concerned with the ‘How,’ not with the ‘What,’ not with literal content, but with its performance of the content. The performance – how it is done, in that is the content of Art."

From this perspective, Albers’ portrait sketch should first be seen as form; its psychic and spiritual content provided by the movement, direction and quality of its dynamic marks, in particular, the broad stroke of black ink, whose dramatic vertical passage down the page defines Albers’ profile and establishes his facial features. This expressive calligraphic gesture establishes a boundary of empty space around the outline of his face; a ‘transition’ line suggesting both a shadow that thrusts his head forward into three-dimensional presence and a void into which his eyes stare.

In contrast, the lines that describe Albers’ eyelids, nostrils, lips and chin are thinner and harder. They chisel his features from the paper surface, defining edges and establishing three-dimensional planes so that his head stands out as a rounded, solid form. Yet these descriptive lines flow out of the same line that suggests empty space, and, as a result, they blur the distinction and soften the hard-edged boundary that usually separates solid flesh and intangible void. They are at once, hair and shadow, firm chin and empty space.

Albers was fascinated by such ineffable boundaries and distinctions, or, as he put it, the space between the ‘factual’ and ‘actual;’ where two-and three-dimensions co-exist, and grass can be seen as both vegetable and forest.

15 Ibid.
16 "For the differentiation of such double if not multiple viewing I suggest a distinction between factual facts and actual facts. …Grass as vegetable, is a factual fact; grass as forest, an actual fact. Or, 1 + 1 = 2 is factual; and 1 + 1 looks like 4 is factual. “ In “One plus One equals Three and More or Factual Facts and Actual Facts,” typewritten Lecture notes, JAAF 72.6.

Josef Albers
Drawing Lines in Space

Introduction: Art and the Incarnation of Space

15

Josef Albers
Drawing Lines in Space

Soft Edge-Hard Edge
Homage to the Square

19

Josef Albers
To Open Eyes

Finding Relationship in Space

24

Josef Albers

Finding Relationship in Space

24

Edith Baumann, Benny Fountain, Shingo Francis, Jane Harris, Fritz Horstman, Richard Kenton Webb

Acknowledgements

36

43

68
INTRODUCTION

EMERGENCE: ART AND THE INCARNATION OF SPACE

BY DR. RICHARD DAVEY

In 1955, whilst studying for his BFA at Yale, the documentary filmmaker, John Cohen made a silent black and white film of Josef Albers teaching in the classroom. Although only sixteen minutes long, this unique footage offers a fascinating insight into the teaching practice of one of the twentieth century’s most respected art teachers.

It opens with a group of students standing with their arms outstretched, drawing circles in the air with their index finger. Albers stands in front of them, demonstrating the movement then holding up a large white circle. He lifts the circle higher, angles it, twists it, turning it before their eyes from a circle to an ellipse to a straight line. He puts it on the floor, encouraging them to look and then draw, in the air, the shape they see. He then shows the students how to use a pencil to focus their gaze. They hold the pencils horizontally then vertically, close to and far away, using them to measure, assess and see with new eyes.

Albers seems to dance as he moves around the room, passionately gesticulating, pointing things out, encouraging the students to look at how things change when seen from different angles. He then leads the rapt group in a slow, circular walk around the white circle as it lies on the floor. The students continue drawing in the air as they look down at it with concentrated attention. Later we see him guiding the hand of a student as they draw lines just above a sheet of paper. The images fade, the screen turns to white and the dance starts all over again: point, look, analyse, draw.

1. Josef Albers was one of Cohen’s teachers.
establishes is not an object’s definitive shape, but the boundary between its visible matter and the empty space around it, where its form emerges from nothingness into distinctive individuality. To represent ‘things seen,’ artists must, therefore, represent what is unseen – the empty space that separates one object from another.

As Albers’ students drew the circle with their fingers, turning the three-dimensional object they saw into a two-dimensional outline, they were putting into practice principles that had been outlined more than five centuries earlier by Leon Battista Alberti in the second book of his treatise, Della Pittura. Painting aims to represent things seen, Alberti argued, and to do so artists had to first see how an object occupies space and only then circumscribe the outline they saw.

What Albers’ teaching methods demonstrated, was that outlines are fugitive, fleeting and fictional. The ‘circle’ was only a circle to those who stood directly in front of, and at eye level, to it; to those looking from the side, beneath or above, it was an ellipse or a straight line. What an outline

As he was to often say in his lectures, Albers believed in, “clear seeing first... precise formulation second,” which is why he taught his students to focus on the object before looking down at the paper, and rather than drawing what they thought they saw, to observe how it actually appeared to them in space. Only after they had observed, and spent time looking, were his students encouraged to draw, then re-draw and draw again, beginning first in the air, then on paper. This process developed a muscle memory which helped them to realise that making a mark is as much a physical act as a visual one, shaped by movement and touch as well as sight.2

2 Josef Albers, Dimensions of Design, p. 35 (original lectures notes, June 29th 1956, in Josef and Anni Albers Foundation Archive (JAAF) 14.40)

3 Ibid. “Producing dimension by repeating, multiplying many shapes, we discover that the emptiness, once touched, often leads us further than eyes.”

“THE MOMENT AN ARTIST MAKES A MARK ON A BLANK PAGE, WE SEE A FORM IN SPACE.”

—RICHARD DAVEY
The moment an artist makes a mark on a blank page, we see a form in space. When they draw another line, they establish its position within that space. Developing the mark into an outline gives it form and character. It begins to tell a story.

Alberti instructed artists, after mastering outline, to concentrate on compositions that would turn a single figure into an 'historia.' This pictorial narrative might celebrate the past, reveal the sacred or highlight beauty in the world. To do this, artists needed to master the use of colour, light and shadow so that they could turn an outline into a three-dimensional surface.

Once a solid surface has been established, it needs space around it to differentiate it from other surfaces. Sometimes empty space is simply suggested through things which themselves appear insubstantial: shimmering gold leaf, amorphous colour or repeated patterns. Sometimes its presence is implied by association. We look at a landscape or peer into an interior, and we see the space that should be there, our imagination turning what we know to be flat brushstrokes lying on a flat surface into the illusion of solid objects inhabiting empty space.

The problem is not the representation of space, which artists have been doing since Palaeolithic artists made the animals they hunted appear to roam across the surface of cave walls. Rather, it is giving the illusion of entering a pictorial space that seems to obey the same natural laws as the world we inhabit. This challenge was solved in 1415, when Alberti's fellow Florentine, the architect Filippo Brunelleschi, demonstrated how converging lines meeting at a vanishing point, which coincides with the artist or viewer's vantage point, could recreate the characteristics of human sight. His discovery of linear perspective brought new depths to artistic space, offering a familiar sense of recession and visual unity. Artists now had a set of geometric principles with which to systematically analyse the appearance of things and the space around them. And the viewer no longer just looked at an image, but felt they could enter it; the solidity of the surface dissolving before their penetrating gaze as if a window had been opened onto a new world.

One of the first paintings to use linear perspective was Masaccio's painting of the Tribute Money in the Brancacci Chapel.

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6 Ibid., p.61.
7 Ibid., p.67.
8 Ibid., p.95. "The function of the painter is to draw with lines and paint with colours on a surface and given bodies in such a way that, at a fixed distance and with a certain, determined position of the centric ray, what you see represented appears to be in relief and not like those bodies.

of the Basilica of Santa Maria del Carmine, Florence. Geometric structure breaks down the boundary between the viewer’s space and the depicted sacred space. Before us is a landscape we can walk into, buildings we can enter and a crowd we can mingle with; but as we look up and gaze at clouds floating in an azure sky, we find that finite, physical space has seamlessly merged with the ineffable space of the infinite. With one look we bring together foreground and background, difference and distinctiveness in a single, unifying span.

Perspective opens a window into a world we can imagine ourselves standing in. It gives our eyes room to move around and creates space for us to distinguish individuality and difference. Scientists have known since classical times that space, which appears empty and insubstantial, is not actually empty, but full of invisible light, unheard sound and clusters of microscopic particles, travelling in waves across the universe. At any one time within this ‘emptiness,’ there are countless atoms forming and un-forming, momentarily coalescing and becoming visible until their bonds dissolve and they disappear again. There is time in this empty space and intangible substance, change and transformation, beginnings and ends so that what may appear empty is, in reality, full.

For an artist to represent what our vision sees, pictorial space must appear empty and its substance invisible. But occasionally works of art show us what Albers would describe as ‘actual facts’ rather than ‘factual facts,’ what is there rather than what we can see. Artworks enable us to stare into the substance of space, rather than showing us the other side. When medieval artists used gold leaf to symbolise heaven, they were using a material that was meant to suggest the otherworldly and mysterious, transporting them away from the physicality of this world. Yet, staring into gold leaf’s polished surface where light is simultaneously reflected, absorbed and held, we encounter something physical rather than ethereal. Instead of gazing into unbounded space we find ourselves in a visual loop, held just beneath, just above and on the painting’s surface, encountering substance rather than void, material presence rather than the optical illusion of infinite reality.

An emphasis on the materiality of a painting’s surface can also be seen in the late works of Paul Cézanne. Defying centuries of artistic convention he would leave areas of canvas and paper visible between and through the painted mark. At the same time, his brush-marks didn’t stay within the outline of forms but disregarded them. They straddled the border between physical objects and empty space to dissolve the difference between the material and immaterial. When our eye attempts to slide into illusionist space, it is brought up short by the material presence of canvas or the white of bare paper. Instead of depth and trompe l’oeil, it finds surface and material. The spell is broken, and the painting becomes a physical thing, allowing
those modernist artists who followed Cézanne’s lead to question the purpose of a painting and push it at its defining limits. A painting could now be seen as a solid object, its surface a maelstrom of paint strokes that no longer needed to represent visible reality, suggesting a sense of space that was no longer confined by the perspectival search for depth and recession.

When Albers’ taught his students to draw circles in space, the intention was to practise skills that would “develop seeing eyes, understanding minds, controlled hands.” Yet as their hands moved through the air, they were not only drawing circles, they were circumscribing space, giving it limits, holding it, containing it, discovering it. As they felt its substance moving across their skin and slipping between their fingers, they learnt to draw through touch as well as sight.

Albers’ legacy as a teacher and writer has been enormous. His students included artists such as Robert Rauschenberg, Eva Hesse and Richard Serra, and his book Interaction of Color, which brought together many of the colour exercises he developed during his years of teaching, continues to have a profound effect on artists and students. In the late 1990s, the Josef and Anni Albers Foundation in Bethany, Connecticut, established two residency studios, inviting artists to spend two months developing their practice deep in the New England woods, in a landscape where the physicality of space and colour is almost tangible.

The Residency co-ordinator is Fritz Horstman, who has spent more than 15 years both using and teaching Alber’s methods. In 2011, and then again in 2015, Jane Harris was a resident artist. Benny Fountain was one of the residents in 2017, whilst Richard Kenton Webb will be a resident in 2020. Although neither Edith Baumann or Shingo Francis has been a Foundation Resident, their work, like that of the other four artists in this very personal selection, resonates with Albers’ approach to pictorial space.

Baumann, Fountain, Francis, Harris, Horstman, Webb and Josef Albers defy perspective’s egocentric model, where the individual is seen to be the originator of space, its Big Bang Point of origin. Instead, they encourage us to be explorers in an unknown realm, looking into space rather than through it. They place our finger in the air so we can see: opening our eyes to the invisible and allowing us to feel the substance of the intangible. They show us the world in new ways, where time is not linear but fluid, space is not empty but solid, and where the origins of space and time combine with our here and now, to dance on the back of our eye. Through their works, space emerges from the formless shadows, to take on form and become ‘incarnate.”

“LIKE ALBERS, THEY ENCOURAGE US TO LOOK INTO SPACE RATHER THAN THROUGH IT.”

-RICHARD DAVEY ON THE SIX ARTISTS’ WORK IN THE EXHIBITION, EMERGENCE; ART AND THE INCARNATION OF SPACE.

12 The author met Benny Fountain whilst spending a month at the Foundation in 2017 as a resident researcher.

13 Danneick 2003, p.256.

14 “Dimension of Design” typeset lecture notes, June 23rd 1958, AAF 84.20.
In 1919, Josef Albers drew a quick pen and ink self-portrait (Fig. 1). Using just a few, succinct lines, he depicted his distinctive aquiline features in side-profile, turned slightly away from the viewer. 1919 was a pivotal year for the 31-year-old Albers. Despite wanting to be an artist from a young age, he initially respected his father’s wishes and became an elementary school teacher in his hometown of Bottrop, Germany, where he worked until he was 25. In 1913, having felt he had fulfilled his obligation to his father, he moved to Berlin and enrolled at the Königliche Kuntenschule (Royal Art School) to train as an art teacher, graduating two years later. Albers planned to stay in Berlin and make his living teaching art, but a spell in a Sanatorium due to illness as well as the death that year of his brother, who fought on the Russian front, saw him return to Bottrop and go back to teaching in his old school. However, in October 1919, he left again, this time to study at the Royal Bavarian Art Academy, Munich, before moving to the newly founded Bauhaus School a year later.

These biographical details may provide the historical context for the sketch, but for Albers, they had no role to play in how the viewer should engage with the work. In a 1940 lecture on ‘the meaning of art,’ he told his audience that artistic ‘feeling’ or ‘seeing’ is like looking at grass. When a cow looks at grass it sees an edible vegetable, but a poet, artist, scientist or philosopher will look at it and see a carpet, fur, a forest; they will see it as colour or changing colours, as ‘plastic or tactile’ or ‘multiplicated movement.’¹⁴ This observation led to his repeated argument that, “Art is
Although Albers saw line as the most two-dimensional, non-spatial graphic element, it offered him the chance to "make an object move" even if that movement is just "the eye's movement through the page."

From this perspective, Albers' portrait sketch should first be seen as form; its psychic and spiritual content provided by the movement, direction and quality of its dynamic marks, in particular, the broad stroke of black ink, whose dramatic vertical passage down the page defines Albers' profile and establishes his facial features. This expressive calligraphic gesture establishes a boundary of empty space around the outline of his face, a "transition" line suggesting both a shadow that thrusts his head forward into three-dimensional presence and a void into which his eyes stare.

In contrast, the lines that describe Albers' eyelids, nostrils, lips and chin are thinner and harder. They chisel his features from the paper surface, defining edges and establishing three-dimensional planes so that his head stands out as a rounded, solid form. Yet these descriptive lines flow out of the same line that suggests empty space, and, as a result, they blur the distinction and soften the hard-edged boundary that usually separates solid flesh and intangible void. They are at once, hair and shadow, firm chin and empty space.

Albers was fascinated by such ineffable boundaries and distinctions, or, as he put it, the space between the 'factual' and 'actual;' where two-and three-dimensions co-exist, and grass can be seen as both vegetable and forest.18

In 'Graphic Tectonics' c.1942, Josef Albers wrote, "Movements are not confined to one direction, but also as moving in opposite directions. A circular line can be followed both ways, clockwise and anti-clockwise, but it does not say whether it is moving or staying still."19

As Albers' broad line meanders down the page, it shifts between figure and ground, void and presence, and it does so because it has, like all lines, two edges connected by a visible face. On the right-hand side, Albers' features appear sharply delineated by an implied crisp, white edge falling away into black, intangible space. But where the left-hand edge encounters the expanse of empty, buff-coloured paper beyond it, the black ink behind it appears solid. It is as though these two-edge lines are asking our eyes to move in opposite directions, with one moving and one staying still, causing the linear space between them to exist in a state of constant perceptual tension.17

This play between movement and stillness, tangible and intangible, may give Albers' portrait an implicit sense of energy, but our brains cannot cope with the need to hold polarised states in equivocal balance, so we make a choice. We see either space or solidity, detailed portrait or expressive form, but never both simultaneously.

Similarly, when we look at a line, we may see a definite, hard edge drawn to define, shape, describe and delineate forms, which can express an idea or capture an emotion. Or we see something soft, implicit and unintentional, appearing at the border of colours or planes, revealed rather than imposed, a moment of subtle emergence at points of transition. A line can be the solid figure standing out against the empty ground, or it can be a rip in the picture surface revealing a limitless void.

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Nevertheless, when our eyes fall through this tear, we are reminded that a line is also the space between its edges, a gap which, however wide or thin, is a place of transition and transformation, merging and emerging, like the boundary of our body. We look at our skin and see a hard border, a barrier separating us from the space around. But look at this edge at the sub-atomic level, and we see interaction and engagement, movement and energy, cells constantly dying and regenerating, becoming dust and growing back. We see the gaseous exchange of inhaling and exhaling, sweat and absorption. And whilst particles may repel, they also attract. This line is not a line of difference and separation, but a space of entanglement, interweaving and the interconnection of particles.

Just as atoms are continuously moving in a solid body, Albers believed colours are also in a state of constant movement. "When I paint," he wrote, "I think first and mostly of color and of color as a moving force...I look for color performance presenting a perpetual illusional motion – from within...as color pulsation and breathing." Albers was always looking for colours to breathe, to have that dynamic energy which meant they were 'alive.' And for colours to be able to breathe, they need space to move and interact.

Interaction of Color was the title Albers gave to the book in which he published his collected teaching on colour. The exercises it contained, like his lessons on drawing, focused on learning to look, to discover the 'actual' rather than the 'factual.' But by juxtaposing colours, Albers not only sought...
to show the perceptual effect they might have on each other but also the way that the invisible line between them might be affected. In notes for a lecture he gave on his use of colour in his painting, he wrote: “Colors are juxtaposed for various and changing visual effects. They are to challenge or to echo each other, to support or oppose one another. The contacts, respectively boundaries between them may vary from soft to hard touches, may mean pull and push besides clashes, but also embracing, intersecting and penetrating.”

Soft Edge – Hard Edge, a portfolio of ten screenprints, printed by Scirocco Screenprints, New Haven in 1963 uses different tonal combinations to explore these ‘soft to hard touches.’ From barely perceptible shifts in greyscale and oranges that seem to merge seamlessly into each other, to clashing confrontations between grey and orange as well as grey and green, Albers subtly highlights the intangible lines that lie between the colours. As with his portrait, some lines confront us with a dramatic cliff edge of separation where others are barely perceptible, merging and interweaving, ‘intersecting and penetrating,’ without making clear where one colour finishes and the next one starts.

These soft, nebulous edges remind us that whilst a line can seem to offer us a hard-edged boundary, it can also offer us a space of entanglement and transition, similar to the moment when water becomes ice or evaporates as steam, or when a photon of invisible light, having pierced our eye, becomes a colour in our mind. It is the space between...

22 “Only by looking at Becoming one distinguishes light from dark.” JAAF 79.17.

23 It consists of simplicity rather than showy complexity, reflecting his desire “to do less in order to do more.” It consists of simplicity rather than showy complexity, reflecting his desire “to do less in order to do more.”

24 From the portfolio Josef Albers.

25 From the portfolio Josef Albers.

26 From the portfolio Soft Edge–Hard Edge.

27 From the portfolio Soft Edge–Hard Edge.
Josef Albers. Porta Negra, 1965
From the portfolio Soft Edge–Hard Edge. Screenprint. Sheet: 17 x 17 in.
The Josef and Anni Albers Foundation, 1976.4.165.7.

When the Albers arrived in America, Josef was no longer a figurative painter who had left Bottrop fifteen years before. He was now an artist who could see the Bauhaus as a place of ‘philosophical’ discovery. Albers commented that starting at the Bauhaus opened his eyes to the idea of abstraction as a way of seeing, making, and experiencing that was not dependent on the ‘natural’ appearances of things. When his students asked him why he used the black background instead of a white one, he replied, “I said ‘to open eyes. ’ And this has been the motto of my life.” Handwritten note. JAAF 80.32.

Through his teaching, Albers revealed the nature of abstraction in his works. He was interested in the way that a square could be transformed visually through the addition of another smaller square. He explained his approach by saying, “One line may meet another line, but in the meeting it is only a minimum effort that is perceived. There is no sense of the line meeting, but simply a change of direction. By the gradual reduction of effort, the quantity of change can be increased.” The Josef and Anni Albers Foundation, 1976.4.165.6.

Josef Albers, Facemde, 1965
From the portfolio Soft Edge–Hard Edge. Screenprint. Sheet: 17 x 17 in.

Out of these early experiments, Albers gradually developed a more refined technique. By working with pure white and black, he created a series of colored glass objects that were displayed in the Bauhaus with the figurative painter who had left Bottrop fifteen years before. When the Albers arrived in America, Josef was no longer a figurative painter who had left Bottrop fifteen years before. He was now an artist who could see the Bauhaus as a place of ‘philosophical’ discovery. Albers commented that starting at the Bauhaus opened his eyes to the idea of abstraction as a way of seeing, making, and experiencing that was not dependent on the ‘natural’ appearances of things. When his students asked him why he used the black background instead of a white one, he replied, “I said ‘to open eyes. ’ And this has been the motto of my life.” Handwritten note. JAAF 80.32.

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The Josef and Anni Albers Foundation, 1976.4.165.6.

Profundo.

In his interest in stained-glass windows, Albers had found the inspiration to create his own abstract objects. When his roommate found at the Bauhaus encouraged him to take this interest further, Albers developed a technique of creating layers of glass, each a different color. By cutting and reassembling these layers, Albers was able to create new forms and explore the idea of abstraction. He began to experiment with more elaborate designs.

Scrolls and strips began to experiment with more elaborate designs. Scrolls and strips were cut from the glass, and their edges were then sanded to create a smooth, reflective surface. By the early 1930s, Albers had developed a technique that allowed him to create a more sophisticated design. Using stained glass, Albers was able to create a kaleidoscope of shifting color patterns. He used these patterns to create a sense of depth and movement in his work.

Albers’s work was characterized by a combination of flat and linear elements. The use of color was used to create a sense of depth and recession. Depending on the order and interaction of the colors, the stencilled lines appeared to recede, hover, and weave in and out of each other, establishing a sense of spatial relationship. The illusion of real depth and recession was achieved through a minimum of effort a quantum of effect. Depending on the order and interaction of the colors, the stencilled lines appeared to recede, hover, and weave in and out of each other, establishing a sense of spatial relationship. The illusion of real depth and recession was achieved through a minimum of effort a quantum of effect.

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Black Mountain College in North Carolina, where he taught from 1933 to 1938, provided Albers with an opportunity to develop his ideas further. He was able to apply his theories of abstraction to the study of color in a way that was new to the field of art education. Albers’s teaching at Black Mountain College was characterized by a focus on the relationship between color and form. He believed that color could be used to create a sense of rhythm and movement in his work.

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When the 31-year-old Josef Albers moved from Bottrop to Munich in 1919, he thought he had finally left teaching behind. Enrolling at the Bauhaus a year later, he enthusiastically embraced the role of a Bauhaus student, learning about new materials and techniques and forging a new artistic style. In 1922, Walter Gropius asked if he would help teach the Bauhaus Vorkurs or ‘Preliminary Course.’ Although initially reluctant, Albers agreed, and over the next ten years, he progressed from being a journeyman to a master to finally leading the course. He replaced its initial emphasis on the principles of craft with a focus on the elementary principles of design.23

Influenced by what he had learnt as an elementary school teacher, Albers’ approach was to presume his students knew nothing and to help them learn through practical experience emphasising the importance of looking, doing, and playful discovery. In a series of lectures he gave at the Lyceum Club in Havana in 1934, he explained, ‘Life is the best teacher. Which is to say, that which teaches most intensely is our own experience... Tasting, testing and trying are more valuable than studying... Feeling for the material. You can’t get this from books, nor from your teacher, only from your own fingertips.’24

Fourteen years after the Bauhaus first opened its doors in Weimar, Hitler’s appointment as Chancellor of Germany, in January 1933, sounded its death knell. On the 11th of April 1933, the Berlin Police and the Gestapo closed the school. To Munich in 1919, he thought he had finally left teaching behind. Enrolling at the Bauhaus a year later, he enthusiastically embraced the role of a Bauhaus student, learning about new materials and techniques and forging a new artistic style. In 1922, Walter Gropius asked if he would help teach the Bauhaus Vorkurs or ‘Preliminary Course.’ Although initially reluctant, Albers agreed, and over the next ten years, he progressed from being a journeyman to a master to finally leading the course. He replaced its initial emphasis on the principles of craft with a focus on the elementary principles of design.23

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Fourteen years after the Bauhaus first opened its doors in Weimar, Hitler’s appointment as Chancellor of Germany, in January 1933, sounded its death knell. On the 11th of April 1933, the Berlin Police and the Gestapo closed the school, which had, by this time, moved to Berlin, suspecting some

24 Notes for a lecture on “Constructive Form” given at the Lyceum Club, Havana, 29th December 1934. JAAF 84.1
of its students and staff of printing Anti-Nazi propaganda and of having communist sympathies. Despite being allowed to reopen a few months later, the permission came with such onerous restrictions that the director, Mies van der Rohe, decided to close the doors and bring this radical and far-reaching experiment in art education to an end.

The closure of the Bauhaus could have been devastating for Josef and his wife Anni, a fellow student he married in 1923, but Albers’ reputation as a teacher preceded him. In the fall of 1933, he received an invitation to leave Germany and become Head of Art at the newly founded Black Mountain College in North Carolina, where he continued to inspire students ‘to open eyes,’ through direct observation and making.25

When the Albers arrived in America, Josef was no longer the figurative painter who had left Bottrop fifteen years earlier. From the moment he had arrived at the Bauhaus, with no money and looking to make a new start, Albers had spent most of his time in the glass workshops. His fascination with glass had developed two years earlier after he was commissioned to design and make a stained-glass window for St Michael’s Church, Bottrop, but the emphasis on craft and practical knowledge he found at the Bauhaus encouraged him to take this interest further. Having no money to buy materials, Albers would go to the local town dump to gather up fragments of broken glass and bottles, which he then assembled into vibrant mosaics, whose simple grids became a translucent kaleidoscope of shifting colour patterns (Fig. 2).

Out of these early experiments, Albers gradually developed a more sophisticated technique, fusing thin sheets of coloured glass onto an opaque layer of pure, white milk glass, then sandblasting simple geometric patterns onto their surface using stencils (Fig. 3). Initially, his designs were flat and linear, with colour relationships used for spatial effect. Depending on the order and interaction of the different colours, the stencilled lines appeared to recede, hover and weave in and out of each other, establishing a space that engaged the eye in optical play without creating the illusion of real depth and recession. By the early 1930s, however, Albers had replaced the simple linear patterns and began to experiment with more elaborate designs. Scrolls curled into impossible feats of optical illusion and a taut concertina of flat planes unfurled into a flight of steps that invites the eye to make a vertiginous ascent.

For Wassily Kandinsky, Albers’ fellow Bauhaus master and friend, the path to abstraction had developed from his desire to reveal inner spiritual realities by uncovering essential forms. For Albers, it had emerged through the fingertip discovery of his materials and an urge, ‘to achieve through a minimum of effort a quantum of effect.’26 Despite sharing Kandinsky’s belief that art could reveal the spiritual, Albers aim was for ‘presentation instead of representation.’27 He saw abstraction as a reality that was ‘probably more real than nature,’ and used simple

25 On our arrival at Black Mountain College in Nov. 1933, when asked by a student what was going to happen, I said ‘open eyes. And this has been the motto of my life.” Handwritten note. JAAF 80.1.2.

27 Undated handwritten note filed in my sketchbooks. JAAF 80.1.2.
geometric forms to help us look out into the world with open eyes, encouraging us to discover those perceptual effects and 'actual' facts, where "one plus one makes three or more." 28

Albers took a number of these glass paintings with him to the United States, but many of them were broken on arrival, and, without the availability of the Bauhaus workshops to make new ones, he began to paint with oil on panel instead. One of the first of these American paintings was Black Frame (1934) (Fig. 4), an intriguing work that is clearly indebted to the earlier glass works and offers a lesson in how to look by inviting us on a journey into perceptual space. Like all of Albers' paintings, Black Frame is about simplicity rather than showy complexity, reflecting his desire "to do less in order to do more." 29 It consists of nothing more than a few flat planes of colour, but the interplay of their different angles combined with the push and pull of their colour relationships breathes life into the composition enabling it to expand out of the limitations of flat, impenetrable two-dimensions into a three-dimensional space that seems filled with air.

At the top of the painting hovers the 'black frame' of the title, its inner edge picked out by a vivid white line. Below it, a light blue rectangle within a cerulean background seems to open up a bottomless well of intangible space, whilst precariously balanced in the space between them is a green rectangle that acts as both bridge and divider. Even without figurative hints and guides, our mind naturally sees three dimensions rather than two, depth rather than flatness, rounded forms rather than surface patterns. 30

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28 Preliminary material for an unfinished book of writings. JAAF 78.2.
29 Fox Weber 2012 p.23.
20 Preliminary material for an unfinished book of writings. JAAF 78.2.
30 "Three dimensionality is seen, and easily perceived, as two-dimensional. It is more difficult to perceive 3 dimensions than 2 dimensions. Catalogue card for Robert Engman’s 1955 exhibition of Recent Occupations, JAAF 80. 32. It is a feature given by the Graduate School of Design at Harvard University, held July 1955, entitled Art Education and General Education. Possession of Production Ailsen said "The psychological sequence is from volume to shape to line." JAAF 84.5.
Albers constantly sought to exploit this urge for depth, wanting his compositions to highlight "the discrepancy between physical fact and psychic impact." 31 Many of the paintings he made at this time use 'active' colour relationships to reveal the space between dimensions. In Meeting B (1934) (Fig. 9), Angular (1935) (Fig. 6) and Prismatic ll (1936) (Fig. 7), flat planes of colour seem to unfold across the picture surface or twist around each other carving out a sense of space through interactions that can suggest depth and shallowness, transparency and opacity, overlap and separation. 32

The central motif in Meeting B hovers between a flat surface and limitless space, only slowly revealing its shallow three-dimensional structure. But then Albers took the outline of this central form and made it the subject of his woodcut Showcase (1934) (Fig. 8). Although he knew that the psychological sequence of visual perception goes from "volume to shape to line (three-dimensional before two-dimensional)," the bright, white lines of this woodcut do the opposite, bringing the previously shallow center to three-dimensional life. 33 They drag and draw us in, pulling our gaze through space from surface to depth and back again. We follow these lines just as we follow the lines in a perspectival drawing, tracing them around and across, up and down, in and out, caught in the gap on a perpetual loop, without objects or figures to divert us, seeing nothing but nothingness.

31 JAAF 79.45.
32 See "From Paint to Painting" JAAF 79.45.
33 JAAF 81.3.
Although Albers saw line as the most two-dimensional, non-spatial graphic element, it offered him the chance to do less but to get more. Through the interaction of vertical and horizontal lines of varying widths and intensities, Albers could produce ‘multiple images’ and ‘several interpretations.’ At first sight, his Graphic Tectonic series (Fig. 10) may resemble a flattened birds-eye view of a maze, but by differing the widths of both the black line and the white space between the lines, and by introducing contrasting areas of white or black rectangular space, Albers achieved a sense of dynamic, optical play that meant these structures transcended their essential flatness. They became three-dimensional, geometric forms rising from the surface of the paper. Describing the Graphic Tectonics Albers wrote, “Movements are not confined to one direction only but interchange. Thus solid volume shifts to open space and open space to volume... upward acts also as downward, forward as backwards, and verticals function as horizontals. Parallels, horizontals or verticals, produce sloping planes, empty spaces become solid.”

The consequence of this perceptual playfulness was a sense of ‘free vision,’ so the viewer could not remain in a single viewpoint but needed to move.

Making the viewer move, even if it was just their eye muscles, was also Albers’ intention in his series of Structural Constellations. Despite their essential simplicity, these drawings, prints and engravings exemplify Albers search for ‘quantum effect.’ Not only do these lines and shaded planes pull us in and around, from left to right, top to bottom, but they seem to tilt, twist and rotate whilst staying still (Fig. 13). They appear both solid and transparent. They coalesce and separate, recede and advance, push us away and pull us through from front to back so that in looking at them, our eyes are never standing still (Fig. 12). The Structural Constellations do not just inhabit the picture space; they give it ‘extended flexibility,’ animate it and change our relationship to it through an articulation of line and form that forces us to look, delve and discover anew.

On the surface, Albers had left the world of representation behind when he began to study at the Bauhaus. “Environment is not my point of departure but color and form,” he was to write on several occasions. But when we look at the meandering forms of the Graphic Tectonics, it is hard not to see a strong resemblance to the Aztec ruins that he and Anni visited and photographed on their regular trips to Mexico (Fig. 11). If we read the black frame in Black Frame literally as a picture frame, then instead of seeing it as an abstract interaction of coloured planes, it becomes a schematic diagram of a landscape painting with the green rectangle, a symbolic landscape and the light blue rectangle, sky. In these interlocking shapes, with their suggestion of solid form and limitless space, we might also see an echo of Albers’ painting Still-life with a Russian box (1914) (Fig. 5), made twenty years earlier while he was studying in Berlin. The black frame in this delicate oil painting is the outside of a tray whose base is a deep cerulean blue. Instead of a simple green rectangle, we find a bright pink and yellow box hovering above a sense of limitless space.
Similar connections between the natural world and abstract forms can be found throughout Albers paintings and drawings and lay at the heart of his teaching. In 1917, he made a pencil drawing of a cow where the animal is seen head-on, reduced to a series of flattened circles and ellipses (Fig. 14). Areas of shading and empty space suggest both its three-dimensional presence and its patterned colouring. Years later the cow had disappeared, but the same interplay of circles and the tension between surface and depth, transparency and opacity are still to be found in a painting like Proto Form A (1937) or a woodcut such as Umschlingungen/Encircled (1933) (Fig. 16). As he told the audience in a lecture he gave on Art and Religion in 1940, “to see in nature how form or color appear in relationship, that is an artistic experience.”

Albers once took a photograph of a cow and calf because, as he wrote on the card around the processed print, “Purposefully a viewpoint chosen that the feet of the calf appears on top of the cow. These photos were taken in order to show that photography has no depth. The photograph has no depth and no bifocal adjustment as our eye does.” Albers was intrigued by this image because it allowed him to glimpse another reality and a different way of seeing. For whether in photographs or drawings, paintings or prints, Albers was looking for those essential forms that reveal the relationship between the ‘personal and the universal,’ those things we have in common “that make us aware of the unexplainable…[the] something in life independent of, and unattainable by, thinking and speaking and therefore inexpressible in words.”

Albers’ pictorial spaces show us the connection between matter and formlessness, the relationship between the personal and universal, the moment when the unrealized is realized. They exist on the border between the figurative and abstract, the two-dimensional and three; in the space where they are neither one thing nor the other. He allows us to see an elephant in interlocking black and white shapes (Fig. 15) and a cascade of tumbling black lines in the frothing spume of breaking waves. The space Albers creates and reveals is not fixed but fluid. It engages us from multiple perspectives and shows us multiple viewpoints, helping us to open our eyes to see actual reality and discover ‘the functional and emotional meaning of form.’

40 Unidentified lecture on Art and Religion c. 1940. JAAF 84.3.
41 JAAF 84.5.
42 JAAF 84.1.
43 JAAF 83.15.
44 See: Edición (1935). Láminas cort., 357 x 407; Abstracto n. 3, Ink and Pencil on paper, 357.5 x 357.5, (Bendz 351/1929)
45 Gelatin Silver prints, 1976.7.38.
46 JAAF 81.33. “Every Visible form has range” from a sheet of quotations taken from his writings, JAAF 84.41. The emphasis on training for production of form is visual empathy i.e., ability to read the meaning of form and order, JAAF 84.6.
When Albers stood in front of his students he did not just stand still and lecture, he waved his hands around, walked and half jogged around the room, twisting and turning, pointing and gesticulating, engaging them individually and as a group. It was an act of physical ‘co-ordination,’ in which he used his whole body to teach, carving fluid lines in space from his fingertip through his arm down his legs to his feet.46

John Cohen’s film of Albers is a reminder that drawing and painting are bodily acts that involve the artist moving in and through space. But it is not just the artist’s body that moves. Albers spent his career exploring and demonstrating the movement of lines and colours. “When I paint I look for color performance, presenting a perpetual illusional motion – from within: As a frontal and perpendicular aggression between spectacle and spectator, or, on a more intimate scale, as color pulsation and breathing.”47 Colour reaches between spectacle and spectator, or, on a more intimate scale, as color pulsation and breathing. Colour reaches out; it sucks us in. It can vibrate with pulsating, distinctive energy or dissolve and disappear into anonymous stillness.

46 “Often I have visitors in my class – teachers, artists, parents. One, a student’s mother, after she had been in my drawing class, said to me that she had noticed ‘co-ordination’ in my drawing. She thought I showed co-ordination, not that I had been drawing in co-ordination – she thought I showed co-ordination, when I first got on the blackboard and with the movements of my drawing hand my whole body participated, including my legs and feet. Therefore she thought I showed co-ordination.” On Co-ordination. Typescript sheet. JAAF 75.37
47 When I Paint. JAAF 81.35
In the 1963 book The Interaction of Color, which summarised his years of teaching, Albers described a series of exercises to help the reader see ‘color action’ and feel ‘color relatedness.’ He described how to use coloured pieces of paper to discover how ‘active color loses identity, appears as another colour, lighter or darker, more or less intensive, brighter or duller, warmer or cooler.’ These perceptual changes and psychic effects are the result of relatedness, a sign of the entwined relationship between a colour and its surrounding environment, from the light and shadow that fall upon it, to the other colours that surround it.

Through their interaction, colours move; they merge or vibrate, clash or overlap. But movement demands space: a space not only of visual energy but relationship and relatedness; the space where, for Albers, true poetry and art exist. ‘As long as we hear single tones or only many tones, we don’t hear music at all. Music is between the tones; we hear music if we feel the relationship of the tones. Or – as long as we hear only words in a poem, so long we don’t get its poetry. The art of the poem is between, behind and above, or despite of, words.’

The gap between colours is, therefore, not just the space between; it is the place of change, and thus, Albers believed, the place of life. For, ‘life is change—day and night, cold and warmth, sun and rain. It is more in-between the facts than the facts themselves.’ Time is an inescapable part of that change, not only the linear progression from day to night, but also the presence of time in space, or, as Albers described it, the ‘time-space’ effect. ‘I confined myself to strictly flat elements. These, through their articulation and constellation, are to produce spatial, that is, time-space effects, without disavowing their two-dimensional setting or performance.’

When Albers stood at the blackboard, his hand extended, he was crossing time zones, his fingertip a nanosecond ahead of his eye. Look to the horizon, and it might take us a few hours to walk there: look to the sun, and it would take a jet 19 years to travel there. At night, if we look out to the furthest stars, we are reaching back to the beginning of time in a journey that would take a space ship hundreds or thousands of years to make. However, when we look out across the universe, we conquer time in a single glance, pulling everything visible into our own time and immediate space, rendering the passage of time, timeless.

Using coloured squares and articulated lines, Albers created pictorial spaces that are places of transition and relationship, where time unfolds and forms emerge. In this space between lines and colours, in the gap that both unites and divides, as our eyes oscillate between the solid and insubstantial, two and three dimensions, depth and shallowness, the opaque and transparent, our body finds itself reverberating in a sympathetic vibration that offers us proof of life.

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49 From From To To From From, JAAF 79.11.
51 Time is an inescapable part of that change, not only the linear progression from day to night, but also the presence of time in space, or, as Albers described it, the ‘time-space’ effect. ‘I confined myself to strictly flat elements. These, through their articulation and constellation, are to produce spatial, that is, time-space effects, without disavowing their two-dimensional setting or performance.’
52 This space between lines and colours, in the gap that both unites and divides, as our eyes oscillate between the solid and insubstantial, two and three dimensions, depth and shallowness, the opaque and transparent, our body finds itself reverberating in a sympathetic vibration that offers us proof of life.
“VIBRATION IS A PROOF OF LIFE, THAT HEART AND PULSE AND BREATH AND NERVES ARE AT WORK”

-JOSEPH ALBERS
In the 1963 book *The Interaction of Color*, which summarised his years of teaching, Albers described a series of exercises to help the reader see ‘color action’ and the ‘time-space’ effect. “I confined part of that change, not only the linear progression from facts than the facts themselves.”

Time is an inescapable cold and warmth, sun and rain. It is more in-between the psychic effects are the result of relatedness; a sign of or darker, more or less intensive, brighter or duller, color loses identity, appears as another colour, lighter or vibrate, clash or overlap. But movement demands surrounding environment, from the light and shadow or to the other colours that surround it.

“Life is change—day and night, but also the presence of time in space, or, as Albers described it, the ‘time-space’ effect.”

The art of the poem is the tones. Or – as long as we hear only words in a poem, so long we don’t get its poetry. The art of the poem is the fall upon it, to the other colours that surround it.
INHALE. ONE-LONG-BREATH-IN...

HOLD

EXHALE. ONE-LONG-SLOW-BREATH-OUT...

REPEAT

Inhale. One – Long – Breath – In – Begin to feel your diaphragm expanding, lifting and filling, and as you do so feel the air flow through your nostrils down your trachea into your lungs, the oxygen molecules passing across tiny hairs and cells, causing a silent reverberation to echo through your body, bringing the outside in, penetrating you with the other.

NOW HOLD

Exhale. One – Long – Slow – Breath – Out. Now feel your diaphragm contracting, relaxing, becoming smaller. Feel the carbon dioxide flowing gently through your nostrils and mouth, penetrating the world, bringing the inside back out.

Edith Baumann inhales then exhales; breathes slowly in then slowly out in silent meditation. She picks up a pigment laden brush and, in a single fluid gesture, leaves a gossamer breath of paint on the picture surface. This gesture is not the imposition of a directed mark, describing a considered form: As she slowly draws the line across the surface, she does not know what will happen or what she will find; how transparent or how consistent the mark will be, how much pigment will be left by the end of the stroke; how straight or jagged the edge will be. Each mark is different, a moment of revelation and discovery, as Baumann allows her brush, breath and the movement of her arm to guide her. As we look at the subtle, minimal surfaces of her paintings with nothing more to distract us than colour and line, we seem to reciprocate that movement, tracing the passage of her breath with our eyes, inhaling particles of pigment with our gaze.

THESE LINES ONCE HAD AN OPAQUE SOLIDITY THAT BEAT AN ASYMMETRIC

rhythm across the painting. They spiralled around a square format, probing and exploring its outer limits. In a syncopated dance entwining the vertical and horizontal, these sharply defined forms both open up and occupy space, hovering perpetually.

EDITH BAUMANN

Edith Baumann, Randomness and Structure #1. 2015. Hand-ground acrylic on canvas. 52 x 52 in. Photo: Allan Stulfer.
between void and solidity, floating and piercing, inviting our gaze into their circular dance: white seen through yellow, black before red, white before yellow, black through red.

In 1997, Baumann began a series of paintings that exchanged the rectangle for the circle and ellipse. She nests them within each other in often subtle tonal gradients from white through grey or black through green, whilst occasionally introducing a jarring contrast that blazed itself onto the retina to blind us with its intensity. One moment the forms appear stable and flat, their colours gently breathing and pulsating from their subtle interaction. The next, they seem to spin around a central, horizontal axis, a gyroscope of interlocking circles twisting and spinning in perpetual, perceptual motion.

**WE STAND BEFORE THESE EARLIER PAINTINGS, WATCHING THEIR DANCE FROM**

a place of stability. Their minimal marks force us to slow down, asking us to breathe, meditate and watch, to feel the subtle movement of air on our skins, to hear the sounds of the world turning. Angled edges invite us into their depths as if space has opened up before us, receding into an amorphous distance so that our eyes can lose themselves in infinite space.

In her most recent works, the dialogue between solid line and gestural mark pulls us into the void, placing us in the gap between the lines. We are no longer fixed bodies but interactive beings, both moving against and with the flow of this atomic world.

**WE SEE BLUE THROUGH A STREAK OF WHITE, OR MAYBE WHITE THROUGH A STREAK OF**

blue, like intangible clouds in an intangible sky. Yellow-green vibrates against turquoise-green in a sea of black, neither dominating the other, but yielding to each other’s presence, merging and repelling, opening up space within space, pushing backwards and forwards, through and beyond so that front and back become confused. Solid and transparent waver in uncertainty, losing their identity to form something new.

As these offset coloured lines shiver and vibrate, interact with, and rub against each other, they reveal the quicksilver substance of space held in the gap between them; a presence as tangible as the colours it separates. This activated and energised space doesn’t just pull us in, it reaches out to us, crossing the boundary of the picture surface: a visual reverberation carried on invisible light waves, that dazzles the periphery of our vision and catches our eye at the edge of what is seen, with nothing more than nebulous, unformed sensations. Baumann’s paintings remind us that in space, a line is not yet solid, a colour is not yet fixed: everything is in motion waiting to emerge.
TIME PRESENT AND TIME PAST
ARE BOTH PERHAPS PRESENT IN
TIME FUTURE,
AND TIME FUTURE CONTAINED
IN TIME PAST.
IF ALL TIME IS ETERNALLY PRESENT
ALL TIME IS UNREDEEMABLE.
-T.S. ELIOT, FOUR QUARTETS - BURNT NORTON

In 2012, Benny Fountain sat in the kitchen
of his house in Portland, Oregon and
drew what he could see: the black and
white chequerboard tiled floor, kitchen
cupboards, sink and faucet, table and
chairs, plates and cutlery, water jug, vase
with flowers and in the end wall, a window.

Summer 2019, and Fountain sits in his
remote, hilltop studio in the Palouse
region of northern Idaho, looking out at
a landscape of gently rolling hills, and he
once again paints his 2012 kitchen. But
instead of painting the Portland cityscape
he would have once seen through the
window, he paints the landscape in front of
him, introducing Idaho into Portland, and
Portland into Idaho; and his past of 2012
into his then present of 2019.

Painting, like memory, can conflate time
and space. Together, they challenge the
truth of what we think we know: that we
can only exist in the present, and in one
place. Certainly, our bodies and conscious
minds may only exist in the here and now;
but in our memories, we are ‘eternally
present,’ carrying within us all the places
we have been and all the times we have
existed. We may think the past lies behind
us and the other places we have been lie
elsewhere, but as Neuroscientists have
shown, the same neurons, in the same
unique combination, which were fired
when we first experienced something
are then reactivated in the process of
remembering, therefore the past literally
becomes the present, and where we have
been becomes where we are.

BUT HUMAN MEMORY IS NOT LIKE
COMPUTER MEMORY: IMMEDIATELY
accessible, constantly present, divided
and distinct. Our memories can fade; they
can blur and mingle. One place can be
mistaken for another. Time can become
mixed up. Sometimes they can seem
pin-sharp as if we are there once again.

BENNY FOUNTAIN
Sometimes they can be nothing more than feelings, a vague sensation that something is familiar. In the spaces of our memory, time and place are not distinct and differentiated, they merge into a nebulous whole, to be concentrated and combined into the unity of an eternal present.

**IN HIS IDAHO/OREGON FICTION SERIES, FOUNTAIN COMBINES HIS PORTLAND kitchen with the view from his Idaho studio to reflect on what is fact and what is fiction. Instead of showing us the fiction of a space where everything is pin-sharp, and where different times and places co-exist in unique difference, he shows us the factual space of our memory, the reality of blurred places and imprecise time; where what we remember is sometimes clear but more frequently obscured.

Fountain unites these two spaces with colour, although he limits his palette to yellow, violet and grey. He does so to see how many colours he needs to retain a fully satisfying colour experience. We may think that a broad spectrum is essential if we want to replicate the reality we see, but since our eyes can only register red, yellow and blue, a palette restricted to violet and yellow will still be able to activate all the eye’s colour receptors, leaving us satisfied and yet still hungry for more.

Fountain wants his colours to capture and keep the viewer’s attention, to slow them down and make them pause. He wants to convey ambiguity as well as satisfaction, to be calming as well as disconcerting. Where the incongruity of a black window will make us stop and stare, a yellow window will jump out at us and pulsate with energy. In this close toned ambiguity, we are forced to question what we see, just as we question our memory: is this solid or shadow, real or unreal, abstract shape or actual object?

Violet and yellow may make the colours of the spectrum present, but if we were to mix all the colours in a paint box together we would get black, or something that appeared black, and if we were to unite all the colours in light, we would get white. So, if we mix together the physicality of coloured pigments with the colours of light, we get grey.

**GREY CAN OFTEN BE OVERLOOKED, AS A COLOUR THAT SUGGESTS DRABNESS or sadness, without energy or character. But if grey is seen as the unifying of light and pigment then it can also represent physical

In his work Fountain makes use of the duality of grey. He shows us the origin of the universe, and every pigment ground from rock carrying in its being the history of the world. So, grey is not just a neutral tone, it is an affront to the viewer, a challenging viewer’s perception. His paintings with bands of grey, he holds them in the ‘eternally present’.

**FOUNTAIN ALSO USES THESE GREY BANDS TO QUESTION THE FICTION fact of the work of art. As they transition from light to dark or from dark to light, they cause the painting to either stand out from or disappear into the surrounding wall. When they stand out, they declare themselves to be different and distinct from the world they occupy, but when they are indistinguishable, their fiction becomes integrated into that external reality.
A COLLECTION OF PAINT-SPATTERED STRIPS OF MASKING TAPE HANG ON

the wall of Shingo Francis’s studio in Culver City, California. Remnants of a process that imposes order onto the untameable subjectivity of colour. Masking tape allows Francis to paint the precise hard-edged line that orients his canvases. Once removed and discarded, these straight edges quickly become twisted, curling up under the weight of the paint that lies in spattered dribbles and globules on their surface, transformed into a soft-edged shadow of their former selves.

These strips of masking tape are used to create the thin zip of colour that runs along the bottom of Francis’s monochromatic canvases. This low ‘horizon’ line introduces space, imposes order, defines above and below and energises the picture surface by introducing colour relationships. Above the line there is the shallow stillness of a single, opaque hue. Below, there is movement and spatial interplay as thin glazes of pigment flow across and drip down the canvas. Above there is only now. Below, there is history, as this subtle palimpsest of transparent paint exposes the passage of time. Just as the edge of a body helps to denote in and out, self and other, this line establishes a boundary that distinguishes and differentiates, separates and excludes.

Francis grew up and still lives in Los Angeles, surrounded by the vast horizons of the ocean and desert, immersed in the intense light of the Southern Californian sun. As a young man, he would sit on his surfboard, out on the ocean, looking to the distant horizon, waiting for waves. If he were there at the end of the day, he would watch as the setting sun dissolved the solidity of the world, merging sea and sky into an amorphous being, which caused the horizon to vanish and, with it, a sense of solid, three-dimensional space. In its place came a colour space that was both deep and shallow, solid and insubstantial.

SITTING THERE, GAZING AT A MYRIAD OF PINPRICKS OF SLOWLY DYING LIGHT
dancing on the ocean, Francis’s eyes would open wide with wonder, hungrily consuming all they could still see in the

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SHINGO FRANCIS

ONE OF THE ASPECTS OF THE LIGHT AND SPACE MOVEMENT FRANCIS

wants his works to share, is the ability to offer the viewer an encounter with real presence rather than illusionary representation. His large monochrome paintings should not be looked at from a distance as an art object. They demand to be experienced up close, slowly, on their terms, where they can engulf us with a single colour, whose opaque presence, at first, seems solid and unyielding to our gaze. Then we notice a thin band of a contrasting colour beneath us. Whether we see it as piercing, opaque solidity or resting on the surface, this moment of interaction sends shivers up and down the canvas, a wave of visual energy that causes the picture surface to pulsate and gently vibrate like a breath. As our eyes open wide to capture these subtle sensations, the periphery of our vision is teased by other movements around the edges, the dribbles and washes along the bottom or a nebulous haze of luminous colour dissolving solidity at the top. However much we want to lose ourselves in the welcoming embrace of purple, orange, red or blue, our eye cannot remain still. We are compelled to move backwards and forwards, across, up and down, in and through, probing the surface of flat colour, whilst following the movement of the artist’s passing hand.

As if looking across the ocean into the intense blue of sea and sky, we encounter both nothingness and substance, stillness and movement, the same sense of the void which Francis encounters during his practise of Buddhist meditation.

RECENTLY, IN HIS SEARCH FOR PRESENCE, FRANCIS HAS BEGUN

to use interference paints, containing microscopic flakes of mica. Because they both transmit and reflect light, they enable him to capture its transient, shifting character more easily than oil. Like the rainbow, their indescent surfaces defy the names we usually attach to colour. They resist boundaries, spinning lines of light across the surface, constantly changing character as we move. Instead of colour stability, they offer anonymous, peripheral sensation, reaching out to us as we reach into them. As we stare at their centre, a line drawn just inside their edges pulls us out to their edges, where the colour seems different and yet the same. Green becomes pink becomes purple becomes pink, becomes purple becomes green becomes blue. For a moment, the centre appears solid whilst the edges fall away, but then as our gaze is pulled back from the edge the centre disappears, melting into anonymous, pearlescent luminosity, where space is filled with light and light is filled with colour.
IN THE MIDDLE OF BUSTLING MODERN KYOTO, THE RYOAN-JI, ZEN BUDDHIST TEMPLE

Temple is an oasis of calm and peace. At its heart is the Karesansui, or dry rock garden, which has provided a space for meditation since the late fifteenth century. The Ryoan-ji was the first purely abstract Zen garden in Japan, consisting of nothing more than fifteen differently sized rocks sitting on small patches of moss, surrounded by white gravel. Every day since its construction, monks have carefully raked the gravel into long, disciplined lines, only deviating from their straight path when they come to the edge of a patch of moss. At that point, they carefully deviate from their path to create a series of concentric ellipses that ripple back out into the empty space as if the rock is a pebble that has been thrown into a pond or an island surrounded by a ring of breaking surf.

IN 1982, JANE HARRIS SPENT TWO MONTHS IN JAPAN STUDYING THESE Zen gardens, an experience which has shaped many of her ongoing concerns. When we look at the exquisitely raked sand in these gardens we do not see mere patterns, but the trace of a body moving through space, interacting with that space and responding to the objects it contains. We contemplate time and the intense, physical discipline needed to drag a rake across gravel, creating perfectly straight lines whose furrows suggest the invisible movement of the space around us: the flow of air and the passage of light and sound. Like the rocks, we are islands in an atomic ocean, standing amongst the particle waves in a sea of matter, surrounded by concentric ripples echoing back out into space.

IN THE RYOAN-JI GARDEN, THE ROCKS ARE SEPARATED FROM THE GRAVEL

by a ring of moss, whereas Harris wants her paintings to show no division between solid matter and empty space. Inspired by the way that Vincent Van Gogh’s dynamic brushstrokes brought unity to his picture surface and ignored traditional boundaries between form and space, Harris also uses hundreds of precise, visible brush strokes to bring a sense of unity across the different elements of her paintings.

Using the bristles of her brush, Harris painstakingly rakes particles of pigment, leaving marks that not only help to build the painting’s space but contribute to its sense of material presence. These precisely controlled movements are more than muscle memories; they demand physical awareness in their application. Each mark is an act of heightened concentration, a moment of touch recording an instant in time, a distinct, individual entity that will build into the whole.
AS ONE MARK LEADS TO THE NEXT, WHICH LEADS TO THE NEXT, WHICH
leads to the next, they send an almost imperceptible ripple of visual movement across the surface. In the centre, the brush strokes become more expansive, sweeping in loops and luscious curves around the edges of her forms, providing them with shadows and subtle highlights, which add to their sense of figurative presence. From a distance, the individual marks disappear, and the surface seems flat and anonymous; up close, the faint trace of ridge and furrow texture, where the brush has been drawn across it, introduces moments of real three-dimensional depth.

Harris is constantly exploring the border between perception and reality; playing with questions of what is surface and depth, solid and intangible, positive and negative. She teases and teases, seeking the unexpected so she can play games with our mind. The physicality of a white watercolour paper turns into an empty space and then becomes a solid white form. The play of light across their surface transforms what appear to be shadows into highlights and highlights into shadows.

The ellipses at the centre of her paintings seem to twist and turn, push and squeeze, interrupt and obscure. They rock and spin, hover and merge green over grey over turquoise over blue over red over white. Sometimes it seems as if we are seeing them head on, sometimes at an angle; they come towards us and they fall away. They crowd around deep pools of colour as if thirsty for light, transformed into exotic blossoms that hover in space. And yet when we look at them closely, the illusions fall away, as the brush-marks pull us back to the surface and their tangible substance. At that point, there is no depth or distance, just these marks and the moment of movement they contain.

WE FIND DUALITIES OF SPACE THROUGHOUT HARRIS’S PAINTINGS,
reflecting her interest in how different types of space can co-exist. In the National Gallery, London there is a small panel of the Annunciation by Duccio which has always intrigued her. Gabriel stands in the open reaching out to Mary, who stands recoiling in interior space. They are different: one inside, one outside; their gestures echoing, yet as he reaches forward, she leans back; he looks up, she looks down. Yet they are also intimately connected by the pink wall that runs behind them, and by the air that lies as a bridge between them, uniting

HARRIS SEES A DUALITY OF SPACE WHENEVER SHE LOOKS OUTHER
studio window in France and gazes at the clouds: clouds she can pass through, floating in a sky she can travel through, two gaseous realms that are co-existent and essentially the same and yet apparently different. The same duality can be found in her oil paintings, where spaces opened up by the interaction of colour exist alongside those created by the movement of her brush, and where straight brushmarks encounter the force of long curving ones, repelling and dividing, delineating different spaces yet essentially the same. Likewise, in her watercolours, we find space suggested by the emptiness of paper opening up next to that revealed through limpid pools of paint.

them in the intense emotional drama of the moment.
ON THE DAY THE PANTHEON IN ROME WAS DEDICATED, AT SOME POINT
around the year 126 CE, the Roman Emperor Hadrian stood beneath its coffered
rotunda and looked up. Suspended above him was the largest unsupported concrete
dome the world has ever known, a feat of both outstanding engineering and
exquisite craftsmanship. To build it, skilled professionals had to make hundreds of
wooden moulds, or forms for the concrete to be poured into, requiring them to
imagine the negative form of each coffer’s final shape.

All architecture is essentially formwork; the creation of an external structure to
hold space. However, when Hadrian stood beneath the Pantheon’s dome and
looked up at the oculus forty-three metres above him and then glimpsed the heavens
beyond that, the space he stood in was not neutral. It would have felt monumental and
awe-inspiring. Buildings do not just hold space; they use it as a material, imbuing
it with potential, shaping and moulding it so that it affects the way we live and
influences the way we feel. Architects can manipulate space to intimidate or enclose us, make us feel safe or overwhelmed, thereby reminding us that the space we inhabit, even when it feels limitless, has boundaries and form, and, therefore, a particular identity.

Fritz Horstman is fascinated by the practical and natural processes that allow space to
take on form and character. With intricate precision, he constructs miniature form-
works out of basswood, walnut and various plywoods that wait in eternal expectation
for the pour of concrete. For Horstman, the empty formwork evokes a moment of
potential, a void waiting to be filled, on the cusp between emptiness and solidity.

SOME OF HORSTMAN’S CAREFULLY CRAFTED MINIATURE STRUCTURES,
made up of batten panels supported by a cluster of tiny props, are based on real
form-works. Others are invented, playing with the idea of moulding and manipulating
space, exploring what happens when different angles and facets interact.

FRITZ HORSTMAN

Some are shallow patterns, taking their starting point from architectural forms such as the Greek Key. Others are entirely impractical, an abstraction of the idea, leaving only the lines of a skeletal, wooden frame to contain the void.

**THE SCALE OF THESE WORKS HELPS TO HEIGHTEN OUR AWARENESS OF SPACE,** leading our eyes down narrow guileys, intriguing us with dark, mysterious shadows, asking us to probe thin openings that remain resistant to our gaze. Even though we can read them in a single glance, we find our attention caught by tiny details that hold us mesmerised in the void.

Recently, Horstman has moved away from the architectural void to charting the course of rivers and more natural forms. This shift has inevitably led him to make subtle changes to the structure of his form-works. Where architectural spaces are shaped by the need for stability, rivers require a structure that can reflect the flow of water. While some of these new form-works have been based on the course of real rivers, others have exploited the distinctive characteristics of a fluid space to reveal the potential for movement to become a specific, dynamic form.

Over millions of years, the flow of a river through a landscape results in a V-shaped valley whereas a glacier carves out a valley that is U-shaped. Inspired by a form that combines the flow of water with the static nature of concrete, Horstman has modelled two half-cones. One has been drawn in curving lines of wood that allow the now absent glacier to emerge. It waits in suspended potential, its form only partially realised. The other half has been carved out of materials found around his house, bound together into a geological stratigraphy of different layers. One is open and fluid, the other solid and stable.

**WHEN CONCRETE HAS HARDENED, AND THE FORM-WORK HAS BEEN REMOVED,** its face is inevitably pockmarked with the remnants of debris that has been caught in the space between the two materials, indicating where the liquid concrete has probed every crevice and pressed against every surface to discover its form. When we look at the different materials bound together in Horstman’s glacier sculpture, our gaze does not just look at the external form; it instinctively investigates their different substances to discover if they are hard or soft, solid or permeable. It follows the space, squeezing into them where there are open latticework gaps, becoming entangled in the tight weave of wadding, trying to penetrate between layers of laminate, turning negative reflection into positive form.

**HORSTMANS FORM-WORKS STAND ON THE CUSP OF POTENTIAL, BETWEEN negative space and positive form. Instead of holding us in the empty centre, they take us to the edge, into the shadow realm, where curves and corners, angles and straight lines, waves and meanders help to reveal the nature of forms. In these solid, wooden structures, we experience the dynamic force of space as it probes and prods, tests and traces the material substance of the world. They remind us that through the negative we encounter the positive; through absence, we discover presence.**
ON THE 7TH OF MARCH 2014, RICHARD KENTON WEBB TRAVELLED to Queenstown, Tasmania to begin a two-month residency at LARQ [Landscape Art Research Queenstown]. The contrast between his home in a small Gloucestershire village on the outskirts of Cirencester and Queenstown, which had once been the richest mining town in the world, could not have been greater. When you travel east after climbing onto the Cotswold escarpment, the Gloucestershire countryside is a series of gently rolling Wolds, where the horizon is rarely panoramic. It is characterised by a patchwork of fields and hidden, often wooded valleys through which small rivers and streams flow. In contrast, Queenstown is surrounded by an almost alien, still largely treeless, landscape of mountains, lakes and vast Copper mines. After the intimate beauty of his English home, Webb was confronted in Tasmania with the monumental abyss of the Sublime, where the horizon lay constantly beyond his grasp.

To situate himself in this landscape, Webb did not just look at it. He walked through it, sat in it, contemplated it, read about it and learnt about it from the people he met and talked to. Wherever he went he would pick up the local richly coloured rocks and soil to study and analyse them, eager to understand the distinctive geology of his new surroundings. To paint Queenstown, he felt he needed to get beneath its physical surface. He wanted to understand it, to gain a deeper relationship with it.

IN HIS TEMPORARY STUDIO, WEBB MADE DOZENS OF PAINTINGS TO capture what it was like to both be in this new world, and be an outsider looking in. Webb wanted to convey the material and physical reality of being there, standing in that space and at that time, with his feet firmly planted on the ground, existing in the present moment, feeling the sun and wind on his skin, experiencing the heat and cold, being dazzled by light, smelling, touching and tasting everything around him. So, Webb took samples from the soil of yellow ochres, copper green blues and especially purples, ground them up with a pestle and mortar, and made them into the pigments he used to paint the landscape. The dust that covered his skin and boots became the dust on his canvas; the space he walked through became the space he painted.

We do not look at the world through innocent eyes, however. We bring who we are on the inside as well as the out, complete with thoughts and emotions, memories, beliefs and ideas. He could have
shown what the Queenstown landscape looks like, but Webb also wanted to convey his feelings of awe, his sensation of being dwarfed by its immensity, his curiosity and sense of discovery. He wanted to capture and hold the memory of being there, studying it, walking through it, trekking all over it, probing and exploring it. So, he painted a vitrine inside a room, and then inside the painting of the vitrine he painted the landscape, transforming it into a museum exhibit to be studied, walked around and contemplated.

Painting the landscape within a vitrine allowed Webb to capture the memory of a specific time and place: perhaps a walk with friends and their dogs, or a picnic by a lake. He holds it up to be examined, like an idea that needs to be discussed. The vitrine allowed him to look from above and below, from the sides as well as the front. He could probe it and prod it, he could burrow into it and expose its inner workings, carving tunnels in the ground that exposed inner landscapes that could never be seen. He could show it in sections to reveal its geology and he could superimpose lines that helped to map its surface.

Webb returned to LARQ the following year, but on this occasion, as he painted the now familiar landscape he also found himself beginning to draw a series of vitrines that contained ice-bergs suspended in a vast ocean. A ship passes silently between them, a mere toy, sailing across the limpid, still surface of the sea, above a sea bed littered with the wrecks of similar ships, beneath clouds that float like islands in a limitless sky. Here, in three-dimensional glory is an image of the world we never see: the hidden world beneath the surface. Hanging in this vast oceanic space, casting shadows on the sea floor, these icebergs appear frozen in perpetual conversation, lit only by the stark light of a single hanging lightbulb, which provides an all-seeing eye. In the managed space of these vitrines, Webb holds up the sublime for our inspection and in doing so, he tames it and allows us to see the beauty of its details. Awe becomes wonder, as hidden mysteries are exposed.

By the time Webb began to paint the Iceberg Drawings, he had replaced the wooden floorboards, walls, doors, electric lights and skirting boards of the rooms with a limitless, yet impenetrable surface of intense black or Verdigris blue green, luscious organic pigments which absorb us into the visceral materiality of their substance. The colossal spaces of frozen ocean and mountainous landscape, which when we are in the midst of them, overwhelm our senses, are now contained within an expansive, infinite space that, in turn, overwhelms them.

These two spaces appear separate, divided by the boundary of the vitrine. We stand permanently on the outside looking in. But then billowing clouds straddle the boundary, making the crossing between the vitrine and this other realm. They are criss-crossed by dotted lines and dense hatchings that turn them from nebulous meteorological phenomenon into tangible structures. Echoing drawings of Provence winds that Webb made between 2000-2003, these dynamic marks help us to chart and traverse their monumental surfaces, they convey movement and suggest sensation, helping to construct vast cloud cities that bridge the gap between one space and another. Through the nebulousness of an intangible space Webb suggests the intimacy of the sublime, he reveals the beauty in what appears mysterious, gives form to the formless, and, for those who have eyes to see, he reunites the divine and the human realms.
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