHING BUT THE MACHINERY AND THE WIND AND OCCASIONAL DROPS OF RAIN

11:15: MACHINERY DIRECTLY IN FRONT OF ME BUT OUT OF SIGHT

RAINDROPS ON UMBRELLA

STRONG WIND VERY LOUD

11:16: SIREN IN THE DISTANCE

STILL THE MACHINERY

11:17: STRONG WIND, LEAVES FLIP ABOUT ON THE PATH

11:18: I MOVE AGAIN, I'M COLD, GRAVEL CRUNCHES

MANY LEAVES RUSH IN LARGE CLOUD-LIKE BUNDLES ROLLING ACROSS THE GRASS

11:19: STILL THE MACHINERY, THE WORKERS WORK ON

A SIREN, QUITE CLOSE. THIS TIME IT'S DEFINITELY AN AMBULANCE

11:20: MY ALARM SOUNDS: RECORDING OVER

A PLANE PASSES OVERHEAD

THE WIND

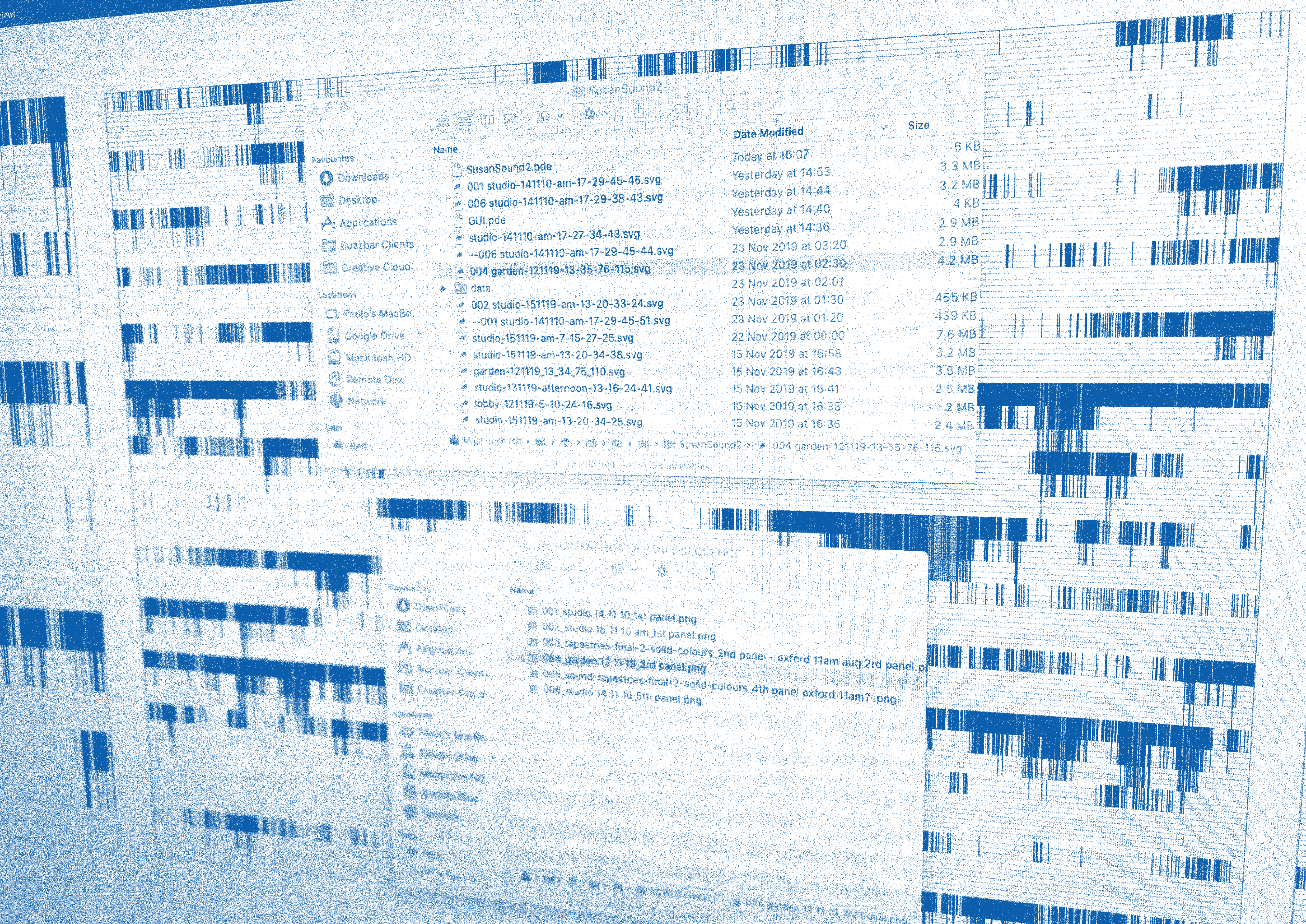
THE SIREN

THE MACHINERY

THE PLANE

SOMEONE PASSES CRUNCHING LOUDLY ON THE GRAVEL

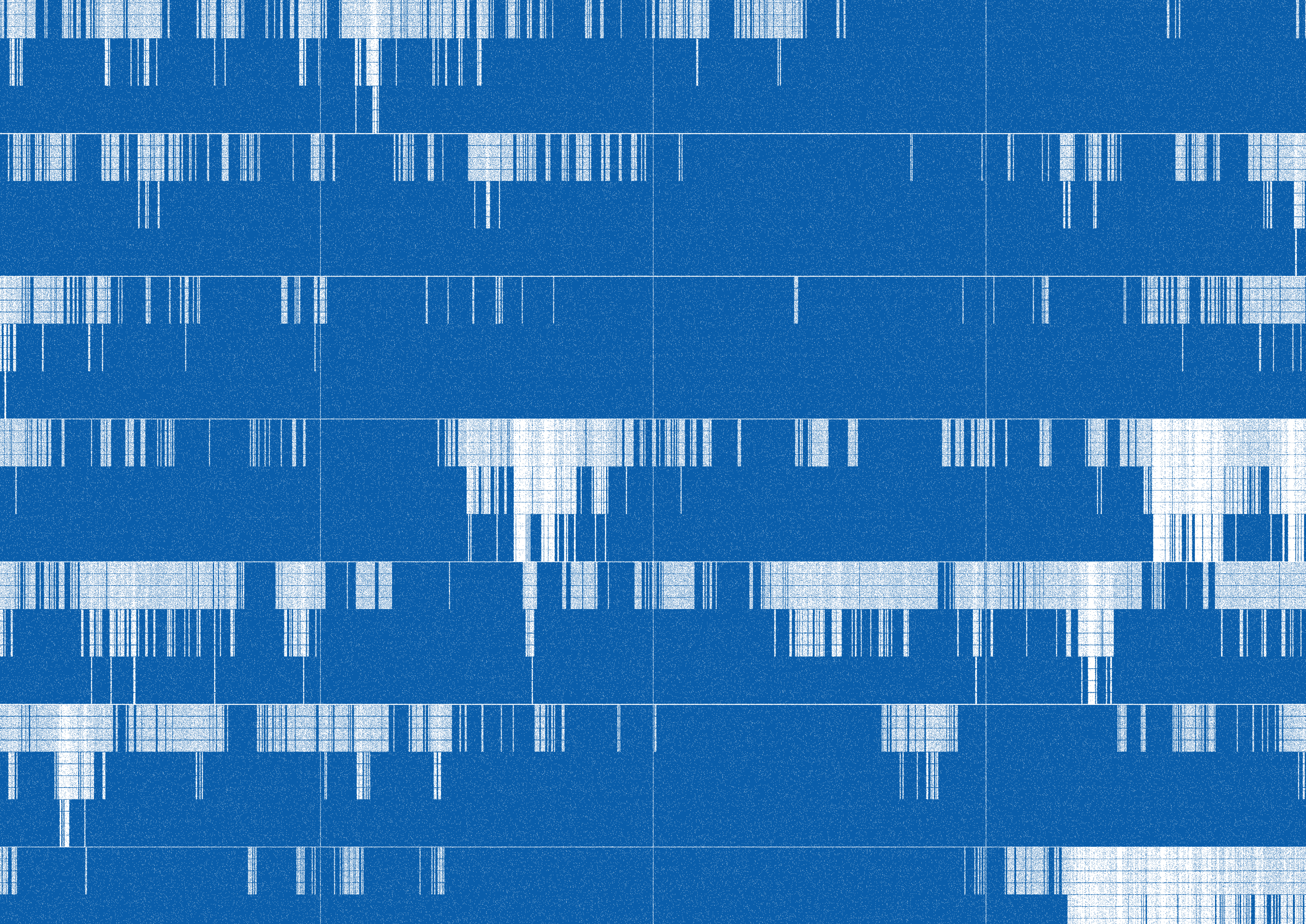
```
   0 52494646 863D8F1F 57415645 62657874 5A030000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  RIFF.=. WAVEbextZ
  48 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
  96 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 144 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 192 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 240 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 5A4F4F4D 2048616E 64792052                                      ZOOM Handy
 288 65636F72 64657220 48346E00 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  ecorder H4n
 336 00000000 32303038 2D30312D 30343034 3A33303A 3532F02C B82A0000 00000000 00000000 00000000 00000000 00000000      2008-01-0404:30:52.,.*
 384 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 432 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 480 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 528 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 576 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 0000413D
 624 50434D2C 463D3434 3130302C 573D3136 2C4D3D73 74657265 6F2C543D 5A4F4F4D 2048616E 64792052 65636F72 64657220  PCM,F=44100,W=16,M=stereo,T=ZOOM Handy Record
 672 48346E00 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  H4n
 720 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 768 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 816 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
 864 00000000 00000000 00000000 0000666D 74201000 00000100 020044AC 000010B1 02000400 10006461 7461003A 8F1F25FF                fmt         D.   .      data :.
 912 D6013FFF C20166FF E4018EFF 000273FF 0D0276FF 2702A6FF 1D0291FF 390294FF 3D02D4FF 1902CDFF 3E02B7FF 0D02C5FF  . ?.. f.. ..  s.  v.' ..  ..9 ..= ..  ..> ..
 960 CA01AFFF AB01E0FF 6301EDFF 25010200 1B011500 D300F7FF 9E002000 7300D9FF 3500B0FF 0700B7FF D5FF91FF C3FF7AFF  . ... ..c ..%       . ...   s ..5 ..  .......
 008 99FF87FF A7FFA7FF AEFF8BFF 93FF9DFF 6FFF8CFF 75FF8CFF 89FF7DFF 7CFF5EFF 69FF39FF 76FF13FF 79FFF2FE 7FFFF7FE  ................o...u.....}.|.^.i.9.v. .y...
 056 55FFE3FE 6FFFECFE 5FFF84FE 54FF79FE 13FF51FE 28FF27FE 28FF0DFE F7FE11FE 38FF0BFE 18FF05FE 47FFC9FD 6CFFA9FD  U...o..._...T.y. .Q.(.'.(. ... .8. . . .G...l
 104 96FF85FD AFFF82FD A6FF84FD ACFF50FD E3FF51FD FEFF16FD E3FF3FFD F9FF48FD 27007FFD 27008BFD 5200A8FD 5C00B1FD  ..............P...Q... ...?...H.'  .' ..R ..\
 152 4C00AEFD 5C00BCFD 7100A9FD 9B0096FD 93007EFD 8F008DFD 9E0090FD C000A7FD B700BEFD AF00B9FD CA00C2FD 9700DCFD  L ..\ ..q ... ... ~.. ... ... ... ... ... ...
 200 8D00D3FD AD00CFFD 8100BEFD 7F00B0FD 7900F0FD 4000DFFD 2200F4FD 0800F5FD 3300FAFD 150014FE 060019FE D6FF32FE  . ... ... ..  ..y ..@ .." ..  ..3 ..   .   ..
 248 D6FF4AFE DDFF81FE D4FFAFFE E3FFDDFE F8FF11FF F6FF1EFF FAFF62FF 25008DFF 3100A8FF 3400D1FF 5000D2FF 3A00FAFF  ..J............. ... ...b.% ..1 ..4 ..P ..:
 296 0F001800 11001100 19004D00 1E004E00 2800A000 1400D800 0F001C01 31006001 2E005301 1E007B01 32008F01 2400B301            M   N ( .   .     1 ` . S   { 2 . $
 344 2A009E01 2A009601 3700A201 3C00AF01 5500B401 5B009701 4800AD01 5C00A601 8700AE01 6500BD01 60009F01 66007E01  * . * . 7 . < . U . [ . H . \ . . . e . ` . f
 392 51008D01 56009201 18008901 05007D01 CAFF8201 B8FF5F01 BBFF5801 9BFF4401 7DFF0C01 47FF1D01 28FF1601 1DFF0001  Q . V .   .   } ... .._ ..X ..D }.  G.  (.
 440 14FF0901 20FF0E01 07FFFF00 09FFFA00 DAFEEA00 DCFEC400 D8FEAE00 A8FE8E00 CFFE8B00 97FE6500 8DFE4E00 91FE2E00   .   .   ..  .. ... ... ... ... ... ..e ..N .
 488 84FE2600 6CFE0B00 3EFEC7FF 2BFEA3FF 17FE88FF F4FD47FF FDFD32FF 0FFE47FF 00FE27FF E5FD18FF 12FEFEFE 00FEF8FE  ..& l.  >...+... .....G...2. .G. .'... . ...
 536 FAFDA2FE 04FEEAFE 1AFECCFE FAFD85FE 25FE8BFE 29FE50FE 27FE5DFE 22FE49FE 0AFE42FE 11FE29FE 21FE32FE 1BFE30FE  .... ... .......%...).P.'.].".I. .B. .).!.2.
 584 42FE21FE 46FE41FE 32FE27FE 41FE19FE 47FE13FE 27FE33FE 2BFE51FE 44FE53FE 5BFE38FE 5DFE4DFE 64FE47FE 41FE2DFE  B.!.F.A.2.'.A. .G. .'.3.+.Q.D.S.[.8.].M.d.G.A
 632 6CFE51FE 5AFE51FE 6AFE5BFE 48FE80FE 34FE74FE 54FEB3FE 3AFED4FE 46FE07FF 4AFE25FF 25FE11FF 16FE2DFF 1BFE4BFF  l.Q.Z.Q.j.[.H...4.t.T...:...F. .J.%.%. . .-.
 680 1CFE58FF F7FD54FF 05FE34FF FCFD5AFF 27FE5EFF 23FE88FF 23FE90FF 2CFEBAFF 1FFEDDFF 2DFECDFF 2CFEE4FF 4FFEF1FF   .X...T. .4...Z.'.^.#...#...,... ...-...,...O
 728 3FFE1E00 2EFE4600 59FE6100 95FE4200 82FE4900 87FE5A00 A5FE6700 90FE7D00 96FE5500 A7FE7700 B5FE6B00 CBFE7100  ?.  ..F Y.a ..B ..I ..Z ..g ..} ..U ..w ..k .
 776 DDFEA300 09FFA900 37FFD500 4CFFE500 6DFFFD00 8EFF2B01 A0FFFE00 B0FFFF00 CAFF0C01 DFFF0101 F2FF0801 08001101  ...  .. 7.. L.. m.. ..+ ... ... ..  ..  ..
 824 1B002E01 39001D01 38000A01 3C000E01 26001F01 3D001E01 42002E01 2E003A01 32002F01 13003101 0C005301 0B004201    . 9   8   <   &   =   B . . : 2 /   1   S
 872 07004401 13002401 03001201 FCFF1001 1100F400 D5FFE900 CAFFEB00 B9FFD500 AEFFC900 BCFFE700 99FFAD00 74FFC100    D   $     ..    . ... ... ... ... ... ... t
 920 67FFA600 3DFFC500 3EFF8800 2FFF8400 03FFA500 F4FE9800 D5FE8A00 B2FE8400 8CFE8500 6EFE8400 7EFE5F00 7DFE6F00  g.. =.. >.. /..  .. ... ... ... ... n.. ~._ }
 968 5DFE5700 66FE3000 87FE1A00 76FE2500 49FE2B00 3CFE1B00 13FEFCFF 13FEEDFF 1AFED9FF 12FECAFF 06FEC8FF EBFD86FF  ].W f.0 ..  v.% I.+ <.   ... ... ... ... ....
 016 07FE85FF D8FD77FF D9FD65FF D3FD4DFF D2FD51FF CBFD50FF A9FD33FF CAFD2CFF D8FD27FF EAFD4EFF D1FD40FF DFFD42FF   .....w...e...M...Q...P...3...,...'...N...@..
 064 03FE53FF 1EFE64FF 05FE28FF F7FD63FF F8FD6AFF FEFD46FF E8FD5DFF FBFD33FF F1FD3AFF EBFD86FF E8FD45FF F0FD4DFF   .S. .d. .(...c...j...F...]...3...:.......E..
 112 DFFD57FF CEFD8EFF ADFDBEFF 81FDE8FF 64FDEEFF AAFD1500 77FD2500 58FD3A00 BCFD2F00 B8FD1F00 C2FD6300 E5FD4000  ..W.............d.....  w.% X.: ../ ..  ..c .
 160 DDFD2E00 E5FD4800 E5FD6700 EAFD6B00 FEFDA600 18FEBE00 37FEBC00 56FEBE00 61FED600 61FEE500 7CFEDC00 86FEDE00  ... ..H ..g ..k ...  .. 7.. V.. a.. a.. |.. .
 208 86FE1001 B3FE1801 D2FE1E01 C3FE4101 C3FE2E01 D5FE3A01 14FF3F01 2BFF1001 42FF0501 46FF1B01 84FF2E01 9AFF2201  ..  ..  ..  ..A ... ..:  .? +.  B.  F.  ... .
 256 BFFF2D01 DCFF3D01 DEFF3101 F0FF2A01 F9FF2A01 3B001101 61000801 8600F100 BB00E600 9000ED00 A400E400 CE00F400  ..- ..= ..1 ..* ..* ;   a   . . . . . . . . .
```

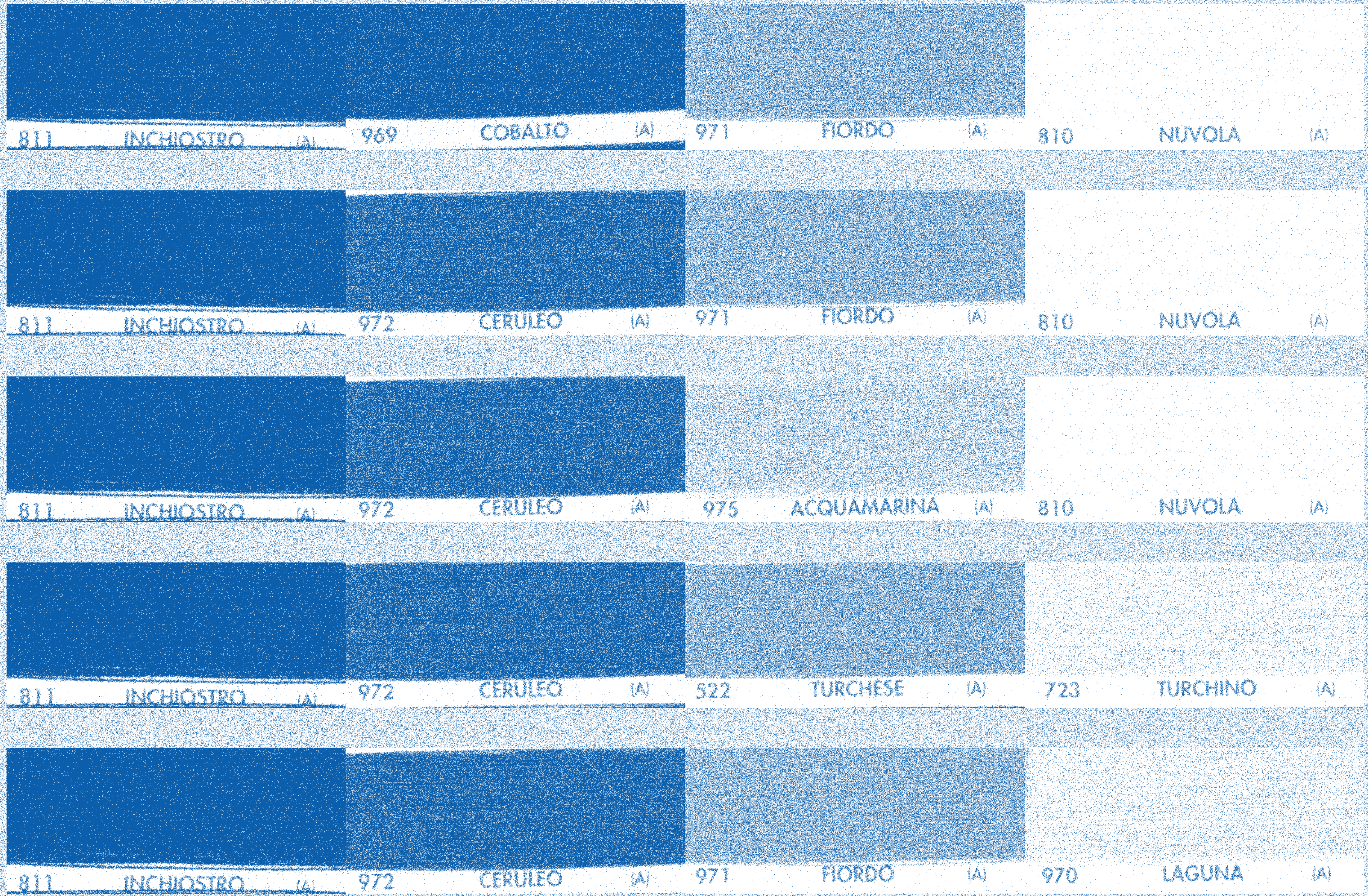

SusanSound2
Search
Favourites
Downloads
Desktop
Applications
Buzzbar Clients
Creative Cloud...
Locations
Paulo's MacBo...
Google Drive
Macintosh HD
Remote Disc
Network
Tags
Red
Macintosh HD › SusanSound2 › 004 garden-121119-13-35-76-115.svg
Favourites
Downloads
Desktop
Applications
Buzzbar Clients
Creative Cloud
Locations
Google Drive
Macintosh HD
Remote Disc
Network

Name	Date Modified	Size
SusanSound2.pde	Today at 16:07	6 KB
001 studio-141110-am-17-29-45-45.svg	Yesterday at 14:53	3.3 MB
006 studio-141110-am-17-29-38-43.svg	Yesterday at 14:44	3.2 MB
GUI.pde	Yesterday at 14:40	4 KB
studio-141110-am-17-27-34-43.svg	Yesterday at 14:36	2.9 MB
--006 studio-141110-am-17-29-45-44.svg	23 Nov 2019 at 03:20	2.9 MB
004 garden-121119-13-35-76-115.svg	23 Nov 2019 at 02:30	4.2 MB
data	23 Nov 2019 at 02:01	--
002 studio-151119-am-13-20-33-24.svg	23 Nov 2019 at 01:30	455 KB
--001 studio-141110-am-17-29-45-51.svg	23 Nov 2019 at 01:20	439 KB
studio-151119-am-7-15-27-25.svg	22 Nov 2019 at 00:00	7.6 MB
studio-151119-am-13-20-34-38.svg	15 Nov 2019 at 16:58	3.2 MB
garden-121119_13_34_75_110.svg	15 Nov 2019 at 16:43	3.5 MB
studio-131119-afternoon-13-16-24-41.svg	15 Nov 2019 at 16:41	2.5 MB
lobby-121119-5-10-24-16.svg	15 Nov 2019 at 16:38	2 MB
studio-151119-am-13-20-34-25.svg	15 Nov 2019 at 16:35	2.4 MB

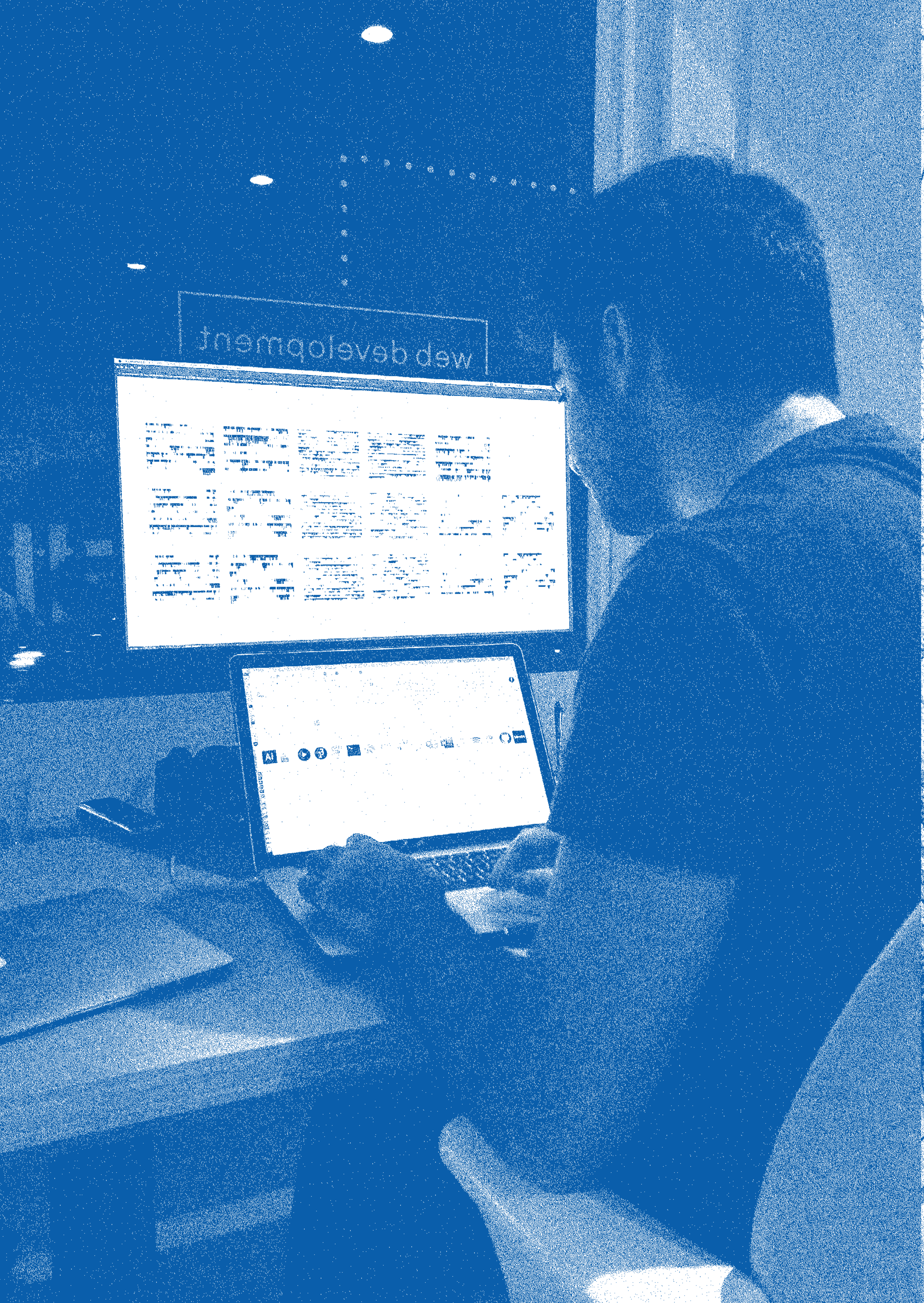
Name

001_studio 14 11 10_1st panel.png
002_studio 15 11 10 am_1st panel.png
003_tapestries-final-2-solid-colours_2nd panel - oxford 11am aug 2rd panel.p
004_garden 12 11 19_3rd panel.png
005_sound-tapestries-final-2-solid-colours_4th panel oxford 11am? .png
006_studio 14 11 10_5th panel.png

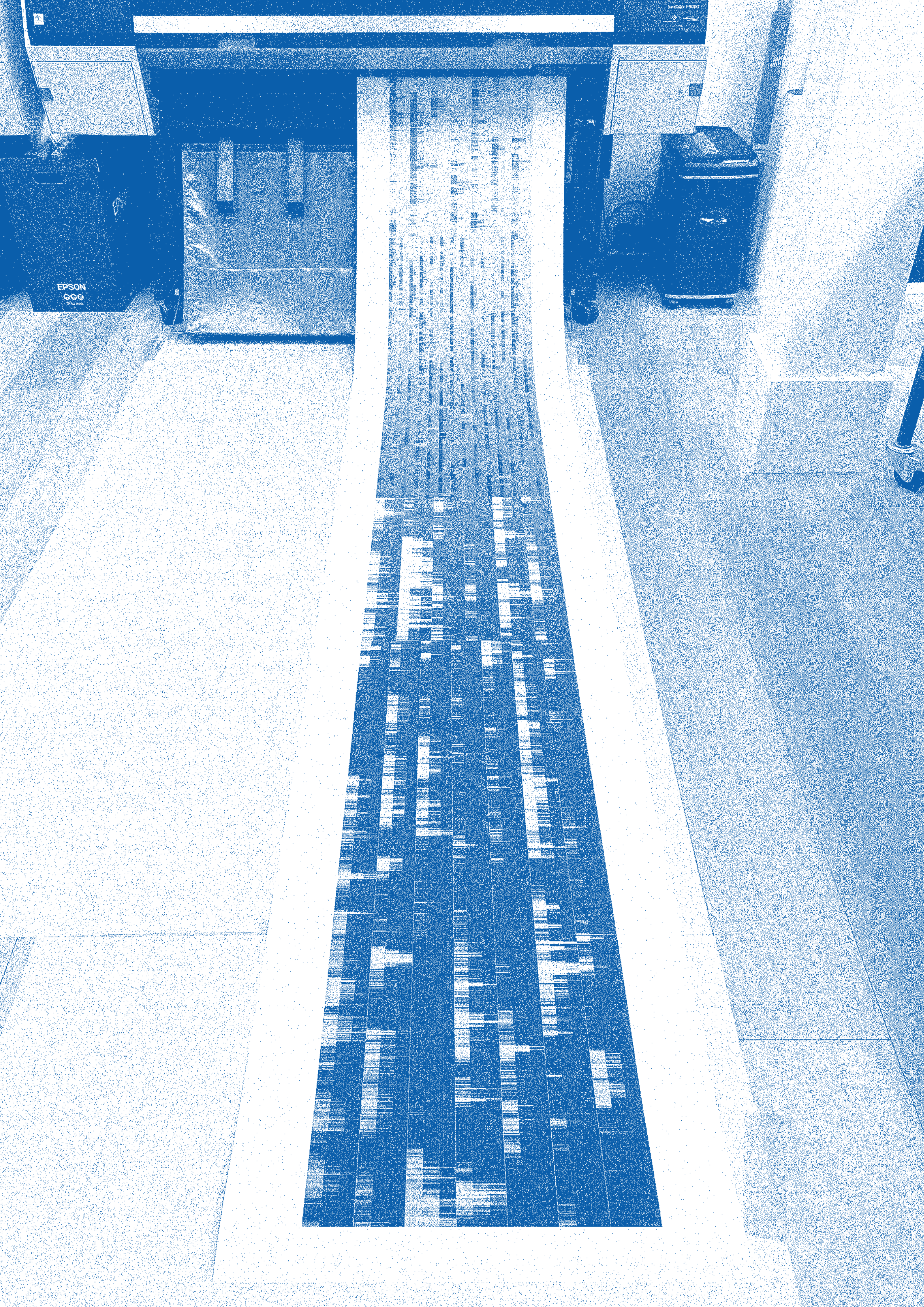


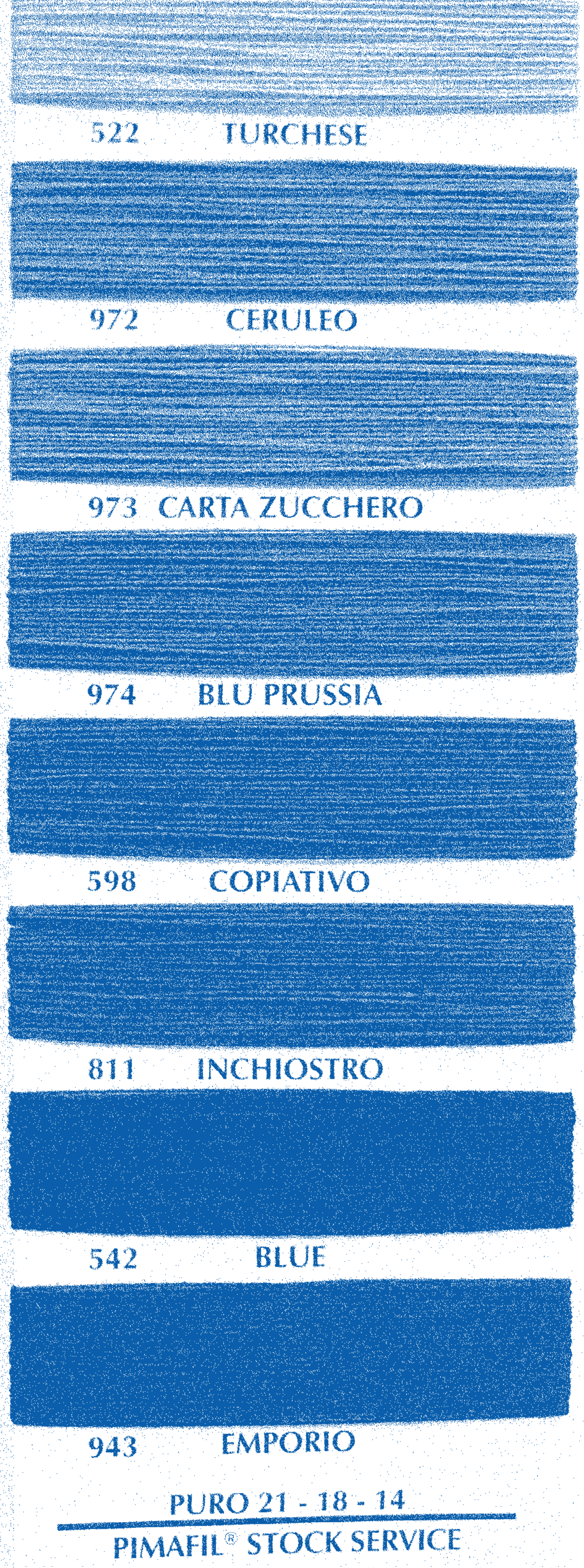


811 INCHIOSTRO (A)	969 COBALTO (A)	971 FIORDO (A)	810 NUVOLA (A)
811 INCHIOSTRO (A)	972 CERULEO (A)	971 FIORDO (A)	810 NUVOLA (A)
811 INCHIOSTRO (A)	972 CERULEO (A)	975 ACQUAMARINA (A)	810 NUVOLA (A)
811 INCHIOSTRO (A)	972 CERULEO (A)	522 TURCHESE (A)	723 TURCHINO (A)
811 INCHIOSTRO (A)	972 CERULEO (A)	971 FIORDO (A)	970 LAGUNA (A)


web development

VIOLA
49241
13121934
STOCK SERVICE
PURO 21 - 18 - 14



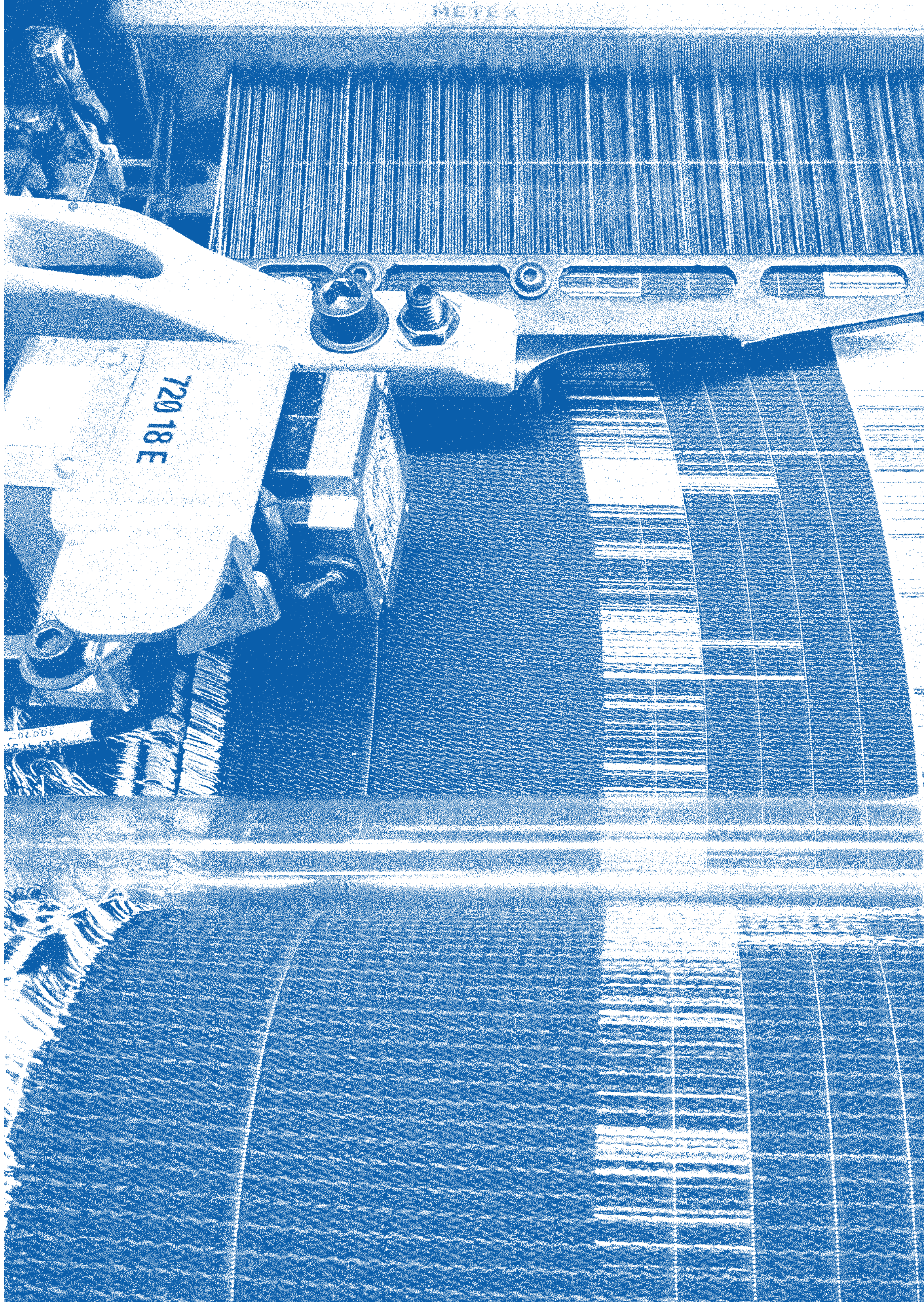

522 TURCHESE
972 CERULEO
973 CARTA ZUCCHERO
974 BLU PRUSSIA
598 COPIATIVO
811 INCHIOSTRO
542 BLUE
943 EMPORIO

PURO 21 - 18 - 14
PIMAFIL® STOCK SERVICE

London to High Wycombe, Oxford, Banbury, Stratford & Birmingham

MONDAYS to FRIDAYS
17 May to 10 September 2021

Train ID		1T17	1R17	2R17	2A17	2W18	1T19	1U19	2G20	1T21	1R21	2D21	2A21	1G23	1T23	2G24
S - Silver Set (Business Zone)																
LONDON MARYLEBONE	Dep	09.01	09.10	. .	09.13	09.17	09.35	09.40	09.44	10.04	10.10	. .	10.13	10.37	10.40	10.44
Wembley Stadium		....	....	....	....	09.26	....	....	09.53	10.13	....	....	....	....	....	10.53
Sudbury & Harrow Road		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Sudbury Hill Harrow		....	....	....	....	....	....	....	09.57	....	....	....	....	....	....	10.57
Northolt Park		. .	. .	. .	. .	. .	. .	. .	10.00	. .	. .	. .	. .	. .	. .	10.59
West Ealing	Dep	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
South Ruislip		. .	. .	. .	. .	. .	. .	. .	10.04	. .	. .	. .	. .	. .	. .	11.03
West Ruislip		....	....	....	....	09.35	....	09.55	....	....	....	....	....	....	....	11.07
Denham		. .	. .	. .	. .	. .	. .	. .	10.09	. .	. .	. .	. .	. .	. .	11.11
Denham Golf Club		....	....	....	....	....	....	....	10.12	....	....	....	....	....	....	11.14
Gerrards Cross		. .	. .	. .	09.33	09.42	. .	10.02	10.18	. .	. .	. .	10.32	. .	10.59	11.20
Seer Green & Jordans		....	....	....	....	09.46	....	....	....	....	....	....	10.36	....	....	....
Beaconsfield		. .	. .	. .	. .	09.50	. .	10.09	. .	. .	. .	. .	10.40	. .	11.06	. .
HIGH WYCOMBE		....	09.36	....	09.43	09.59	10.00	10.15	....	....	10.36	....	10.46	11.03	11.12	....
Saunderton		. .	. .	. .	09.50	. .	. .	. .	. .	. .	. .	. .	10.53	. .	. .	. .
Princes Risborough		....	....	....	09.57	....	....	10.25	....	....	....	....	11.00	....	11.21	....
Monks Risborough		. .	. .	. .	10.01	. .	. .	. .	. .	. .	. .	. .	11.03	. .	. .	. .
Little Kimble		....	....	....	10.05	....	....	....	....	....	....	....	....	....	....	....
AYLESBURY	Arr	. .	. .	. .	10.16	. .	. .	. .	. .	. .	. .	. .	11.16	. .	. .	. .
Haddenham & Thame		09.39	....	....	....	....	....	10.32	....	10.40	....	....	....	11.16	....	....
Bicester Village		09.55	. .	. .	. .	. .	10.24	. .	. .	10.54	. .	. .	. .	. .	11.41	. .
Islip		10.02	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Oxford Parkway		10.06	. .	. .	. .	. .	10.32	. .	. .	11.02	. .	. .	. .	. .	11.49	. .
OXFORD		10.14	....	....	....	....	10.40	....	....	11.10	....	....	....	....	11.59	....
Bicester North		. .	. .	. .	. .	. .	. .	10.46	. .	. .	. .	. .	. .	11.28	. .	. .
King's Sutton		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BANBURY		. .	10.09	. .	. .	. .	. .	11.02	. .	. .	11.07	. .	. .	11.42	. .	. .
Leamington Spa		....	10.26	10.32	....	....	....	....	....	....	11.26	11.32	....	12.00	....	....
Warwick		. .	. .	10.38	. .	. .	. .	. .	. .	. .	. .	11.37	. .	12.04	. .	. .
Warwick Parkway		....	10.33	....	....	....	....	....	....	....	11.33	....	....	12.08	....	....
Hatton		. .	. .	10.44	. .	. .	. .	. .	. .	. .	. .	11.44	. .	. .	. .	. .
Claverdon		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bearley		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	11.52	. .	. .	. .	. .
Wilmcote		....	....	....	....	....	....	....	....	....	....	11.56	....	....	....	....
Stratford UA Parkway		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	11.59	. .	. .	. .	. .
STRATFORD UPON AVON	Arr	....	....	....	....	....	....	....	....	....	....	12.04	....	....	....	....
Lapworth		. .	. .	10.50	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Dorridge		....	....	10.55	....	....	....	....	....	....	....	....	....	12.18	....	....
Widney Manor		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Solihull		....	10.45	11.01	....	....	....	....	....	....	11.45	....	....	12.23	....	....
BIRMINGHAM Moor Street	Arr	. .	10.56	11.14	. .	. .	. .	. .	. .	. .	11.56	. .	. .	12.33	. .	. .
BIRMINGHAM Snow Hill	Arr	....	....	....	....	....	....	....	....	....	....	....	....	12.40	....	....
Jewellery Quarter		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
The Hawthorns		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Smethwick Galton Bridge		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Rowley Regis		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cradley Heath		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Stourbridge Junction		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kidderminster	Arr	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .



COGNAC
18121408
TUNDRA
18121406
BRONZO
18121407
MALACHITE
18121404
BLU SALBERT
18121403
RAVENNA
18121402
ROSSO

```
import processing.svg.*;

import ddf.minim.*;
Minim minim;
AudioSample sound;

float nRows = 48;
float maximumAmp = 0; // used to calculate maximum audio amplitude
float barHeight = 10;


// Audio amplitude thresholds for each column height
//float thresholds[] = {5, 8, 15}; // street recording
//float thresholds[] = {10, 12, 15}; // library
float thresholds[] = {20, 100, 270}; // oxford 11am
//float thresholds[] = {15, 18, 40}; // oxford 2pm
//float thresholds[] = {20, 18, 40}; // oxford 3pm

//String soundFile = “studio-short.mp3”;
//String soundFile = “studio.mp3”; // street recording
//String soundFile = “library.mp3”;
//String soundFile = “oxford-11am-23rd-aug-2019.wav”;
String soundFile = “garden-121119.wav”;
//String soundFile = “oxford-3pm-23rd-aug-2019.wav”;
//String soundFile = “oxford-2pm-23rd-aug-2019.wav”;

//float peakMultiplier = 5; // street recording
//float peakMultiplier = 5; // library
float peakMultiplier = 0.25; // oxford 11am
//float peakMultiplier = 2; // oxford 2pm 3pm


float nSteps = thresholds.length;
float gap = 600;

PrintWriter output;

void setup() {
  // open csv file for value output
  output = createWriter(“output.csv”);
  noLoop();
  beginRecord(SVG, “output.svg”);

  minim = new Minim(this);
  sound = minim.loadSample(soundFile, 512);

  size(800, 5000);
  //background(255);

  int nColumns = 2800;

  int nChunks = nColumns * (int)nRows; //19600 - split render in chunk rows

  //1. get samples values from left channel
  float[] samples = sound.getChannel(AudioSample.LEFT);

  //2. get an amplitude average per chunk from those values each  16 348 samples
  FloatList sampleAverage = new FloatList();
  float average=0;
  for (int i = 0; i< samples.length; i+=1){
    average += abs(samples[i])*1000 ; // sample are low value so *1000
    if ( i % (samples.length/nChunks) == 0 && i!=0) {
      sampleAverage.append( average / (samples.length/nChunks) );
      average = 0;
    }
  //3. show thoses values
  println(“nb of samples: ” + samples.length);
  println(“nb of points to display: ” + sampleAverage.size());

  fill(0, 0, 0);
  noStroke();

  //4. render each chunk
  for ( int i=0; i<nChunks; i++){
    float amp = sampleAverage.get(i);
    if(amp>maximumAmp) maximumAmp = amp;

    int stepLevel = 0;
    for(int is = (int)nSteps - 1; is >= 0; is--){
      if(amp > thresholds[is]){
        stepLevel = is + 1;
        break;
      }
    }

    float color1[] = {0, 0, 0}; // black
    float color2[] = {255, 0, 0}; // red

    float r = color1[0];
    float g = color1[1];
    float b = color1[2];

    if( amp*peakMultiplier > 100 ){
      r = color2[0];
      g = color2[1];
      b = color2[2];
    }

    fill(r, g, b);

    int row = (int)(i / nColumns);

    // 5. Separate segments to have 7, 6, 14 and 14 chunks
    if (i % nColumns == 0 && ( row == 7 || row == 7+6 || row == 7+6+14 || row ==
7+6+14+14 )) gap += 600;

    println(i + “: ” + amp + “ step: ” + stepLevel + “ max: ” + maximumAmp + “ row: ” +
row);
    output.println(i + “,” + amp + “,” + stepLevel);
    if(stepLevel != 0){
      rect(i % nColumns, barHeight * nSteps * row + gap, 1, stepLevel * barHeight);
    }
  }


  println(“finished rendering.”);

  output.flush();
  output.close();

  println(“CSV output complete.”);

  endRecord();

  println(“SVG output complete.”);
}
```

Writing the Ephemeral:
John Cage’s Lecture on Nothing as a Landmark in Media History

Simon Aeberhard

John Cage’s Lecture on Nothing is one of his early, legendarily forbidding speeches first held in 1950. The score of the lecture can be understood as a reaction to one of the most momentous cuts in twentieth century’s media history. Cage’s lecture overtly responds to the establishment of the electromagnetic recording, storing and distributing of acoustic material after World War II by reflecting on these technical developments. The text, however, also accurately and subtly reacts to the profound destabilization of the relationship between literacy and orality triggered by these inventions by applying new methods of writing.

Seen as such, the Lecture on Nothing can be connected to Cage’s electronic music on audiotape, Williams Mix for example, and his elaboration of 4’33”, which forms the basis of his “silent pieces.” What unifies these three contemporaneous, but essentially different, works is their thought-provoking semantic emptiness. This article argues that these works are best understood as an artist’s quest for an adequate semiotic means of writing an aural event after electroacoustic media have become widely accessible.

[The ephemeral—a dilemma]

Upon first consideration, the concept of the ephemeral—the common topic the articles in this issue engage with—quite plausibly seems to be a radical antonym of writing. At the core of any notion of the ephemeral—the transitory and the short-lived, the elusive and the perishable—emphatically stands the idea of non-repeatability, singularity and of a fragile presence that vanishes in the very moment it comes into existence. Repeatability on the other side, stability (temporal as well as spatial) and absence (of the communicator) precisely seem to represent the key features of writing and inscription.[1] The function of writing, as legends have it, consists in making (relatively) permanent, lasting and endurable what otherwise would be irretrievably lost in time.

From a philosophical point of view, the concept of the ephemeral thus poses a dilemma. Whatever can be written down and medially inscribed is, by definition, repeatable and therefore cannot, by definition, be ephemeral. And whatever is to be considered ephemeral is essentially constituted by its unrepeatability, and therefore cannot possibly be recorded (at least not without the loss of its quality of being ephemeral)—be it on paper or on electromagnetic tape. The ephemeral, from this perspective, remains external to all media: that which cannot be inscribed, noted or written down. The problematic situation of any analysis of the ephemeral thus consists in the impossibility to medially codify (in a metaphysically non-biased terminology) what one actually tries to analyze.

Music history and the history of musical notation

The dilemma of writing the ephemeral even, and especially, holds true in music history, and more precisely, in the history of musical notation and in the evolution of (forms of) writing music. The phenomenological precondition enabling the communication of (proto)musical entities (corresponding to the invention of verbal languages—see e.g. Luhmann 2012: 123–138) is the selection of certain (recursive) forms audible in a pristine chaos of sonic impressions and perceptions (and perceptions of sonic perceptions). A certain tune or rhythmical pattern is abstracted from an originally more complex acoustic event and is, by imitation, made reproducible. Every other aspect of the original event—tempo, pitch and tone, for example—is considered to be an accidental property and can therefore, relative to the hypothesized tune or rhythm, be perceived as ephemeral, informal and unique. The advantage of this first (proto)musical operation lies precisely in abstracting certain stable elements from all the other qualities (audible or not) of the original acoustic event: by formalizing it, the simple tune (to be clear: this is an entity purely theoretical in nature, for it does not exist outside of the abstraction) will stay the same (and recognizably so) whether sung, whistled or hummed; the rhythmic pattern will be identical (and therefore repeatable) whether clapped, tapped or drummed. It becomes, as the media theory of sociologist Niklas Luhmann would have it, form.

Obviously, nothing of this has to do with notation and inscription in the strict sense of “writing something down.” But it might have become clear from this hypothetical derivation that the attempt to transform sonic ephemerality into a stable, reproducible musical form strongly relies on abstraction. Omission of all accidental properties of a sonic event is the necessary precondition of visually fixing music by symbols and signs. Only what is deemed an essential property of an acoustic event is, and can be, stabilized in writing. All the other, elusive, properties of that same event—tempo, pitch and tone, for example—will be considered accidental, and therefore ephemeral, precisely *because* they are not formally inscribable, precisely *because* they cannot medially be “written down” (in the loosest of all senses), precisely *because* they are not understood as a musical form.[2] Musical notation and recording inescapably follows this logic of not so much copying the original sound but ascertaining certain conditions for recreating it (cf. Chanan 1995: 138), or, as art philosopher Nelson Goodman states: “The function of a score is to specify the *essential* properties a performance must have to belong to the work; the stipulations are only of certain aspects and only within certain degrees” (Goodman 1976: 212, my emphasis).

In the course of the evolution of musical notation from ancient letter notations to Gregorian and Byzantine *neumes* to the mensural notation of early modern Europe and the classical staff score, these systems not only made musical forms inscribable (and therefore intelligible) in a continuously higher degree of precision, but they were also able to include more and more aspects and parameters of music, thus making more and more sonic elements comprehensible as musical forms. Measure, tempo, durations, rests, mode, key, pitch all became a musical form at some point or another during the evolution of musical notation (even though, of course, that history will not always have evolved unilineally). As a consequence, the “writability” of these musical parameters made the recording of music through writing a complex art form with a range of highly formalized acoustic and meta-acoustic aspects. For composers of their time, the written scores also always, to a certain degree, “informed” the boundaries of what was musically imaginable (the Latin term “informare” means “giving a form, a shape to something”—cf. [Fuhrmann 2011: 121]).

As a result, the history of (Western) music can quite accurately be described as a progressive inclusion of virtually all accidental properties of acoustic events into what is essentially considered to be music. More and more aspects of sound became musical forms, which in turn changed their status from ephemeral to recordable. However, the gradual inclusion of more and more aspects into musical notation resulted in the expulsion not only of the accidental and ephemeral, but, ultimately, of (singular, elusive and informal) time out of *Zeitkunst* per se. Once even the smallest of sounds has become a musical form, i.e. musically "notable" (in every sense of the word: noteworthy, noticeable and writable), once any little noise or sonic aspect has potentially become an essential part of a musical event, once the products of the musical industry have technically become indefinitely reproducible with the highest acoustic fidelity, then the outside of music, everything that is not musically writable, seems to have become its inside.

---

[1] The Derridean “itérabilité” of course comes to mind—cf. [CHECK] (Derrida 1988: 23): “A writing that is not structurally readable—iterable—beyond the death of the addressee would *not* be writing.

[2] This is the reason why critique of the performing arts will never be able to do without metaphysics: Only a speculative language is able to capture the singular, non-codified and fundamentally non-codifiable aspects of a certain performance.

Roughly speaking, the onset of this process happened right after World War II, when electroacoustic media devices, tape recorders, became accessible and the avant-garde, the composers of New and Electronic Music, started engaging with analytical taxonomies encompassing virtually all possible noise (cf. e.g. Sinker 1997: 213). As one contemporary composer wrote in 1960:

> The subject of "total organization" leads naturally to the consideration of electronic media, since the latter make possible the exact control of all musical elements […]. A dynamic nuance thus not only can, but must, become a fixed quantity, as can and must, also, any tone in the whole range of pitch or color gradations. Every moment of music not only can but must be the result of the minutest calculation, and the composer for the first time has the whole world of sound at his disposal. (Sessions 1960: 31)

Every aspect of an acoustic event now seems to be medially inscribable, musically writable and repeatable as a musical form. And the project of music, in the long run, "ends up canceling the distinction between music and nonmusic", as Luhmann (2000: 295) claimed.[3]

The rupture—John Cage discovers "noise"

The notion of a progressive evolution of musical notation, as logically inevitable as it might seem on this first media-philosophical account, presents a striking rupture. This rupture, properly manifested only by the new aural media in the late 1940s, will stand in the center of the following considerations. I will argue that the possibility of electroacoustically capturing, storing and distributing as well as, on all these levels, technically manipulating and editing literally any pattern of noise, profoundly and irreversibly changes the relationship between writing and its sonic complement—and therefore changes the very notion of writing and written music altogether.

What does this rupture in media history consist of? "The whole question is very intellectual" (Cage 1961: 116), John Cage sarcastically warns in his *Lecture on Nothing*, the text from 1950 I am going to analyze at some length below. Cage's lecture reflects the medial rupture as it happens not only on different levels but also, as will be shown, in different modes. While autobiographically recalling his becoming an avant-garde composer during the 1930s and 1940s, Cage explains what fascinated him most in music, despite having, "so to speak, no ear for music" (Cage, quoted in Kostelanetz 2003: 64). He discusses an unexpected quality he found and admired in certain noises (unlike in tonality, for example: "I never liked tonality" [Cage 1961: 116]), namely their disturbing resistance to becoming a musical form: "I used noises. They had not been intellectualized; the ear could hear them directly and didn't have to go through any abstraction about them" (Cage 1961: 116).

The most characteristic feature of noises compared to sounds is their simplicity, their cultural greenness and unspoiltness, and the fact that they had not been and cannot possibly be musically symbolized or formalized. Unlike sounds, single or combined, noises as such lack meaning (within or outside of the musical system). Presented to the open ear, noises are a reminder of the difference between a sonic structure as an abstract, symbolic musical or verbal form and a sonic structure as an empirical, *per se* meaningless acoustic event.[4] Cage presents this difference as a difference in sound perception involving either the mind or the ear: "I learned that the intervals have meaning; they are not just sounds but they imply in their progressions a sound not actually present to the ear. […] What is being fooled? Not the ear but the mind." (Cage 1961: 116) Seen as such, the ear is able to more or less mechanically take up acoustic reality unspoiled by musical formalization and cultural signification, whereas the mind proves to be corrupted by intellection when it comes to sonic perception.

The sonic structure and symbolic meaning of sounds, tones and intervals (even twelve-tone) are always inextricably intertwined; noise, by being just noise, only noise and nothing but noise, is capable of liberating the composer from the hefty implications that come with sound's symbolic meaning. The difference between sound and its meaning, between (musical) mind and (acoustic) ear—a difference, that only noise (as the negation of this difference) can point out—has consequences for Cage: "I began to see that the separation of mind and ear had spoiled the sounds,—that a clean slate was necessary. This made me not only contemporary, but 'avant-garde'" (Cage 1961: 116).

What makes Cage "avant-garde" in the first place (and what made the difference between sound and noise apparent to him) is his early engagement with the new devices and techniques of electroacoustic media "which will make available for musical purposes any and all sounds that can be heard" (Cage 1961: 4), as he writes as early as 1937. Similarly, the *Lecture on Nothing* of 1950 recounts an experience in which electroacoustic noise strikingly exhibited its power to move beyond musical formalization: "The most amazing noise I ever found was that produced by means of a coil of wire attached to the pickup arm of a phonograph and then amplified. It was shocking, really shocking, and thunderous" (Cage 1961: 117).

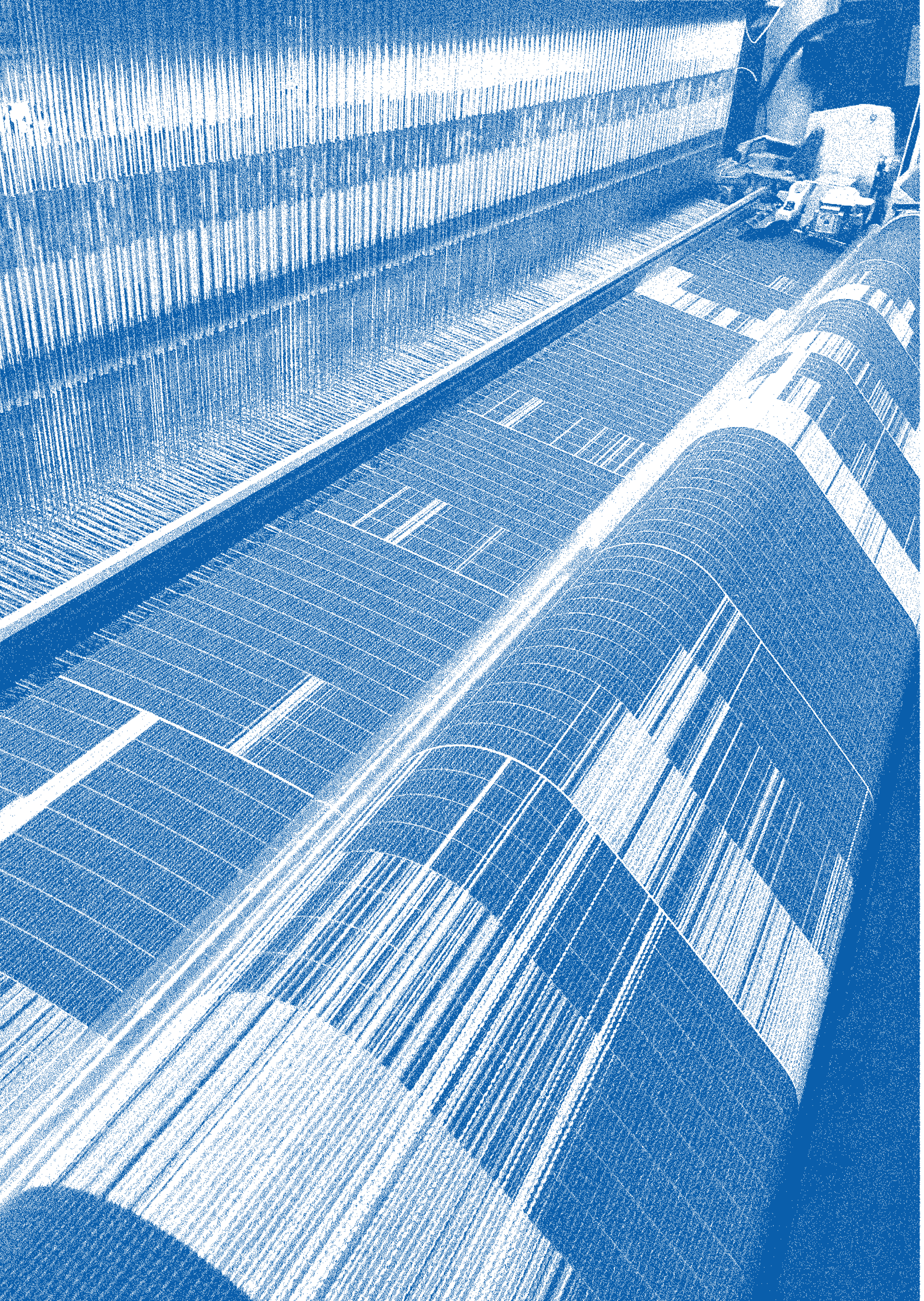
From a phenomenological point of view, Cage perceives the new devices not only as a means of altering habitual ways of listening, but, more importantly, as a kind of "thrust reversal" in the media history of music, as an inversion of the dynamics between mind and ear, for they do not only newly and shockingly bring noise into the musical business, they also demonstratively split up the "writability" of acoustic material into a purely technical, even mechanical notion of repeatability on the one hand, and an abstract symbolization and signification on the other.

Ever since the invention of the phonograph in 1877, audio devices have, for the first time in media history, competed with the tempting promise to record, store and reproduce not only musical or verbal sounds, but all audible aspects of an acoustic event without exception and with all the supplementary qualities that would formerly have been considered accidental properties. The phonograph creates a world in which virtually all and any noise is writable (i.e. indefinitely repeatable), in which every noise—as ephemeral as it might seem—has the potential to become sound. Indeed (and as a result of these technical possibilities, I would claim), Modernist, Surrealist, Dadaist, Bruitist and Futurist experimenters of all artistic genres, from the late nineteenth century to the *musique concrète*, were able to perceive noise as sound: they discovered, explored and celebrated a whole new soundscape beyond what had been previously musically or verbally notable (see Khan 2001). These schools quite naturally included noise into music (and literature) and began to "write" noise—with or without the use of new devices.

---

[3] Against this background, it comes as no surprise that composers in the forties and fifties of the twentieth century began, instead of applying classical scores, to engage more and more with so-called "graphical" music notations that resemble sketches rather than scores, exactly *because* they do not strictly denote specific sounds (cf. Goodman 1976: 187–189; Nonnenmann 2008: 25).

[4] Douglas Khan understands the difference between sound and noise as the difference between the abstract and the empirical of a certain acoustic event (cf. Khan 2001: 25). The Berlin based media archeologist Wolfgang Ernst captures this same difference with the Lacanian concepts of the Symbolic and the Real (cf. Ernst 2008).



However, what even the strangest of Bruitist poems and performances regularly fails to achieve is to capture the ephemeral, that is, the irreducibly singular and perishable qualities of noise. Instead, by exhibiting noise *as* a performance and making it medially writable and repeatable, it undergoes a process of symbolization in one form or another and thus irretrievably loses what Cage is interested in: "to let sounds be themselves" (Cage 1961: 10), "to use them not as sound effects but as musical instruments" (Cage 1961: 3).

Instead of selling noise as the new sound (and thereby more or less making noise a musical form), Cage takes the opposite direction: sound is to become noise again—concrete, meaningless, and ephemeral. The new aural media obviously still play a crucial role in Cage's development of this idea. Even if they make noise technically repeatable and medially inscribable, by the same technical means they also powerfully destroy the symbolic form of musical sound as well as its meaning. Deconstructively speaking, the symbolic dimension of a certain sound in technical reproduction is only present in its absence (cf. Gauß 2009: 277). What electroacoustic devices in fact capture, store and distribute, what these media inscribe and make repeatable, is not the sonic form of symbolic sounds but the acoustic mark of the actual sound event.[5] Those apparatuses function, "since Edison's days, as an analog medium" (Kittler 2010: 199): what they take up, record and play back are, at first mechanically, later by means of transformation into electromagnetic impulses, mere air vibrations, physical sound waves, not their culturally biased form.

Cage is probably one of the first to pay attention to and understand the dialectics of the new media: their ability to at the same time convert sounds into noises (medially inscribing their real and accidental properties instead of their symbolic form) and noises into sounds (making their ephemeral properties repeatable). And Cage is certainly the first to artistically explore this—by writing music: "the present methods of writing music," Cage writes in his *Credo* of 1937, "will be inadequate for the composer, who will be faced with the entire field of sound" (Cage 1961: 4). This allows for a retelling of Cage's musical career, at least from the late 1940s to the early 1950s, as a de-intellectualization of music, a de-symbolization of noise, a "musicalization of aurality itself" (Khan 2001: 102) and, eventually, a quest to literally write the ephemeral.

Writing in order to hear something one hasn't heard yet

Williams Mix (1953)

The quest begins in 1938, when Cage invents the prepared piano. Placing a pie plate on the strings of a regular piano and threading nails between them can in fact be considered a first (and remarkably simple) step to interfere with mind and ear, for it "introduces extreme unpredictability in this sense at least: that it renders obsolete all possible score analysis, if 'score' is taken to refer to the paper music that is considered to determine what counts in classical performance" (Sinker 1997: 215). Radically uncoupling sensory and intellectual perception, the prepared piano takes to extremes the difference between musical information and the actual listening experience.

In this regard, Cage's prepared piano pieces drastically draw attention to the fact that real sounds always and necessarily differ from their symbolic representation on sheet music, that actual music performances always have qualities that cannot be formalized in writing, and that every sound is fundamentally different in its physical properties. Even though Cage attempts to disrupt the bond between musical writing and sonic compliance, however, he does not yet push beyond the restrictions of a classical score: writing still essentially is imagination and symbolization. Here, writing music still means using conventional symbols in a pre-established notational system—except that the resulting compliance might sound different from what you expect.

After having used record turntables (playing test tones at variable speed) for the first time in *Imaginary Landscape No. 1* in 1939, the abovementioned coil of wire on the phonograph in *Imaginary Landscape No. 2* in 1942, electronic oscillators in Imaginary *Landscape No. 3* in 1942, and radio (playing mostly white noise) in *Imaginary Landscape No. 4* in 1951—all of which use a comparatively classical staff score, but still strikingly transform the scored sound—, Cage, according to himself, first encountered the audiotape "in Paris in the late forties" (Cage, quoted in Kostelanetz 2003: 167) when he met Pierre Schaeffer, an electrical engineer at the French Radio and TV station and inventor of *musique concrète*. At first, however, Cage did not see much potential in the first electromagnetic acoustic medium that had been a British war spoil after the liberation of Radio Luxembourg from the Nazis: "It didn't really dawn on me" (Cage, quoted in Kostelanetz 2003: 162). But in 1951, he gave it a try within the *Project for Music for Magnetic Tape* that was founded by New York-based architect Paul Williams. Pieces by Christian Wolff, Morton Feldman and Earle Brown resulted (cf. Austin 2004: 189, 236), as did Cage's *Williams Mix* that was written in 1952 and realized in 1953.

The score of this four-minute, fifteen-second piece for eight simultaneously played tracks of magnetic tape is particularly interesting, because it transgresses the boundaries set by ordinary sheet music. Instead of denoting an imaginary musical event using highly formalized marks in a pre-established notational system (i.e. notes in a staff), the score of *Williams Mix* is in fact a sketch that accurately maps and graphically organizes the new electromagnetic noise. Every single page of the score depicts "full-size," i.e. each a quarter inch in height (cf. Pritchett 1996: 91), two rows of the eight tracks of the magnetic tape, each ten inches in length. Played back by the customary fifteen inches per second, every page consequently represents the duration of no more than one and a third second of music. As a result, the entire score of the short piece consists of an exuberant 192 pages.[6]

In this respect at least, the score resembles a "dressmaker's pattern" (Cage, quoted in Kostelanetz 2003: 170), for it soberly constitutes the design for cutting and pasting pre-existing tapes. The raw material for the premiere (and Cage's only realization of the piece) consisted of approximately 600 recordings on magnetic tape with sounds roughly grouped into six categories (city sounds, country sounds, electronic sounds, manually produced sounds, wind produced sounds and small sounds requiring amplification) and three modes of constancy/unpredictability (frequency, overtone structure, amplitude). In an arduous process, these tape bits were cut, prepared and spliced according to the graphic disposition of the score. By chance operations Cage obtained exact specifications for each category and each sound category's place and form.

The musical result of this seemingly absurd process of handicraft—only possible with the help of friends—is hard to grasp for the mind and barely graspable for the ear: "[W]hatever associative properties the recorded sounds might have once possessed are almost entirely obliterated" (Khan 2001: 113). In this regard at least, Cage's berserk slicing out of conventional musical signification has obviously been successful.

Paradoxically, Cage achieved this effect by writing. Writable forms here dialectically function as a precondition for the deliberate formation of ephemeral (i.e. musically not formalizable even though technically repeatable) noises. In order to achieve this, Cage's writing smartly takes advantage of two characteristic features of sonic production with

---

5. This point is particularly important because it's the unfailing source of historic misunderstandings: Already Edison, for example, set out to invent a "machine that would record and reproduce the human voice" (Edison 1995: 696), thereby making writing obsolete. His later patented machines were all designed to ease business communication by applying the "more direct" means of oral speech instead of the strenuous letters of the alphabet. This intent confuses the symbolic dimension of writing with the characteristic of repeatability of the new apparatuses—quite naturally so, for it follows the logic that I exposed in the previous paragraph.

6. As a matter of fact [or: According to records], Cage had originally planned a twenty-minute piece but then apparently decided to call it a day after having written the first movement (cf. Austin 2004: 193).

electromagnetic tape that came into being with its invention: physical (instead of anthropological) chronometry and acoustic (instead of sonic) multidimensionality.

"Whether one uses tape or writes for conventional instruments, the present musical situation has changed from what it was before tape came into being," Cage retrospectively writes in his essay on *Experimental Music* from 1957, and continues:

> Since so many inches of tape equal so many seconds of time, it has become more and more usual that notation is in space rather than in symbols of quarter, half, and sixteenth notes and so on. Thus where on a page a note appears will correspond to when in a time it is to occur. A stop watch is used to facilitate a performance; and a rhythm results which is a far cry from horse's hoofs and other regular beats. (Cage 1961: 11)

The correlation between tape length and duration of the recording forces the composer—instead of enabling him to deliberately create sonic meaning by applying seemingly anthropological patterns—to fill in pre-existing blanks representing continually elapsing time. The composer thus becomes an "organizer of sound" (Cage 1961: 5) in a homogenous space entirely indifferent to musical signification, "because one second of sound is so many inches on tape. That means that the old meters of two, three, and four are no longer necessary, that space on a page is equivalent to time" (Cage in Grimes and Cage 1986: 48).[7]

Using such a matrix, graphical writing thus joins the indifference of the tape reel toward musical forms, musical semantics and musical meaning. In this chronometry, there is simply no space available for semantic rests, dramatized climaxes and the like. The composer's decision not to fill in sound at a particular place will not (semantically) count as a rest; instead, it will be (semiotically) read as a blank—a blank which will not remain silent after all, but will be "mechanically" filled with white noise by the apparatus.

When transferred to the score, the rigid time/space-correlation of the tape as a two-dimensional medium imposes a certain semantic blindness on the composer concerning his sonic material, for he is not working with musical forms or even actual sounds but with material records (grouped or not), with nontransparent and fragmented stripes of band. When Cage "wrote," i.e. sketched, *Williams Mix* (and even while he worked on realizing it), he could not possibly have had an accurate idea of what these assembled bits and pieces would sound like. But it is not only the unpredictability of this operation that Cage takes advantage of: Angular and skew cuts in the material band will inevitably also destroy the "realness" and recognizability of a particular sound; they will produce noise that has emphatically been unheard (of). By suspending the linearity of time, selective manipulations—such as cutting, copying and crossfading, isolating, reversing and superimposing these fragments— will render noise acoustically multidimensional. Music, as it were, has become editable (cf. Chanan 1995: 130).

Cage once stated: "You see, I don't hear music when I write it. I write in order to hear something I haven't heard yet" (Cage, quoted in Kostelanetz 2003: 63). *Williams Mix's* ludicrously laborious score seems to take this statement to a whole new level. From media history's point of view, the electromagnetic tape here seems to open up space for a new notion of writing. What is being "written down" no longer registers pre-existing thoughts and ideas (musical or not), nor is Cage's sketch a graphical drawing requiring interpretation in order to denote sound (as Feldman's compositions do, for example). On the contrary: The written score here serves as a quasi-mechanical program that precedes but does not anticipate in every detail its sonic and musical compliance.

Quietly composing silence

4'33" (1952)

> What is *4'33"*? A piece of music? A bit of *épater les bourgeois*? Musical dada? Zen Buddhism? The random sounds of the environment revealed by the framework of David Tudor's non-performance? Theater? Conceptual art? A hoax? A mere nothing? (Salzman 1982: 6)

Whatever *4'33"* actually *is*, its evolutionary history proves to be quite interesting when viewed from the perspective of written musical composition: Seen in this light, the iconic and world famous "TACET"-score (published typewritten in 1960, calligraphic in 1986) is the late (and strikingly simplified) result of a long process of transformations. The first verifiable conceptual references to *4'33"* can be traced back to *A Composer's Confession*, an address Cage gave at an art-convention in Poughkeepsie on 28 February 1948. Cage then announced that he wanted to "compose a piece of uninterrupted silence and sell it to Muzak Co. It will be three to four and a half minutes long—those being the standard lengths of 'canned music'—and its title will be Silent Prayer" (Cage 1981: 43).

But it would take some time, and some programmatic shifts, too, until David Tudor famously closed and re-opened the keyboard lid of his piano three times in Woodstock on 29 August 1952 to indicate the beginnings and the endings of the three movements—each of a different length, adding up to four minutes and thirty-three seconds of silence—which is, to be clear, "silent" only under the premise that silence is defined not as the absence of noise but rather as the absence of intended sound, or a silence, as Cage himself memorably stated, that is "silent" only under the premise that "silence is not acoustic" (Cage, quoted in Revill 1992: 164). The score, visibly "read" by Tudor while "playing" and turning pages, is unfortunately lost. Although the postmodernist "TACET"-score admittedly was the first to be officially published, the original hand-written manuscript of *4'33"* most certainly looked substantially different.

Apart from a conceptually developed second manuscript by Cage himself that served as a birthday present in 1953,[8] David Tudor, the performing pianist of *4'33"*'s debut, has twice tried to reconstruct the "silent piece." The first of these versions was made for a reenactment of the original in 1982 at Symphony Space in New York, thirty years after its premiere. This variant comprises fourteen pages and a cover sheet.

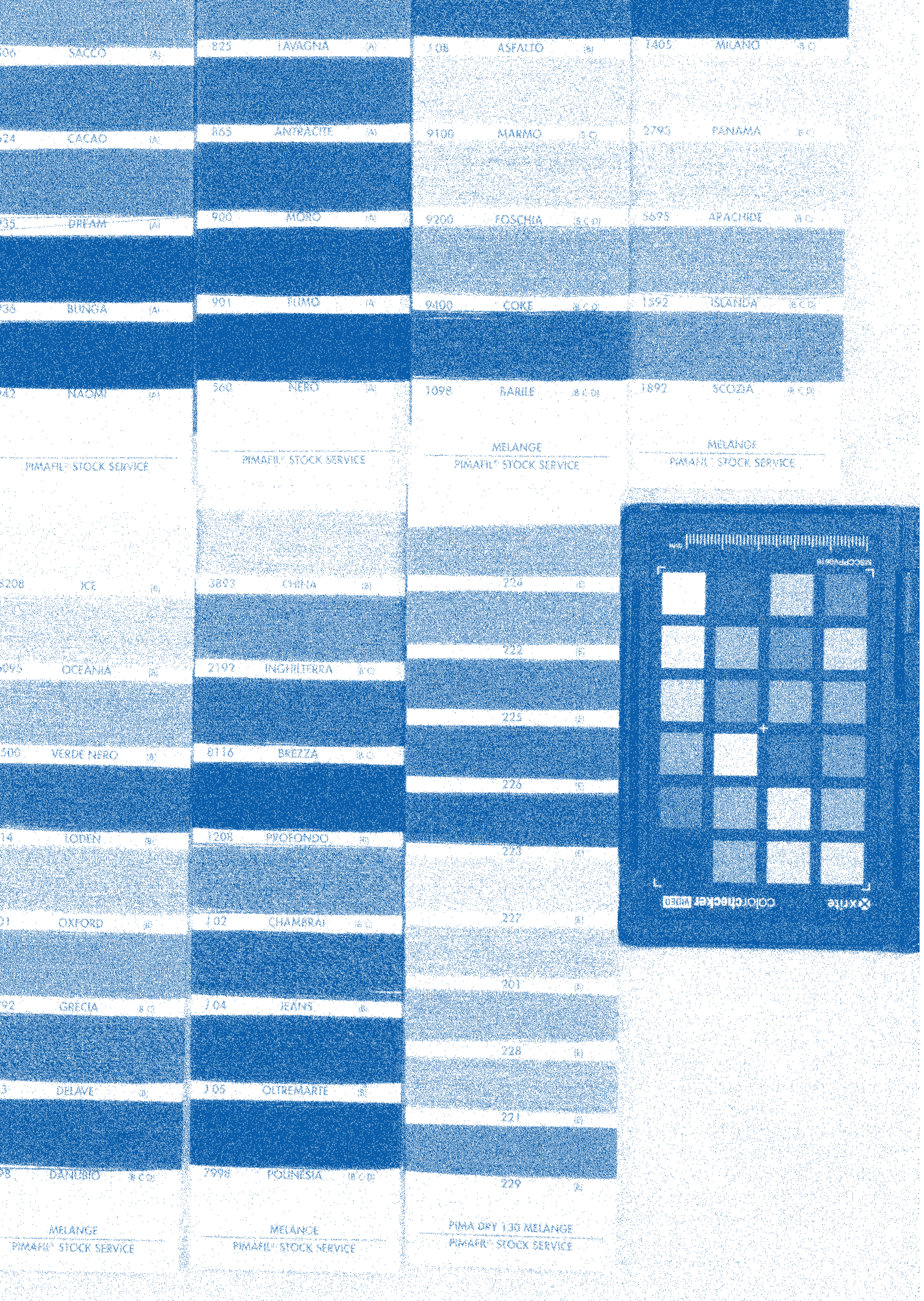
The second reconstruction was written in 1989 for a video documentation on John Cage. Musically, this second reconstruction is more elaborate (since it avoids self-contradictory stipulations) and is therefore considered more adequate. The fact that every page represents thirty-two seconds of performance time, however, has the unfortunate consequence that the first page needs to be turned just one second before the first movement ends.[9] David Tudor's second reconstruction contains eight pages in total for the three movements.
This second reconstruction is written chronometrically, which is rather unusual for staff scores. This indication is found on the top left of the first page in a metric system (where Tudor's first reconstruction uses inches to indicate time): two and a half centimeters correspond to a quarter note. The score furthermore has a time signature (four/four) and a tempo

---

[7] Cf. also the early commentary by Cage in *Credo*: "The 'frame' or fraction of a second, following established film technique, will probably be the basic unit in the measurement of time" (Cage 1961: 5).

[8] It was a birthday gift for the artist friend Irwin Kremen, to whom all the subsequent versions and variants of *4'33"* are dedicated. This time/space-proportional ("1 page=7 inches=56"" [are the quotation marks necessary here?]) manuscript, published in 1993, already specifies that *4'33"* is "for any instrument or combination of instruments" and consists of twelve pages that show one or two single lines, together with time indications of when a movement ends.

[9] The durations of the single movements are not always consistent, even though they always add up to *4'33"*: The leaflet for the Woodstock-premiere specifies 30", 2'23" and 1'40" for the three movements respectively, whereas the (later) published "TACET"-scores and, along with them, Tudor's reconstructions require durations of 33", 2'40" and 1'20".



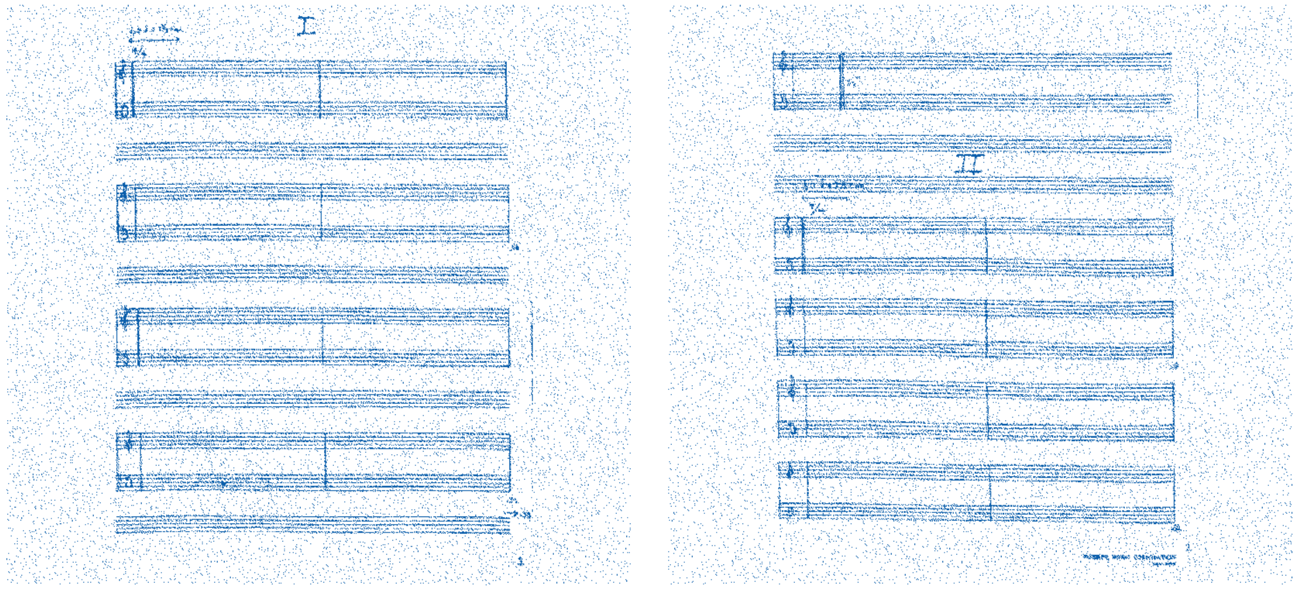


Figure 1 and 2: David Tudor's second reconstruction of the original score of *4'33"* (1989). Page one and two (recto and verso). Published with permission of The Getty Research Institute, Los Angeles (980039)

indication (sixty beats per minute). The clefs may give a hint as to what instrument is (not) to be played during a performance of *4'33"*: the violin and bass clefs strongly suggest a keyboard instrument. On the first page, every third line of staffs is left blank and thus paratextually serves to separate the significant lines of the work from its margins.

Those significant lines, however, are—in strict accordance with the instruction *not* to play an instrument—left blank, too (except for the above-mentioned clefs and bar lines). Interestingly enough, these two bar lines per row denote intentionality: In lieu of rest symbols, they *semiotically* make clear that the staff lines are intentionally and significantly left blank. Only the bar lines emphatically show that the total absence of graphical marks in a pre-established notational system is to be read as absence of intentionally produced sounds.

Even though the composition process is often, and rightly so, associated with *Music of Changes*, as it uses the same elaborate method of chance operation as well as a grand staff score (cf. e.g. Pritchett 1996: 78–88), the fact that *4'33"* (unlike *Music of Changes*) is notated in time/space-proportion puts it closer to *Williams Mix*. The seemingly absurd economics of writing—fourteen or eight pages respectively for four minutes and thirty-three seconds of not playing an instrument—resembles *William's Mix's* laborious writing process, which took place the very same summer of 1952 in which he wrote *4'33"*.

The assumption that the writing process of this piece must have been significantly and essentially more complex than the purely verbal "TACET"-scores and the later developments of the concept piece might make one believe,[10] corresponds to a (confusingly dialogical) statement of Cage's *I* from his 1988 *Charles Eliot Norton Lectures* at Harvard:

> […] i built up the silence of each movement and the three movements add up to *4'33"* i built each movement up by means of short silences put together it seems idiotic but that's what I did […] all i had to do was work with the durations *then it was a very spontaneous creation* i built it up very gradually and it came out to be *4'33"* i just might have made a mistake in addition *i was thinking of like whimsical or something maybe rather than spontaneous* what were you thinking about *kind of whimsical i mean in other words* oh was it a joke you mean *yeah i mean like at six o'clock that evening of the night that you created it were you thinking that tonight i'm going to create a new piece or did suddenly* no no it took several days to write and it took me several years to come to the decision to make it and i've lost friends over it […]. (Cage 1990: 20–22)

The title of the work, *4'33"*, Cage says here, was set *after* the composition; it developed by writing it down. The musical idea of *4'33"* has been generated graphically, in other words, as an inscription of non-inscriptions on a music sheet. In this respect at least, *4'33"* indeed works very much like *Williams Mix*: the tape, with all its new medial implications, especially chronometry and multidimensionality, informs the written score.

4'33" for the first time in history transfers the electroacoustic medium's mechanical time/space-correlation to the classical staff score and uses the resulting grid-system as a "Denkform" (cf. Fuhrmann 2011), as a way of newly thinking music. In his reconstruction, Tudor indicates the chronometry of the piece even twice: He specifies that two and a half centimeters of the score indicate one second of elapsing time, and he also redundantly establishes a four/four-measure with a tempo of sixty beats per minute. His score thus stipulates two rigid reading directions: one, semiotic, it would seem, for (new) machines, and one, semantic, for (old school) musicians.

As has been shown in the discussion of *Williams Mix*, a chronometrical transfer results in negatives: The mechanical time/space-correlation cuts out the symbolic dimension of elapsing time, cutting out its cultural meaning. Tudor's questionable double-indication of measure and tempo therefore isn't only redundant but useless, if not misleading. The more or less mechanical way of "reading" the score's two-dimensional surface transforms its (non)inscriptions into semiotic instructions, not into semantic meanings. This is also the reason why there are no rest signs in the score of *4'33"*: There are no, and there cannot be, rests in the strict, that is, in a meaningful, sense: the absence of inscriptions does not symbolize deep momentous rests, but refers to the presence of white noise.

The second feature of tape, its multidimensionality—the fact that the tape can be alienated and manipulated as well as cut or torn in a way that renders its sonic form not only incalculable but also strikingly new to the ear—impacts the composer in the form of a certain blindness as concerns his material. The composer cannot possibly know what the realization of his composition will sound like. In addition to this, the manipulation of the tape results in noises that have no correspondence in a pre-existing sonic reality and are thus a means of exploring radically singular instances of acoustic events.

---

[10] The "TACET"-scores that state that "the work may be performed by an instrumentalist or combination of instrumentalists and last any length of time," clearly already develop the piece further. *0'00"*, a *"solo to be performed in any way by anyone"* of 1962 and *one* of 1989 can be understood as further elaborations of this concept.

[11] Surprisingly, there are quite a number of records of (performances of) *4'33"* for sale on the market. Insofar as the compositional writing process emphatically disrupts the linearity of time, no record (that necessarily proceeds in one dimension only) will ever really grasp what happens in a given performance of *4'33"*. Herein lies the motivation of this article: not to directly present instances of Cage's music but rather—via links to the Worldwide Web—point to (medially corrupted) representations and re-enactements [CHECK]. For Cage's ambivalent attitude towards recordings of his pieces, see (Tone 2003, 12 et seq.).

4’33” ingeniously leaves out the apparatus altogether, and this enables Cage to write the ephemeral, the unrepeatable and emphatically singular, as paradoxical as this might at first have seemed. Cage writes what has not been and cannot possibly be musically formalized nor technically inscribed.[11] What could be more ephemeral, perishable, drastically and fundamentally non-writable than silence? *4’33”*, however, succeeds in denoting in symbolic ways this fragile, emphatically singular and essentially inimitable presence that vanishes in the very moment it comes into existence.

Denoted by the score, *4’33”*’s unrecordable performance, the unique acoustic event, the instantaneous musical product (it might be safer to refer to a “proto-” or “meta-musical product”) forms and makes audible what otherwise, in any other piece of music, would be thought of as random sound or ambient noise. Only the composer’s written accumulation of zero-inscriptions allows a conceptualization of accidental, transitory and perishable, that is, of emphatically ephemeral noise as (proto or meta)music. Musical notation here does not serve as a (formalized) code for music anymore; on the contrary, it inscribes what essentially (by definition) is *not* writable: the accidental white noise as sonic trace.

Whatever *4’33”* actually *is*,[12] my intention here was to show that *4’33”*—as much as it may have been influenced by philosophy and art (Robert Rauschenberg’s famous *White Paintings*, for example, or Guy Debord’s *Hurlements en faveur de Sade*)—is also, and to no little degree, determined by media history.[13]

Establishing the Program(matics)
Lecture on Nothing

Nevertheless, *4’33”* is not the first piece in which Cage mastered writing the ephemeral: that would be his 1950 *Lecture on Nothing*, held for the first time *after* having encountered tape, but two and three years respectively *before* the debuts of *4’33”* and *Williams Mix*. Cage’s lecture has been quoted above because it theoretically reflects the impact of the new electroacoustic media on musical perception and the prcoesses and methods of composers. The possibility of technically capturing, storing, distributing and, on all of these levels, manipulating any and all sound regardless of form not only allows for whole new sounds and noises to be musically discovered, but demands new modes of writing. This level of reflection in content, however, becomes even more apparent in the lecture’s form, for it arises from—*mutatis mutandis*—the very same means of composition as *4’33”* subsequently does.

In the foreword of *Silence*, Cage’s first collection of writings and lectures, published in 1961, he programmatically writes:

> For over twenty years I have been writing articles and giving lectures. Many of them have been unusual in form—this is especially true of the lectures—because I have employed in them means of composing analogous to my composing means in the field of music. My intention has been, often, to say what I had to say in a way that would exemplify it; that would, conceivably, permit the listener to experience what I had to say rather than just hear about it. (Cage 1961: ix)

Cage’s application of compositional means in his lectures, as well as implementing methods that make a distinction between just hearing and experiencing through listening, determines the perspective to be taken when analyzing the *Lecture on Nothing*: it can be seen as a score for an oration, a notation of a primarily acoustic event. “This space of time / is organized,” reads a line of the Lecture on Nothing. “This is a composed / talk, / for I am making it / just as I make / a piece of music,” reads another two (Cage 1961: 109 et seq.).

In this respect, the *Lecture on Nothing* presents a score quite analogous to the ones discussed above, and maybe the talk is best understood as a silently noisy musical piece disguised as a lecture. Instead of genuine musical sound, the *Lecture on Nothing’s* score organizes the written trace of an oration as its primary sonic material to exemplify the difference between sound and noise, between mind and ear, between sonic form and acoustic reality. The implication of language and linguistic meaning, however, repeats and doubles this difference and engages with the incurably complicated medialities of spoken and written language (see Kotz 2007: 14–28 on this subject).

Cage’s lecture is, of course, not put to paper conventionally. Instead, the written sentences of his talk are fixed in a relatively strict chronometrical time/space-frame and thus make use of tape’s equation of length and duration. *“There are four measures in each line and twelve lines in each unit of the rhythmic structure,”* Cage comments in an italicized introduction and continues by stating that his notion of “measure” (that would be a musical form) is metaphorical:

> *The text is printed in four columns to facilitate a rhythmic reading. Each line is to be read across the page from left to right […]. This should not be done in an artificial manner (which might result from an attempt to be too strictly faithful to the position of the words on the page), but with the rubato which one uses in everyday speech. (Cage 1961: 109)*

The first unit (out of forty-eight) reads as follows:

I am here ,   and there   nothing to say   .
is

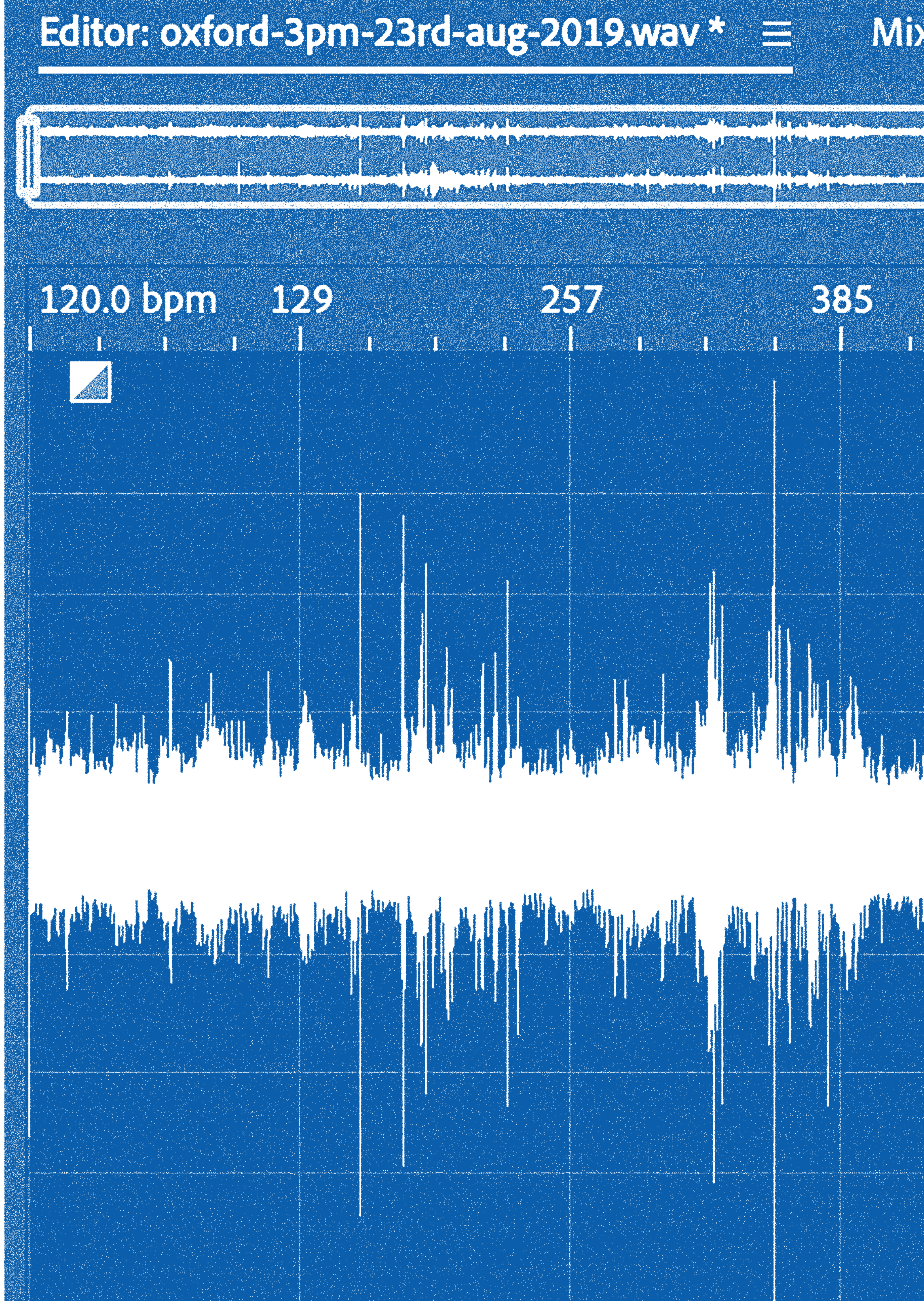
If among you are
those who wish to get somewhere   ,   let them leave at
any moment   .   What we re—quire   is
silence   ;   but   silence requires
what
is   that I go on talking   .
Give any one thought
a push   :   it falls   easily
down
;   but   pusher   and   pushed   pro–duce   that enter–
the   the
tainment   called   a dis   cussion   .
–
Should we have one later ?   (Cage 1961: 109)

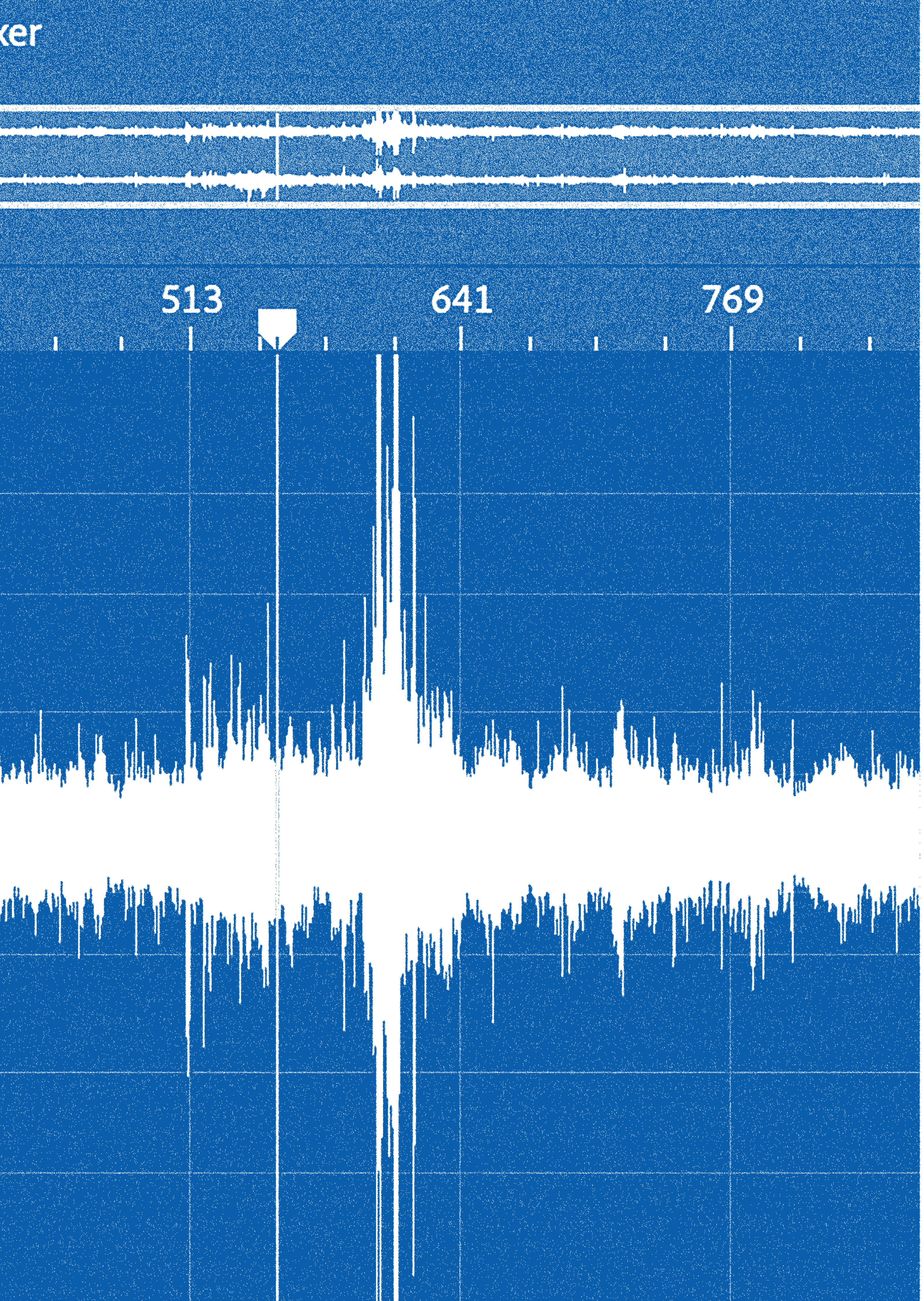
---

12. Critics and theorists of different scholarly disciplines have come up with, in general, three different, more or less programmatic, approaches (cf. Gann 2010: 188): Some treat *4’33”* as a philosophical idea, following in this point the composer, who regularly identified the piece with Zen Buddhism. Silence in this respect urges the listener not to understand, but to be (or to become) aware of the noises this “silence” consists of. Some scholars have focused on the intriguing indeterminacy of the piece, following Cage’s development as a composer. With *4’33”*, where the chance-generated compositional blanks in the performance are filled with environmental sounds, the composer frees himself (and the performers as well as the listeners) of controlling sounds at all. Some researchers instead stress the theatrical aspects of the work, following in this point the later versions and variants of *4’33”*. The point of the “silent piece” in this regard consists in framing a mere nothing: the accidental and situational soundscape of its own context, and thus reflecting upon the nature of performance *per se*.

13. The often ignored fact that Alphonse Allais (cf. Solomon 2002; Schröder 2012: 62 et seq.) had written a silent piece in many aspects pretty much like *4’33”* half a century before Cage (he had also painted monochrome paintings), supports this point. The satiric *Marche funèbre. Composée pour les funérailles d’un grand homme sourd* is not the same work as *4’33”*, even if its score looks perfectly the same and denotes the very same acoustic event. The difference—and this is where Cage’s work is much more radical than Allais’—is that the “acoustic event,” with Cage, having experienced tape music, cannot refer to symbolic rests (silence in the common sense: the absence of musical sound) anymore, but to real noise (the presence of unformalized and ephemeral soundscapes).

14. As Maier has discovered, there is a significant irregularity in this structure: The fifth unit of the fifth large part does not consist of the mandatory twelve, but only of eleven, lines. As a result, the lecture does not have a total of 2304 (forty-eight times twelve lines with four measures each), but only 2300 measures. Maier parallels this “mistake” with tiny irregularities of his musical pieces (cf. Maier 2001b: 137).





This first of forty-eight paragraphs is itself divided into forty-eight “measures” (twelve lines with four “measures” each), reflecting in this the macro-structure of the entire lecture, and each unit on both levels is in turn divided into five parts using the chance-generated and explicitly meaningless proportions of 7 : 6 : 14 : 14 : 7.[14] According to Cage, this establishes a “micro-macrocosmic / rhythmic structure” which he finds “acceptable / and accepting,” in which he can fill material—or none. The entire talk in total is thus “contained / within / a space of time / approximately / forty minutes / long” (Cage 1961: 112).

The margins between columns (often, but not always stressed by punctuation marks and hyphens: linguistic meta-forms, comparable to the bar lines in *4’33”*, that obviously do not have any sonic compliance but only exist in written language and belong to the symbolic order) mark the default positions of this rhythmical pattern. The linear flow of words is thus organized in a matrix that divides everything to be said (and everything *not* to be said) in fractions of equal durations (about one second each). Disregarding Cage’s own demand for everyday speech’s *rubato*, the visual appearance of the score disrupts the “natural” flow of spoken language over and over. Literacy and orality, the talk’s visual and its aural guise, thus engage in a conflicting and dynamic relationship analogous to the multidimensionality achieved by cutting and splicing the tape in the pieces analyzed above.

Correspondingly, the content of Cage’s talk is concerned with exploring its own (silent) surroundings. Similar to the unwavering provocation of public anticipation with the debut of *4’33”*, Cage virtuously plays with the expectations created by announcing a lecture in which the master explains his artistic beliefs: “I am here, / and there is nothing to say.” Nothing, Nothingness, in fact would have been a literary and philosophical topic increasingly discussed during the dawn of the tape era, but even though there are passages that tend to exploit this mystically, Cage in his lecture literally has “nothing to say.” “What we require / is / silence,” Cage postulates instead and thus avoids the prospect of broaching substantial issues, while he, at the same time, establishes a meditative level by presenting his lecture as an entirely and exclusively sonic event, drawing attention to the noise and ambient noise of his talk respectively. Nevertheless, any attempt of the audience to enjoy the lecture contemplatively and (proto)musically is immediately undermined by the articulated urge to substantially say something (even if it is nothing): “[B]ut what silence requires / is / that I go on talking.” The talk thus achieves dynamical and dialectical properties in which sonic structure and substantial lecture, noise and the theoretical reflections on noise, mind and ear perplexingly become each other’s environment and respective reference: “Nothing more than / nothing / can be said” (Cage 1961: 111).

“But now / there are silences / and the words / make / help make / the silences” (Cage 1961: 109). The lecture oscillates between expectations for the speaker to fall silent or to continue talking, between intellectual interpretation and random noise, without giving a solution in favor of one side or the other. The articulation of the possibility to fall silent can be filled with meaning; words can be perceived as singular noises, while the breaks between the words are meaningful silences. The talk sophisticatedly elaborates on the cultural unspoiltness of noises while itself consisting of highly symbolic noises (i.e. words). The distinction between the meaning of a word and its sonic structure becomes questionable and correspondingly, also the distinction between significant silence (rest) and random silence (white noise).

Postulating randomness—“[c]learly we are beginning to get / nowhere” (Cage 1961: 114)—, the fourth large part of Cage’s talk consists of stereotypical phrases exhibiting their own rigid time structure as well as the fact that they ostensibly lead to nowhere. These units are sequentially “repeated” seven times in total:

Here we are now		at	beginning
		the	
of the fourth large part		of this talk.	
More and more		I have the feeling	that we are getting
nowhere.	Slowly	,	as the talk goes on
,	we are getting	nowhere	and that is a pleasure
.	[…]		Here we are now
,	a little bit after the	beginning	of the
fourth large part		of this talk	.
	More and more	we have the feeling	
	that I am getting	nowhere. […]	Originally
	we were nowhere	;	and now, again
,	we are having the	pleasure	
of being	slowly	nowhere.	If anybody
is sleepy	,	let him go to sleep	.(Cage 1961: 118 et seq.)

Two paragraphs in the fifth and last large part of this lecture score are completely left blank, but, of course, they still need to be “verbalized” according to the instruction of this score.[15] In the lecture’s own words, the condition for these blank sections even to be “spoken” “is the continuity / of a piece of music,” more precisely: it is the rigid framework established first and foremost by tape, by the chronometry of the reel and its characteristics discussed at length above. Similar to the continuous progress of the tape record reel and its indifferent playing back of what is being said regardless of the symbolic forms that might or might not be implied, the lecture’s score documents a sonic trace. Cage goes on: “Continuity / today, / when it is necessary, / is a demonstration / of disinterestedness” (Cage 1961: 111). The inscriptions thus do not refer to symbolically formalized meaning, all they denote is sonic compliance, an instance in framed time. Along with this, the notion of repetition becomes obsolete, as tape renders technically reproducible any and all sounds that can be heard, while at the same time destroying their symbolic form. Repetition becomes thus only a symbolic term, as it can only be perceived as such in the listeners mind (but not their ear): “We need not destroy the / past: / it is gone; / at any moment, / it might reappear and / seem to be / and be the present. / Would it be a repetition? / Only if we thought we / owned it, / but since we don’t, / it is free / and so are we” (Cage 1961: 110).

The indifference of the tape toward what is being said even extends to indifference as to whether something is being said at all. “Each moment / presents what happens” (Cage 1961: 111), regardless of content or meaning. Non-inscriptions in the magnetic tape’s reel are thus treated in exactly the same way as inscriptions: Blanks no longer serve as a meaningless background but start to become significant, albeit not yet meaningful. They are mechanically translated into a sonic compliance, and the sonic realization of non-inscriptions, silence or white noise, is neither symbolic (as writing is) nor real (as acoustics is), neither abstract nor empirical, but arises from the dialectics between abstract and empirical, between the Symbolic and the Real.

Compared to *4’33”*, the mammoth two-dimensional emptiness of the oration’s score even intensifies the inscription of an acoustic zero-event, as the established context it challenges does not consist of experimental music but of verbal communication. Instead of denoting an ephemeral meta-musical event by inscribing non-inscriptions, the (un)written language here interferes with its sonic compliance as oration *and* its verbal meaning as a text. Wherever this program of writing is suspended by blanks, the (silent) talk consequently addresses both interchangeably: the sonic environment of a (proto)musical event and the silent environment of a substantial lecture. “I have nothing to say / and I am saying it / and that is poetry / as I need it” (Cage 1961: 109).[16]

---

15. According to Maier, 667 out of the overall 2300 (roughly speaking: three out of ten) “measures” are silent, i.e. they are either left blank or only denote a punctuation mark (Cf. Maier 2001a: 114, 174–182). In conversion [Altogether?], those 667 measures would add up to a good thirteen minutes of cumulative silence.

No record, be it as acoustically accurate as technically possible, will be able to grasp what occurs while Cage is speaking pauses in his talk: this silence cannot coherently be described in physical terms only. Instead, the silence refers to its being programmed by writing; it refers to the symbolic order of formalized inscriptions in which it was generated in the first place. But this silence is not purely symbolical, not concealment in the sense of a conscious communicative act, but sensory silence: white noise. It is the dialectic and dynamic interference of the symbolic system of writing on the one hand and the empirical reality of physical acoustics on the other that Cage specifically explores in order to inscribe emphatic ephemerality: the interference between mind and ear. The blunt chronometry and the nonsemantic multidimensionality of the tape reel explains the economic absurdity of leaving blank two entire sections (equaling five fourths of a page) to generate two minutes of silence instead of using, for example, metalinguistic instructions as in the "TACET"-score of *4'33"*. The chronometrical grid enables Cage to explore new possibilities of sonic presence that only became accessible on a sensory level in the era of tape after 1945 and, subsequently, thinkable on a rational level. The *Lecture on Nothing* can in this respect actually be understood as the legitimate predecessor of the landmark *4'33"*.

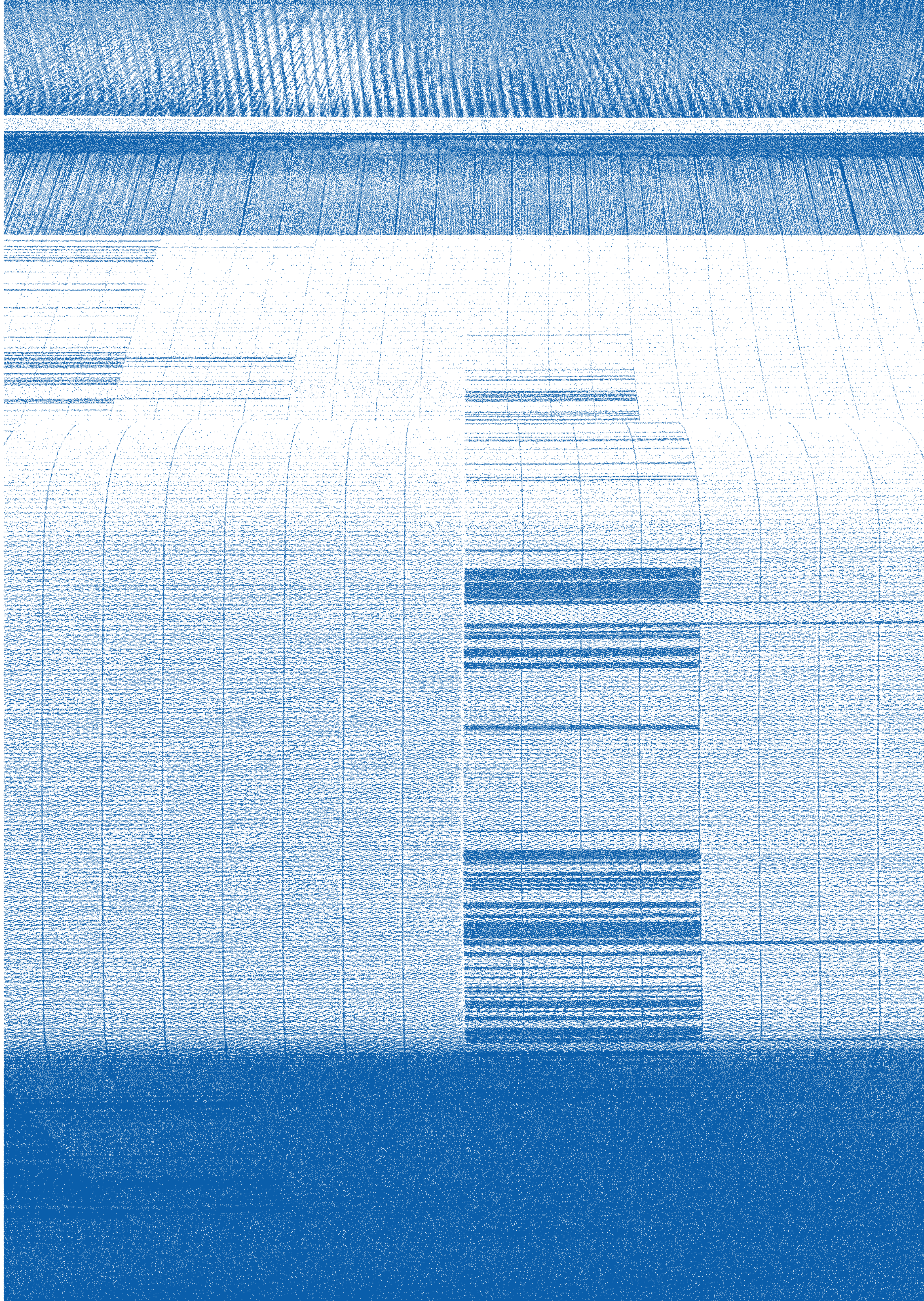
This essay, originally published in The Journal of Sonic Studies 13, 'Acoustic Ephemeralities', 2017, is reproduced here by kind permission of the author Dr Simon Aeberhard.

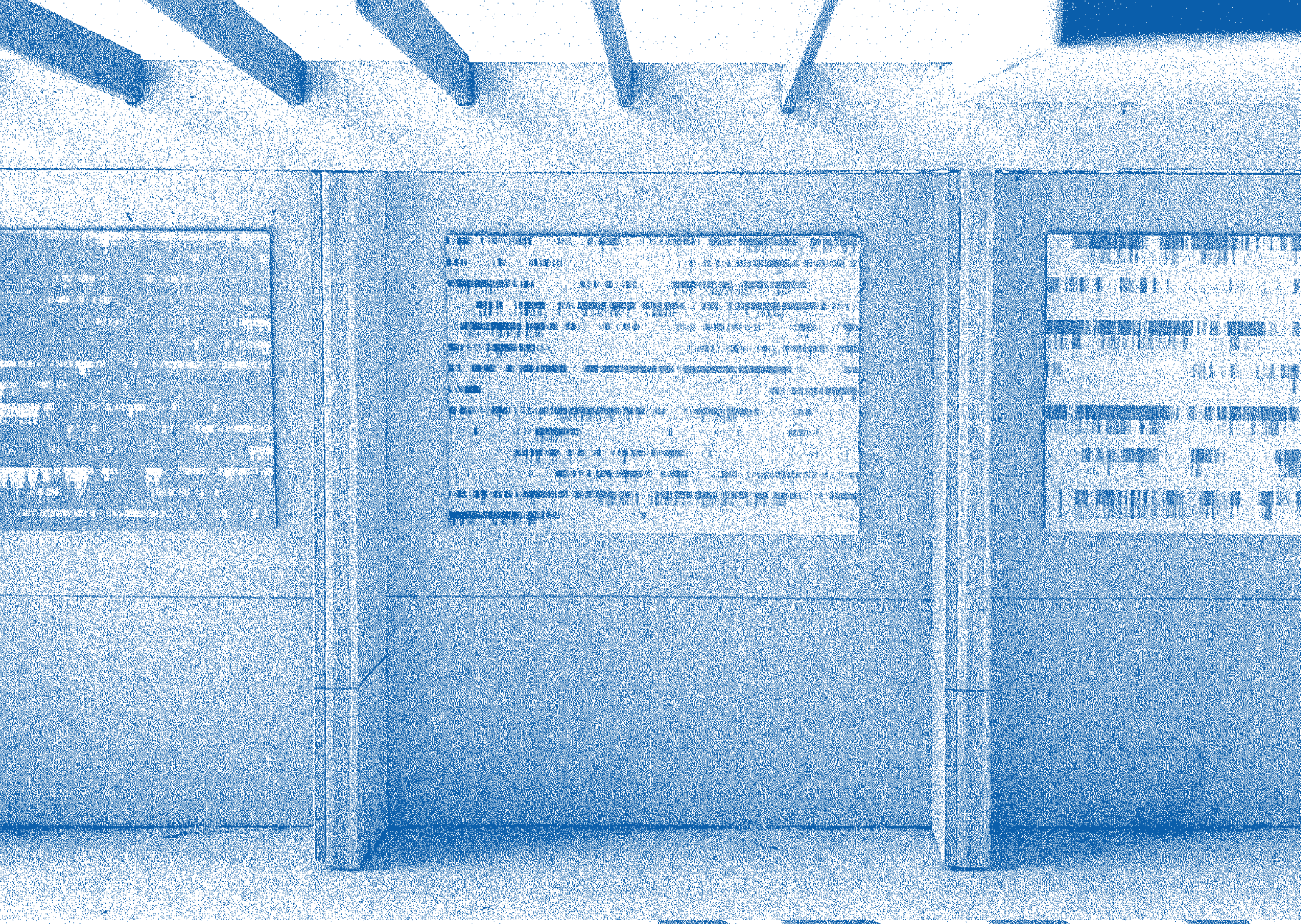
---

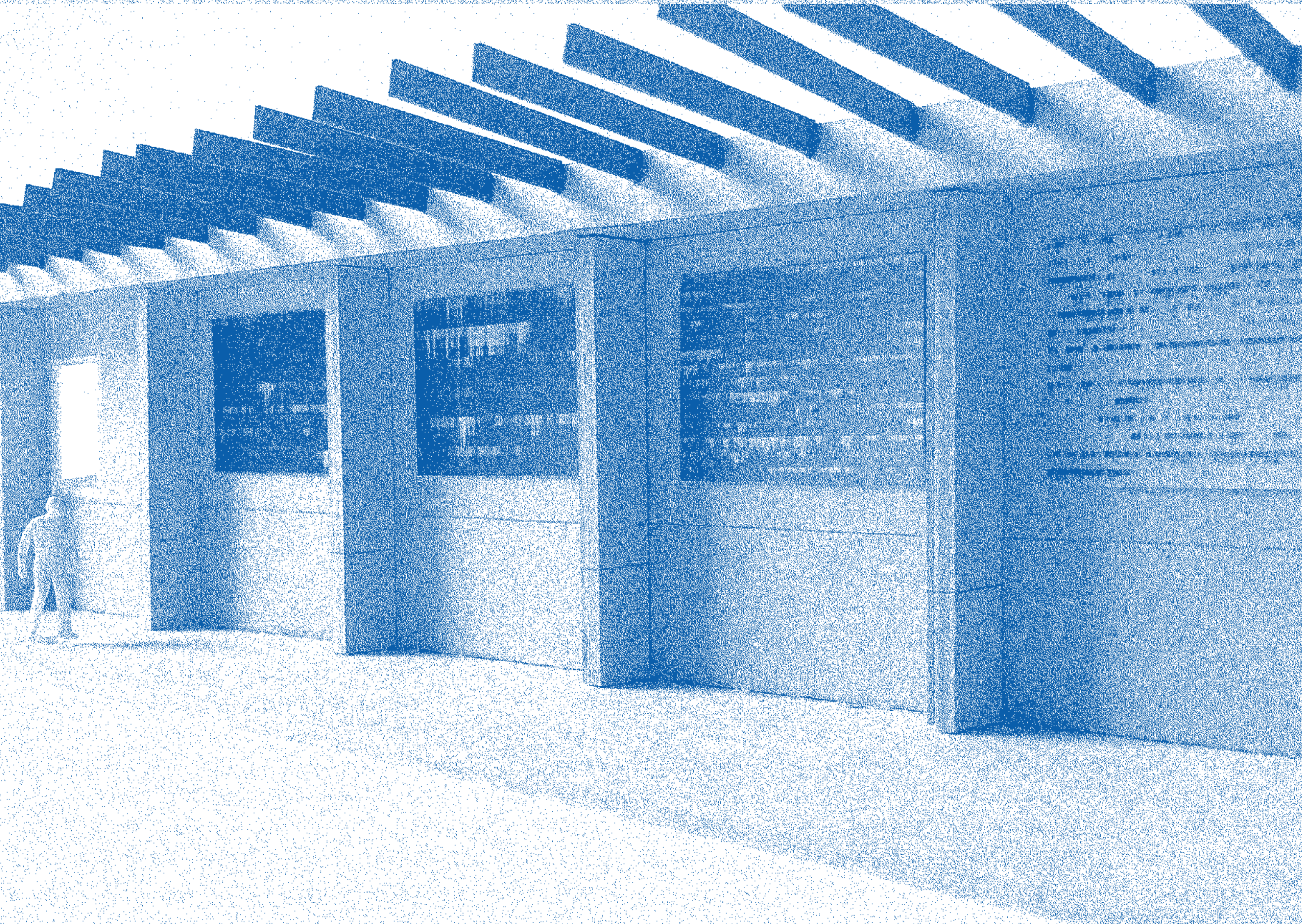
16. It is in fact instructive to ask what the actual difference between Cage's monumental lacuna and the lacunas in common poesy is. At first glance they appear to be the same: The language of lyric poetry is, as is Cage's talk, fixed within a (more or less) pre-established metrical frame; the hiatuses are significant and need to be actively read. The oration of the *Lecture on Nothing*, however, cannot possibly be understood as the conscious utterance and enunciation of a lyrical persona. Accordingly, the suspension of language, as it becomes manifest in those lacunas, cannot be perceived as an active silencing, as an interruption or a concealment of what the speaker has to say. Instead, Cage's score resembles a program: The (chance-generated) structure demands a blank space decidedly not rooted in conscious utterances of a subject that has something (i.e. nothing) to say. Even though this blank space at first is graphically specified within the matrix, it is to be mechanically "translated" into a sonic event within physically elapsing time, thereby inevitably generating white noise. As a speaker, Cage is therefore technically-speaking not the author of his *Lecture on Nothing* and cannot claim an originator's rights for what happens while he's not talking. The speaker has become the medium of his text-as-event, not its author.

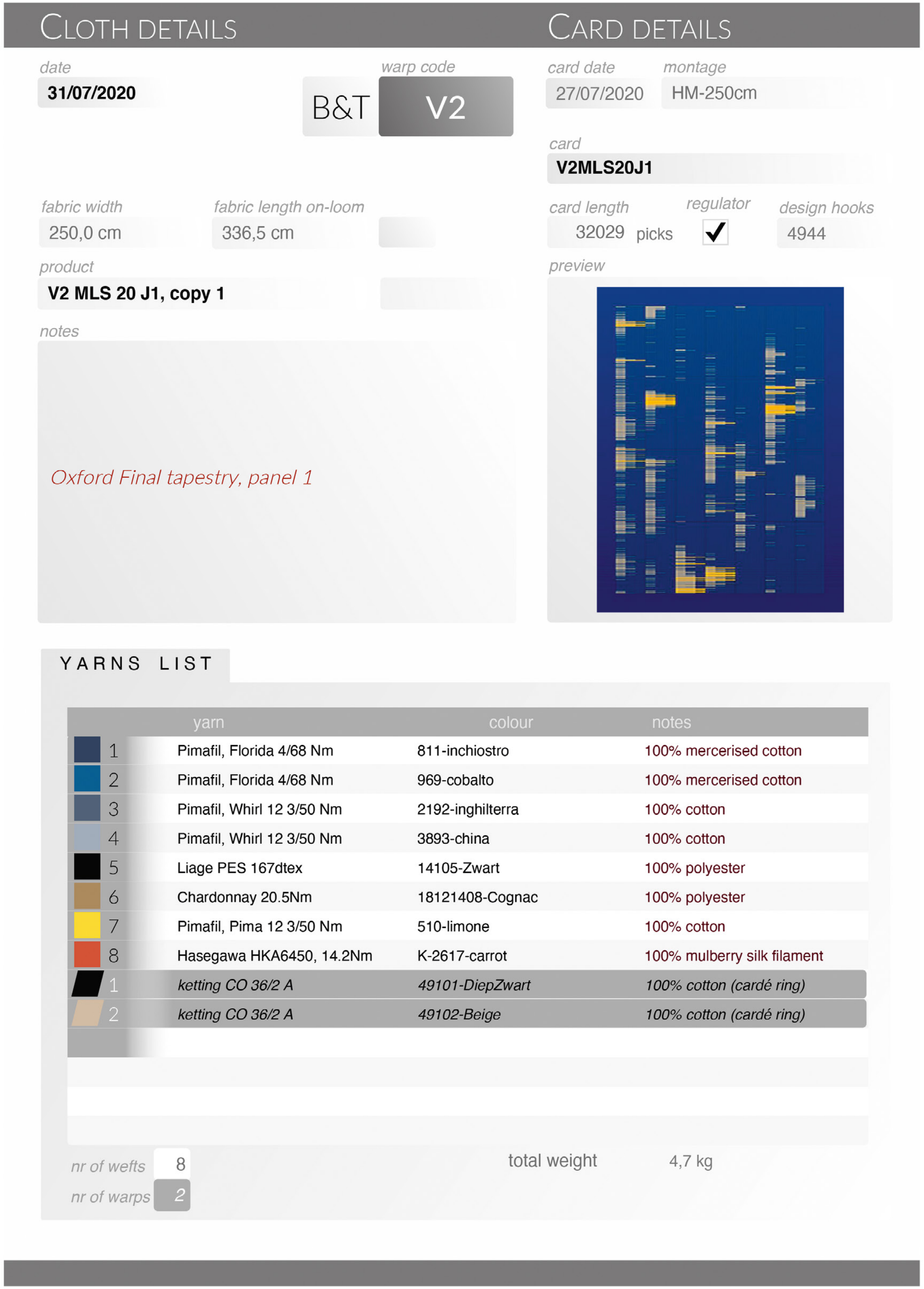
References

Austin, Larry (2004). "John Cage's Williams Mix (1951–3): the restoration and new realisations of and variations on the first octophonic, surround-scape tape composition." In Patricia Hall and Friedemann Sallis (eds.), *A Handbook to Twentieth-Century Musical Sketches* (pp. 189–213). Cambridge: Cambridge University Press.
Cage, John (1961). *Silence. Lectures and Writings*. Middletown: Wesleyan University Press.
Cage, John (1981). *For the Birds. In Conversation with Daniel Charles*. Boston: Marion Boyars.
Cage, John (1990). I–VI. *[The Charles Eliot Norton Lectures]*. Cambridge: Harvard University Press.
Chanan, Michael (1995). *Repeated Takes. A Short History of Recording and its Effects on Music*. London: Verso.
Derrida, Jacques (1988). "Signature Event Context." *Limited Inc.* (pp. 1–23), (trans. Samuel Weber and Jeffrey Mehlman). Evanston: Northwestern University Press.
Edison, Thomas Alva (1995). "[Autobiographical Notes]." In Robert A. Rosenberg, Paul B. Israel and Keith Nier (eds.), *The Papers of Thomas A. Edison 3: Menlo Park: The Early Years, April 1876–December 1877*. Baltimore: The Johns Hopkins University Press.
Ernst, Wolfgang (2008). "Zum Begriff des Sonischen (mit medienarchäologischem Ohr erhört/vernommen)." *PopSkriptum* 10.
https://www2.hu-berlin.de/fpm/popscrip/themen/pst10/pst10_ernst.htm
Fuhrmann, Wolfgang (2011). "Notation als Denkform. Zu einer Mediengeschichte der musikalischen Schrift." In Katrin Bicher (ed.), *Musiken. Festschrift für Christian Kaden* (pp. 114–135). Berlin: Ries & Erler.
Gann, Kyle (2010). *No Such Thing as Silence. John Cage's 4'33"*. New Haven: Yale University Press.
Gauß, Stefan (2009). *Nadel, Rille, Trichter. Kulturgeschichte des Phonographen und des Grammophons in Deutschland (1900–1940)*. Köln: Böhlau.
Goodman, Nelson (1976). *Languages of Art. An Approach to a Theory of Symbols*. Second edition. Indianapolis: Hackett Publishing.
Grimes, Ev and John Cage (1986). "Conversation with American Composers." *Music Educators Journal* 73: 47–49, 58–59.
Khan, Douglas (2001). *Noise, Water, Meat. A History of Sound in the Arts*. Cambridge: The MIT Press.
Kittler, Friedrich (2010). *Optical Media. Berlin Lectures 1999* (trans. Anthony Enns). Cambridge/Malden: polity.
Kostelanetz, Richard (2003). *Conversing with Cage*. Second edition. New York: Routledge.
Kotz, Liz (2007). *Words to Be Looked At. Language in 1960s Art*. Cambridge: MIT Press.
Luhmann, Niklas (2000). *Art as a Social System* (trans. Eva M. Knodt). Stanford: Stanford University Press.
Luhmann, Niklas (2012). *The Theory of Society*, Vol. 1 (trans. Rhodes Barrett). Stanford: Stanford University Press.
Maier, Thomas M. (2001a). *Ausdruck der Zeit. Ein Weg zu John Cages stillem Stück 4'33"*. Saarbrücken: Pfau.
Maier, Thomas M. (2001b). "'Error Is an Excellent Thing'. Analyse und Deutung von 'Fehlern' in einigen Kompositionen John Cages aus den späten 1940er Jahren." *Archiv für Musikwissenschaft* 58/2: 131–143.
Nonnenmann, Rainer (2008). "Invention durch Notation. Von der Verfertigung musikalischer Gedanken beim Schreiben." *Neue Zeitschrift für Musik* 169/5: 20–25.
Pritchett, James (1996). *The Music of John Cage*. Cambridge: Cambridge University Press.
Revill, David (1992). *The Roaring Silence*. New York: Arcade.
Salzman, Eric (1982). "John Cage: Imaginary Landscaper." *Keynote* 6/7: 6–10.
Schröder, Julia H. (2012). "'So that one becomes aware of the presence of a sound—or its absence'. Circling Cage's Concept of 'Silence'." In Dieter Daniels and Inke Arns (eds.), *Sounds Like Silence* (pp. 59–66). Leipzig: Spector Books.
Sessions, Roger (1960). "Problems and Issues Facing the Composer Today." In Paul Henry Lang (ed.), *Problems of Modern Music. The Princeton Seminar in Advanced Musical Studies* (pp. 21–33). New York: Norton.
Sinker, Mark (1997). "shhhhhh!" *The Musical Quarterly* 81/2: 210–241.
Solomon, Larry J. (2002). "The Sounds of Silence. John Cage and 4'33"." http://solomonsmusic.net/4min33se.htm
Tone, Yasunao (2003). "John Cage and Recording." *Leonardo Music Journal* 13: 11–15.









CLOTH DETAILS

date
31/07/2020

warp code
B&T V2

fabric width
250,0 cm

fabric length on-loom
336,5 cm

product
V2 MLS 20 J1, copy 1

notes
Oxford Final tapestry, panel 1

CARD DETAILS

card date
27/07/2020

montage
HM-250cm

card
V2MLS20J1

card length
32029 picks

regulator
✓

design hooks
4944

preview

YARNS LIST

		yarn	colour	notes
■	1	Pimafil, Florida 4/68 Nm	811-inchiostro	100% mercerised cotton
■	2	Pimafil, Florida 4/68 Nm	969-cobalto	100% mercerised cotton
■	3	Pimafil, Whirl 12 3/50 Nm	2192-inghilterra	100% cotton
■	4	Pimafil, Whirl 12 3/50 Nm	3893-china	100% cotton
■	5	Liage PES 167dtex	14105-Zwart	100% polyester
■	6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
■	7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
■	8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
■	1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
■	2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8
nr of warps 2

total weight 4,7 kg

CLOTH DETAILS

date
31/07/2020

warp code
B&T V2

fabric width
250,0 cm

fabric length on-loom
336,5 cm

product
V2 MLS 20 J2, copy 1

notes
Oxford Final tapestry, panel 2

CARD DETAILS

card date
27/07/2020

montage
HM-250cm

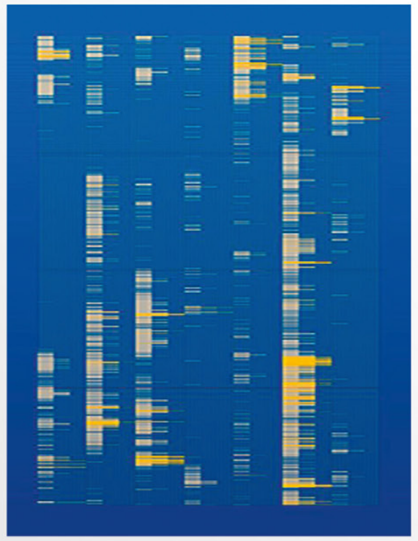
card
V2MLS20J2

card length
32497 picks

regulator
☑

design hooks
4944

preview

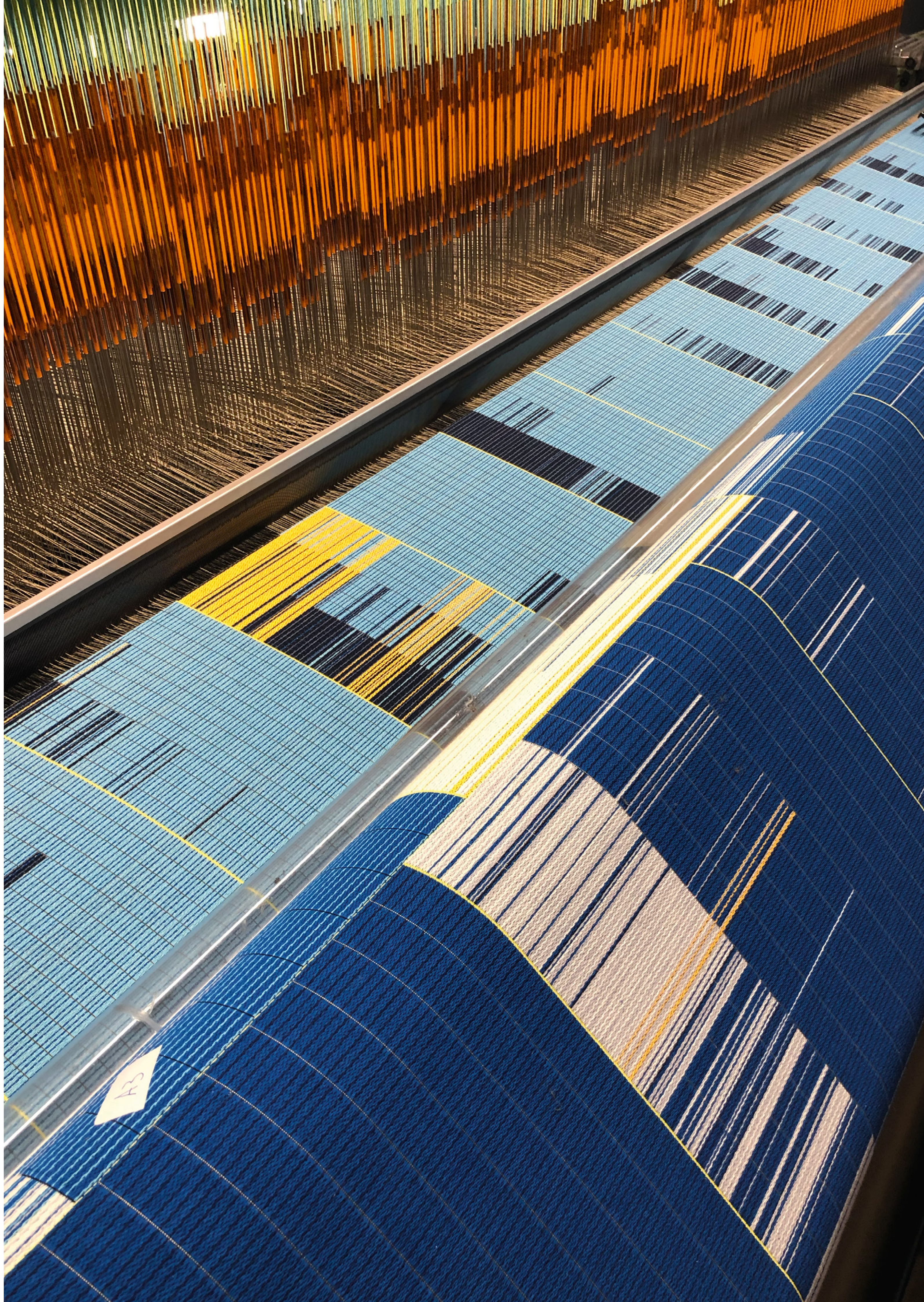


YARNS LIST

		yarn	colour	notes
■	1	Pimafil, Florida 4/68 Nm	811-inchiostro	100% mercerised cotton
■	2	Pimafil, Florida 4/68 Nm	969-cobalto	100% mercerised cotton
■	3	Pimafil, Pima 12 3/50 Nm	8208-ice	100% cotton
■	4	Pimafil, Whirl 12 3/50 Nm	3893-china	100% cotton
■	5	Liage PES 167dtex	14105-Zwart	100% polyester
■	6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
■	7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
■	8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
■	1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
■	2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8
nr of warps 2

total weight 4,8 kg



CLOTH DETAILS

CARD DETAILS

date
31/07/2020

warp code
B&T V2

card date
27/07/2020

montage
HM-250cm

card
V2MLS20J3

fabric width
250,0 cm

fabric length on-loom
336,5 cm

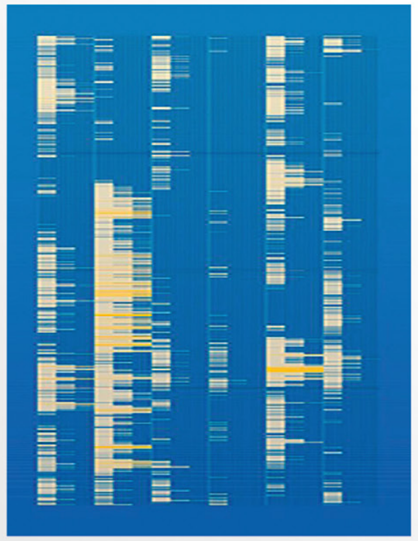
card length
31867 picks

regulator
☑

design hooks
4944

product
V2 MLS 20 J3, copy 1

preview



notes

Oxford Final tapestry, panel 3

YARNS LIST

		yarn	colour	notes
🟦	1	Pimafil, Florida 4/68 Nm	971-fiordo	100% mercerised cotton
🟦	2	Pimafil, Florida 4/68 Nm	969-cobalto	100% mercerised cotton
⬜	3	Pimafil, Pima 12 3/50 Nm	8208-ice	100% cotton
⬜	4	Pimafil, Whirl 12 3/50 Nm	3893-china	100% cotton
⬛	5	Liage PES 167dtex	14105-Zwart	100% polyester
🟫	6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
🟨	7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
🟥	8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
⬛	1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
🟫	2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8

nr of warps *2*

total weight 4,7 kg

CLOTH DETAILS

CARD DETAILS

date
31/07/2020

warp code
B&T V2

card date
27/07/2020

montage
HM-250cm

card
V2MLS20J4

fabric width
250,0 cm

fabric length on-loom
336,5 cm

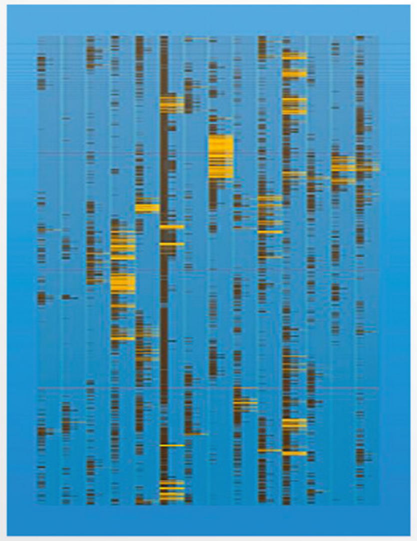
card length
34063 picks

regulator
☑

design hooks
4944

product
V2 MLS 20 J4, copy 1

preview



notes

Oxford Final tapestry, panel 4

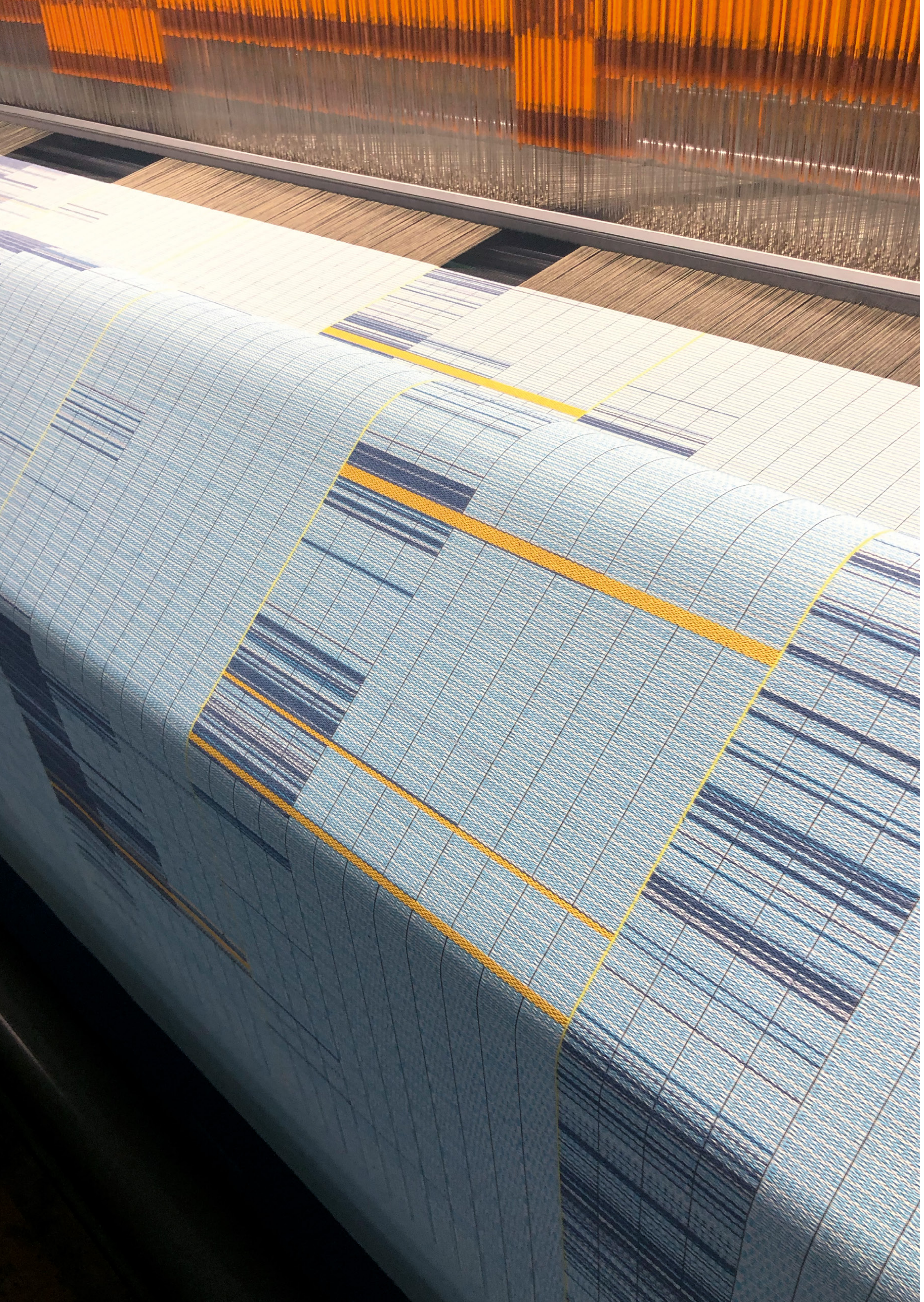
YARNS LIST

		yarn	colour	notes
🟦	1	Pimafil, Florida 4/68 Nm	971-fiordo	100% mercerised cotton
🟦	2	Pimafil, Florida 4/68 Nm	969-cobalto	100% mercerised cotton
🟦	3	Pimafil, Whirl 12 3/50 Nm	2192-inghilterra	100% cotton
⬛	4	Pimafil, Whirl 12 3/50 Nm	7998-polinesia	100% cotton
🟫	5	Liage PES 167dtex	14126-goud	100% polyester
🟫	6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
🟨	7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
🟥	8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
⬛	1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
🟫	2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8

nr of warps *2*

total weight 5,0 kg



CLOTH DETAILS

date
31/07/2020

warp code
B&T V2

fabric width
250,0 cm

fabric length on-loom
336,5 cm

product
V2 MLS 20 J5, copy 1

notes
Oxford Final tapestry, panel 5

CARD DETAILS

card date
27/07/2020

montage
HM-250cm

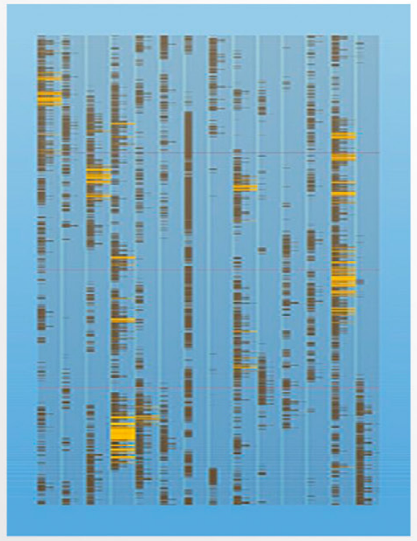
card
V2MLS20J5

card length
33200 picks

regulator
☑

design hooks
4944

preview



YARNS LIST

		yarn	colour	notes
🟦	1	Pimafil, Florida 4/68 Nm	971-fiordo	100% mercerised cotton
⬜	2	Pimafil, Florida 4/68 Nm	810-nuvola	100% mercerised cotton
🟦	3	Pimafil, Whirl 12 3/50 Nm	2192-inghilterra	100% cotton
🟦	4	Pimafil, Whirl 12 3/50 Nm	7998-polinesia	100% cotton
🟫	5	Liage PES 167dtex	14126-goud	100% polyester
🟫	6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
🟨	7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
🟥	8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
⬛	1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
🟫	2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8
nr of warps 2

total weight 4,9 kg

CLOTH DETAILS

date
31/07/2020

warp code
B&T V2

fabric width
250,0 cm

fabric length on-loom
336,5 cm

product
V2 MLS 20 J6, copy 1

notes
Oxford Final tapestry, panel 6

CARD DETAILS

card date
27/07/2020

montage
HM-250cm

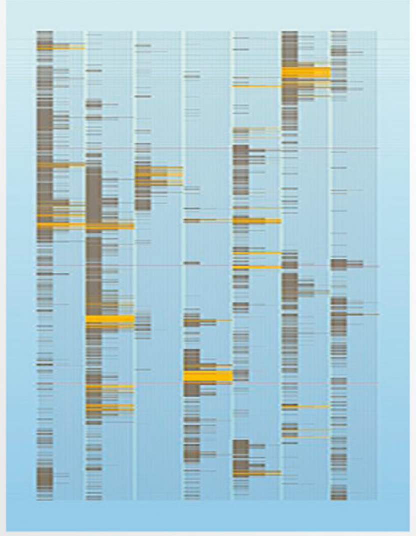
card
V2MLS20J6

card length
32511 picks

regulator
☑

design hooks
4944

preview

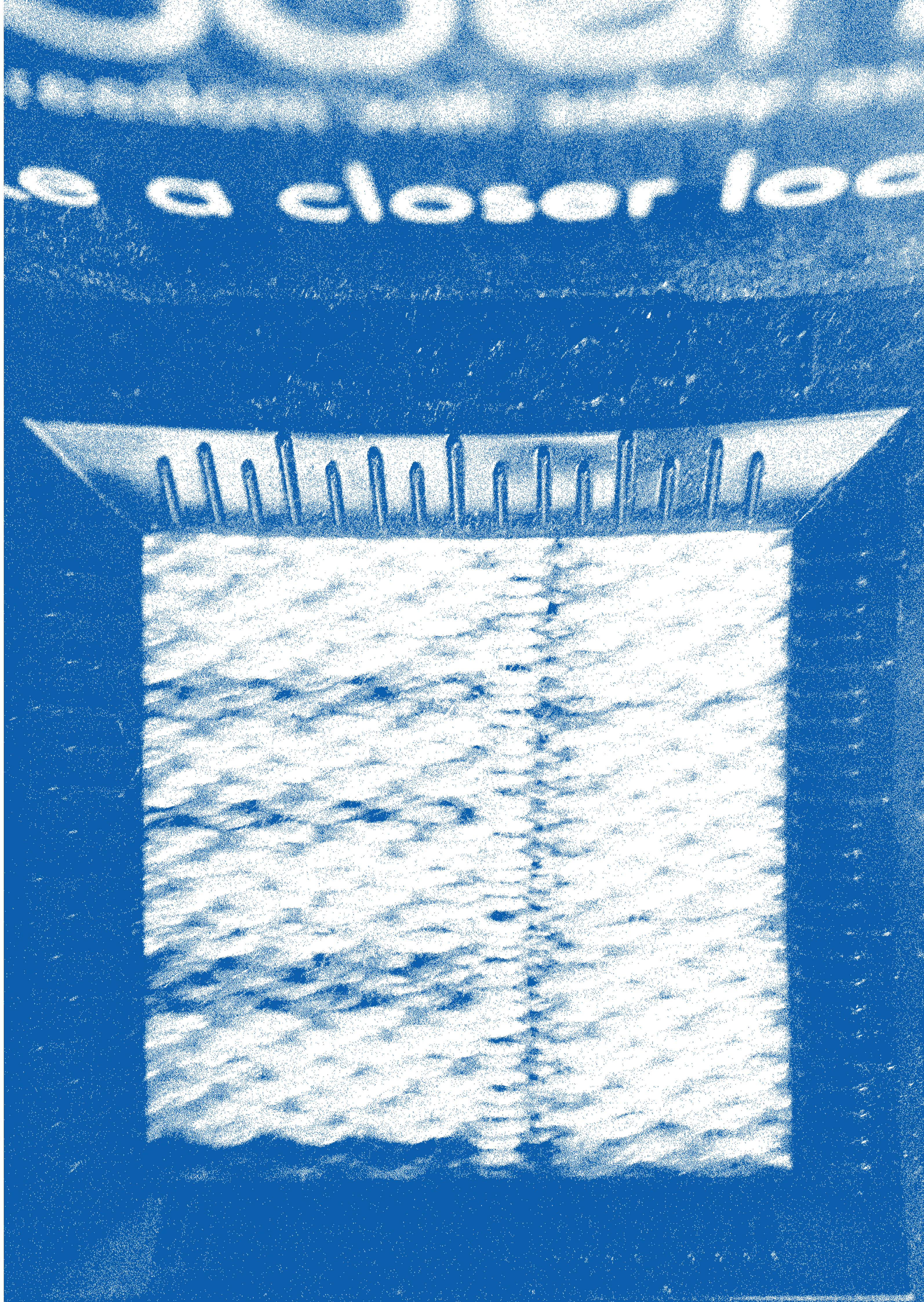


YARNS LIST

	yarn	colour	notes
🟦 1	Pimafil, Florida 4/68 Nm	971-fiordo	100% mercerised cotton
⬜ 2	Pimafil, Florida 4/68 Nm	810-nuvola	100% mercerised cotton
🟦 3	Pimafil, Whirl 12 3/50 Nm	2192-inghilterra	100% cotton
⬜ 4	Pimafil, Whirl 12 3/50 Nm	3893-china	100% cotton
🟫 5	Liage PES 167dtex	14126-goud	100% polyester
🟫 6	Chardonnay 20.5Nm	18121408-Cognac	100% polyester
🟨 7	Pimafil, Pima 12 3/50 Nm	510-limone	100% cotton
🟥 8	Hasegawa HKA6450, 14.2Nm	K-2617-carrot	100% mulberry silk filament
⬛ 1	*ketting CO 36/2 A*	*49101-DiepZwart*	*100% cotton (cardé ring)*
🟫 2	*ketting CO 36/2 A*	*49102-Beige*	*100% cotton (cardé ring)*

nr of wefts 8
nr of warps 2

total weight 4,8 kg



13121911
49230
LONDRA
72
13121
COPIATIVO
COBALTO
AVIATORE
GENZIANA
571
969
2/26 Mm
2/26 Mm
ssimo

This lecture was printed in Incontri Musicali, *August 1959. There*
measures in each line and twelve lines in each unit of the rhythmic
There are forty-eight such units, each having forty-eight measures.
whole is divided into five large parts, in the proportion 7, 6, 14, 14,
The forty-eight measures of each unit are likewise so divided. The t
printed in four columns to facilitate a rhythmic reading. Each line is
read across the page from left to right, not down the columns in
This should not be done in an artificial manner (which might result fr
attempt to be too strictly faithful to the position of the words on the
with the rubato *which one uses in everyday speech.*

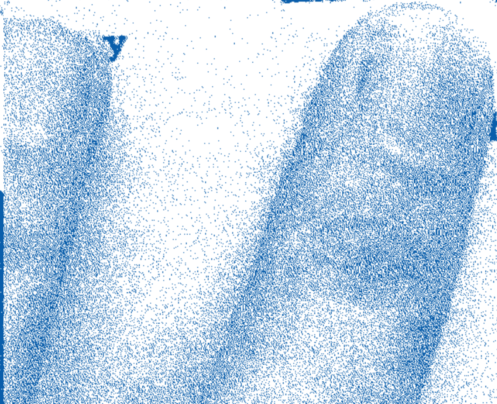
LECTURE ON NOTHING

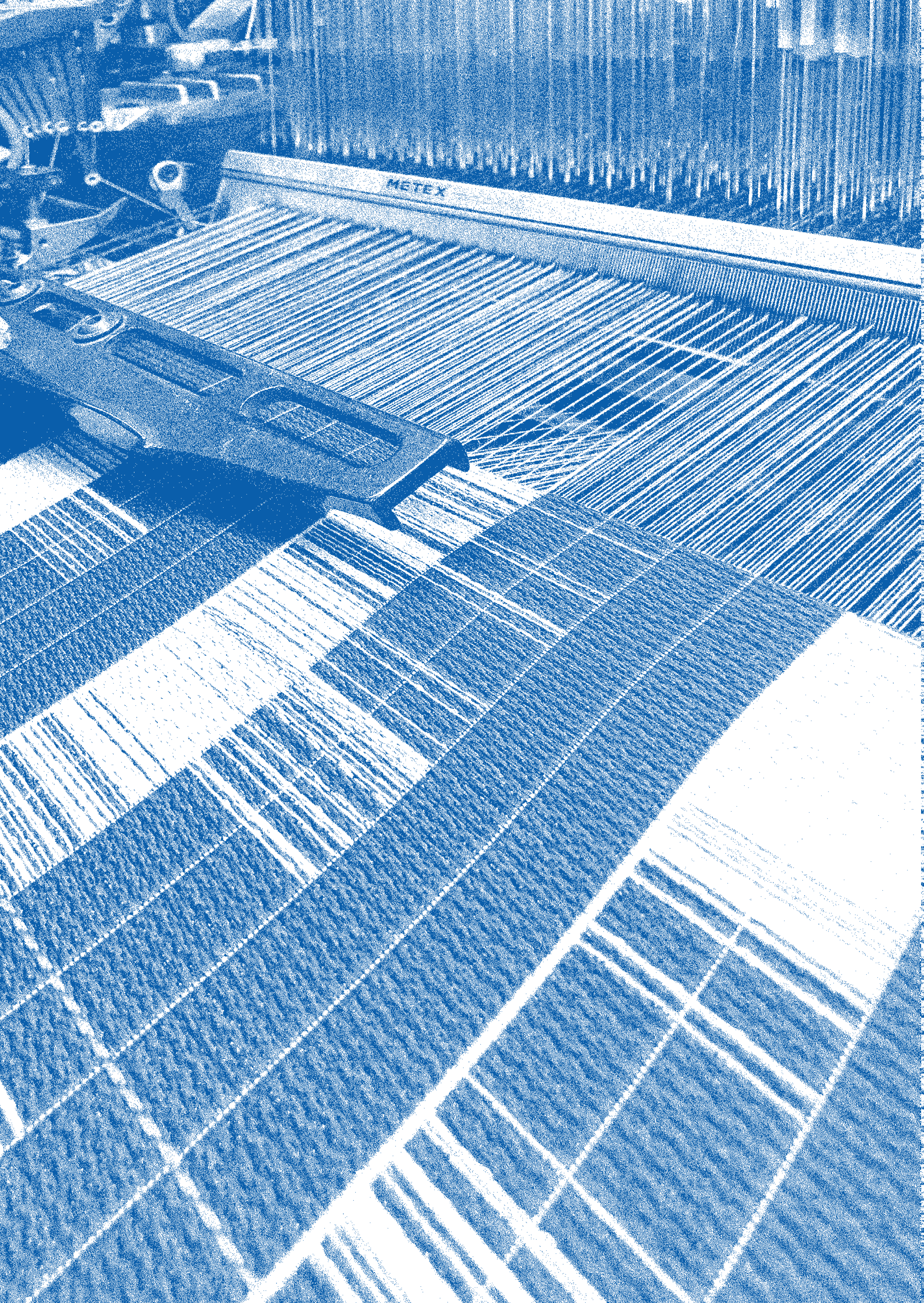
I am here , and there is nothing to say .
If among you a
those who wish to get somewhere , let them leave a
any moment . What we re–quire
silence ; but what silence requires
is that I go on talking .
Give any one th
a push : it falls down easily
; but the pusher and the pushed pro–duce th
tainment called a dis–cussion .
Shall we have one later ?

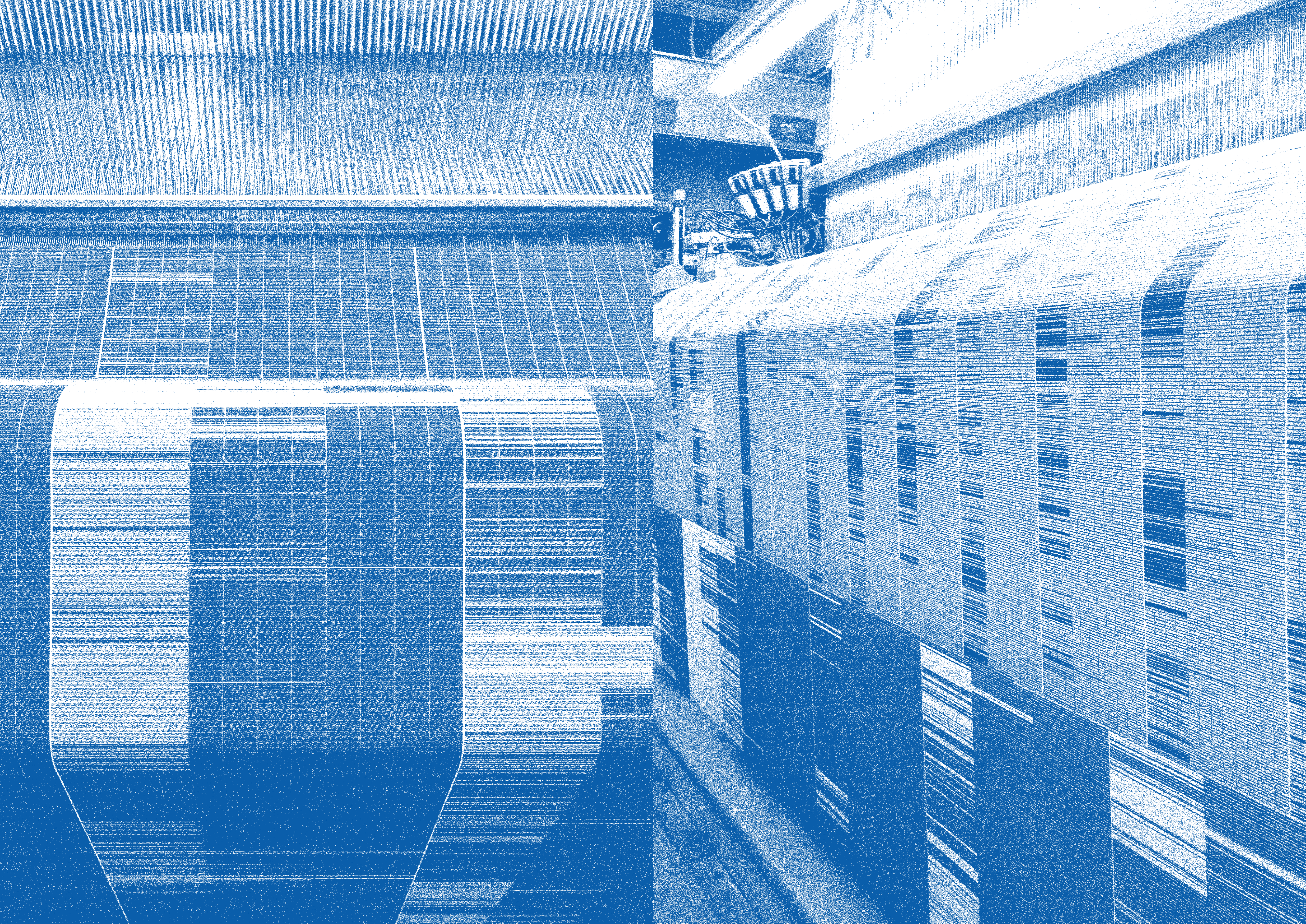
* * *

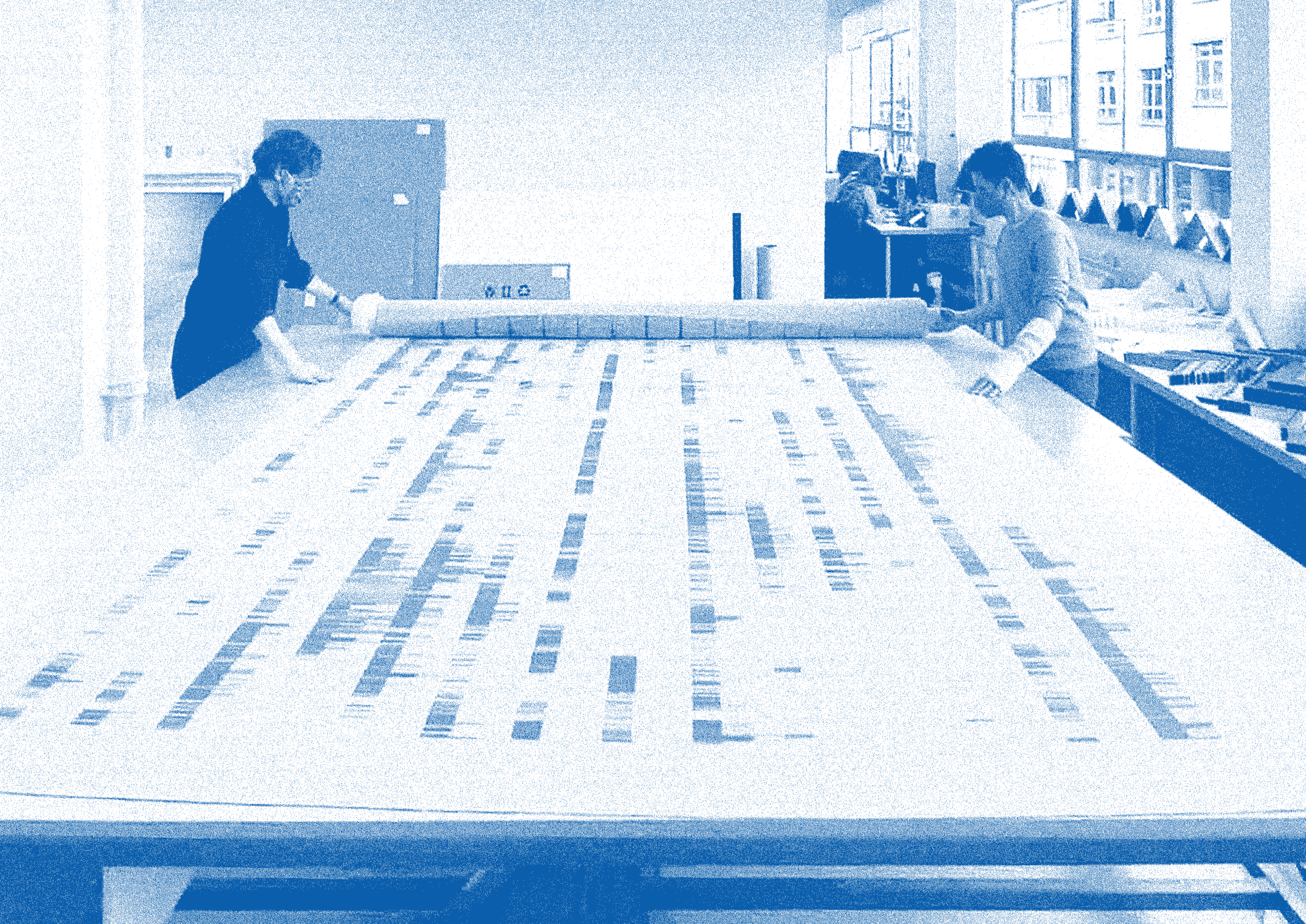
Or , we could simply de–cide not to ha
cussion . What ever you like .
now there are silences
words make help make
silences .
I have nothing to say
and I am saying it a
y as I need it .
his space of time is
We need not fear these silences, —

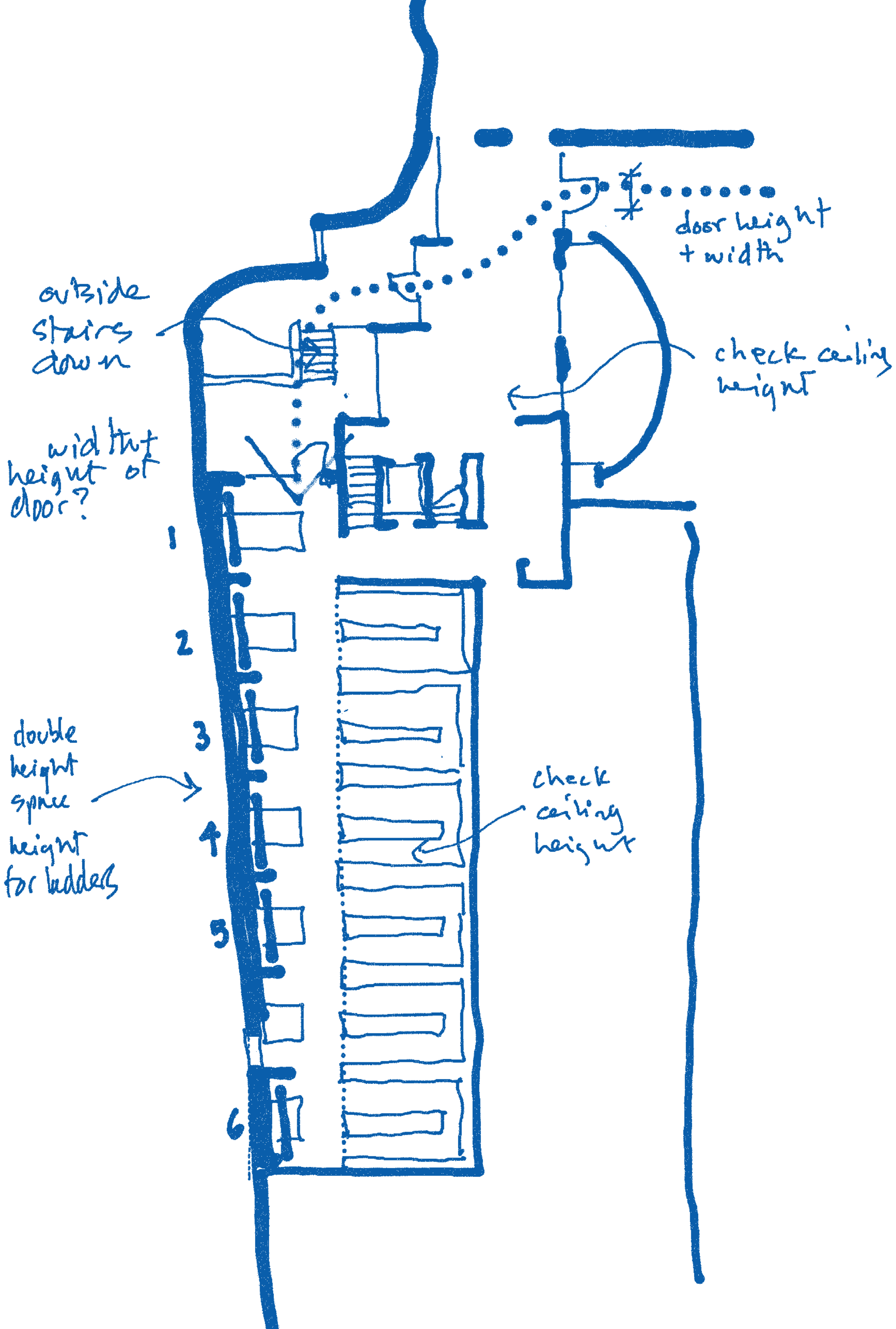
* * *

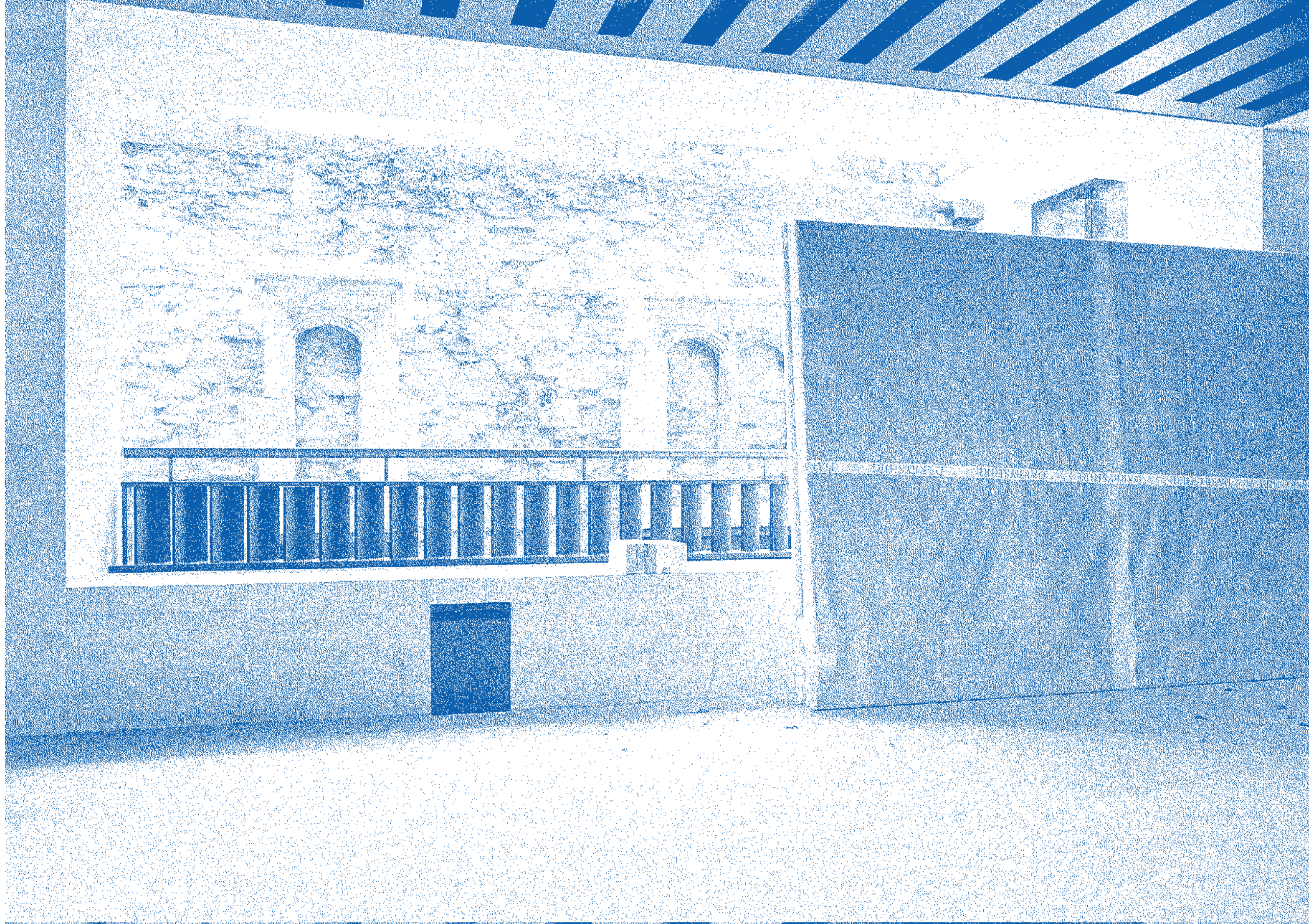


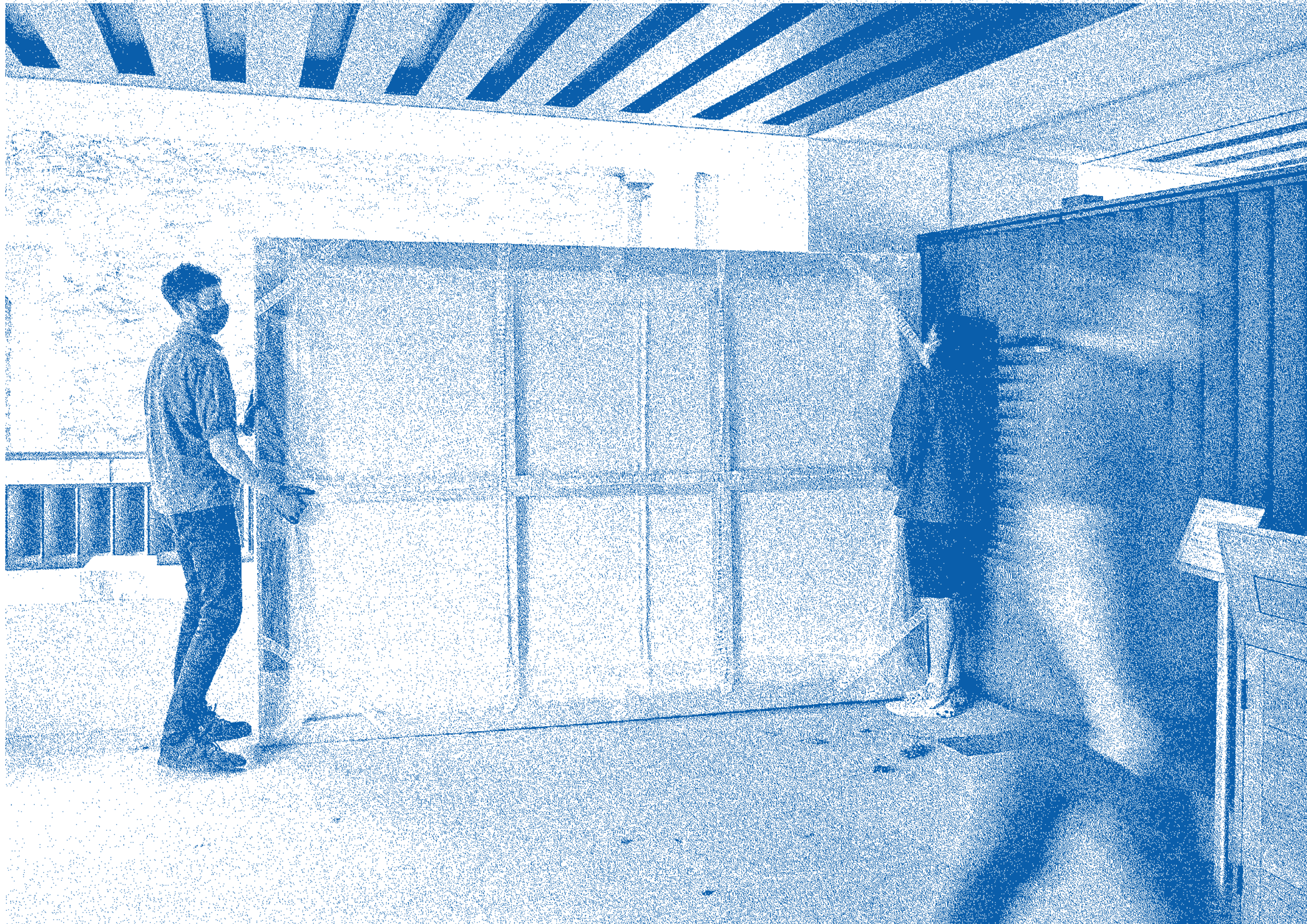

METEX





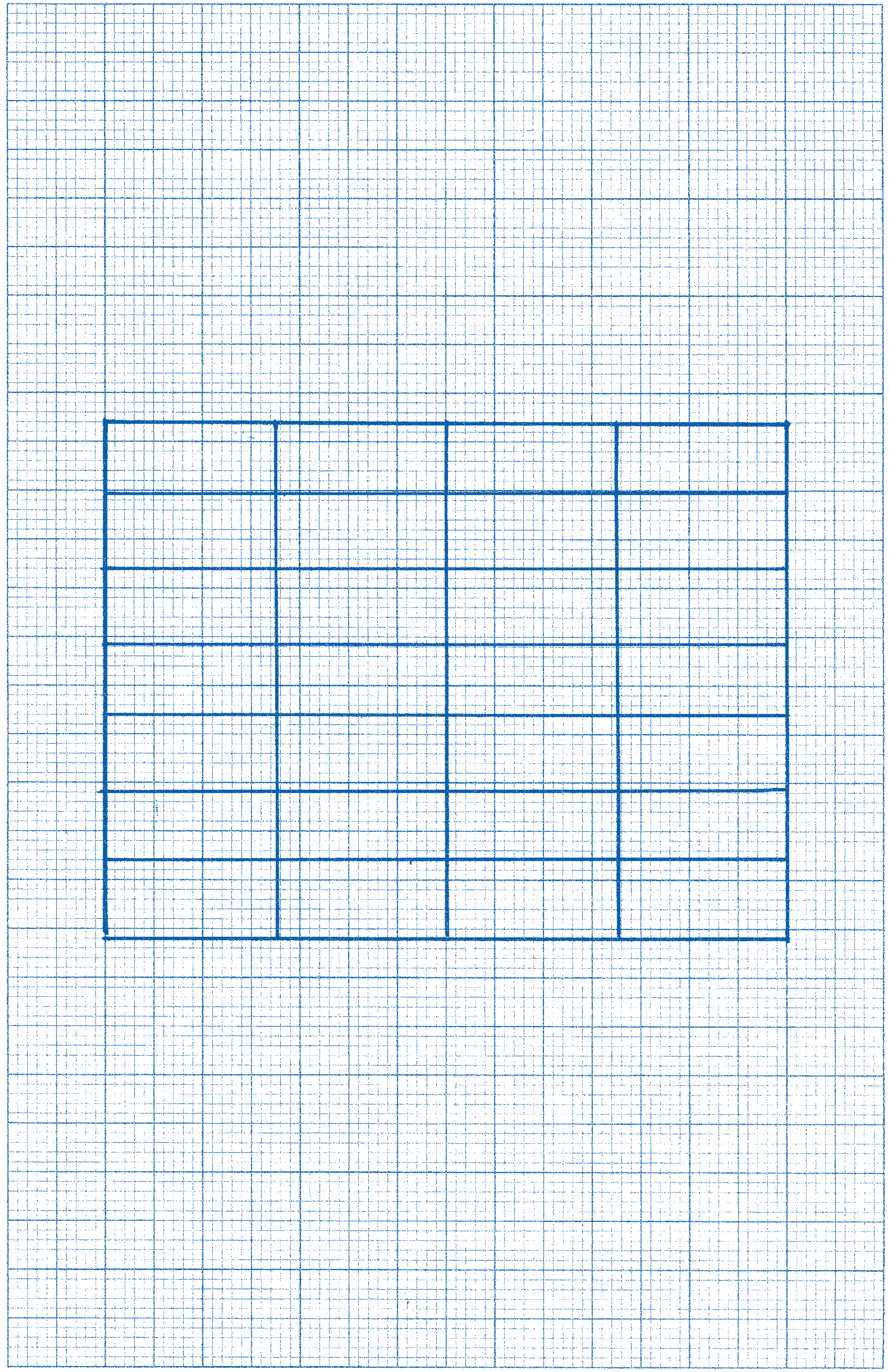

outside stairs down
door height + width
check ceiling height
width height of door?
1
2
3
4
5
6
double height space height for ladders
check ceiling height

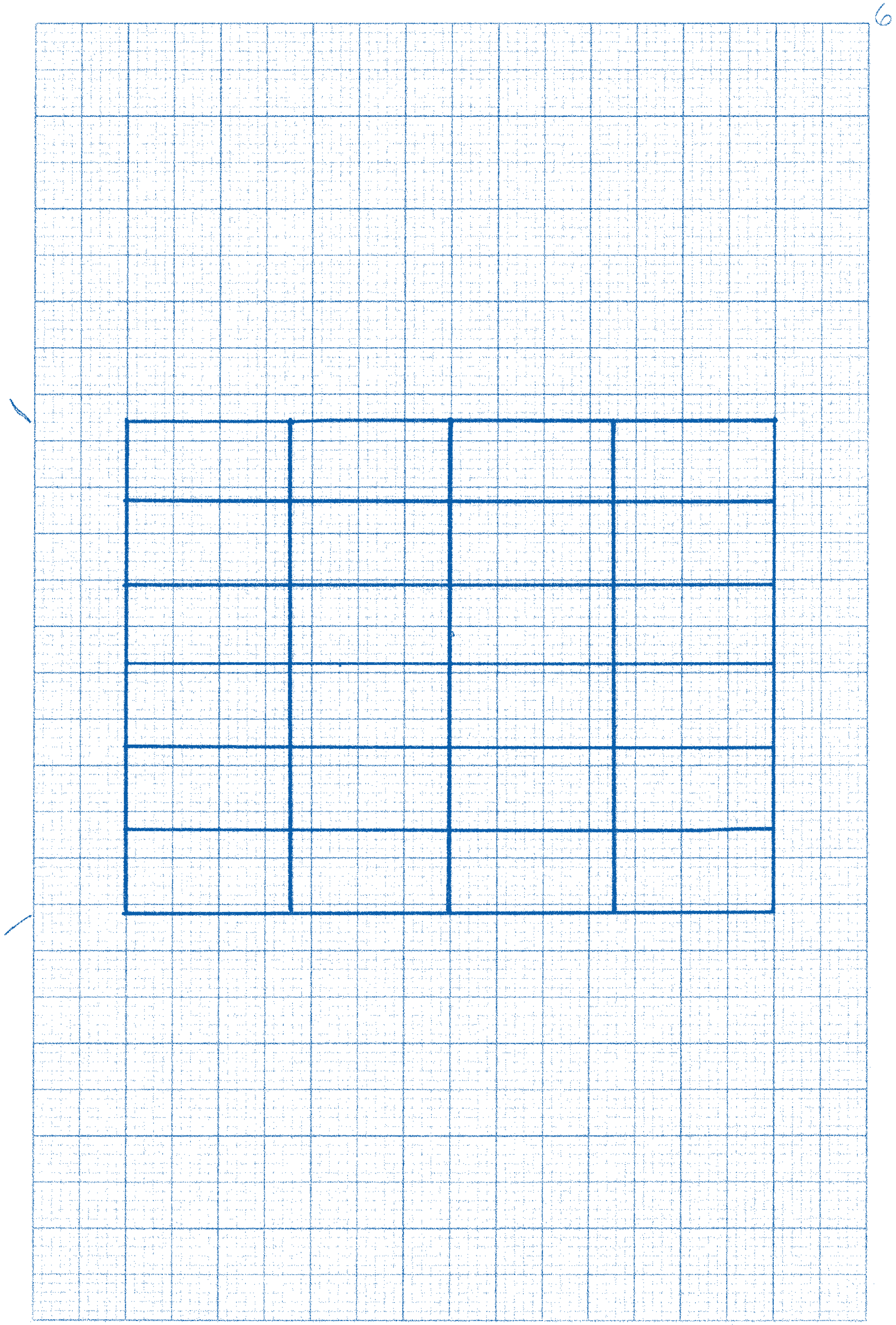


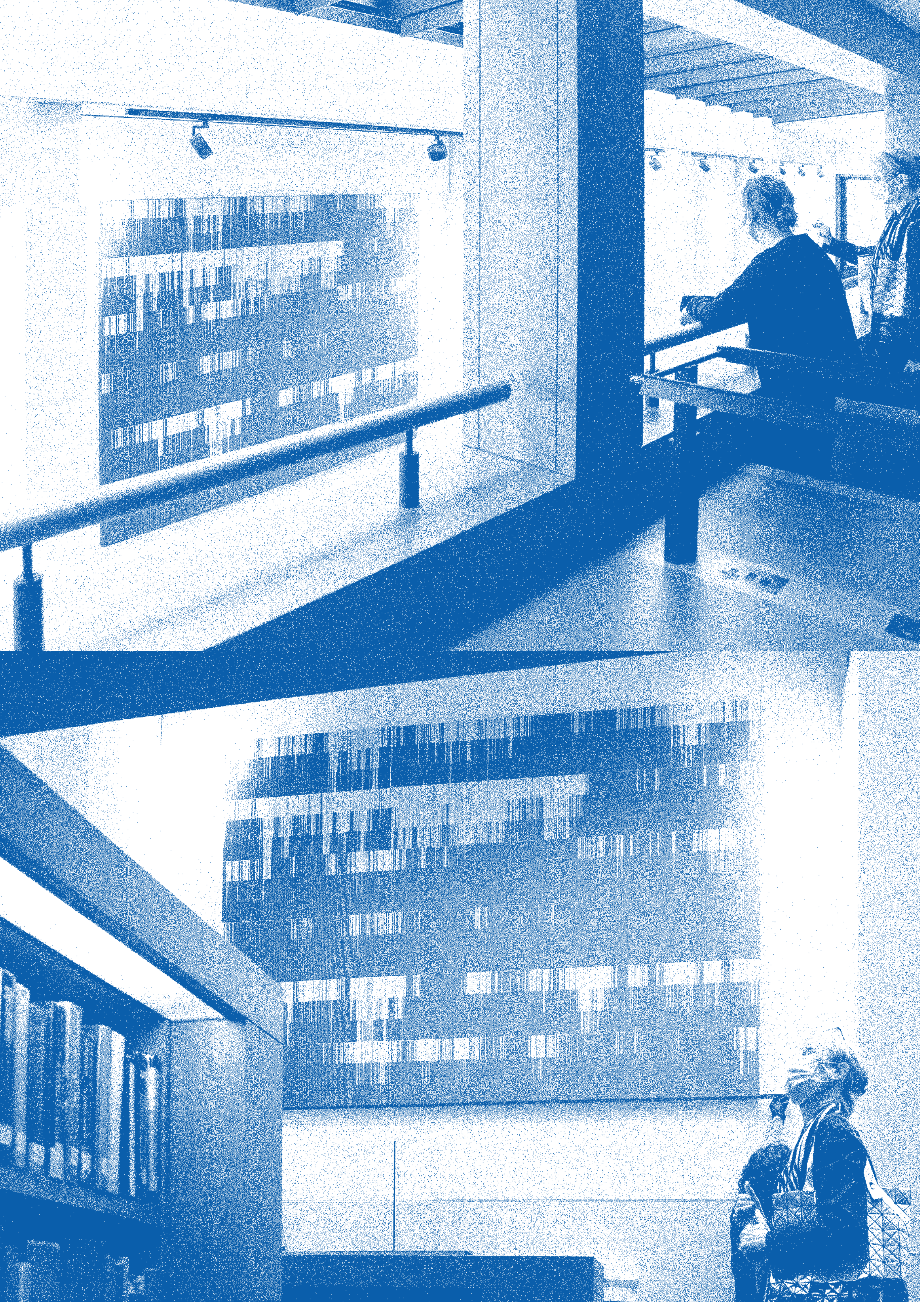


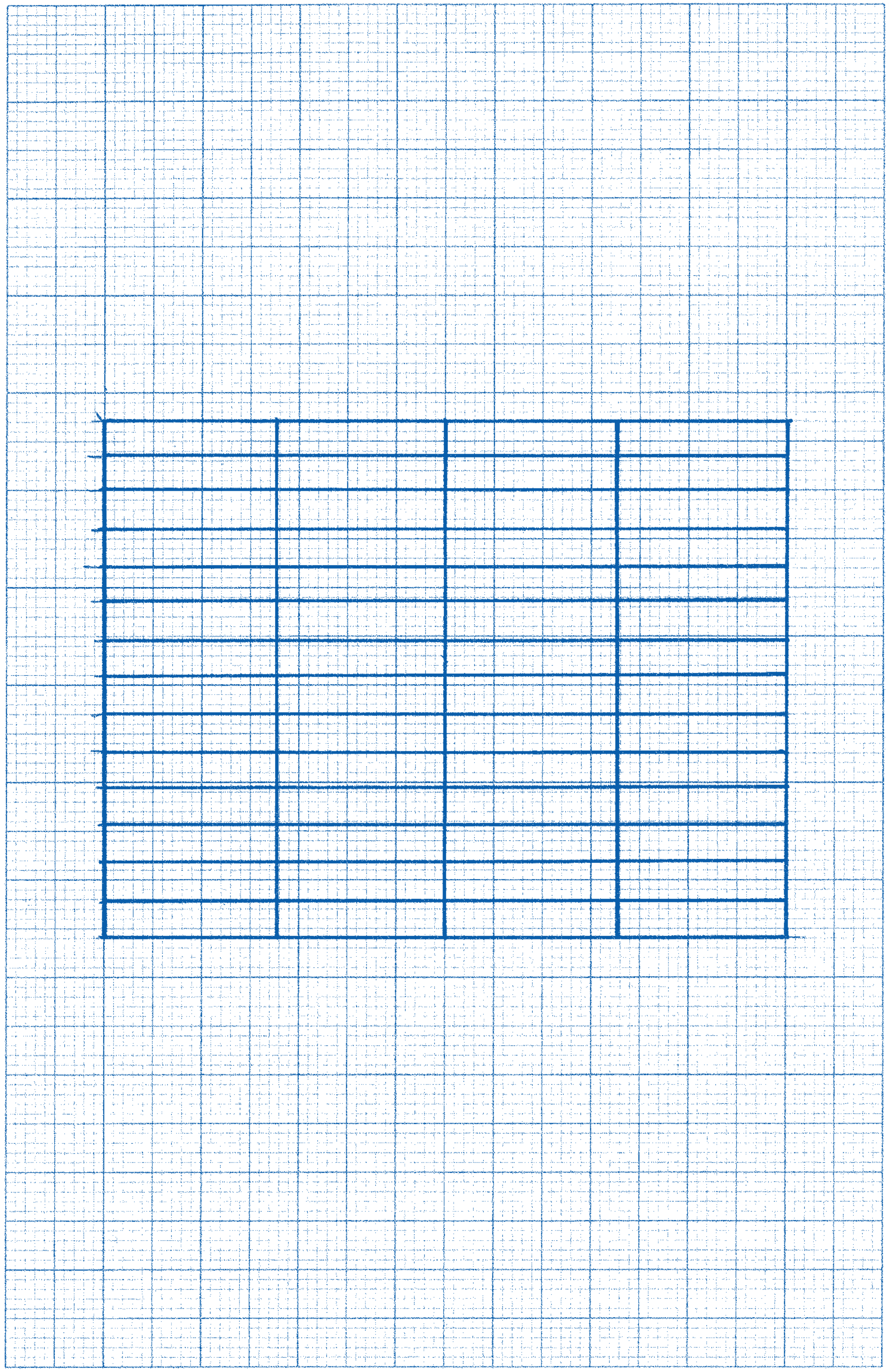
DO NOT TOUCH
THE BOOKS

There are four measures in each line and twelve lines in each unit of the rhythmic structure. There are forty-eight such units, each having forty-eight measures. The whole is divided into five large parts, in the proportion 7, 6, 14, 14, 7. The forty-eight measures of each unit are likewise so divided.

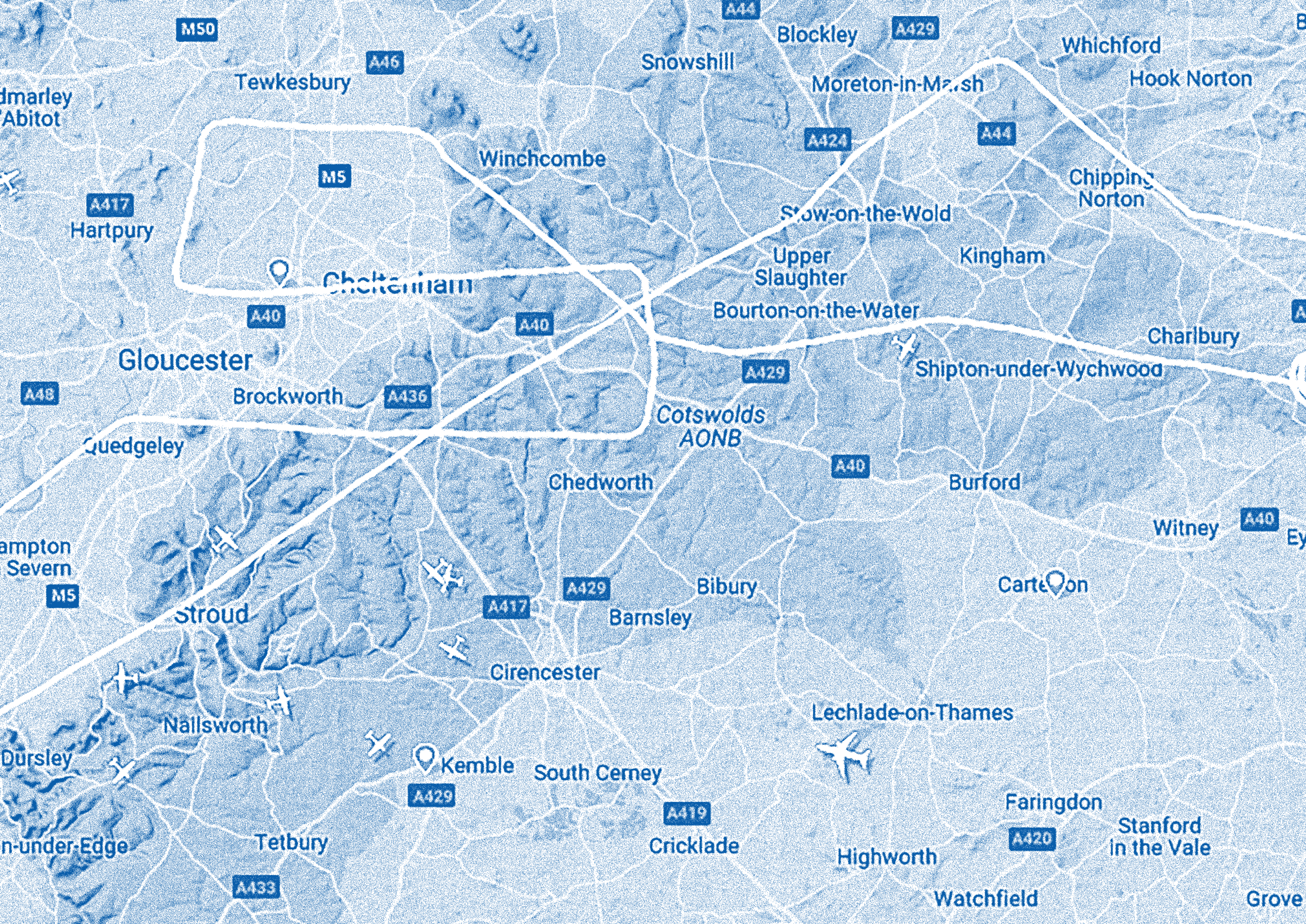



6

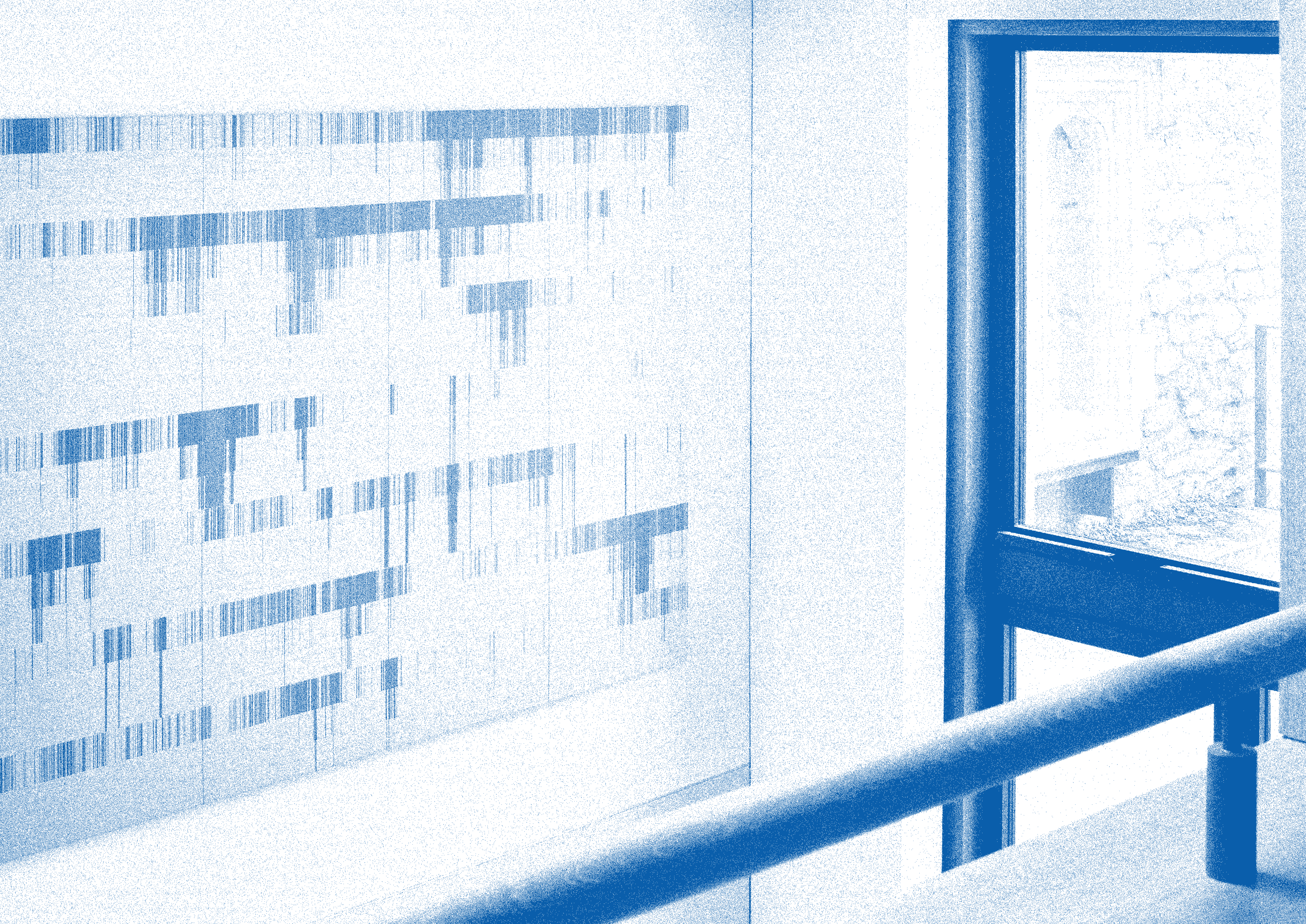




ace
ifectant


M50
A44
Blockley
A429
Whichford
A46
Snowshill
Tewkesbury
Moreton-in-Marsh
Hook Norton
dmarley
Abitot
A424
A44
Winchcombe
M5
Chipping
Norton
A417
Hartpury
Stow-on-the-Wold
Upper
Slaughter
Kingham
Cheltenham
A40
A40
Bourton-on-the-Water
Charlbury
Gloucester
A429
Shipton-under-Wychwood
A48
Brockworth
A436
Cotswolds
AONB
Quedgeley
A40
Chedworth
Burford
Witney
A40
ampton
Severn
Bibury
Carterton
M5
A429
A417
Stroud
Barnsley
Cirencester
Lechlade-on-Thames
Nailsworth
Dursley
Kemble
South Cerney
Faringdon
A429
Stanford
in the Vale
A419
A420
n-under-Edge
Tetbury
Cricklade
Highworth
A433
Watchfield
Grove

EQUAL FREEDOM
DONALD DAVIDSON
ASPECTS OF HOBBES
HUSSERL
KANT
Concepts of Truth
SPACE
LEIBNIZ
Critique of Everyday Life, Henri Lefebvre
LOCKE
MIND AND COGNITION
WICKEDNESS
RUSSELL
FICTION AND FICTIONALISM



RESISTANT DATA

Alex Bacon

Systems represent both the massive potential and precipitous danger of our data-driven age. Insofar as they organise information so as to make it legible and thus easily analysable, they serve to advance knowledge and ease the workings of daily life. However, they also submit the subjects they analyse to oppressive regimes of surveillance and control. Data, as the product – and sometimes origin – of systems, thus captures a certain contour of our contemporary situation. We live as much under the cloud of the progress proposed by the latest data-driven technological advancements as we do that of the nefarious possibilities of data (ours, a company's, a country's, etc.) falling into the wrong hands.

Susan Morris addresses this situation in various bodies of work that visualise data sets related to everything from the intimate workings of the human body to the subtle nuances of the natural world. These can be understood as the two entities most often subjected to data-generating systems. The latter serves as the subject of her recent tapestry commission, for the New Study Centre of St John's College, University of Oxford. In late 2019 Morris spent time in the garden outside of the ancient Sprott's Wall side of this library, recording the sounds that occurred there in sessions lasting 50 minutes.

A range of phenomena transpired, much of it the kind that typically goes unnoticed: the wind rustling the trees, bird calls, the murmur of distant conversation from passers-by, and so on. These ambient noises comprised the data collected for the work, a single data set of which (from the afternoon of November 12, 2019) was then transferred into a visual form through the application of an algorithm, generating a grid of coloured bars to be woven by a Jacquard loom into tapestries. The Jacquard loom is itself a medium premised on the most basic element of a digital system, the 0 and 1 of binary code, and thus a precursor to the computer.

Rather than using a rigorous scientific approach – that of a botanist, say – Morris subverted the supposedly objective parameters of most data collection, turning instead to the model of the musical score. She activated her recording equipment at somewhat arbitrary times and allowed the vagaries of what was captured to determine the work's final form, without any predetermined plans or attempts to control or analyse the situation in advance. This makes her approach determinately Cagean in its desire to allow chance operations to shape the work's form, and also to ensure that the tapestries reflect only a discrete and highly limited set of possibilities of a system with potentially endless permutations. This relates to how every performance of one of John Cage's scores represents a singular set of possibilities, typically ones determined by their occurrence within a set duration that limits them.

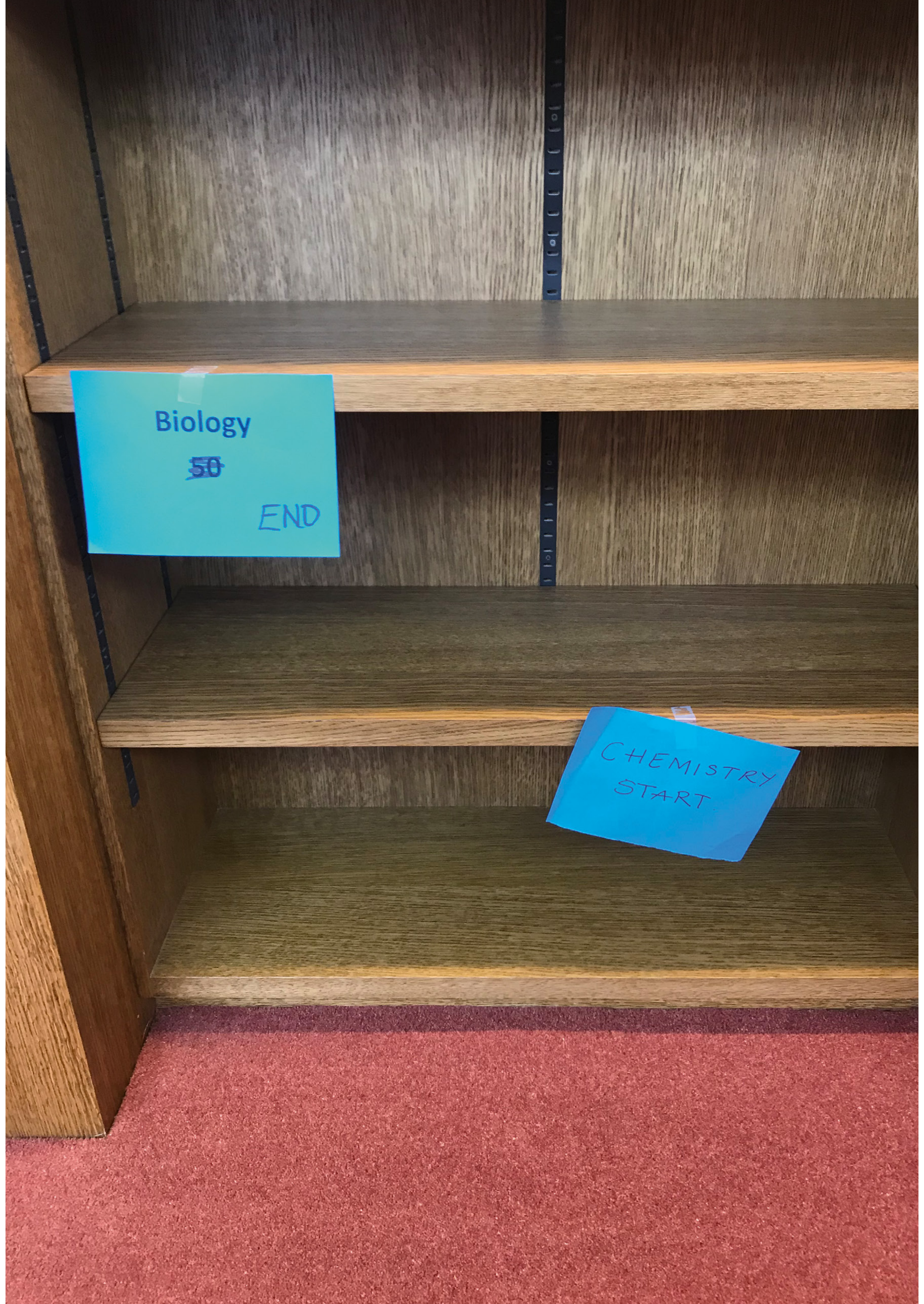
The finished tapestries are installed in the library, where the sound waves that were recorded just outside of it are pictured as linear dashes, thus using data as a way to collapse the notion of interior and exterior, using a man-made system to bring the natural world into the space of human knowledge and research. The gridded format was determined by Morris's interpretation of the written instructions given in Cage's 'Lecture on Nothing'. These state that 'there are four measures in each line and twelve lines in each unit of the rhythmic structure. There are forty-eight such units, each having forty-eight measures. The whole is divided into five large parts, in the proportion 7, 6, 14, 14, 7. The forty-eight measures of each unit are likewise so divided.'

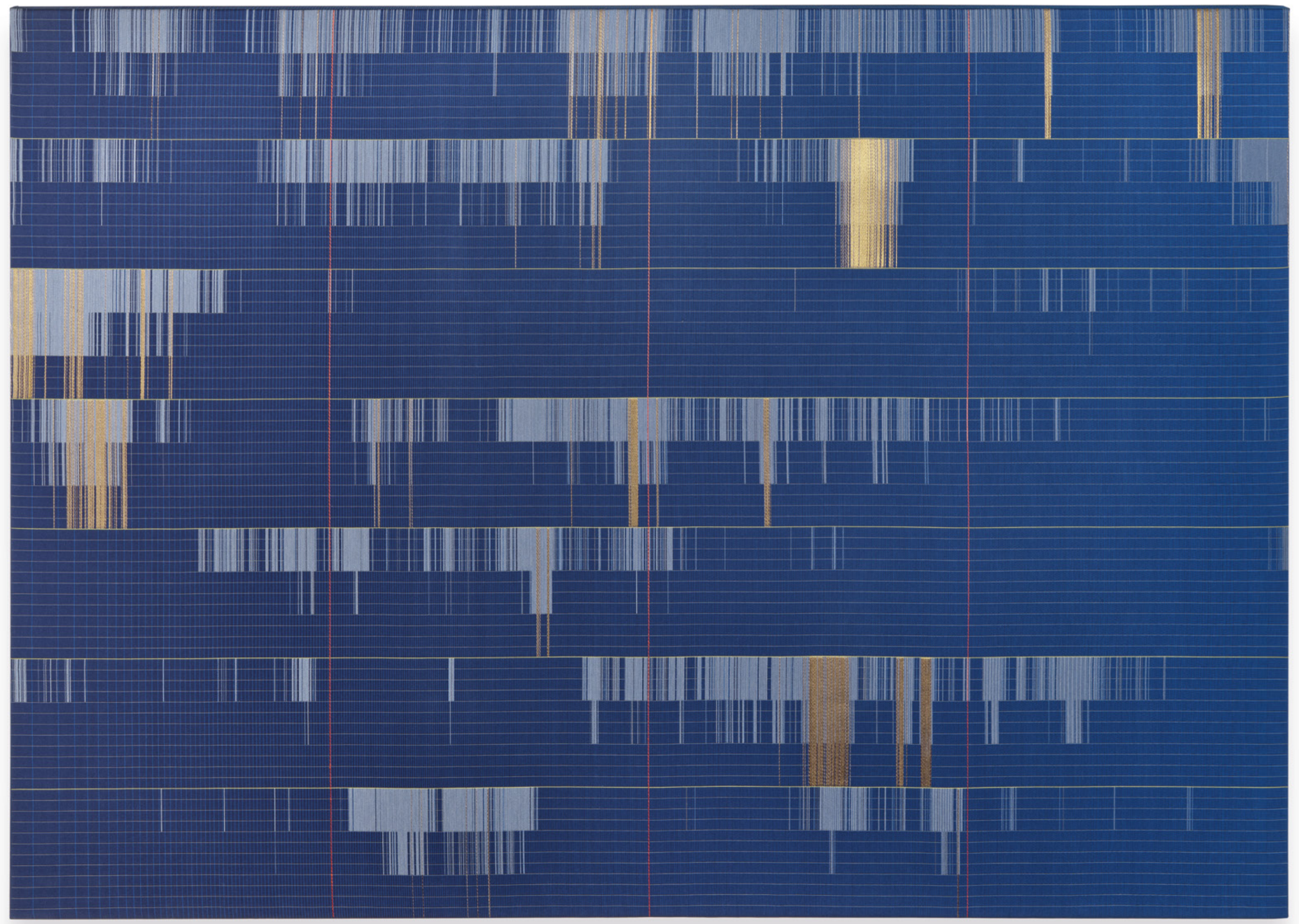
In previous Jacquard tapestry works, Morris has utilised data from her activity patterns as registered by an Actiwatch sleep and activity tracker. These new works are both related to and diverge from this earlier series. She has shifted away from the internal operations of the body as it intersects with contemporary systems of management and surveillance, towards reflecting on the related ways that we seek to catalogue and analyse the natural world. Like the corporeal data of this earlier work, these initially seem benign. However, this is merely a surface appearance. In the case of the work involving the body, resistant elements emerged, for example when Morris did not follow a conventional sleep pattern for a particular reason, such as travel or staying up to meet a deadline.

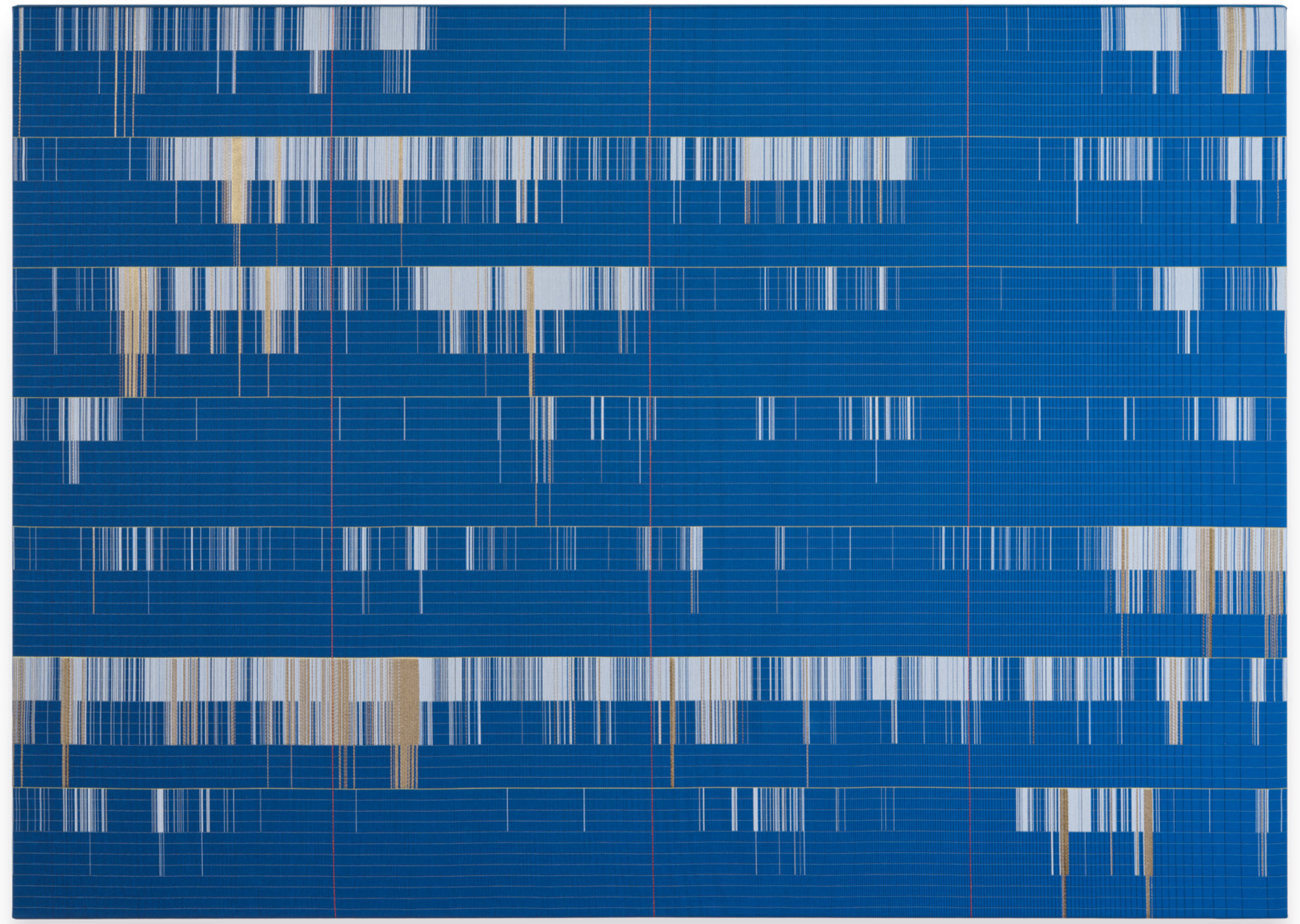
In the case of this more recent work, we can locate a related type of productive disjunction between the abstracting and quantifying aspects of the data sets and the resistance of the garden to these attempts to ascertain it. Indeed, just as with the earlier works related to the body, even as we learn very specific details about the garden we know very little at the same time. We cannot imagine what it looks like, what it is comprised of, what it feels like to be there, and so on (or only in the most sketchy and vague ways). Instead it is the very vastness of the garden that becomes evident as we brush up against the limitations of the data produced from it.

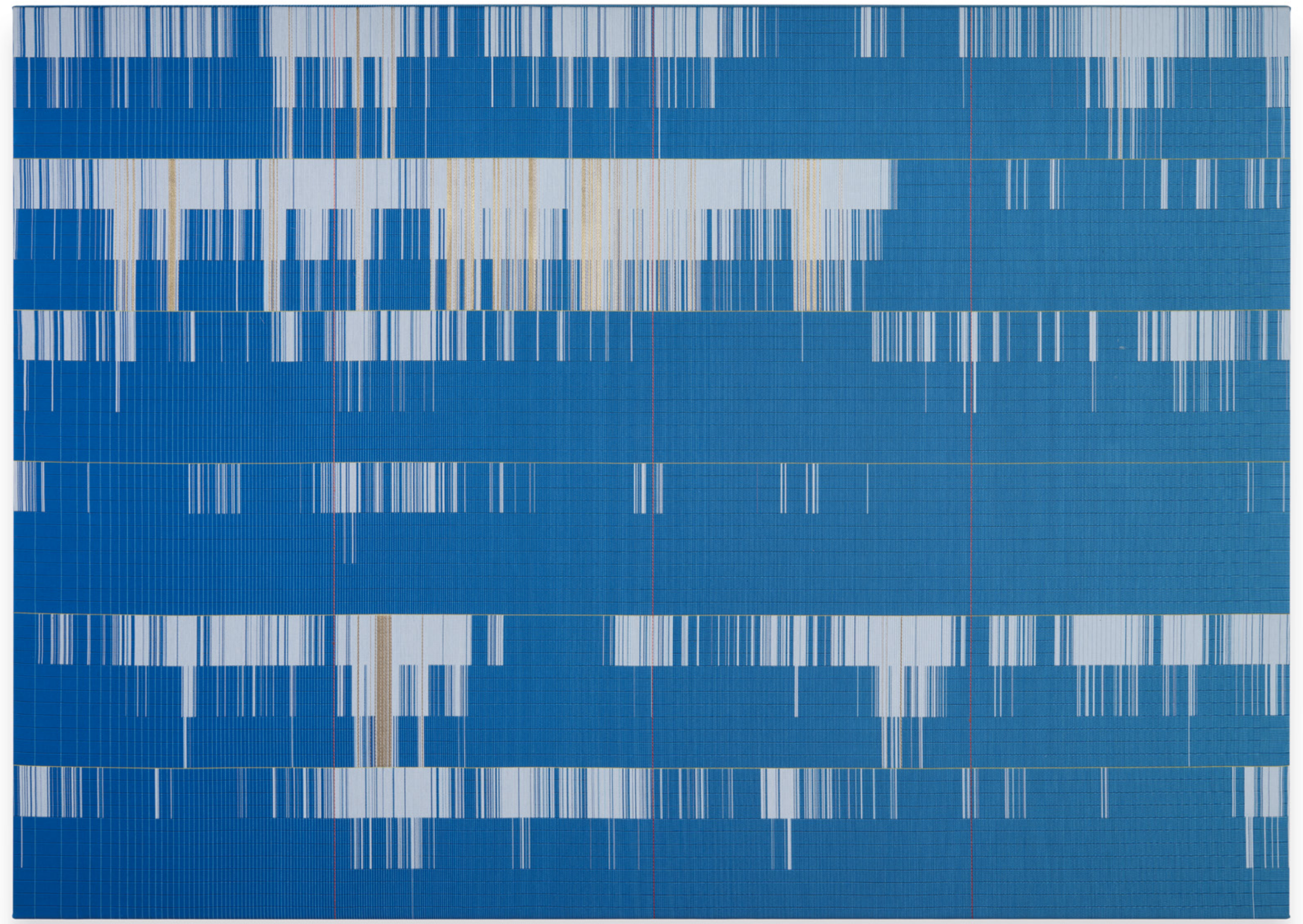
This leads us to consider how the garden is itself a systematised understanding of nature. It is a historically and culturally specific entity, with origins in 18th century England, that has been subjected to human ideals of order and composition and is meticulously maintained by a team of gardeners, rather than simply occurring entirely naturally. Thus, Morris's work also draws our attention to how such cultivated plots of land have been normalised to the point that we sometimes assume they have just sprouted organically from the earth. This also brings the garden into a parallel relation to the contemporary human body. Not as the subject that gives it form, but because today the human body in advanced capitalism also cannot escape the organising principles that it is inevitably submitted to, benign and otherwise.

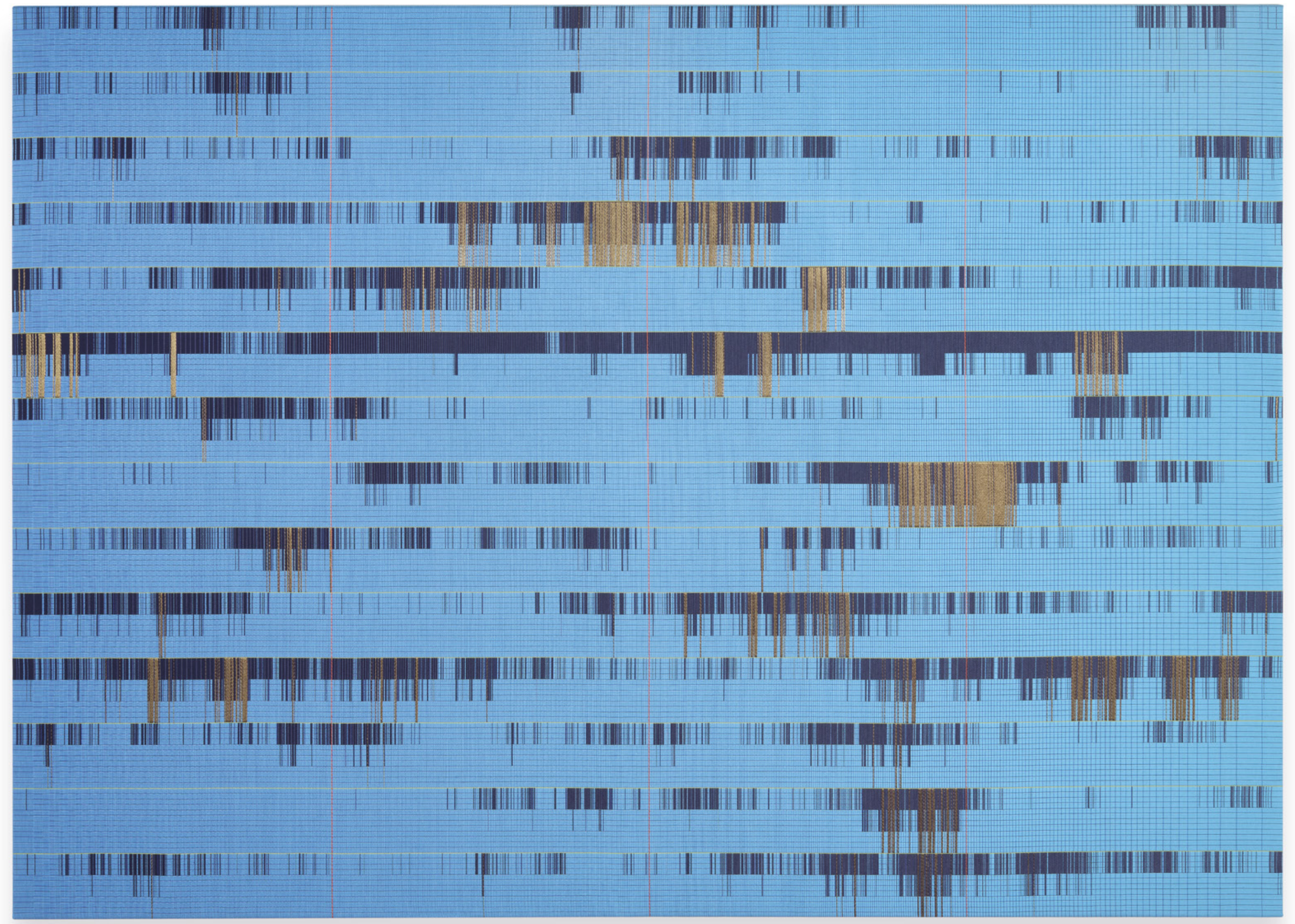
This is what we encounter in Morris's works. We are simultaneously brought to the brink of the vast flow of data, in all its sublimity, while being given the means, through decisions made by the artist over how much and what kind of information can be presented in her tapestries, to stand back and consider the very nature of such data sets. We might initially balk at the seeming coldness of their subjection of the most intimate and organic entities to the harsh, non-discriminating eye of a system, but we come to admire the beauty of their material irregularities. Despite the artist's best efforts to force them into a perfect grid as she stretches them, what are supposed to be rigid lines of data sometimes wiggle and buckle, suggesting yet another way that material can resist the will to form.

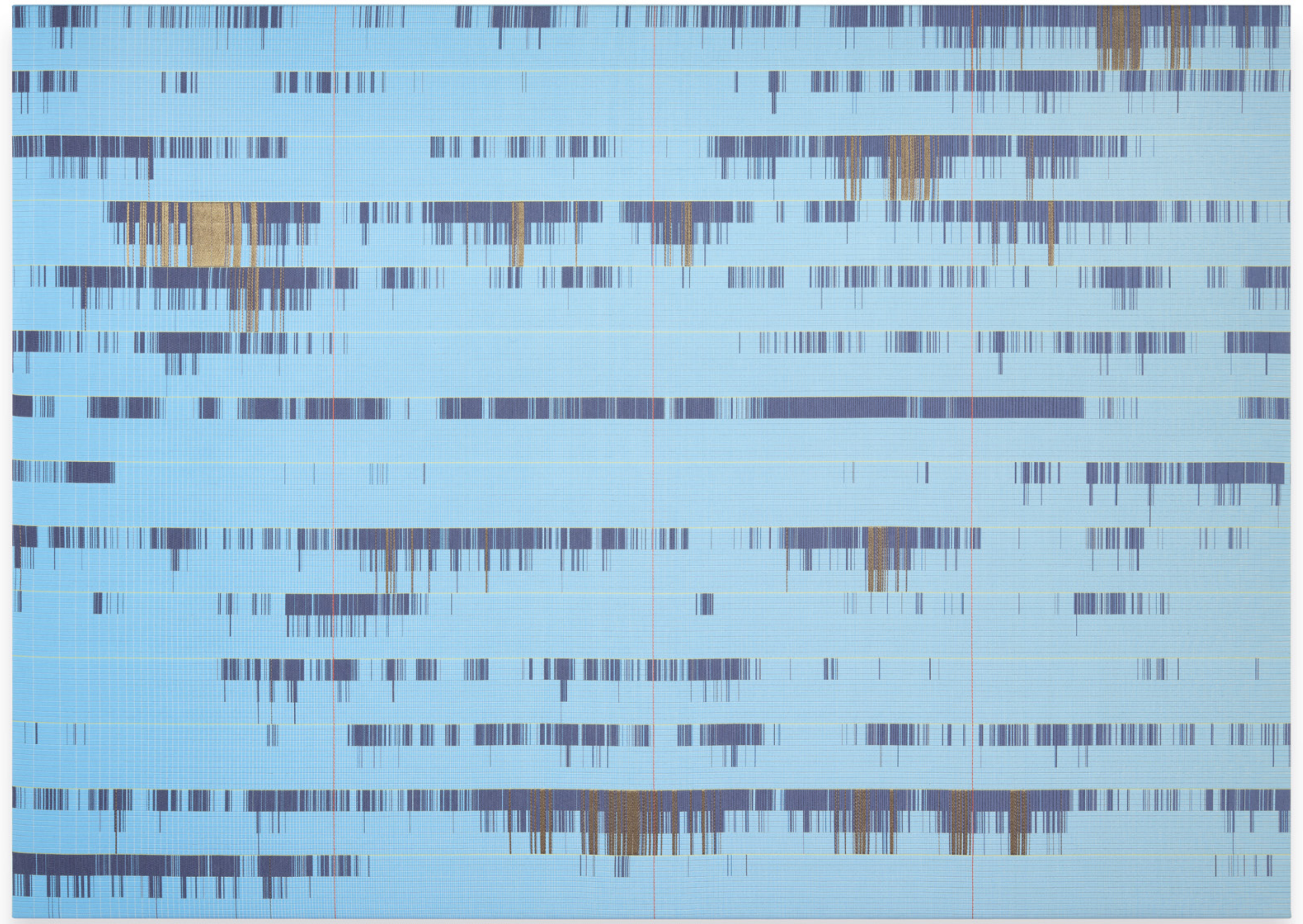


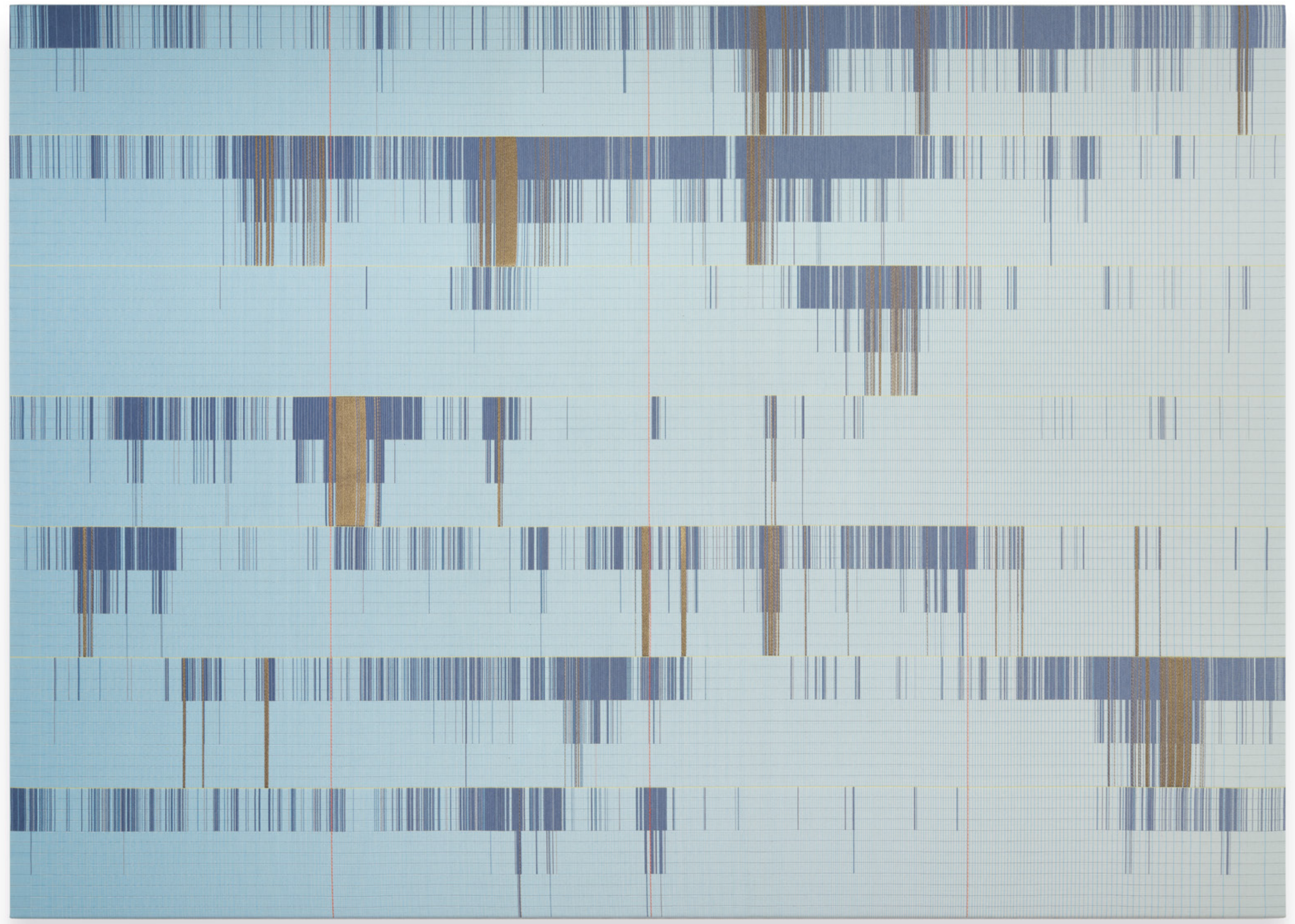












John Cage, preparing a piano (1948). Provided courtesy of the John Cage Trust.

Susan Morris is an artist who also writes. Her work engages with periodicity and the involuntary mark, either through a diaristic form of writing or by diagrammatic works generated from data recorded by devices worn on the body and, more recently, from ambient light and sound recordings. Her PhD, *On the Blank*, UAL, 2007, examined the relation between writing, photography and drawing. Morris has won several grants and awards including, in 2010, a Wellcome Trust grant to produce a suite of Jacquard tapestries for permanent display at the John Radcliff Hospital, Oxford, from data recording her sleep/wake patterns. This project spun off into an independent series of tapestries recording activity, light and sleep for continuous periods of up to five years. She is currently working on her second written piece, an 'involuntary novel' made using the app Evernote – this as counterpoint to her visual work that has been described as 'involuntary drawing'. Ten years apart, both text-based works record day-to-day life during a single year. In 2016 she had her first museum show, *Self Moderation*, at Kunsthaus Centre d'art Pasquart, Switzerland. Her most recent solo exhibition *Susan Morris: Ongoing Work*, 2021, was at Bartha Contemporary, London. *A Day's Work*, a group exhibition she curated, opened at SKK Soest, Germany, in spring 2019 and in October 2022 *The Gorgeous Nothings*, which she has also curated, will open at Bartha Contemporary. She is the co-editor, with Rye Dag Holmboe, of *On Boredom: Essays in Art and Writing* (UCL Press: 2021).

Rye Dag Holmboe is a writer and art historian. He is currently Leverhulme Early Career Fellow at UEA, where his research examines the relationship between creative process and psychoanalysis. He completed his PhD at UCL in 2015 where he was an AHRC Doctoral Scholar and later a Teaching Fellow. He has also taught at the Chelsea School of Art. Holmboe has published widely on art, literature and psychoanalysis. He is the co-editor, with Susan Morris, of *On Boredom: Essays in Art and Writing* (UCL Press: 2021). His book on the collagist Nicol Allan was published by Slimvolume in 2021, and a further book on the Conceptual artist Sol LeWitt will be published by MIT Press in 2023. Holmboe is currently writing a monograph on the painter Howard Hodgkin. He is also in the fourth year of a psychoanalytic training at the British Psychoanalytic Association.

Alex Bacon is an art historian based in London and New York City who is also active as a critic, curator, and publisher. He is co-founder of Circle Books and, until recently, was a Curatorial Associate at the Princeton University Art Museum. Among his publications Bacon is co-editor, with Hal Foster, of a collection of essays on Richard Hamilton (MIT Press, 2010), as well as the author of texts in various exhibition catalogs and edited volumes such as Francis Alÿs, Hanne Darboven, Gilbert & George, Ad Reinhardt, Niele Toroni and Stanley Whitney. He has written for numerous publications, including Artforum.com, Art in America, the Brooklyn Rail, Mousse and Rhizome. He is currently completing his PhD in art history at Princeton, with a dissertation on the first decade of Frank Stella's career.

Dr Simon Aeberhard is an assistant lecturer in German Literature at University of Basel, Switzerland. One of his research interests is centred around notions of writing and notation in several artistic domains after World War II.

Silence (On Prepared Loom) was commissioned by St John's College for the New Library & Study Centre, designed by Wright & Wright Architects. It was curated by Vivien Lovell, Modus Operandi, assisted by Poppy Heron.

There is a long tradition of art for architecture at St John's, an early example being William Laud's invitation to Hubert Le Sueur in 1633 to create the statues of Charles I and Queen Henrietta Maria for the Canterbury Quadrangle. In recent decades, the architecture of the Garden and Kendrew Quadrangles designed by MacCormac Jamieson Prichard and the new Library and Study Centre by Wright & Wright has allowed artists to create site-specific works inspired by their context. This approach has been led by the vision of the College's presidents, bursars and art panel members, and supported by its architects – who have so generously afforded opportunities for other creative minds.

Susan Morris's woven tapestry series *Silence (On Prepared Loom)* for the new Library & Study Centre is the latest such commission. The six-part piece forms an important addition to the collection of notable contemporary artworks for the College that include Kirsty Brook's *Otranto Passage Artwork*, Susanna Heron's *Stone Drawing*, and Mary Lum's *St John's Primer*, as well as earlier commissions by Wendy Ramshaw, Alexander Beleschenko, Langlands & Bell and Ian Monroe.

Vivien Lovell, Modus Operandi

The relationship of the College gardens to the new Study Centre and Library at St John's has always been central in the thinking of Wright & Wright, who designed this beautiful building. We were therefore completely captivated by Susan Morris's proposal for an artwork for display within the interior space of the galleried reading room. Susan's work takes the experience of hearing the sounds of the garden and transforms this into a set of planar, textile forms to be read silently by the viewer. This cleverly reflects the nature of scholarship, which interprets the products of experience and imagination, transferring them into a permanent and enduring form that is accessible to others. In setting the commission for this work, the College emphasized its desire for a tapestry form, inspired by other successful placements of tapestry in modern Oxford buildings, such as those by Tom Phillips in the Hall of St Catherine's. The second desire of the College was for works of art that would have enduring interest and freshness for daily users of the Library; in other words, something that could still intrigue a third year student as much as it might captivate a fresher. Susan's response to these constraints has been magnificent. The College is very fortunate to be able to look forward to enjoying these wonderful artworks for many years to come.

Professor Andrew Parker, Emeritus Research Fellow in Physiology; Previous Principal Bursar

Acknowledgments: With thanks to Margaret J Snowling, President, St John's College Oxford, and the following staff members: Iris Burke, Zoe Hancock, Petra Hofmann, Ian Stokes, Oliver Warner. Thanks to those on the Art Selection Panel who, with Prof. Parker and Vivien Lovell, chose to commission my work for the library: Dr Georgy Kantor, Tutorial Fellow in Ancient History; Keeper of the Pictures, Silver and Vestments, Professor Mohamed-Salah Omri, Tutorial Fellow in Modern Arabic; Fellow Librarian & Keeper of Archives, Professor Hannah Skoda, Tutorial Fellow in History; Keeper of the Pictures, Silver and Vestments, Professor Alastair Wright, Tutorial Fellow in History of Art.

Because of the difficulties of travelling to and accessing locations during the pandemic many of the photographs in this publication were taken on smartphones. I couldn't go to Ghent during the final weaving process, for example, so images that document the tapestries on the loom were taken by Marcos Ludueña-Segre.

The images of the interior of the library and the adjacent gardens were taken by myself, on my phone. The high-resolution photographs that document the installation of the work were taken on a long, hot day in August 2021 by Jackson of Stephen White & Co. Assisted by Tim Haccius, Jackson returned in July 2022 to photograph the tapestries once the lighting had been installed. These images are shown in the gatefold of this book. I am extremely grateful to both Tim and Jackson for this work, as the tapestries were not easy to photograph. I thank them too for the inspired images of the library bookshelves, which emphasize the visual links between the arrangements of the books and the patterns in the tapestries.

Thank you to Paulo Ricca for writing the algorithm that converted the sound recordings into line. I count myself very lucky to have been able to work side-by-side with you in the funky Buzzbar before lockdown made that impossible.

Huge thanks to Marcos Ludueña-Segre for persevering with this project under difficult conditions. Thank you for pushing to get onto the loom so that samples were ready for the selection process and for somehow, miraculously, getting these very large pieces woven in time. It's always amazing to work with you, your intuitive response always brings about a shift in my perspective and I am grateful for your input.

Thank you to Dan Edwards, Matthew Collins, Sam Nias and Charlie Higg of Darbyshire Ltd for building the stretchers and transporting and installing the work. Your skillful negotiation of some of the college's tight corners, corridors and mediaeval steps to get these large pieces into the library was a marvel to behold. Thank you for allowing me to record this process. Thank you to Pamela Richardson at Darbyshire for stretching the works under such challenging circumstances. You understood perfectly my pernickety desire to make these unruly pieces of woven cloth into tight grids and I am so happy with the result.

I am grateful to Rye Dag Holmboe and Alex Bacon for their enthusiastic engagement with the ideas behind this new work – thank you both for your essays.

This book also contains the essay, 'Writing the Ephemeral: John Cage's Lecture on Nothing as a Landmark in Media History' by Dr Simon Aeberhard. I came across this piece online when I was researching Cage's infamous lecture and immediately thought it would be great to reproduce here as one of the many documents that trace and inform my thinking around Cage's work. My sincere thanks to you Dr Aeberhard, especially for allowing me to intercut your work with images of mine.

Thank you Wright & Wright Architects for permission to use your drawings in this book and to the John Cage Trust for their images of the Prepared Piano.

Thank you Niklas and Daniela von Bartha of Bartha Contemporary, London, for all your support of my work.

Thank you to all at Trevor Horne Architects.

Thank you Vivien Lovell for bringing it together.

Thank you, dear Christopher Lawson, for designing this beautiful book, which functions as a kind of extended caption to the work. It will be permanently housed in the library within which the tapestries are hung, under the shelf mark: ART/900/MOR

Susan Morris