

The anxiety of Op: towards a theory of art and non-visual senses

It is an often implicit presupposition in the history of aesthetics, and the history of painting in particular, that the authority of visual judgment ranks highest in a hierarchy of the senses. Using Bridget Riley's painting 'Current' as a case study, the various arguments about Op that position it either as a pedagogical project of educating vision, or a means of sensory derangement, are considered. It is argued instead that in Op the sensate presence of the body is never fully sublimated to cogitation and its generally linguistic modes of translating sensory experience.

by EVA DÍAZ

THE EYE LOSES its pre-eminence in the very area in which it is dominant: in painting.¹ In 1965 Bridget Riley's painting *Current* (Fig.1) was featured on the cover of the catalogue of the exhibition *The Responsive Eye*, organised by the Museum of Modern Art, New York (MoMA).² The language of a 'responsive eye' departs from a prevalent presupposition in the history of aesthetics: that the authority of visual judgment ranks highest in a hierarchy of the senses.³ In contrast, a responsive, receptive eye is affected by the world, as the nose literally inspires, comingling external stimuli with the body in order to perceive. Although sometimes grouped together as 'Op', works employing this affective notion of vision are perhaps kin to what Josef Albers, another *The Responsive Eye* artist, termed 'perceptual art': a dynamic operation toggling between the biological fact of retinal apperception and the cognitive processes that interpret those experiences.⁴

Current is among several of Riley's works that employ parallel lines in sets, a technique in which one or more similar but slightly misaligned patterns create visual illusions of depth and vibration, using a so-called

1. *Current*, by Bridget Riley. 1964. Synthetic polymer paint on board, 48.1 by 149.3 cm. (Museum of Modern Art, New York; Scala, Florence).

periodic structure.⁵ Like moiré, in which superimposed groups of lines seem to quiver and vibrate, these effects are also accomplished by use of colour contrast, in which adjacent shades, applied in bands or sections of varying weight, appear to be askew. This is due to the physiology of human perception and the limitations of the photoreceptive cones in the retina to parse hues and their intensities.⁶

The techniques of deploying periodic structures and moiré-like patterns are obviously not Riley's singly, and many artists from among the ninety-nine included in the 1965 MoMA exhibition presented work in this vein (Fig.2), including those from a slightly older generation such as Victor Vasarely (1908–97), and a wide range of artists in Riley's peer group such as Richard Anuszkiewicz (1930–2020), Carlos Cruz-Diez (1923–2019), Julio Le Parc (b.1928), Jesús Rafael Soto (1923–2005) and Julian Stanczak (1928–2017; Fig.3). In recent years exhibitions featuring such younger artists as Tauba Auerbach (b.1981), Liz Deschenes (b.1966),

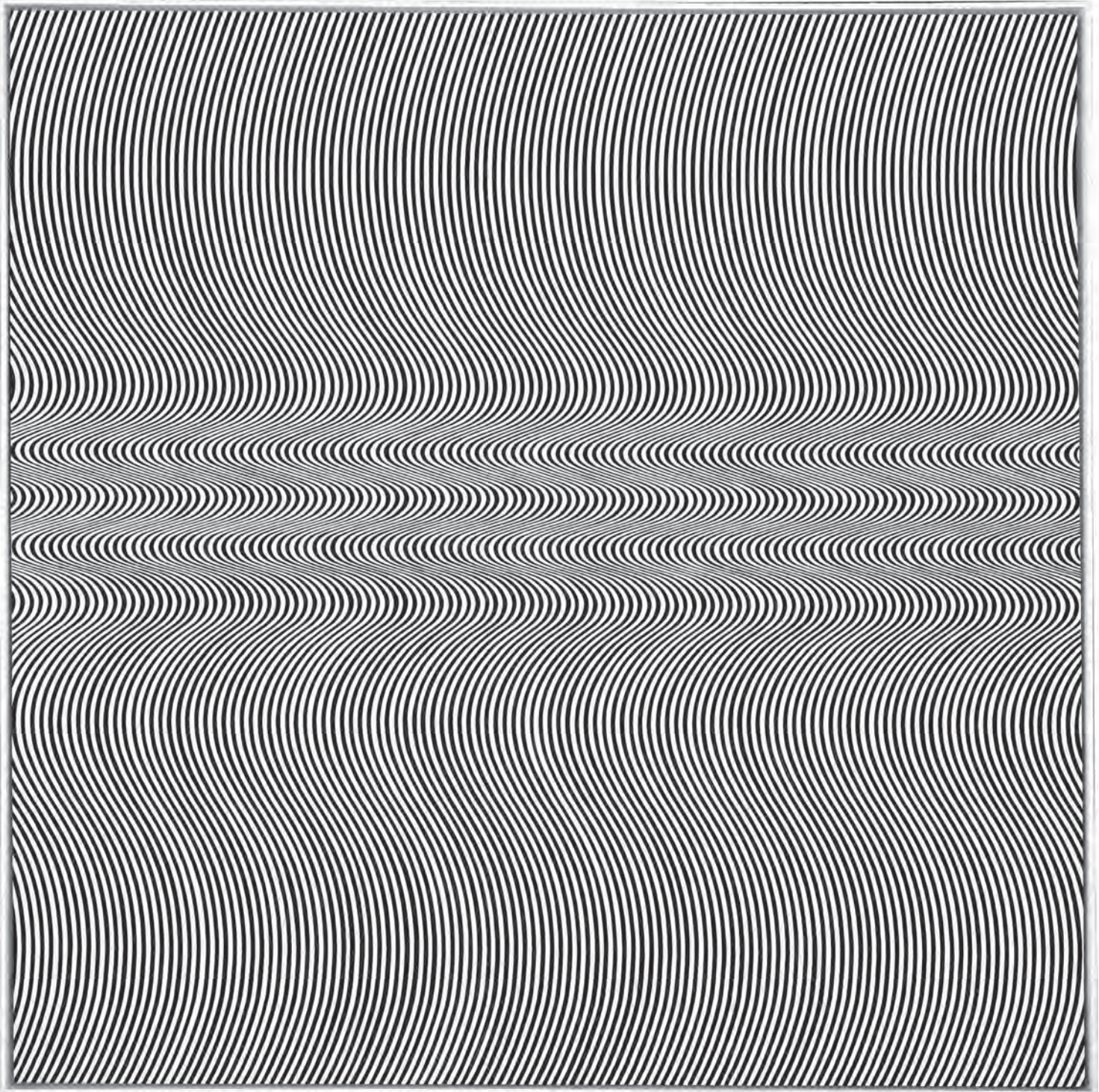
An earlier version of this essay was delivered at a symposium on 14th May 2022 occasioned by the retrospective *British Riley: Perceptual Abstraction* at the Yale Center for British Art, New Haven (YCBA). I am grateful to the symposium's participants and organisers, including the YCBA's Director, Courtney J. Martin, and Associate Director of Research, Jemma Field, as well as James Meyer, Curator of Modern Art, the National Gallery of Art, Washington, the respondent to my talk.

1 M. Serres: *The Five Senses: A Philosophy of Mingled Bodies*, London 1985/2016, p.37.
2 W.C. Seitz: exh. cat. *The Responsive Eye*, New York (Museum of Modern Art), St Louis (City Art Museum), Seattle (Art Museum), Pasadena (Art Museum) and Baltimore (Museum of Art) 1965–66.
3 See M. Jay: 'In the realm of the senses', *American Historical Review* 116 (2011), pp.307–15; Serres, *op. cit.* (note 1); D. Howes, ed.: *Empire of the Senses:*

The Sensual Culture Reader, Oxford and New York 2005. For Serres and others, considering the human sense of smell has been the main counterpoint to reassessing the dominance of vision. For a history of philosophical thought with respect to the senses, see A. Le Guérer: *Scent: The Essential and Mysterious Powers of Smell*, New York 1994, pp.141–54 and 159–203; J. Drobnick: 'Toposmia: art, scent, and interrogations of spatiality', *Angelaki: Journal of the Theoretical Humanities* 7 (2002), pp.31–47; and *idem*, ed.: *The Smell Culture Reader*, Oxford and New York 2006. See also C. Classen, D. Howes and A. Synnott: *Aroma: The Cultural History of Scent*, London and New York 1994.
4 A note on nomenclature: in the 1960s few artists favoured the name 'Op' as a means to categorise their work, particularly given its seemingly pat derivation from 'Pop' and its faddishness in the media. Other artists

virulently loathed the term, criticising its undue emphasis on the optics of vision; Josef Albers and Julian Stanczak singled the phrase out for particular scorn. Nevertheless, the name has been used for nearly sixty years, so this article follows the convention of calling such works 'Op'. The provenance of the phrase 'Op art' is twofold – in 1964 Donald Judd somewhat cryptically wrote, 'Optical effects are one thing, a narrow phenomenon, and color effects are another, a wide range. Op art', D. Judd: 'Review of "Julian Stanczak: Optical Paintings"', Martha Jackson Gallery, New York, *Arts Magazine* (October 1964). Independently of Judd, it seems, Jon Borgzinner – whose mother worked at Martha Jackson Gallery – used the term in J. Borgzinner: 'Op art: pictures that attack the eye', *Time* (23rd October 1964), in which he referred to Stanczak's work.
5 A critic writing in 1963 about Riley's

paintings described periodic structures in this way: 'The whole picture surface is used to plot the transformation of a gradual pattern', N. Lynton: 'London letter', *Art International* 7, no.8 (October 1963), quoted in P.M. Lee: 'Bridget Riley's eye/body problem', *October* 98 (2001), pp.26–46, at p.31.
6 The French word *moiré* means 'watered' silk or other textiles, although the technique involves using heated rollers to achieve a lustre. Hues at varying intensities can be misrecognised for one another, for example, reds near yellow appear more yellow than when near blues, due to the so-called Bezold–Brücke shift, among other optical illusions. For a discussion of moiré in Op and its relationship to kinetic systems, see Y.-A. Bois: 'On the uses and abuses of look-alikes', *October* 154 (fall 2015), pp.127–49, and *idem*: 'François Morellet / Sol LeWitt: a case study revisited', *October* 157 (summer 2016), pp.161–80.



Anoka Faruqee and David Driscoll (b.1972; b.1964), Carsten Nicolai (b.1965) and Julie Oppermann (b.1982) have included works that also make significant use of similar procedures. Exploring the subtleties of each artist's deployment of patterned compositions and visual illusions in works of geometric abstraction would be a task far beyond the scope of this article. Yet in the prevalent use of these techniques, important clusters of concerns arise about the relationship of aesthetics to sense perception. Chief among them is the question: do moiré, lines in sets and other forms of graphically dynamic compositions focus visual attention, training the eye to experience the visual world more richly, in order to overturn perceptual habits that influence how we think about the world cognitively? Or, somewhat counterintuitively, do repetitious patterns and moiré disorientate, disturb or overwhelm perception in order to destabilise the cultural primacy of vision?⁷

Riley's *Current* provides a way study these positions. *Current* lives many lives. The work entered MoMA's collection in 1964, the year it was painted, and was exhibited in the wildly successful *The Responsive Eye*, curated by William Seitz, the following year.⁸ *Current* became an emblem of art of the 'Op' moment, particularly in its service as front and back cover image for the catalogue of *The Responsive Eye*. It was on view at MoMA in 2017 in the exhibition *Making Space: Women Artists and Postwar Abstraction* and again in Riley's 2022 retrospective at the Yale Center for British Art.⁹ *Current* is part of a series of line-set paintings Riley undertook in 1961–64, such as *Fall* (Tate; 1963) and *Crest* (British Council Collection; 1964). Moiré utilises the appearance of superimposed lines, and Riley's work does not in fact contain actual transpositions, only adjacent, parallel bands. The work plays with moiré effects, however; the close bending of lines tricks the eye into seeing phantom overlaps as boundaries kinaesthetically shift and pulse. The result is even more pronounced on a screen, which is how many people encounter art that is not on public view. In this case the tremulous lines create doublings and duplications due to so-called 'interline twitter', an effect caused by the linear scanning technologies of interlaced video in television, or the pixel refresh rate in computer monitors that causes patterns to flicker (evident when striped or herringbone fabrics on screens appear to vibrate wildly).

In *Current* a series of alternating black-and-white curved lines seem to cascade from the top of the square-format work. Near the painting's horizontal centre the undulations quicken, to use a temporal terminology, or gather and drape, to use the vocabulary of space. The gentle concavity (read left to right) of the top hemisphere bends and doubles back five times before relaxing into a penultimate curve in the same direction as the upper one, only to flex back a final time convexly in the work's bottom register. In the central portion of the work the distance between the lines decreases at some turns, seeming to recede, while a thickening line appears to project towards the viewer. The bends appear like a belt cinching the waist of the canvas, like a crimp ironed into a tumble of hair or like a wavy heat mirage

on the horizon. The work gleams vibrantly, as jolts of yellow, green, violet and other colour illusions pop and skitter among the black-and-white lines, uncontained by the vertical bands. Areas of shimmer and depth seem like vertiginous effects of the viewer's contingent location in front of the work, in much the same way that glints of light on an object move with a change of position. Misapprehensions of the apparitional colours, along with the illusion that the longer striations are pulsing, give the work preternatural movement and vitality.

It can be argued that *Current* trains the eye by ordering vision. This view emerges from polemics around geometric abstraction that posit art as the investigation of the fundamentals of form – line, colour, shape and so on – particularly its visual appearance and material constitution. A prominent thread of this argument runs from the Bauhaus, through Black Mountain College to Yale University in Josef Albers's work and teachings. A student of his at Yale, Julian Stanczak, employed the Albersian language of deception, dynamism and energy while reflecting on his career late in life, stating in 2007 'I was possessed by my work, by my ability or lack of it, to see [. . .] Any deception, any light, creates energy, and I am ordering energy'.¹⁰

'Ordering energy' is frequently accomplished with pattern. Patterns, by definition, are repeating form groups, and therefore follow predictable systems. Working with pattern is not the same thing as obeisance to it, however, and painters such as Stanczak and Riley rely just as critically on the disruption of pattern as they do on its repetition. Periodic structures require exacting practice; altering the width, colouration and interval of the line sets results in unevenness and irregularities that produce a throbbing quality. Yet the displacements and misalignments must adhere to an overall logic of repetition, otherwise the dynamic, wavering effect is lost. This is a kind of rule-breaking that makes patterns work against themselves, thereby opening up a zone of perception in which the careful testing of visual data against cognitive assumptions can develop perceptual acuity.

The process described earlier of speculating about what one sees when faced with a work by Riley – the manner in which the work appears kinetic thanks to the gradations of the line-set pattern – requires the mind to evaluate contingent effects using the visual evidence of the painting as verification. The retinal apperception of the painting, and what the mind understands about the ambiguous or contradictory visual evidence before it, are in Riley's work a circuit of complex perception logically appraised. According to Riley, 'It is important that the painting can be *inhabited*, so that the mind's eye, or the eye's mind, can move about it credibly'.¹¹ The emphasis in the phrase 'the eye's mind' may be that the eye 'owns' the mind, can 'possess' the mind when visual attention is guided by order and structure. Geometries of repetition attune vision to the subtleties of perceptual stimuli. This is a therefore a pedagogical project of training the eye to see anew, beyond the crust of habit and ingrained assumptions.

The counter argument to this is that these works do not train the eye, but rather destabilise the very concept of visual certainty. To some

7 The present author has considered the first argument in some depth in relation to Josef Albers in E. Díaz: *The Experimenters: Chance and Design at Black Mountain College*, Chicago 2015, esp. pp.15–52, 'The ethics of perception'. S. Rycroft: 'The nature of Op art: Bridget Riley and the art of nonrepresentation', *Environment and Planning D: Society and Space* 23 (2005), pp.351–71 also explores this argument. In some sense one can see Rosalind Krauss's influential essay 'Grids' as a critique of the trance-like effects of visual repetition: R. Krauss: 'Grids', *October* 9 (summer 1979), pp.50–64, repr. in *idem: The Originality of the*

Avant-Garde and Other Modernist Myths, Cambridge MA and London 1985, pp.8–22.

8 It broke MoMA attendance records with 180,000 visitors in its two-month run, and inspired a three-part CBS documentary hosted by Mike Wallace.

9 M. Ohadi-Hamadani and R. Stratton: exh. cat. *Bridget Riley: Perceptual Abstraction*, New Haven (Yale Center for British Art) 2022, digital publication, available at bridget-riley.publications.britishart.yale.edu/#content, accessed 4th August 2022. Detailed description of the work begins with Lee, *op. cit.* (note 5), and C.J. Martin: 'Director's foreword', in Ohadi-Hamadani and Stratton, *op. cit.*

(this note), accessed 30th April 2022.

10 J. Stanczak, video interview, *The Columbus Dispatch* (11th February 2007), available at www.youtube.com/watch?v=RDw3ZOUrPTY, accessed 22nd April 2022.

11 B. Riley: 'The experience of painting' [1988], repr. in R. Kudielka, ed.: *The Eye's Mind: Bridget Riley, Collected Writings 1965–1999*, London 2009, pp.143–147, at p.144, emphasis in original.

12 T.B. Hess: 'You can hang it in the hall', *ARTnews* (April 1965), available at www.artnews.com/art-news/retrospective/op-is-out-of-town-art-thomas-b-hess-on-momas-show-the-responsive-eye-in-1965-5742/,

accessed 5th August 2023.

13 S. Raspet: 'Towards an olfactory language system', *Future Anterior* 13, no.2 (winter 2016), pp.138–53, at p.139.

14 B. Riley, 'Interview RC 595', *Parkett*, available at www.youtube.com/watch?v=ZqEtMdUo71, accessed 20th April 2022. Riley also titled a 1966 work *Breathe* (Museum Boijmans van Beuningen, Rotterdam).
15 Le Guérer, *op. cit.* (note 3), pp.142, 160, 161, 174, 176–77 and 191. Aspects of non-visual experience have been derided, as Le Guérer has written, for being 'concerned solely with the material world and incapable of disinterested aesthetic action', *ibid.*, p.178.

commentators it is a predicament that experiencing a painting might actually be connected to other human biological phenomenon. For them, it is troubling that vision might be as visceral as the body's other senses. Reviewing *The Responsive Eye* in 1965, the writer Thomas B. Hess opined:

Op is the art that the public flocks to see, and critic Jack Kroll reports they 'bob and wave' in front of the exhibits, shake their heads back and forth, make little jumps, like penguins at a mating dance, to get the biggest retinal kicks. (Perhaps this peripateticism is due to one Op theorist – moiré variety – who was widely misquoted in the press as saying that certain optical illusions give a sensation of LSD, so hundreds of people innocently sway in front of laminated black-and-white constructions, convinced that they are getting a cheap jag. This writer admits to feeling queasy after a long look at Op, but William Seitz assures him

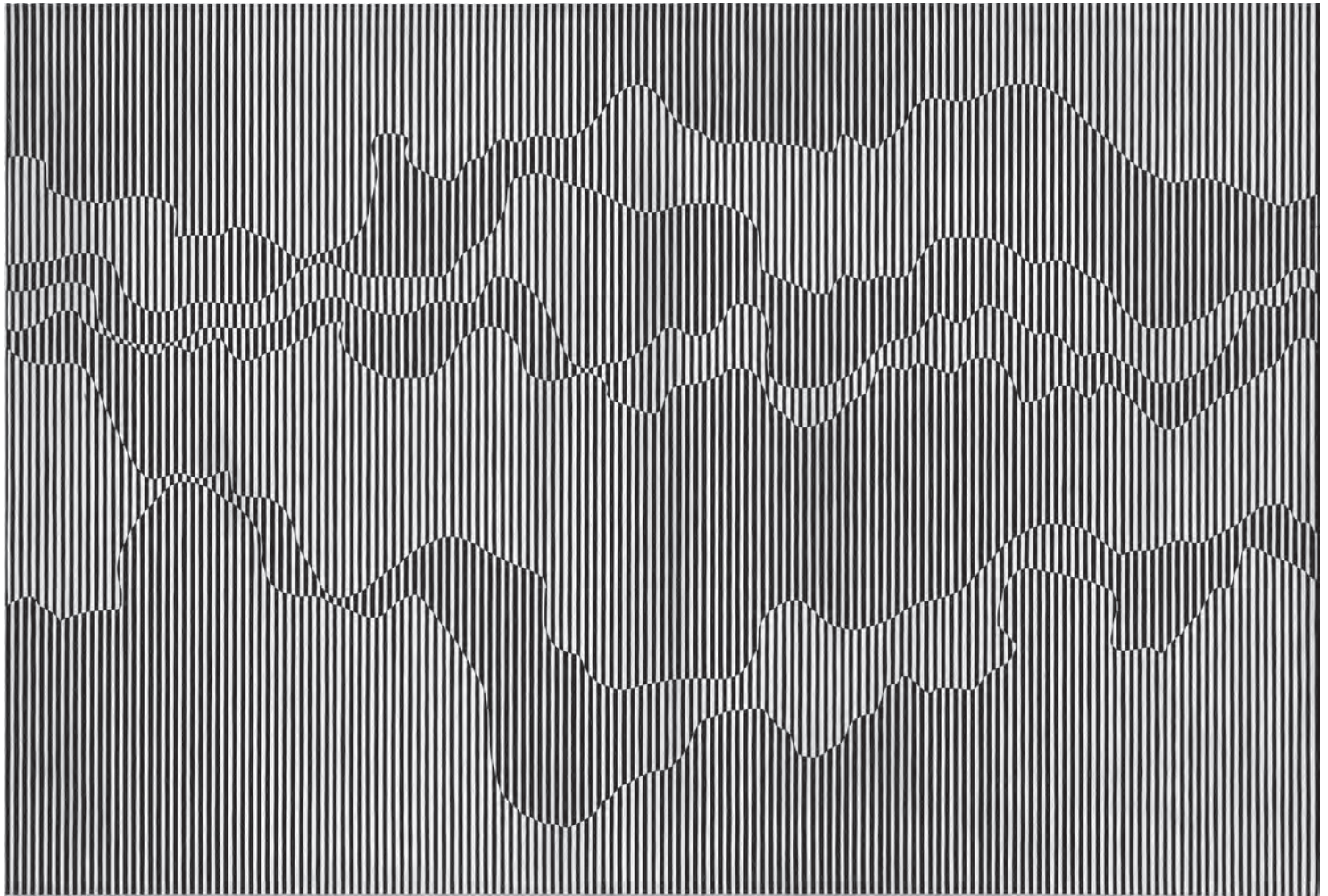
2. Installation view of *The Responsive Eye* at the Museum of Modern Art, New York, 1965, showing in the far corner *Instability through movement of the spectator*, by Julio Le Parc. 1962–64. (Museum of Modern Art Archives, New York; Scala, Florence; photograph George Cserna).

that it is a passing reaction, 'like your first cigarette'). [...] The Op sensation jangles through your nervous system [...] just as when [...] drink[ing] a martini or smell[ing] gasoline.¹²

Why is it that, in the words of artist Sean Raspet, 'As a field that has historically been concerned with the material specificity of representation, art has primarily addressed the visual subsection of the human sensorium?'¹³ Riley discussed her own work as unharnessing the power of form beyond vision, proclaiming, 'To make these basic forms release the full visual energy within them, they have to breathe as it were, to open and close, or to tighten up and relax. A rhythm that's alive has to do with changing pace [...] The whole thing must live.'¹⁴

Riley invites us to expand our understanding of art to include non-visual sense experiences like breath, touch or smell, which are not typically conceived of as aesthetic – experiences classically condemned as 'half-formed nature' (Plato), 'mere feelings' (René Descartes), 'secondary' (John Locke), 'unproductive' (Immanuel Kant), simply 'practical' not 'theoretical or spiritual' (Georg Wilhelm Friedrich Hegel), or symptoms of 'organic repression' (Sigmund Freud).¹⁵ Michel Serres lamented that the





result of such visual superiority in the history of aesthetics is that ‘many philosophies refer to sight; few to hearing; fewer still place their trust in the tactile, or olfactory’.¹⁶ Karl Marx also lamented the overemphasis on cognition in experience: as he wrote when young, ‘man is affirmed in the objective world not only in the act of thinking, but with all his senses’.¹⁷ Denis Diderot and Jean-Jacques Rousseau, criticising both the Catholic suspicions about sensory pleasure and the Cartesian emphasis on rational thought and cogitation, pushed the experiential aspects of sense. Diderot, writing in 1751, stated ‘I found that of all the senses the eye was the most superficial, the ear the most arrogant, smell the most voluptuous, taste the most superstitious and capricious and touch the most profound, the most philosophical’.¹⁸ Rousseau wrote in *Emile* (1762) that ‘in learning to think we must exercise our member, our senses and our organs, all instruments of our intelligence; to derive all possible benefits from these instruments’.¹⁹

Imagine instead – as alternative philosophical traditions from Diderot and Rousseau onwards have – that touch, not vision, is our prevailing and most dominant sense. All sense perception involves physical activation of the body by external stimuli. Scent molecules physically pass through the nose’s approximately four hundred odour receptors into the olfactory bulb,

3. *The duel*, by Julian Stanczak. 1963. Synthetic polymer paint on canvas, 137.2 by 198.1 cm. (Museum of Modern Art, New York; Scala, Florence).

and those signals are directed to the amygdala, the body’s primary memory and emotional processing centre. Sound waves mechanically vibrate the tympanic membrane while the cochlea transduces those sound wave signals into electrical impulses received by the temporal lobe of the brain. Taste is consumption of physical elements of the external world, mostly appreciated through retronasal olfaction as molecules pass to the olfactory bulb to trigger smells beyond the five tongue-based receptors. Sight is the physical, indexical activation of light waves on the photoreceptive rods and three SML (small, medium and long wavelength-sensitive) receptor cones of the eye that activate perception in the occipital lobe. There is no distance in sense perception: the outside literally comes in.

The notion of Op as a disturbance may open up a surprising form of learning, not of the discipline of visual focus, but a system of uncoupling sight from cultural authority. Can Riley’s work, and her invocations of breath and energy, of a vulnerable and subjective body, be understood as a proposal towards a biopolitics of the senses? In activating the fuller catalogue of the senses, Riley’s paintings, according to Simon Rycroft,

¹⁶ Serres, *op. cit.* (note 1), p.26.
¹⁷ K. Marx: ‘Economic and philosophic manuscripts of 1844’, quoted in D. Howes: ‘Hyperesthesia, or the sensual logic of late capitalism’, in Howes, *op. cit.* (note 3), pp.281–303, at p.282.

¹⁸ Denis Diderot, quoted in Le Guéner, *op. cit.* (note 3), p.166.
¹⁹ Jean-Jacques Rousseau, quoted in *ibid.*, p.167.
²⁰ Rycroft, *op. cit.* (note 7), p.354.
²¹ *Ibid.*, pp.352–53.
²² M. Merleau-Ponty: ‘Eye and

mind’, transl. C. Dallery, in M. Merleau-Ponty: *Primacy of Perception*, ed. J.M. Edie, Evanston IL 1964, pp.159–90.
²³ F. Spalding: ‘Bridget Riley and the poetics of instability’ [1999], repr. in E. de Chasse, *idem* and R.

Kudielka: exh. cat. *Bridget Riley: Paintings 1963–2015*, Edinburgh (National Galleries of Scotland), 2016–17, pp.11–33.
²⁴ S. Morley: ‘Review of “Bridget Riley: paintings from the 1960s and 70s”, Serpentine Gallery, London’,

'Do not so much picture the world as take their place alongside a series of other performative practices that conjure the world into being again and again'.²⁰ This 'complex virtuality', to Rycroft, consists of 'a dynamic interaction of all conceivable scales and modes of being (human, animal, viral, molecular, and so on), always in the process of becoming [...] in which agent and nature are mutually constitutive'.²¹ Riley employs pattern and moiré-like effects to challenge visual judgments and to activate a dynamic space of reception that is sensorially hybridised, proposing a richer notion of aesthetic experience beyond visuality. Disturbing the notion that there is a continuous connection of eye to mind, and sight to reason, Op disrupts forms of scopic power that demand other senses of the body remain secondary. One could say that Riley short-circuits the primacy of vision, allowing the body to experience the permeability of inside and out in a trans-corporeal relationship to external matter. The disturbance comes in the eye, but it means something else to the body, flagging the way that incoming stimuli are the precondition of sensory perception, not experiences 'authored' by the mind. It is known that Riley studied Maurice Merleau-Ponty's work, in particular the 1964 translation of his essay 'Eye and mind', in which he emphasised the incarnate response in the body as aesthetic experience, not a disembodied, 'conditioned thought'.²² Penetrating what he termed 'the skin of things', painters are in a unique position to show 'how the things become things, how the world becomes world'.²³

How does Riley's 'breath', her mutable sense of 'living', function in practice? Can such a work as *Current* be understood as dissolving the primacy of vision into an expanded notion of aesthetic perception as greater sensory engagement? For Riley, the 'eye's mind' may be a distinct form of perception intruding into notions of visual aesthetics as distanced and reasoned contemplation. As Simon Morley has argued, Riley's complex notion of vision triggers reciprocal operations with other senses, with the spectator 'drawn into a dialogue taking place in the uncharted territory of the visual response'.²⁴ Vision is the catalyst, yet the reactions exceed sight alone, 'jangling' the nervous system. The eye is a living organ, and therefore a vulnerable visual device, its retina joined to the brain via the optic nerve. In turn, the optic nerve connects to the visual cortex sited in the occipital lobes, sending stimuli to the primary and three other visual cortexes by way of the thalamus, the brain's relay hub for all sensory stimulation save olfaction. The primary visual cortex is the brain's centre for visual pattern recognition. The dynamic qualities of geometric abstraction, the manner in which this practice moves viewers between visual precision and distortion, intense looking and multifocal space, has the effect of stimulating, tricking and even trumping the visual cortex's categorisation functions, triggering Op's telltale illusions of depth, fictitious colours and pulsing movement. Riley's work, in particular its uncertain, moiré-like kinetic effects, has a paradoxical effect of enhancing other senses beyond vision. As perception is forced into conflict with verifiable evidence, Riley employs the contingency of vision as a threshold to other non-visual sensory experiences. At times the language of synesthesia has been employed to describe the effects of the 'eye's mind' as a haptic encounter. Consider this sharp exchange from an interview by David Sylvester in 1967:

DS: Do you want the work to be aggressive towards the spectator?
Do you like it to hurt your eyes? [...] Doesn't it give you a pain?
BR: No – no pain! It gives me pleasure.

THE BURLINGTON MAGAZINE 141 (1999), pp.561–63.

²⁵ B. Riley: 'Interview with David Sylvester' [1967], in Kudielka, *op. cit.* (note 11), pp.92–98.

²⁶ B. Riley: 'On swimming through a diamond', *British Vogue* (March

1984), p.292. Elsewhere Riley has described her work as

stimulating sensations as if within 'the interior of a tree', quoted in F. Spalding: 'Review of "Bridget Riley, Paintings 1982–1992"', Hayward Gallery, London', THE BURLINGTON

DS: Does it give you that famous admixture, pleasure-pain?

BR: Perhaps, in that it is a stimulating, an active, a vibrating pleasure.

DS: Comparable to what?

BR: Running . . . early morning . . . cold water . . . fresh things, slightly astringent . . . things like this, certain acid sorts of smells.

DS: Really, you enjoy certain acid sorts of smells?

BR: Yes I don't like heavy sorts of smells. I like light, buoyant sorts of smells.

DS: Like ammonia?

BR: Oh no, like wood being cut.

Later in the interview Sylvester hammered again on the idea of Riley's work as 'aggressive':

DS: Do you think of your work as aggressive?

BR: Not necessarily, I think of there being colossal energies involved. . . in the medium. . . in the units, intervals, lines. . . I know that they are high voltage, potentially. [...] I called one painting *Static*, in the sense of a field of static electricity. It is visual prickles. But I don't find that a painful physical thing. It's a quality, as velvet is smooth, so this is a sparkling texture, really.²⁵

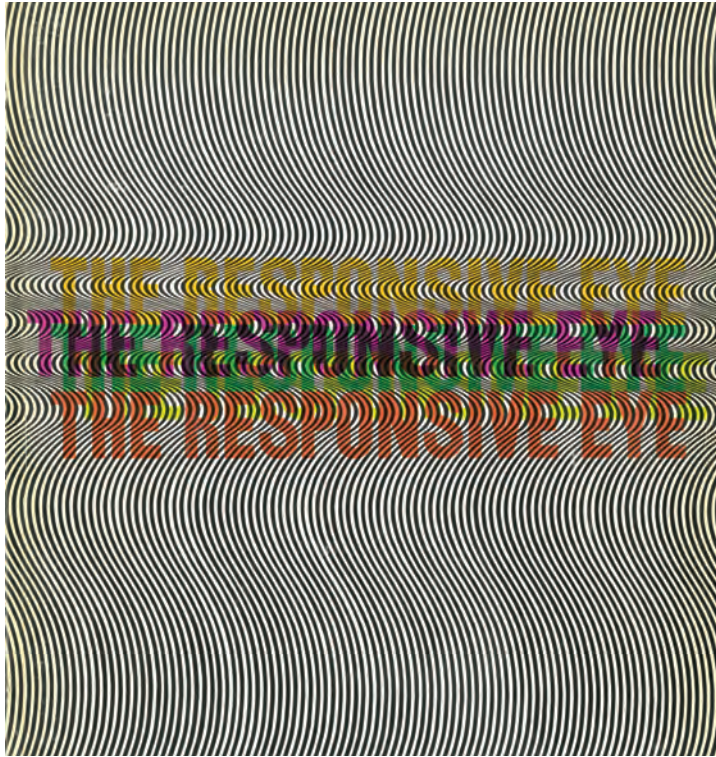
What Riley describes here is less synaesthesia – the involuntary substitution of one sense for another – than the stimulation and enhancement of senses beyond vision, using visual cues. In Riley's case the apprehension of visual stimuli can have protean effects, an enriched experience of vision becomes, as she wrote, like 'swimming through a diamond'.²⁶ *Current* is composed of only black and white, although it is full of colour. The work is not itself kinetic, although the undulations of line create persistent illusions of movement and depth. The eye sees what is not materially present. Riley's paintings do dizzying things to the viewer's perception of colour, light, depth and motion – in fact, they point to the very limit of visual certainty. Frank Stella once quipped that his paintings operated in a deadpan manner: 'What you see is what you see'.²⁷ Riley's works, in contrast, relish deception and, in that process of play and visual trickery, undermine the sureness of visual data.

The practice of art history requires translating experiences of sense – generally vision – into written reflection. Such a process, at its core, requires toggling between one visual experience (visual art) and another (the written word, whether on a page or screen). *Current* disturbs this relationship between vision and language. Even its title is multifarious. *Current* is the 'now', an indication of present-ness. *Current* is also a forceful flow of water, or air, or an electrical charge. *Current* can likewise mean a prevailing mood or temper of thought. Riley's painting confirms and refuses each of these meanings. Each time one tries to 'capture' the now, in this moment, as a whole, the waves skitter out of secure position. When one imagines the swiftness of a flow, the eddies in the central portion of the work subject the 'current' to alternating forces. Likewise, when one tries to pin down a prevailing mood, the wavering tremors make delineating a clear thrust or direction impossible. Evidently both Seitz, curator of *The Responsive Eye*, and Joseph Bourke Del Valle, designer of its catalogue, thought so too, as the brilliant book design features a drunken palimpsest of language jammed up

MAGAZINE 134 (1992), pp.739–40, at p.739.

²⁷ Stella in discussion with Dan Flavin, Bruce Glaser and Donald Judd, broadcast as 'New nihilism or new art?' on WBAI-FM, New York, recorded 15th February 1964, aired

24th March 1964, excerpted and reprinted as B. Glaser, 'Questions to Stella and Judd', ed. L.R. Lippard, quoted in G. Battcock, ed.: *Minimal Art: A Critical Anthology* [1968], Berkeley 1995, pp.148–64.



4. Cover of the exhibition catalogue for *The Responsive Eye* at the Museum of Modern Art, New York (1965), designed by Joseph Bourke Del Valle.

in the central channel of Riley's work (Fig.4). However, unlike a typewriter jam – usually an overmarking of several letters in one area – in this case there are five differently coloured, sans serif, all-caps banners of all three words of the title, looking more like a misregistration of colour plates in a printing error. *The Responsive Eye* book makes *Current* into moiré deluxe, in which the work becomes a topography of fractious and wavering forces.²⁸

The instability of Op's visual field disturbs the primacy of distanced contemplation, collapsing the space between the spectator and the work. Its expansive qualities, which stimulate non-visual perceptions and allude to the insufficiency of visual judgment, have been decried by critics as unduly haptic. As Pamela Lee pointed out, Rosalind Krauss's attack on Op's 'duplicitous', much like Hess's and Sylvester's, argued that such work is ultimately too tactile and not optical enough.²⁹ The repetitions and patterning of Op become just another form 'trickery', of objectifying ornamentation, the production of a decorative field in which optical illusions generate deceptive effects and conjure phantom objects.³⁰ For Krauss, reacting to *The Responsive Eye* in 1965, a painting was deemed successful when its viewers focused on the non-illusionary surface of the work, employing careful visual control to modulate their experiences of looking.³¹ The implicit superiority of sight experiences, to an art historian, hardly requires question.³² A single-sense – vision – is therefore privileged, as if it can be assessed independently of other bodily experiences.

Yet in this visual arrogance lurks a deep anxiety. Art, film and advertising in large part employ a by-definition visual 'spectacle' that prioritises image circulation as the primary locus of semiosis, evaluation and

exchange. The spectacle therefore anaesthetises the sensory powers of the haptic; touch and smell are far too subjective and cannot be easily translated into the stamps of reproducibility required for mass consumption. Visually re-presenting the world allows for the circulation of objectified signs. Detached contemplation and analysis of visual stimuli necessitates physical distance as the primary criteria for perception, not the sited immediacy of bodily sensation. Like a priest railing against concupiscence, the art history of vision-centric practices is suspicious of sensual complexity as a contaminant clouding the disciplined and rational eye with the carnality of the body. Linguistic interpretations of visual form supersede the relatively inchoate experiences of olfaction or touch. In this policing of the purity of the aesthetic in a perverse and rather defensive fashion, visual precision, watchfulness and control are emphasised, as if ever more vigilant attention will upend regimes of visual control. Sensual seduction is suspect, it is a tool of derangement, though capitalism increasingly employs expensive, multisensory experiences to overwhelm as a form of touristic consumption.³³

Look harder. Work harder at looking. The disciplinary aspects of mastering visual information have been taken up by such Foucaultian art historians as Jonathan Crary and Molly Nesbit, among others.³⁴ Nor, from the perspective of artistic labour, is there a clear valediction of the aesthetics of assiduous visual attention as shoring up a firm position of cultural power. To critics of Op, the emphasis on repeated visual forms may represent an obsessive, benumbing instance of parodic mimicry, to use Hal Foster's concept, an emulation of the desubjectivising repetition of mass production.³⁵ Rudolf Arnheim, speaking in a documentary made by Brian De Palma about *The Responsive Eye* in 1965, rued that:

Part of it is, certainly, that a human being would be willing to make, let's say, 5,000 dots, [...] [it is] a combination of masochism and protest. Partly you're the victim of it, and partly you are the rebel against it [...] You must not only look at the product of this, at what has been done, but the way it has been done, and imagine the man who has made it.

Later in the interview Arnheim defines 'anonymous art' – painterly labour without the visible facture that can be tied to 'anyone particular' – as 'the surrender of the human privilege of expressing meaning, which is surrendered to something outside of the human mind. [...] The construction is done by the geometry, and the impulse is done by the physiology'. In Op the minimisation of the artists' expressive mark was paramount – Riley herself began hiring skilled draughtspeople to produce her works in 1961, a practice that she continues today. To Arnheim, the outsourcing of meaning and emotion renders Op a kind of mechanistic practice. Lee too has flagged the technocratic interpretation of Op as a fear of 'programming' or even brainwashing, noting that 'Op's supporters regarded the programmability of their work as a function of its aesthetics of impersonality, understood as critical of the emotional excesses attributed to the previous generation of Abstract Expressionism'.³⁶ Bypassing visual

28 Serres argues that topology may be the richer term here, as the folds and veils hide as much as they reveal, see Serres, *op. cit.* (note 1), pp.22 and 26-27.

29 Lee discusses Krauss in the context of Riegler's notion of the haptic, see Lee, *op. cit.* (note 5), pp.37-39.

30 Clement Greenberg commented that Op is 'Rather easy stuff, familiar and reassuring [...] much closer to the

middlebrow than to [...] the genuine avant-garde thing', C. Greenberg: *Collected Essays and Criticism*, ed. J. O'Brian, Chicago 1993, IV, p.263.

31 R. Krauss: 'Afterthoughts on Op', *Art International* 9, no.5 (June 1965), pp.75-76.

32 For a discussion of this topic, see R. Krauss: *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition*, London and New York 2000.

33 See Howes, *op. cit.* (note 17), pp.288-89.

34 See J. Crary: *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, Cambridge MA 1990; and M. Nesbit: 'Readymade originals: the Duchamp model', *October* 37 (summer 1986), pp.53-64. See also J. Crary: 'Attention and event in the work of Bridget Riley', in E. de Chasse, *et al.*: exh. cat. *Bridget Riley Retrospective*,

Paris (Musée de l'art moderne de la Ville de Paris) 2008, pp.30-43.

35 H. Foster: 'Dada mime', *October* 105 (summer 2003), pp.166-76, at p.172.

36 Lee, *op. cit.* (note 5), pp.43-45.

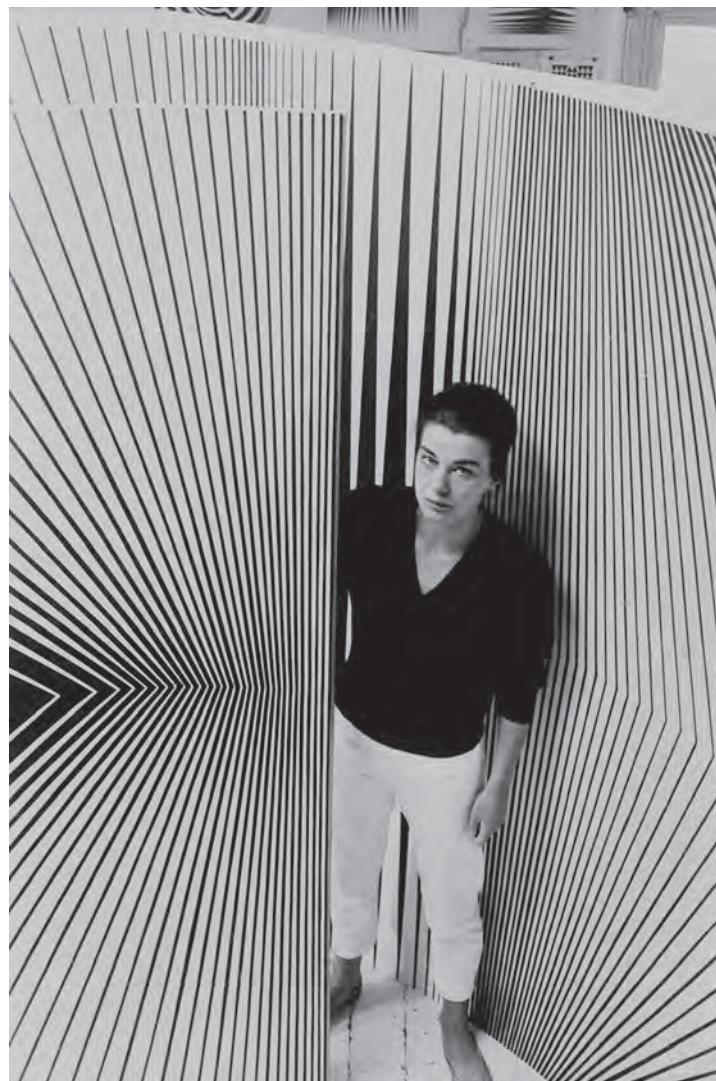
37 D. Hickey: 'Trying to see what we can never know', in J. Houston, ed.: *Optic Nerve: Perceptual Art of the 1960s*, New York 2007, pp.11-17, at p.13, for an attempt to recuperate Op as a kind of mindless populism.

judgment and control to emphasise bodily sensation, Op is suspected as being closer to instinct in the way it triggers biological effects, and is thereby outside 'higher' consciousness and evaluation.³⁷

Yet Riley's concept of the 'eye's mind' may in fact flag the limit of the eye-as-mind, the eye minding the 'aggressive' 'jangling' of the body's other senses impinging upon it. Riley herself talked about painting as a perturbation, akin to happenings: 'I feel that my paintings have some affinity with happenings where [a] disturbance [is] precipitated'.³⁸ The history of the derangement of the senses in art is too long a story to recount here. Riley's admiration for the Italian Futurists' emphasis on movement and energy is known; as far as early-to-mid 1960s happenings are concerned, a brief sketch of the cluster of practices derived from Antonin Artaud's notion of the 'theatre of cruelty' will suffice.³⁹ Artaud's condemnation of language and visibility in favour of a cacophonous simultaneity of competing media posited a type of performance beyond script, bypassing the literalism of theatrical visions sourced in text. For the composer John Cage (1912–92), the complex and disorientating nature of Artaudian-inspired multisensory performance could upend the primacy of harmony in music by emphasising instead the physiological experiences of sound, such as duration and vibration. The painter Allan Kaprow (1927–2006) further dissolved the notion of a singular work into the spectator's environment, interpolating viewers as participants in processes unfolding in time and space, containing sonic, tactile and olfactory dimensions. Perhaps the most sophisticated bridge between these explorations of complex sensory environments and a commitment to painterly engagement can be found in the work of Yayoi Kusama (b.1929); using abstract painting as a surface for spaces could possibly induce meditative or trance-like states in the body beyond visual perception alone.⁴⁰

Riley and other Op practices counteract the ways in which performativity, environment and the activation of diverse senses has been segregated from visibility. In Riley's case, unlike Kusama's, the overture of her work to disorientate the viewer's sense of perspective, figure-ground relations and the sureness of visual evidence remained sited in painting, not installation. Riley judged *Continuum* (Fig.5), a 1963 immersive sculpture and her only foray into installation, a failure: 'The viewer found himself actually "in" the work', she said, 'where all I wanted was visual absorption'.⁴¹ For Riley, visual absorption requires the body to exist in a charged field amid the work, comingling with it almost, so that vision could become a handmaiden for other forms of bodily experiences and physical energies. This is what Riley defined as 'nature': not the 'picturing' of landscape, but 'the dynamism of visual forces – an event rather than an appearance'.⁴²

By flagging the overvaluation of certain experiences in culture (cognition, distance and analysis) and the devaluation of others (sensuality, proximity and the body), line-set illusions and other disruptions of visual certainty initiate a circuit of complex and contingent perception in which appearances are unfixed and unreliable. Phenomenologists might call this a threshold to the 'embodied mind', whereby the sensate presence of the body is never fully sublimated to cogitation and its (generally linguistic) modes of translating sensory experience.⁴³ When Riley uses the phrase the 'eye's mind', can this be thought of as the eye's 'minding' – being bothered by – the disturbances her work triggers?⁴⁴



5. Bridget Riley standing amongst her 3D painted artwork 'Continuum, 1963', in an exhibition at Gallery One, 16 North Audley Street, London, by Tom Picton. 1963. (© Estate of Tom Picton; artwork © Bridget Riley 2023; Tate Images).

Op-style geometric abstraction does not simply train the eye and hone visual acuity. Instead, the use of pattern and moiré effects extend vision into time and space, more robustly connecting sight to the operations of other senses, moving beyond the idea of seeing as immediate apperception and instant control. Recall Stanczak's statement: 'I was possessed by my work, by my ability or *lack of it, to see*' (present author's emphasis). Bringing vision to its bodily limit – beyond the threshold of visual control – might be the 'eye-mind' end game, if only to open the human sensorium to the greater diversity of non-visual sensory experience. This may be a richer form of living, which bypasses the demands of a visual acuity that is forever attending to spectacles of display and consumption'.⁴⁵

38 B. Riley: 'Perception is the medium', *ARTnews* (October 1965), available at www.artnews.com/art-news/retrospective/bridget-riley-perception-is-the-medium-1965-12638/, accessed 5th August 2023.

39 On Riley and Futurism, see Spalding, *op. cit.* (note 23), pp.15–16. On Artaud, see the present author's discussion in Díaz, *op. cit.* (note 7), pp.58–60, 'Chance protocols'.

40 Kusama termed this process of expanding painting into environment by use of overwhelming repetition, thereby activating sensual connections between self and other, 'self-obliteration'. See Jud Yalkut's film *Kusama's Self-Obliteration* (1967), Shady Film Productions, available at www.youtube.com/watch?v=n6wnhLqJqVE, accessed 8th August 2023.

41 Bridget Riley, quoted in S. Tait:

'Review of "Bridget Riley: The Eye's Mind", Hayward Gallery, London', *The London Magazine* (13th November 2019). For more on the effects of this work, see F. Follin: 'Bridget Riley's "Continuum" (1963) recreated', *THE BURLINGTON MAGAZINE* 147 (2005), pp.619–21.

42 B. Riley: 'Working with nature' [1973], in Kudielka, *op. cit.* (note 11), p.110.

43 See Spalding, *op. cit.* (note 23).

44 Richard Schiff has pointed to the importance of feeling in Riley's work, and the way that her emphasis on 'fleeting sensations' emphasises presence not thought, writing that 'Feeling differs from ever other sense', R. Schiff: 'Every shiny object wants an infant who will love it', *Art Journal* 70, no.1 (spring 2011), pp.6–33.