

--> See the **erratum** for this article

Molinari and the Science of Colour and Line

Robert Welsh

Volume 5, Number 1, 1978

URI: <https://id.erudit.org/iderudit/1077313ar>

DOI: <https://doi.org/10.7202/1077313ar>

[See table of contents](#)

Publisher(s)

UAAC-AAUC (University Art Association of Canada | Association d'art des universités du Canada)

ISSN

0315-9906 (print)

1918-4778 (digital)

[Explore this journal](#)

Cite this article

Welsh, R. (1978). Molinari and the Science of Colour and Line. *RACAR : Revue d'art canadienne / Canadian Art Review*, 5(1), 3–20.

<https://doi.org/10.7202/1077313ar>

Molinari and the Science of Colour and Line

ROBERT WELSH

University of Toronto

Without apparent precedent in Canada, an internationally recognized painter, Guido Molinari, has been honoured simultaneously with a major retrospective exhibition and with the publication of a sizeable collection of his writings on art. The two events occurred under the aegis of the National Gallery of Canada, and are due particularly to the organizing efforts of Pierre Théberge, author of the exhibition catalogue *Guido Molinari* and editor of the artist's *Écrits sur l'art*.¹ Even for those who did not attend the actual exhibition, these two volumes make available a considerable amount of critical documentation. It must be hoped that this practice will be followed for other Canadian artists as well. It is now possible to examine the art and theories of Molinari as never before, even more so thanks to the co-operation of the artist himself in answering a questionnaire prepared by the present author.²

As has been well documented by Théberge, Molinari's early development was motivated chiefly by a study of the works and writings of other artists. He initially experimented within the limited range of Realist-Impressionist stylistic tradition which still dominated Canadian art circles, including those in Montreal, until well after World War II.³ Only upon contact with the Surrealist-derived *automatiste* mode of style championed by Paul-Émile Borduas did Molinari begin to evolve in a direction which would ultimately lead him to a fully abstract form of art. Indeed, during the crucial formative years of ca. 1951 to 1955, such typical canvasses as *Juxtaposition* (Fig. 1, cat. no. 2) display a palette knife technique which enhances the seeming ebb and flow of glacier-like configurations of abstract colour areas in a manner that is analogous to the contemporaneous late style of Borduas.⁴ Despite the visual evidence of this general influence, it

was subsumed under circumstances which defy any simple classification of Molinari as an epigone of the Montreal Automatist movement. Nevertheless, it allows an understanding of the basis for the emergence of his subsequent geometric abstract style.

A painting of 1951, *Emergence II* (Fig. 2), already signified a wish to transcend the automatist technique of spontaneous improvisation by carrying it to an ultimate extreme. Analogously with comparable examples executed while blindfolded, this was one of several paintings produced by Molinari in darkness. The gestural, non-visual origin of these practices celebrated the 'automatic writing' exercises of European Surrealism to such a degree that the drip techniques of the American Abstract Expressionist Jackson Pollock appear to be rationally controlled by comparison.⁵ It was in his blindfolded paintings that Molinari first discovered, as he puts it, 'a constancy in my compositional structuring of space, e.g. a more static left side, a rather vertical movement at left, then a movement towards the right top corner, with a counterbalance mass

¹ Pierre Théberge, *Guido Molinari* (exhibition, National Gallery of Canada, Ottawa, 1976); Guido Molinari, *Écrits sur l'art: 1954-1975*, ed. Pierre Théberge (Ottawa, 1976). References to the exhibition catalogue are given for works not illustrated in this article, as well as for works illustrated in black and white here but in colour in the catalogue. The matte surface of the catalogue reproductions unfortunately diminishes the 'optical effects' seen in the original paintings and described below.

² Answers to this Questionnaire were received in late 1977. A copy of the documentation has been deposited in the library of the Department of Fine Art, University of Toronto.

³ For this development, see Théberge, 9-32, and cat. figs. 1-3.

⁴ Compare Molinari's cat. fig. 6 and cat. nos. 2 and 3 with works by Borduas as illustrated, for example, in Dennis Reid, *A Concise History of Canadian Painting* (Toronto, 1973), 232-37, or in R. Guy, *Borduas* (Montreal, 1972), 195-208.

⁵ On Molinari's involvement with automatism, see Théberge, 7, 15-17.



FIGURE 1. Guido Molinari, *Juxtaposition*, 1954. Oil on canvas, 58.4 × 76.2 cm. Collection of the artist (Photo: National Gallery of Canada).

towards the bottom right corner.⁶ This, as will be seen below, would lead to the rejection of all vestiges of three-dimensional spatial illusionism in favour of a personal form of hard-edge geometric abstraction. These preoccupations with the abstract structuring of space preceded Molinari's initial encounter with original works by Piet Mondrian, Jackson Pollock, and other leading non-Canadian abstract painters. It was while he was still under the spell of Montreal Automatism that the artist's earliest intimations of a personal species of fully abstract art occurred.

Ironically, it was not Pollock's brand of automatism, but his presumed indebtedness to the art of Piet Mondrian, which made him for Molinari a paradigm of the progressive spirit in world art. This view was trenchantly stated in an important article of April 1955, 'L'espace tachiste

⁶ Questionnaire.

⁷ Molinari, 'L'espace tachiste ou situation de l'automatisme' (1955), in *Écrits*, 15-17.

ou situation de l'automatisme.⁷ This article was written partly as a defense of Borduas against the accusation by Fernand Leduc that, in going to New York, Borduas had become a 'colonial' artist, presumably due to submergence in the *ambiance* of American Abstract Expressionism. In his article, Molinari argued that Canadian Automatism had limited its horizons by retaining the idea of 'the object' employed within a three-dimensional space. In contrast, Pollock had imbued the New York school – and, more recently, Borduas – with a universal character by building upon Mondrian's attempt to destroy the remnants of three-dimensional space still found in Cubism. However accurate this analysis of Pollock's contribution to world art may have been, it was to play a decisive rôle in Molinari's further development. It explains, for example, why in 1955 he was prompted to paint the Pollock-inspired *Abstraction No. 1* (Fig. 3, cat. no. 4) while also initiating a change of style that led in the



FIGURE 2. Guido Molinari, *Emergence II*, 1951. Oil on masonite, 59.7 × 49.5 cm. Collection of the artist (Photo: National Gallery of Canada).

general direction of Mondrian-like geometric abstraction. As viewed by Molinari, the evolution from Cézanne and Cubism through Mondrian to Pollock had replaced the last vestiges of perspective and objects modelled by light (habits, alas, retained by Canadian Automatism) with 'an energized, non-Euclidian space.' As early as 1955, therefore, the self-styled 'theoretician of Molinarism' had linked his own future with an historical development that he considered to be the essential one in twentieth-century Western art.

This sense of indebtedness to Mondrian, in fact, predated not only the debt that he felt he owed Pollock, but also his initial viewing of actual paintings by Mondrian, which occurred on a trip to New York in early 1955.⁸ Earlier knowledge had come at second hand, from reading a brief article written in 1951 by J.J. Sweeney, titled 'Mondrian, the Dutch and De Stijl.'⁹ The article reproduced no paintings, but only several diag-

ram sketches taken from a letter to the author, along with a critical exegesis by Sweeney of the letter itself. At least three important ideas by or about Mondrian may be derived from this source, all of which appear to have affected the Canadian artist deeply. Firstly, Sweeney quoted with approval the French critic Charles Estienne, who characterized Mondrian as one of those worthy artists who 'is in permanent revolt against his own style. The most exalting part of his effort, but also the most thankless consists in preventing the codification, even by himself of his own style.'¹⁰ Certainly Molinari, no less than many other contemporary abstract artists, has been inclined to seek constant stylistic renewal, beginning, it would seem, with this indirect contact with the art

⁸ Théberge, 16. Only a year or so later he also viewed original paintings by Pollock in New York (Questionnaire).

⁹ *Art News*, 1 (Summer 1951), 24-25, 62-64; see also Théberge, 17, note 7.

¹⁰ Sweeney, 24.

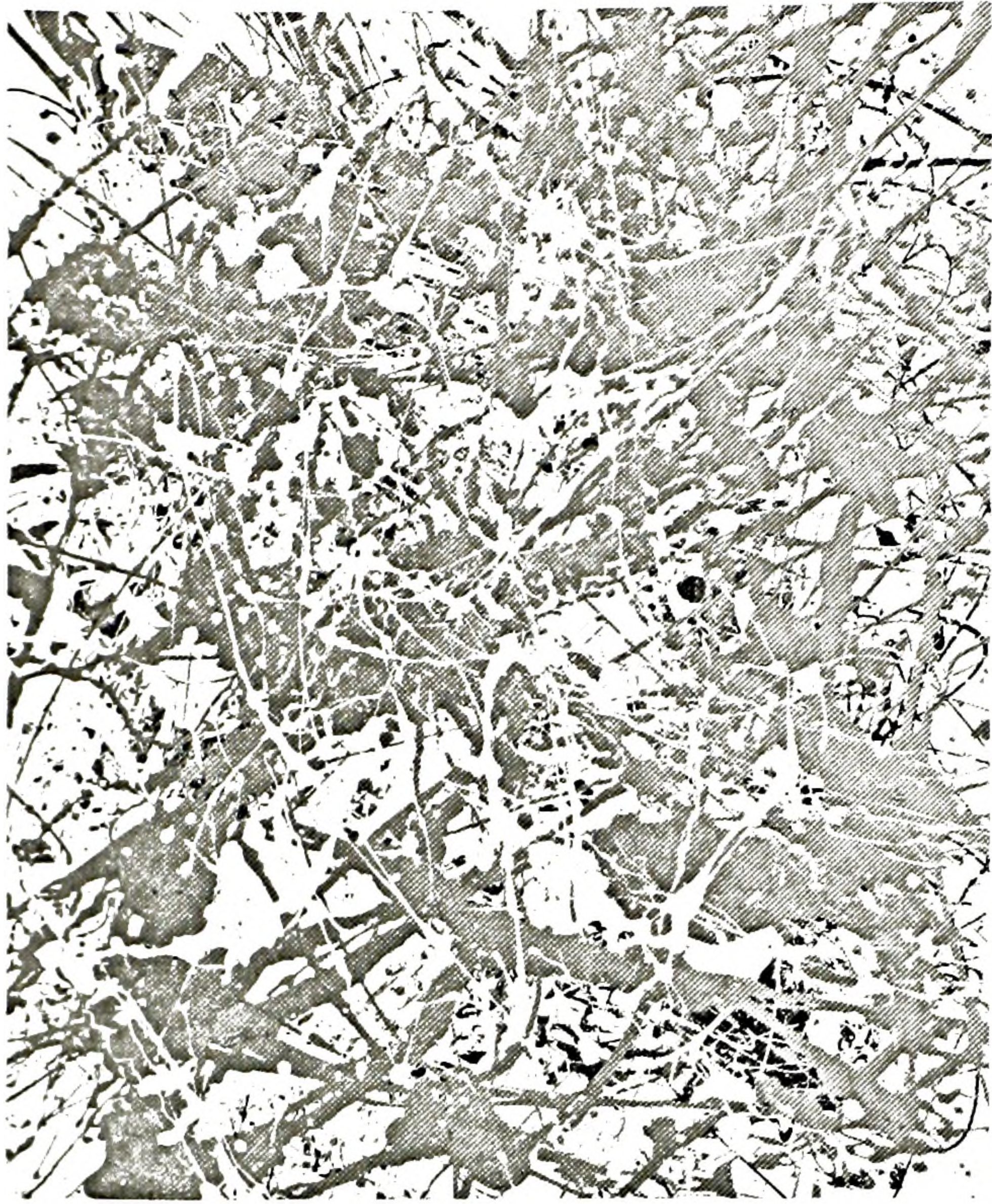


FIGURE 3. Guido Molinari, *Abstraction No. 1*, 1955. Oil on linen, 81.3 × 66 cm. Collection of the artist (Photo: National Gallery of Canada).

of Mondrian in 1951. Secondly, and on a more specific level, Sweeney quoted a letter of spring 1943 in which Mondrian expressed his frequently stated concern with breaking down the essentially volumetric or three-dimensional spatial quality – and thus the residual naturalism – of Cubism into an abstract, two-dimensional, and thus volumeless spatial system.¹¹ Molinari readily admits that ‘Mondrian’s affirmation of a need for a new, non-cubist space’ has provided one essential theorem for his own art since 1951, although he also stresses that from the same year he ‘was aware that in order to go beyond Mondrian meant the necessity of destroying the linear grid still found in the New York period. From that insight, I progressively chose to work with more equal sized shapes.’¹² A third lesson from Mondrian was found in his observation, ‘I think the destructive element is too much neglected in art,’ which Molinari has described as ‘the main dialectical force in the concept of evolution towards a new space.’¹³

¹¹ Ibid., 25, 62.

¹² Questionnaire.

¹³ Quotations from Sweeney, 24, and Questionnaire; see also Molinari, ‘L’espace tachiste,’ in *Écrits*, 16-17.

¹⁴ For Molinari’s interpretive accounts of these artists, see *Écrits*, 20-21, 42-47, 86-94, and 98-102.

¹⁵ This information was volunteered in the Questionnaire.

Molinari is hardly the only artist to have been encouraged by the example of Mondrian towards a final destruction of three-dimensional, illusionistic canons of spatial design in favour of two-dimensional geometric abstraction. Yet he displayed a singular degree of fervour in extracting his critical insights from so pithy a presentation of Mondrian’s late art theory as that presented in Sweeney’s article.

When contact with actual paintings by major early twentieth-century abstract artists did occur through visits to New York in the late 1950s, the galvanizing effect upon Molinari’s art was both immediate and profound. Through immersion in a whirlpool of activities as painter, joint organizer of the Non-figurative Artists’ Association of Montreal, and, for a time, director of a commercial art gallery there, he rapidly achieved a place of prominence among those artists known as *Les Plasticiens*, who are generally thought to have replaced the Automatists in the leadership rôle within the Montreal avant garde. His efforts as a writer on art were particularly notable, stemming from, among other sources, a personalized reading of such artist-theoreticians as Kandinsky, Malevich, Herbin, and of course Mondrian.¹⁴ If an interest in atonal music as providing an analogy with his ‘non-tonal’ painting and a stimulus for his ‘preoccupation with an intuitive and energized space . . . as a plenum of energy’ be added to this list of involvements,¹⁵ then one has a fair notion of the variety of interests which supported the emergence of a personal form of abstract painting during the same period.

Since the National Gallery exhibition catalogue provides ample visual evidence of this rapid and systematic transformation of personal style, it is not necessary to stress here how complex and innovative were the mutative processes by which this evolution was accomplished. Yet certain observations on the main motivations for change deserve special comment. Above all, one should not presume a simple scheme of development based upon successive influences from the models provided by other abstract artists. Throughout his career, Molinari has been little concerned with questions of allegiance to the specific styles of other artists and movements – whether they be based in New York, Montreal, or elsewhere – which are occasionally cited as possible influences. Preferring to be considered outside such categories as *Les Plasticiens*, Post-painterly Abstraction, and Op Art, he only rarely acknowledged the term ‘hard-edge’ as appropriate to his

own species of abstract art.¹⁶ Attempts to credit him with initiating specific formal innovations (as, for example, rows of parallel vertical stripes of colour) appear to him as historically irrelevant as his alleged indebtedness to the compositional devices of Barnett Newman, Ellsworth Kelly, or Gene Davis.¹⁷ Instead, Molinari lays the greatest stress upon his uniquely original conception of pictorial space and upon the mixture of personal and art-theoretical factors which produced this accomplishment.

This is the context in which his studied interpretation of the art of Mondrian, particularly during the late 1950s, finds its rationale. His appreciation of 'Mondrian's admission of a need for a non-cubist space,' cited above, led naturally to 'extensive experimental study in the expressive forms in the language of Mondrian, as found in his definition of line and colour as means of defining pictorial plane.'¹⁸ Typical of his relationship to the artistic models that he most revered, this led Molinari to a progressive development away from the example of Mondrian rather than to a mere elaboration of De Stijl principles. The important *Black Angle* (Fig. 4) of 1956, for example, would seem to embody not only Mondrian's 'non-cubist space,' but also Molinari's design inclination, revealed in his earlier blindfolded paintings, for structuring space in his compositions from 'a more static left side . . . vertical movement at left, then . . . towards the right top corner, with a counterbalance mass towards the bottom right corner.'¹⁹ This canvas also appears to seek in a special way Mondrian's cherished 'dynamic equilibrium.' Yet Molinari was motivated more by a desire 'to organize those constant flows . . . balancing the vertical and oblique' as his 'answer to Mondrian's awareness of the vertical/horizontal compositional principles,' than by direct emulation of a work such as Mondrian's *Painting 1* (Fig. 5) of 1926 – a canvas which particularly fascinated Molinari when he first saw it at the Museum of Modern Art in New York. In other black-and-white paintings of the years 1956-58 there are even greater deviations from the peculiarities of Mondrian's personal style. Among *White Vertical* (cat. no. 7), *Multi-White* (cat. no. 9), and *Structure No. 1* (cat. no. 44; executed in 1961 from a sketch of 1956), for instance, the planar components of black and white are so nearly evenly divided in the total area that they cover that it becomes difficult to decide which colour, if either, functions as the ground for the 'figurations' of the other. Cer-

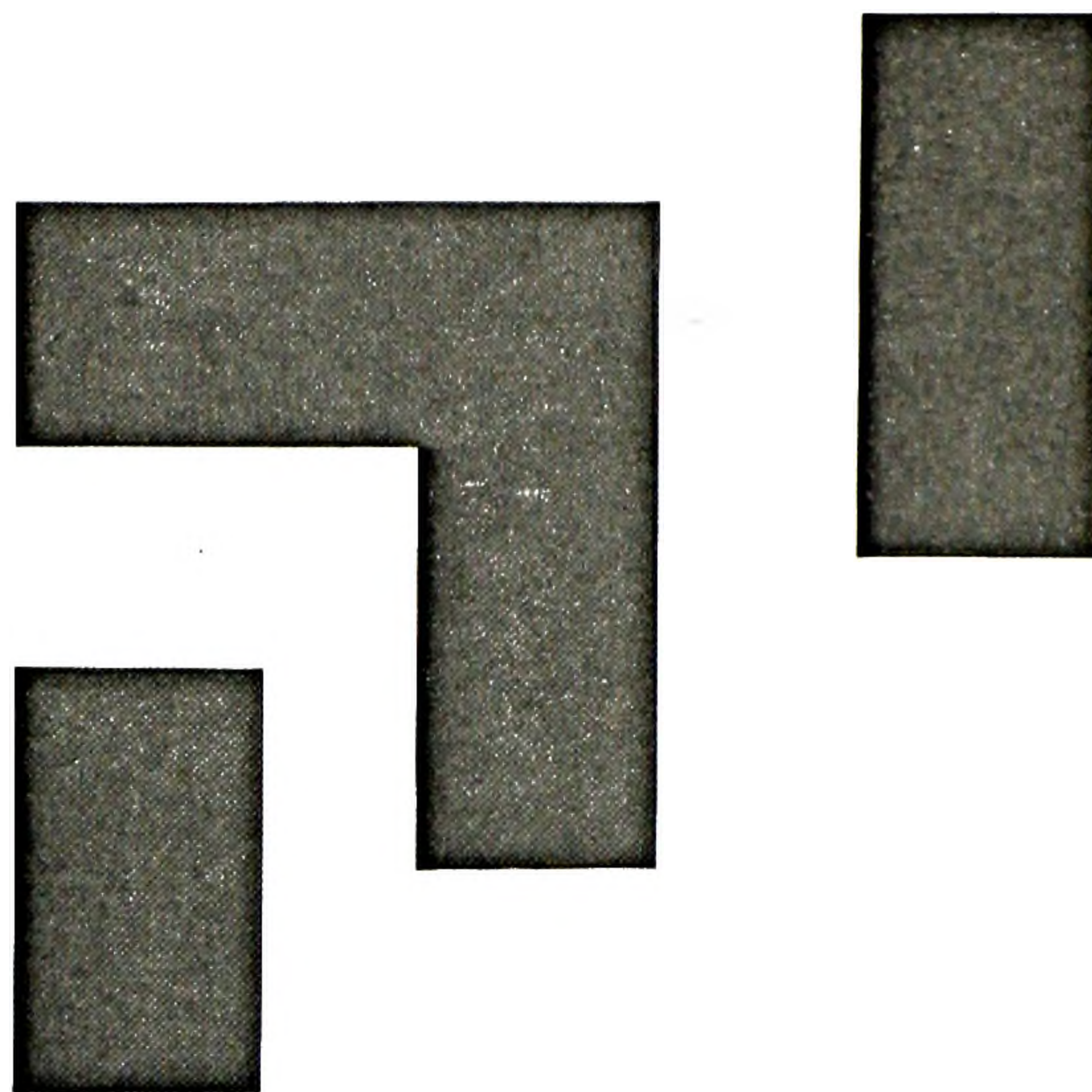


FIGURE 4. Guido Molinari, *Black Angle*, 1956. Duco on canvas, 152.4 × 182.9 cm. Ottawa, National Gallery of Canada (Photo: National Gallery of Canada).

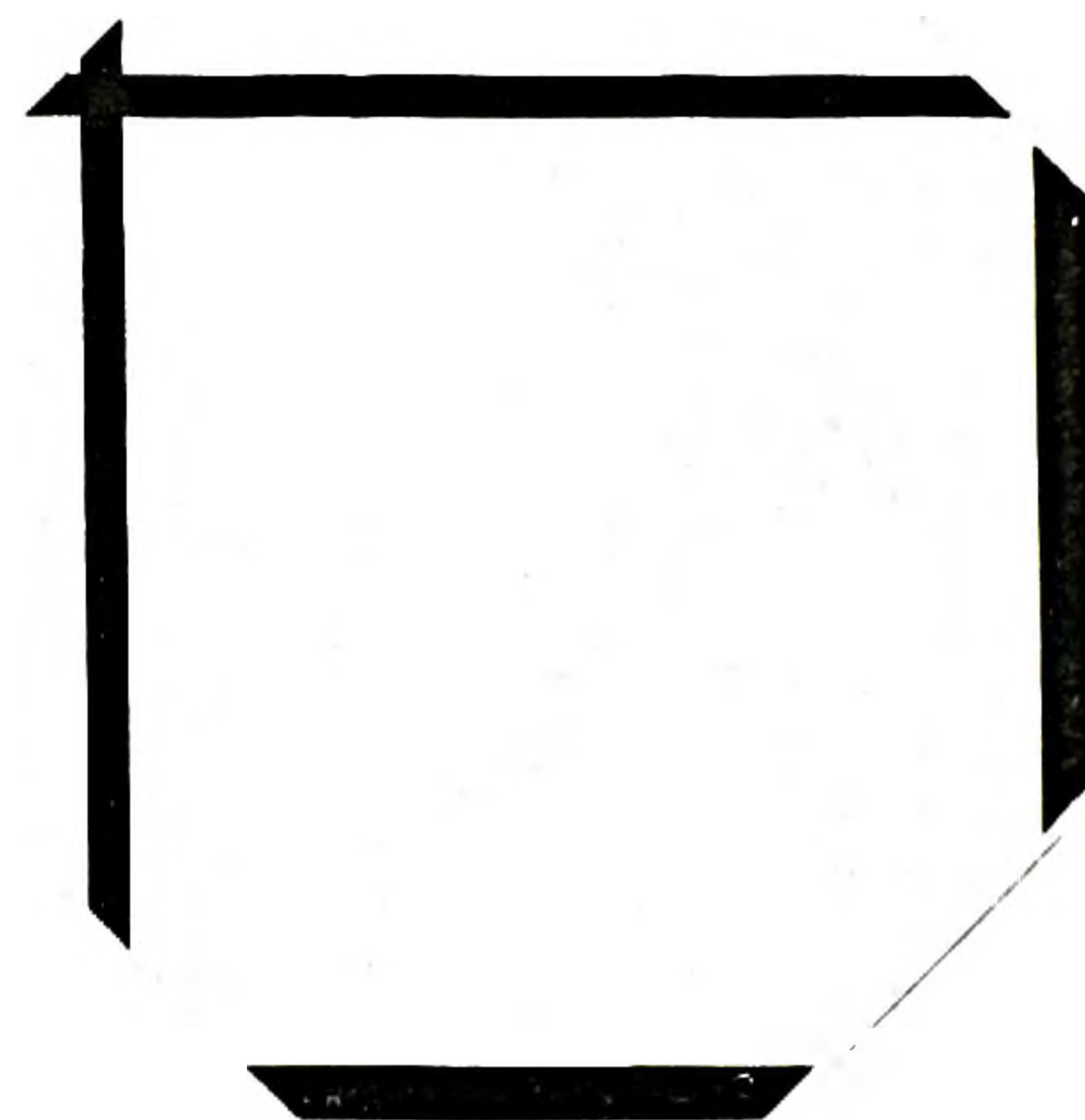


FIGURE 5. Piet Mondrian, *Painting 1*, 1926. Oil on canvas, diagonal measurement 113.7 × 111.8 cm. New York, Museum of Modern Art (Photo: Museum of Modern Art).

16 Although Molinari's use in 1955 of the term 'plasticien' patently derives from Mondrian's term 'neo-plasticism' ('L'espace tachiste,' in *Écrits*, 16-17), and he classified himself in 1966 as a Canadian 'hard-edge' painter ('L'Op Art et l'illusion du jamais vu,' in *Écrits*, 45), his declaration of 1954, 'Je suis le théoricien du molinarisme' ('Sans titre,' in *Écrits*, 14) represents best his personal wish to be appraised individually.

17 Théberge, 36-38, cites two such instances.

18 Questionnaire.

19 See note 6, above.

tainly this ambiguity represents one aspect of Molinari's attempt to 'go beyond Mondrian' by 'destroying the linear grid still found in the New York period' and by choosing 'to work with more equal sized shapes.'

Beneath the apparent diversity of compositional types which characterized Molinari's production of the late 1950s lies an unrelenting attempt to move ever further away from the style of Mondrian while approaching him in some respects as never before. It was during these years that the Canadian artist employed almost exclusively Mondrian's primary colour triad of red, yellow, and blue in high saturation (as well as black and white). In answering the present writer's inquiry as to the purpose of this borrowing, the artist answered:

My use of primary colours around 1957-60 was to simplify and create larger chains or series of different red, blue, black and whites, in one specific work, as opposed to a more multi-coloured serial system. Of course by keeping the means more simplified and similar to Mondrian's, it was more possible to measure the possible evolution from his system.²⁰

Throughout this period various means are employed to preserve some horizontal accents in the internal composition, even if they often occur only as short abutting edges of two differently coloured, but otherwise continuous, vertical stripes (see cat. nos. 10-12). In the impressive *Counterpoint* (Fig. 6, cat. no. 14) of 1960, we find both a last vestige of Mondrian's sacrosanct opposition of vertical and horizontal 'lines,' as well as a residual sense that the vertical stripes still function as 'figures' set upon a 'ground' of underlying horizontal colour bands. Perhaps unexpectedly, however, this painting also seems to reflect a further attempt 'to organize those constant flows' of his blindfolded paintings (i.e. a vertical movement at the left, towards the top right, and then to the bottom right corner). Thus the artist explains how in these years his 'flows' were elaborated in terms of 'a division in four horizontal layers, then three then two, those movements balancing the vertical and oblique top to bottom movements.'²¹ As will be seen below, this is by no means a full explanation of the expressive and spatial structure of a painting like *Counterpoint*. Yet it does pin-point effectively the mixture of both indebtedness and challenge to

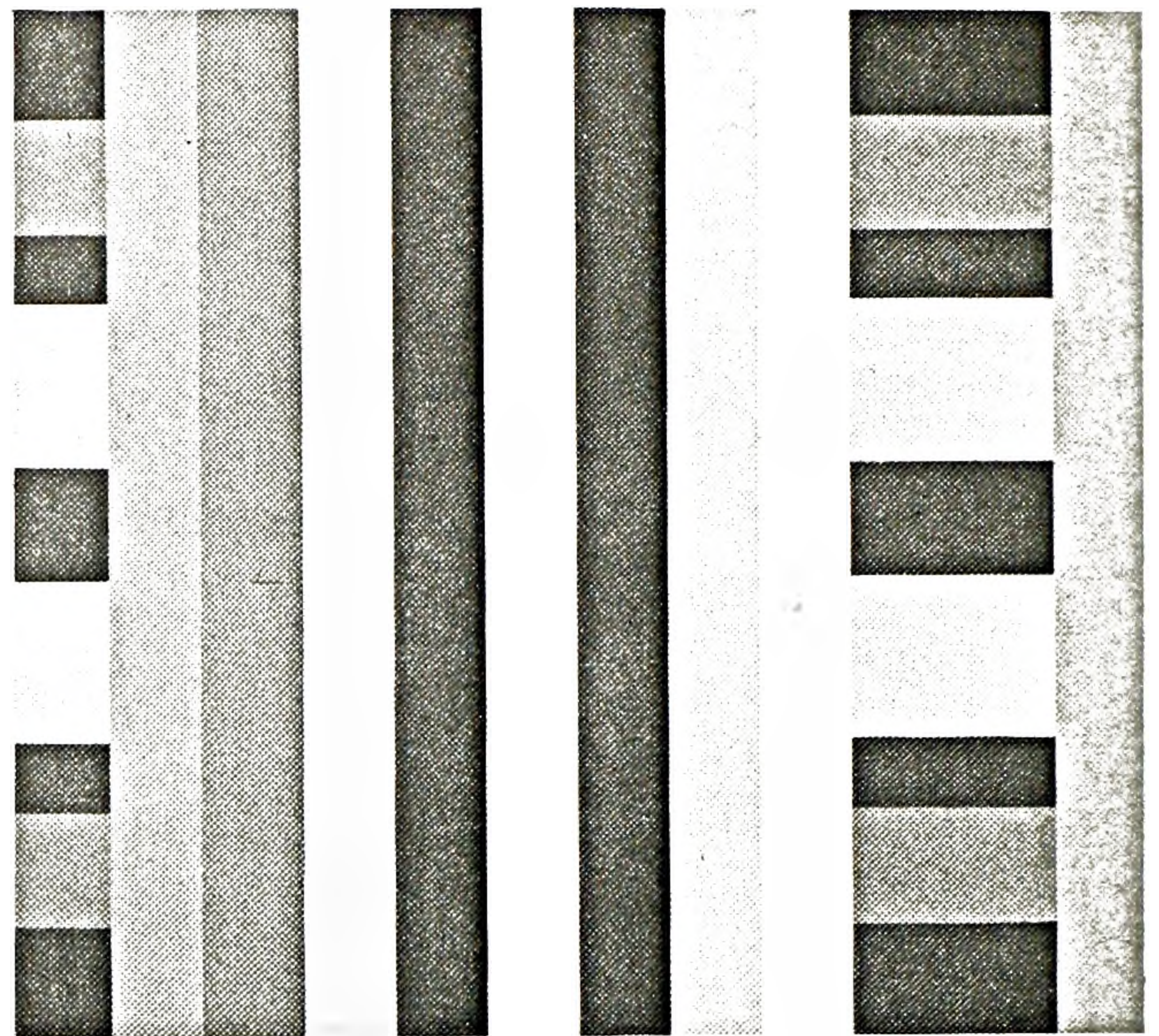


FIGURE 6. Guido Molinari, *Counterpoint*, 1960. Acrylic on canvas, 114.3 × 128 cm. Collection of the artist (Photo: National Gallery of Canada).

the model of Mondrian which informed Molinari's attitude as his final break with the vertical-horizontal principle drew near.

As Molinari's writings show, his abandonment of the pictorial principles of Mondrian and other earlier abstract artists, including Borduas, involved two fundamental aspects. Firstly, he had come to appreciate, not least of all from reading Mondrian's own writings, that the Dutch artist's retention of the vertical-horizontal line structure remained rooted in naturalist tradition. Hence the horizontal line was still identified with horizons found in traditional Western landscapes.²² Secondly, he had begun to feel that Mondrian and others, including once again Borduas but not Pollock, retained another dualistic conceptualization – the figure-ground principle. This principle survives in much abstract painting to the extent that certain geometric shapes are read as being contained within a uniform, if quite flat, background 'space.'²³ Hence Mondrian's lines and planes on a white ground (no less than the figure-ground relationship retained by Malevich and Borduas) are echoed to some extent in *Counterpoint* – although they are no longer reflected in the pure vertical stripe paintings that Molinari executed throughout the 1960s, and for which he is best known, especially outside Canada. One cause of this final and definitive break with earlier forms of abstract art was an internal logic in the evolution of his own compositional experiments. Vertical stripes take command in the pictorial field of battle progressively more

²⁰ Questionnaire.

²¹ Ibid.

²² See Molinari, 'Statement on Mondrian' (1965), in *Écrits*, 42-43.

²³ Molinari, 'L'espace tachiste,' in *Écrits*, 15-17.

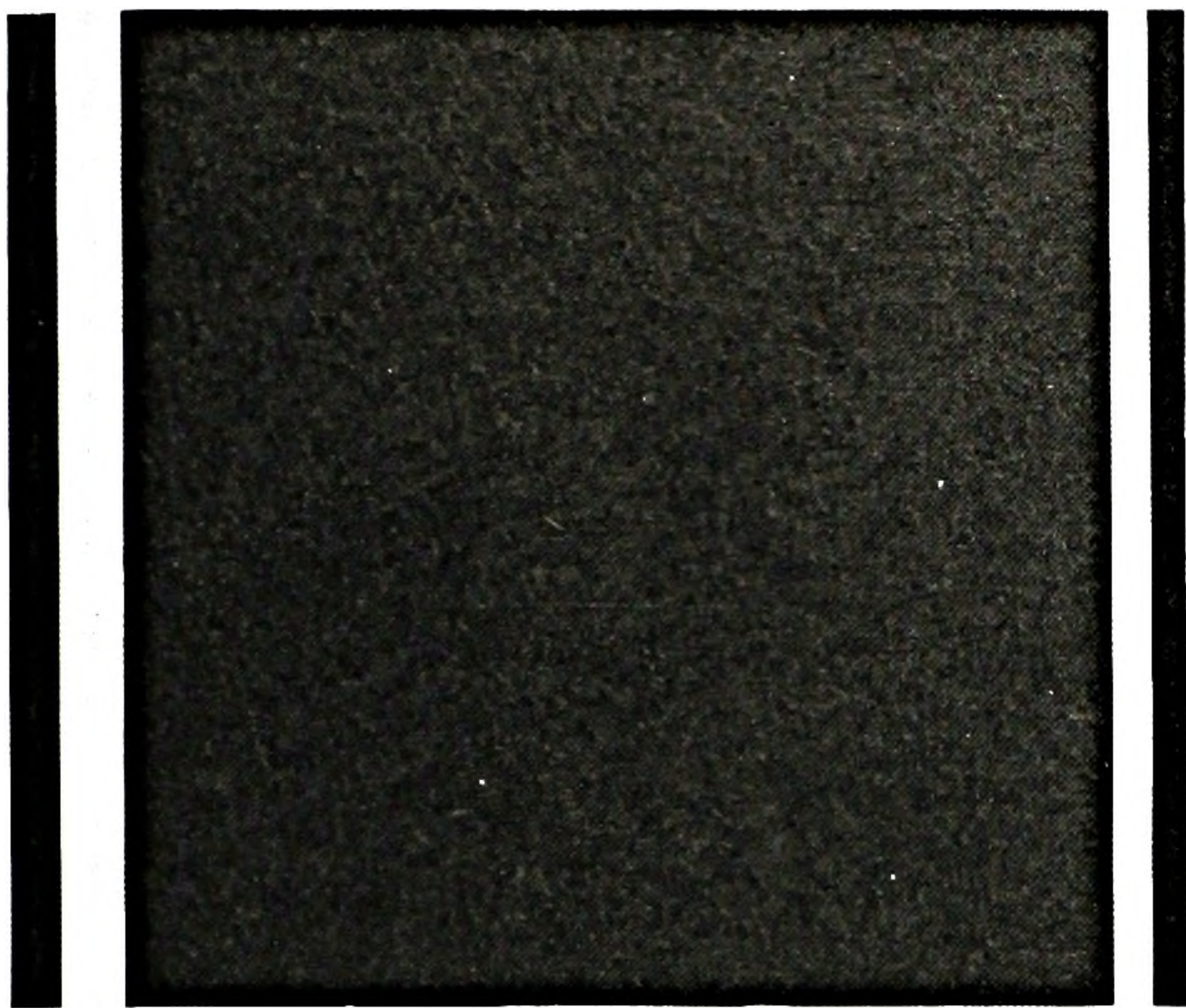


FIGURE 7. Guido Molinari, *Black Square*, 1961. Acrylic on canvas, 98.4 × 115.9 cm. Collection of the artist (Photo: National Gallery of Canada).

during the late 1950s. This reading of his development would agree with the precepts of so-called formalist art criticism, according to which progress in art is believed to result primarily from a dialectic struggle among artists to attain ever purer forms of abstraction.

It is therefore understandable that at least one American critic would claim the innovation of vertical stripe paintings for Barnett Newman, even if that artist's so-called 'zip' paintings of the 1950s remained generally less hard-edge and more painterly in execution than Molinari's *Black Square* (Fig. 7) of 1961 – a prime candidate for the charge of overt Newmanism.²⁴ In the same way, Molinari's temporary reintroduction of rectangular components around the years 1962-63 in such compositions as *Red Space No. 2* (Fig. 8) may have reflected a fascination with the problems explored by Josef Albers in his *Homage to the Square* paintings, even if the latter's centricity of design contrasts with the asymmetry that is all but invariably featured in the work of Molinari. Here again, formal similarities probably were of little concern to the Montreal artist, whose chief interest in Albers was soon to focus upon the ex-Bauhaus master's textbook of 1963, *Interaction of Color*.²⁵

Molinari had already studied the Ostwald colour system in the 1950s, and therefore would seem to have appreciated Albers's theories mostly for their confirmation of usages which he had evolved independently through an empirical process of trial and error. He has specifically stressed the validity of Albers's observations on the 'interactions' of adjacently placed colour planes, whose reciprocal effects preclude both a

correct perception of any single hue as such, and agreement even among trained art students as to the relative balance of intensities.²⁶ Anyone familiar with the styles of both artists will, of course, quickly note how differently each exploits the various expressive possibilities which such 'laws' of colour allow. While Albers's 'interpenetrations' of related hues and intensities tend to dissolve the formal components of his square-based designs, Molinari's rows of hard-edge, asymmetrically conceived pillars *en marche* continue to aspire to Mondrian's ideal of dynamic equilibrium. This is due chiefly to the uniformly high saturation and equal intensities of the variously juxtaposed colour combinations.²⁷

Molinari's ultimate intention was to establish his 'own position regarding the problem of colour.' As he wrote in 1972, this involved a thorough 'redefinition of the colour phenomena and dynamism' according to a structural pictorial process based upon seriality.²⁸ He explains the four premises of this concept of seriality as being the rejection of a single colour dominant, the recurrence or repetition of the chosen hues, a constancy of form and of colour qualities, and the elimination of secondary oppositions (such as textures and soft-hard contrasts). This not only provides the best available definition of the artist's mature personal style, but also allows us to shift our attention from a mere analysis of his evolution in formalist terms to the more complex matters of expressive distortions in the colour-form interrelationship which he seeks.

²⁴ See note 17 above, and, for Molinari's own analysis of Newman, 'Réflexions sur la notion d'objet et de série' (1971), in *Écrits*, 79-80. *Black Square* might be compared with various Newman paintings from the 1950s and later (cf. illustrations in Thomas B. Hess, *Barnett Newman*, [exhibition, New York, 1971]). Conversely, certain of Molinari's paintings in primary colours from the same year (e.g. *Red Asymmetrical*, Fig. 9, cat. no. 20) may be thought to have anticipated in their pigmentation Newman's series 'Who's Afraid of Red, Yellow and Blue,' from the late 1960s (illus. in Hess, 133-35).

²⁵ Molinari knew Albers's work from around 1954, and while teaching at the art school of the Montreal Museum of Fine Arts around 1964, he read *Interaction of Color* (New Haven, 1963), with whose theories he is in general agreement (Questionnaire).

²⁶ In 'Colour,' (*Écrits*, 88, 92-93), Molinari praises Albers for his stress on the relativity in the perception of colour interactions, but states that the Bauhaus master still relies upon a 'dominant colour' to produce merely 'a pseudo serial arrangement of quantities' (93).

²⁷ Although Molinari has stated his preference for the 'structural' use of colour by Mondrian over the stress on one dominant by Albers (*ibid.*, 93-94), since ca. 1963 his own usages of colour have gradually shifted away from Mondrian's exclusive reliance upon the three primaries, black, and white.

²⁸ *Ibid.*, 94.

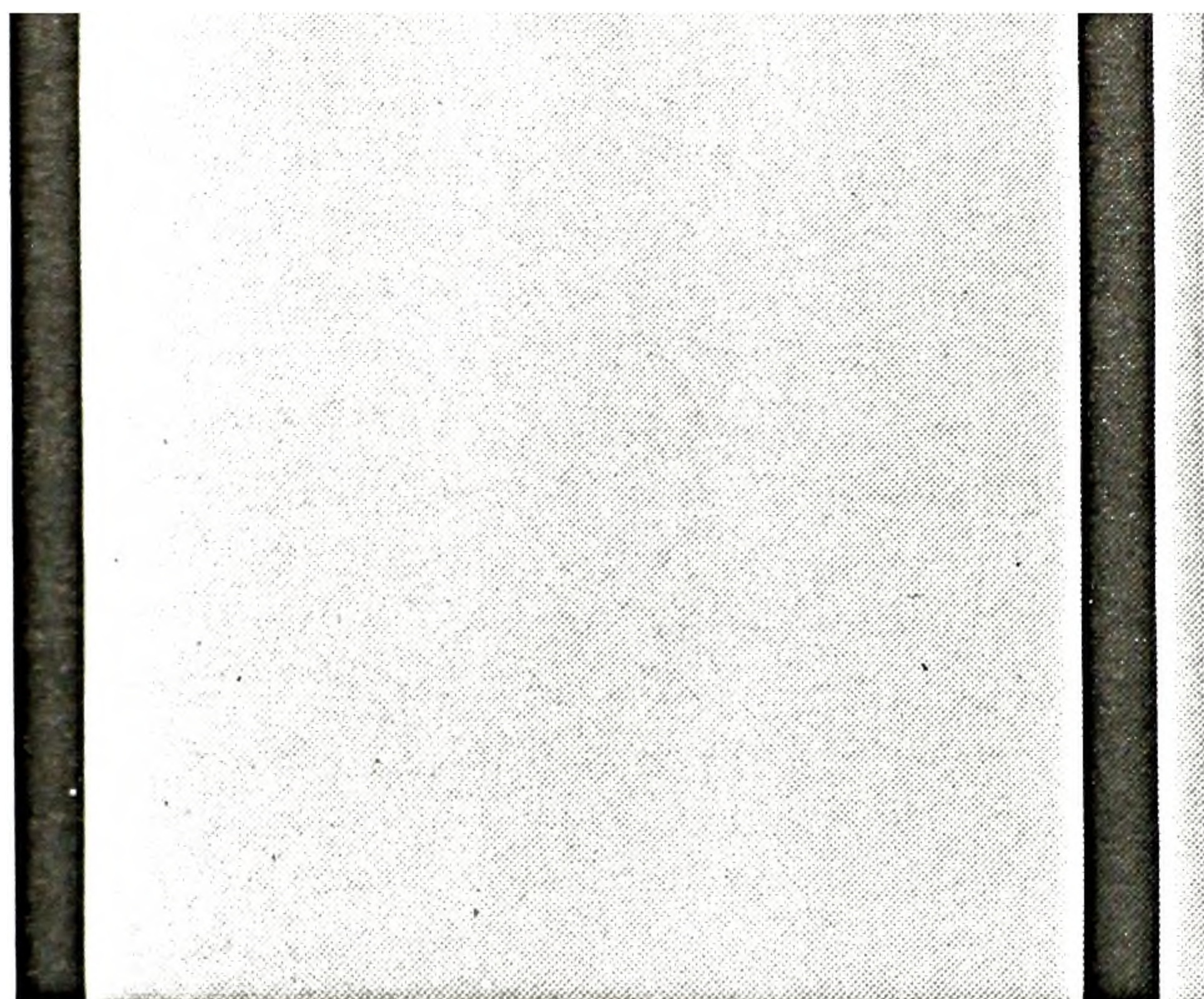


FIGURE 8. Guido Molinari, *Red Space No. 2*, 1962. Acrylic on canvas, 146.7 × 158.4 cm. Collection of the artist (Photo: G. Molinari).

Although Molinari prefers to see his 'personal problematic,' as he calls it, centred in the concept of seriality and worked out in allegiance to hard-edge canons of geometrizing abstraction, this characterization leaves unresolved certain questions relating to the psychology of perception. The issue appears to have been raised first by his inclusion in *The Responsive Eye*, an exhibition organized in 1965 by the late William C. Seitz for the Museum of Modern Art in New York. Although listed there under the rubric 'Perceptual Abstraction,'²⁹ the association of Molinari with some of the better known, so-called 'optical' artists implied to some extent a shared interest in an art of 'kinetic' movement and optical illusion. Molinari would not deny a profound and long-standing interest in the psychology of perception, as his study of the colour theories of Ostwald and Albers attests. On the other hand, he resolutely denies that he should be considered to be an 'Op' artist. In viewing this movement as an outgrowth of the surface vibrations found in Action Painting, he feels that it constitutes a surreptitious return to spatial illusionism, since its various forms of 'after images' must be read as relief-like projections in front of the 'real structure' of the painting surface.³⁰ Op Art would offer no better alternative than the relief paintings of Charles Biederman, which, Molinari believes, also misuses the lessons of Malevich, Mondrian, Van Doesburg, and Herbin. In contrast, he feels that

29 W.C. Seitz, *The Responsive Eye* (exhibition, Museum of Modern Art, New York, 23 February – 25 April 1965), 7-8.

30 Molinari, 'L'Op Art,' in *Écrits*, 45-47.

31 Théberge, 34-35.

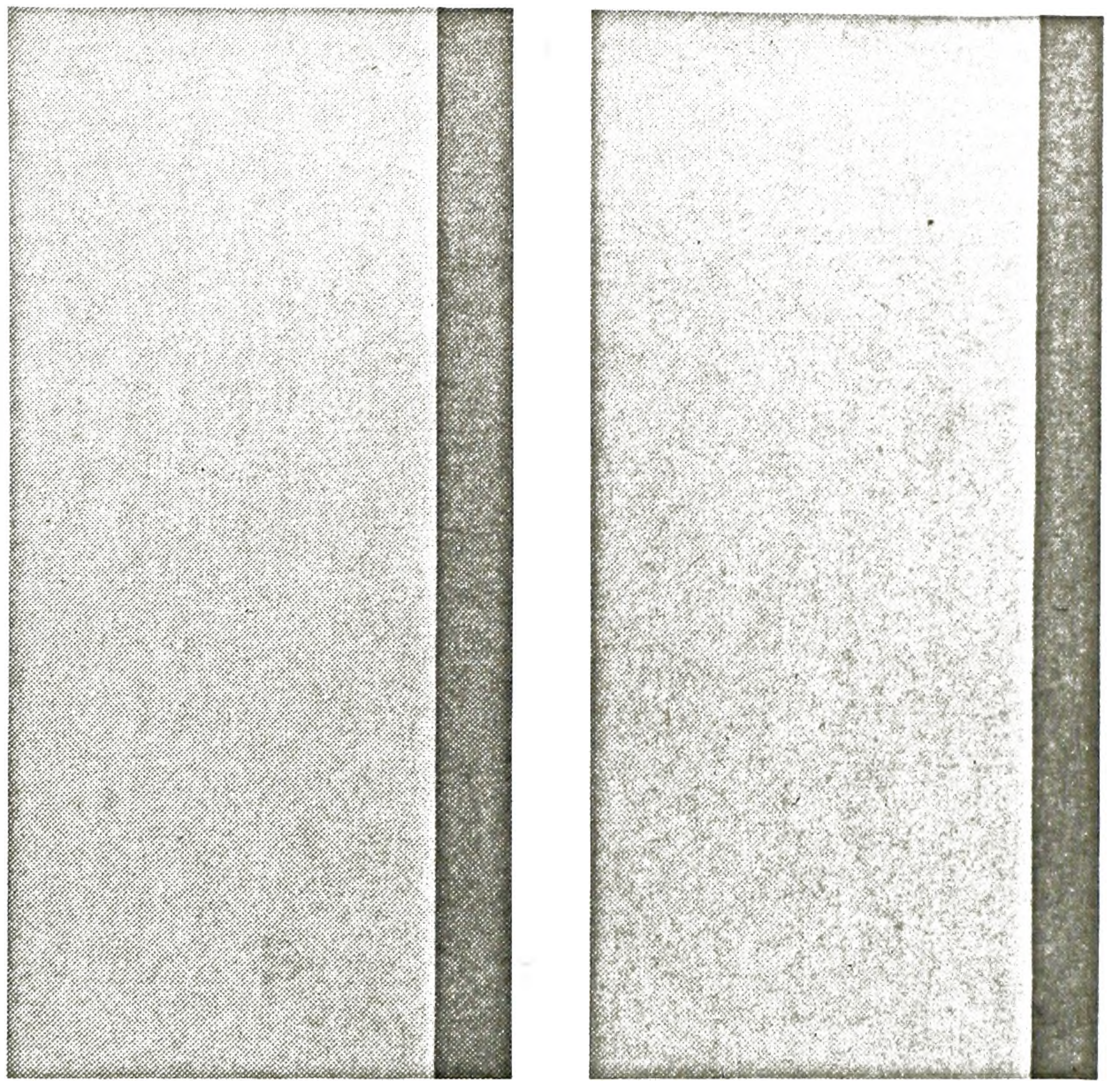
international hard-edge painting does not display any fascination with the third dimension, but rather, by building on the foundations of Malevich's Suprematism and the De Stijl movement, creates a space which results from the dynamic interaction of colour and form.

In the case of Molinari, as it has been seen, the breakthrough to the realization of a mature personal style occurred about 1961, when a reliance upon series of vertical colour stripes became his primary compositional format. As Théberge explained, *Red Asymmetrical* (Fig. 9, cat. no. 20) of that year first embodied the full-grown concept of seriality which has informed Molinari's oeuvre ever since. The apparent symmetry of the sequence of narrow yellow, wide red, and narrow blue stripes seen on the left side and repeated identically at the right side does not withstand a sustained visual analysis. The sense of symmetry actually dissolves because, as Théberge states, 'This very juxtaposition, as soon as it comes into the field of vision, immediately destroys this order and just as quickly modifies the colours in such a way that neither of the series of stripes can really be perceived as identical.' And, as Théberge adds, despite the use of identical colours and widths of stripes, 'the entire painting [is thus] transformed into an event of visual and temporal energy vibrations through each viewer's system of perception.'³¹

The phrase 'through each viewer's system of perception' is central to any attempt to interpret Molinari's stripe paintings on a level more profound than their offhand classification as a species of decorative art. Because it includes only six stripes, *Red Asymmetrical* provides a synoptic example of the multiplicity of readings of colour-form relationships to which the viewer is entitled – indeed is forcefully induced – in his process of perception. One's reading accordingly depends upon which single, pair, or other grouping of stripes one chooses to focus upon (or 'fixate,' as psychologists say). For the present writer, four contiguous stripes provide the maximum single focus possible in this painting, and even with four one's powers of attention are quite strained. Since the appreciation of attendant colour vibrations and of modifications of juxtaposed neighbouring hues changes according to one's choice of sequential reading or temporary focus, the perceptual possibilities inherent in any sequential examination of this 'relational' and 'serial' painting are numerous.

Yet this painting seems classically restrained in composition when compared to another one

FIGURE 9. Guido Molinari, *Red Asymmetrical*, 1961. Acrylic on canvas, 106.7 × 119.4 cm. Collection of the artist (Photo: National Gallery of Canada).



from the same year, *Homage to Jauran* (Fig. 10), a canvas containing thirteen stripes of slightly varying widths in four colours. Here it is tempting to imagine a planned sequence reading from left to right. Following the introduction of the four 'colours' black, white, blue, and red, one encounters three consecutive tripartite series having an *a-b-a* order of hues: namely, a black stripe flanked by two in white, a blue flanked by two reds, and another black flanked by two blues. However plausible this reading may appear, and apart from the possibility of reading from right to left, it is equally feasible to read the whole painting sequentially in terms of single-or double-stripe units. Alternatively, one might concentrate on the slightly off-centre tripartite group of black flanked by two white stripes, and then attempt to expand it to include at least the two red stripes flanking those in white, if not also the two blue stripes which can now be read to flank the two red stripes to form a seven-part unit. Admittedly, upon admission of the blue stripes, the question becomes moot as to whether or not this seven-part grouping can be read (that is, 'fixated') independently of encroachment from the next, unpairable, set of two flanking stripes. To be sure, the search to discover symmetry within *Homage to Jauran* ends in even greater visual uncertainty, not to say frustration, than with *Red Asymmetrical*.

Throughout the 1960s, although stripes of even widths gradually became a ruling principle (e.g. *Rhythmic Mutation No. 9*, Fig. 11, cat. no. 33; also cat. nos. 28, 38, and 42), the sequence of colours typically included anywhere between three and eight hues. Since the colour sequences vary between arrangements in regular and irregular serial patterns, more multiple readings than those induced by *Homage to Jauran* are often allowed. By these means Molinari encourages viewers towards an active, yet subjective, participation in the perception process of his serial endeavours.

A second question raised by the phrase 'each viewer's system of perception' is concerned with whether or not Molinari's paintings may, in fact, be read solely, or even chiefly, as two-dimensional spatial structures. Advocacy of two-dimensionality as such does not seem to appear as part of his published art theory, but the preservation of a flat painting surface might appear to result logically from his wish to abrogate once and for all the figure-ground duality of Western art. Yet upon concentrated viewing of numerous paintings by Molinari, the present writer has found that with relatively few exceptions, an optical illusion does occur and transforms the physically flat canvas into the appearance of a corrugated surface. When asked about what may be called

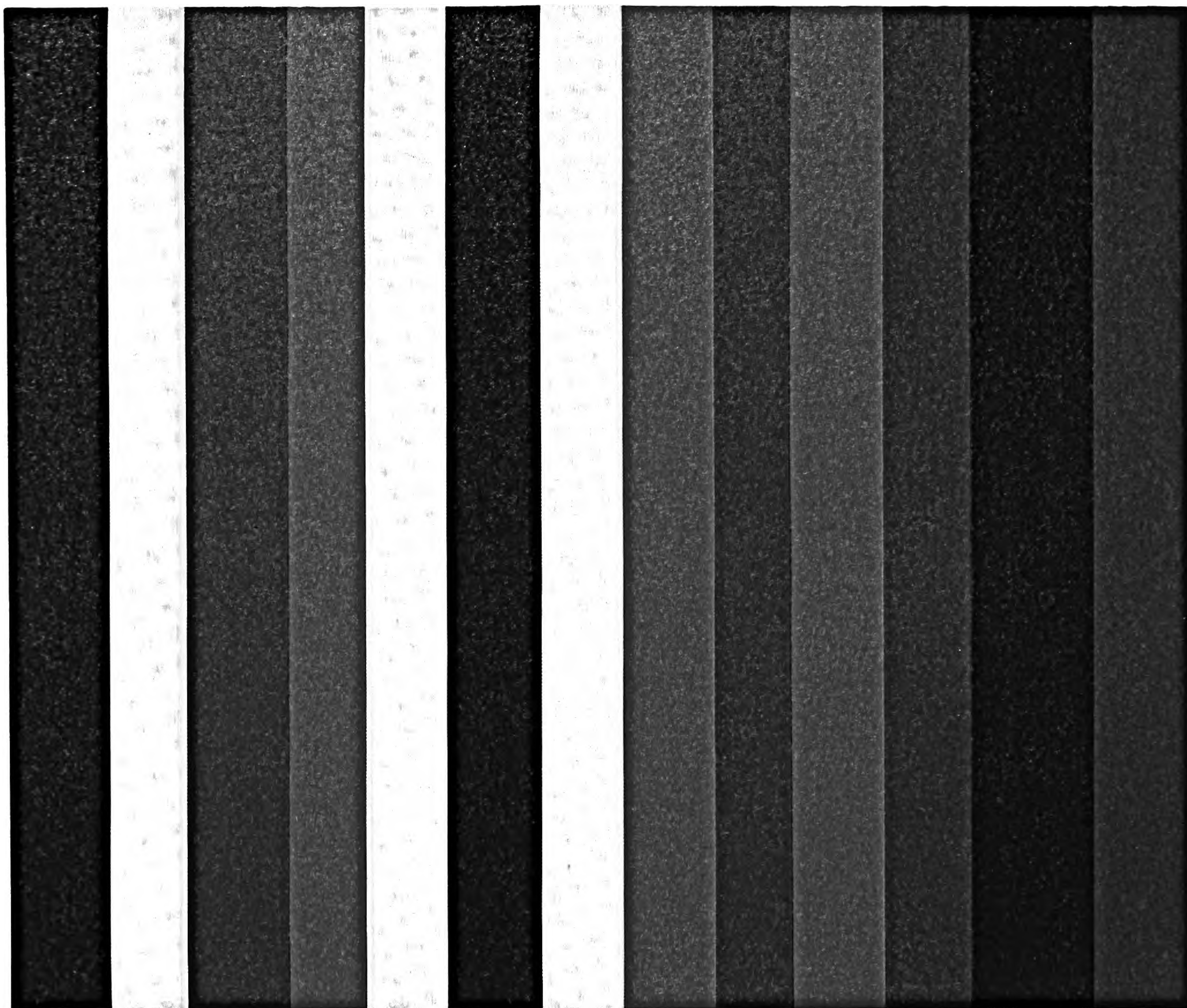


FIGURE 10. Guido Molinari, *Homage to Jauran*, 1961. Acrylic on canvas, 148.9 × 176.2 cm. Vancouver, Vancouver Art Gallery (Photo: Jim Gorman/Vancouver Art Gallery).

this 'washboard effect,' the artist responded that it does not interest him *per se*. Instead, he would consider it to be similar to such 'after image' phenomena as the sparks or popping effects which frequently occur at the intersections of Mondrian's grids, 'that is, a not sought-after effect, even if a necessary by-product of the colour-form structure of the painting.'³² The artist's own antipathy to the effects of optical illusion notwithstanding, some inquiry into the nature of this washboard effect seems necessary if the dynamic equilibrium which he pursues is to be explained adequately.

The answer to the apparent dilemma caused by the artist's disinterest in an art based upon optical

illusion may be found to some degree in the ambiguity with which individual human perception responds to such phenomena. Although they were exploited most systematically within the Bauhaus and Op Art movements, optical illusions occur throughout the history of art in such diverse traditions as Roman mosaics and Renaissance scenographia. By the late nineteenth century, these optical experiences had become the subject of intense scientific inquiry, especially as their examination pertained to a knowledge of human perception and the character of physical space. No lesser figures than Hermann von Helmholtz, Wilhelm Wundt, and Ernst Mach seriously concerned themselves with the subject, while the aesthetic theory of 'empathy' championed by Theodor Lipps was related to a large

³² Questionnaire.

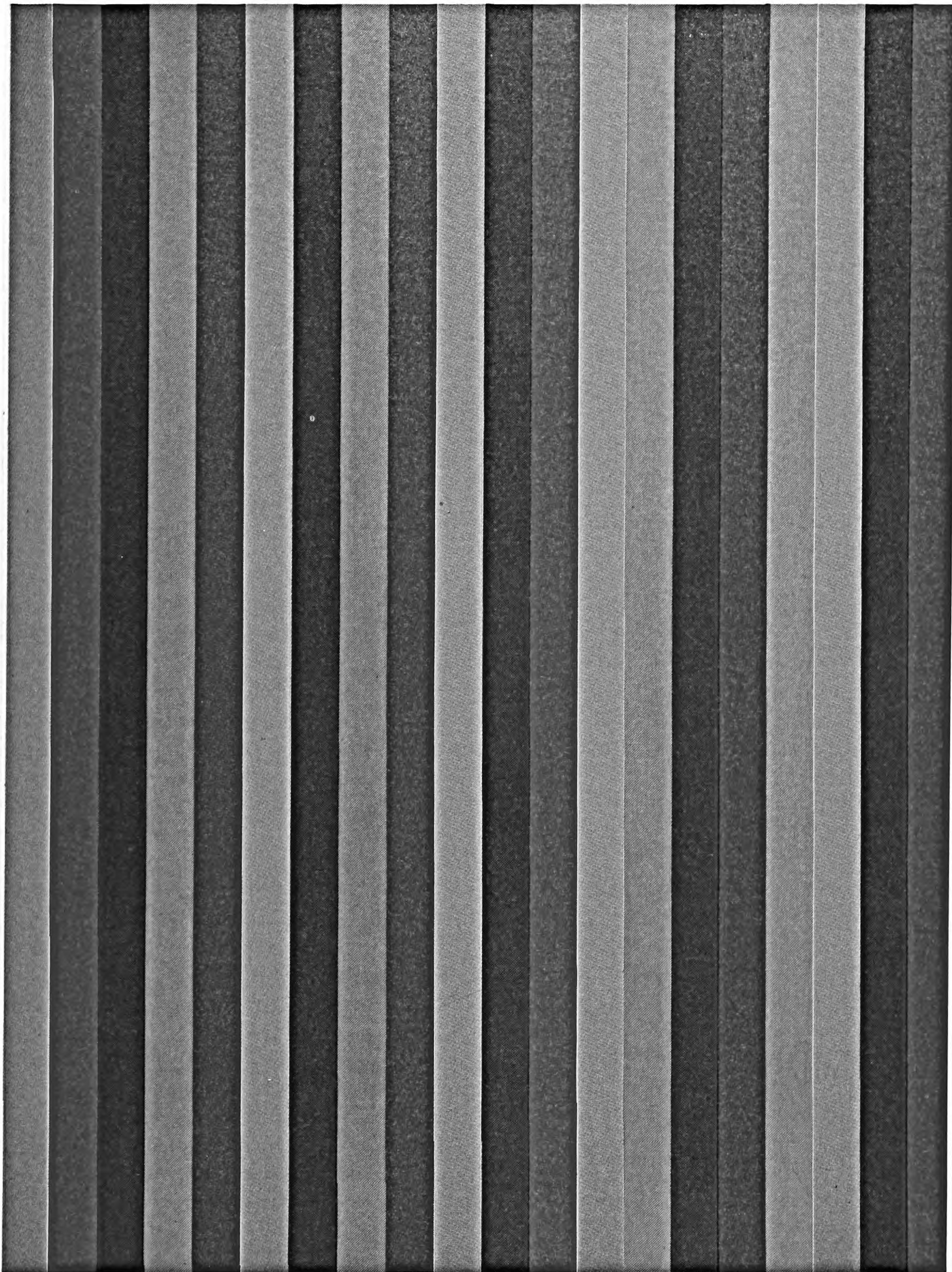


FIGURE 11. Guido Molinari, *Rhythmic Mutation No. 9*, 1965. Acrylic on canvas, 203.2 × 152.4 cm. Ottawa, National Gallery of Canada (Photo: National Gallery of Canada).

degree to his book-length study of optical illusions.³³ These turn-of-the-century investigations led not only to the emphasis placed upon them by Gestalt psychology, but also to their conscious or unconscious use by Molinari.

Apart from after-images, most optical illusions involve deceptive perception within either a two-dimensional or three-dimensional spatial context. Examples of two-dimensional illusion include the tendency of vertical lines to appear longer than horizontal lines when seen in a right-angled configuration, and that of parallel lines of the same length to appear unequal – or even to be not parallel – if they are affected visually by accompanying lines of varying lengths and dispositions (as, for example, in the so-called Müller-Lyer, Oppel-Kundt, and Zöllner illusions).³⁴ Significantly, the ambiguities of perception involved in these types of illusion are studiously avoided by Molinari, at least in his vertical stripe paintings, where all ‘lines’ are of equal length and the parallelism is uncompromising.

Common three-dimensional illusions include Necker’s cube and Schroeder’s staircase, in which boxes of space appear to turn inside out according to which of two planes that are drawn as being parallel to the picture plane is read as being the one that is closer to the viewer.³⁵ Neither is relevant to Molinari’s vocabulary of style, embodying as they do yet another variation on the problem of the figure-ground relationship. It is rather those few simple illusions which skirt the borderline between an effect of two- or three-

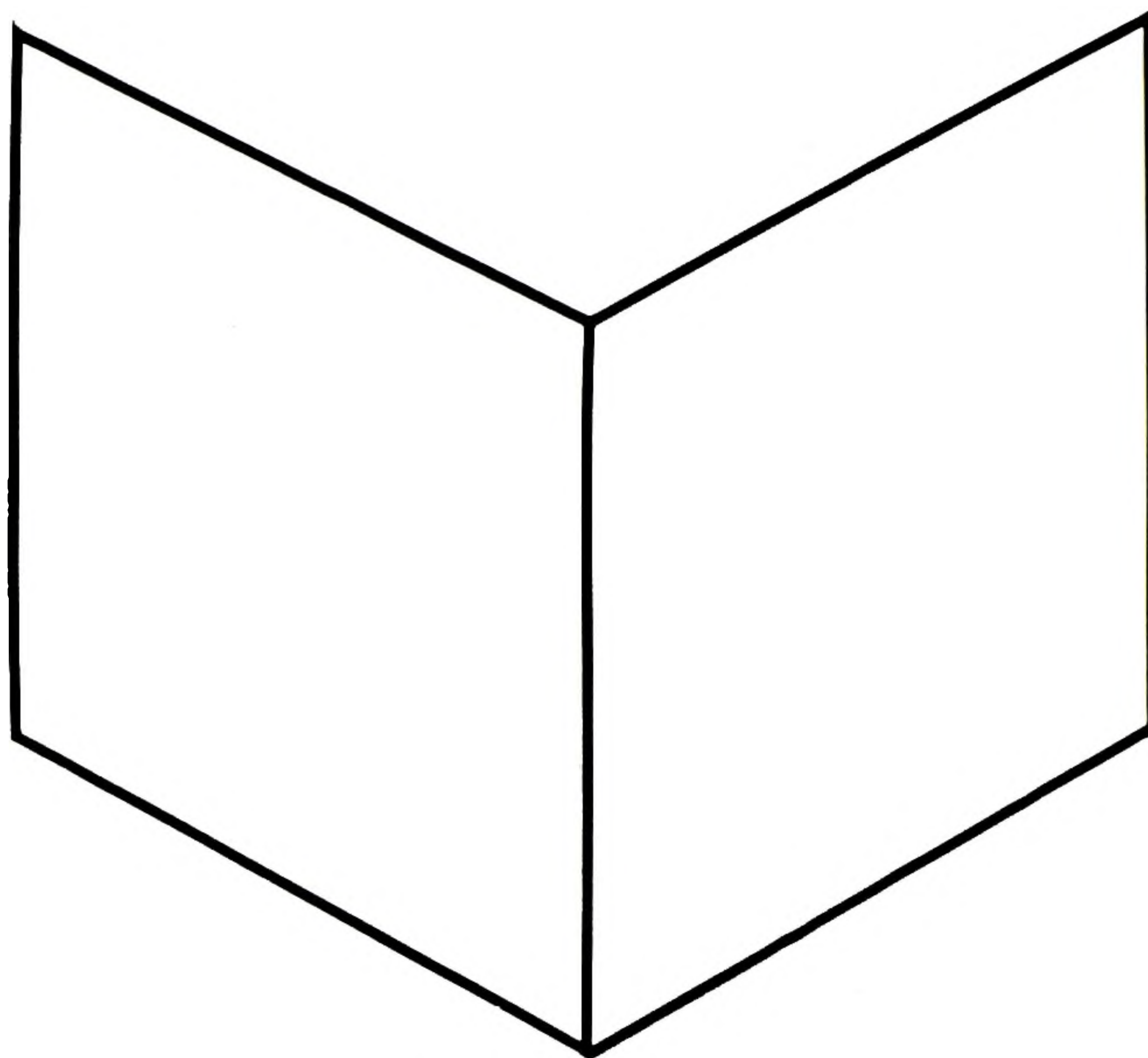


DIAGRAM A. Optical Illusion: Mach’s Book (Ernst Mach, 1886).

dimensionality that appear to function within Molinari’s paintings, whether intended – or even appreciated – by him or not.

The most fundamental of these intermediate illusions which may be cited is Mach’s book, which in its standard form (Diagram A) does indeed imply three-dimensionality, since either a trough or a ridge effect is perceived according to whether the viewer imagines the open book to be facing towards or away from him. As the angle at which the book appears to be open increases to the point of complete flatness, the illusion of spatial ambiguity decreases and then disappears. Strangely, something of this illusion would seem to be embodied in *Red Asymmetrical*. Upon prolonged viewing, the thin blue and yellow stripes at the centre appear to buckle slightly into a ridge, although the viewer knows rationally that they are perfect elongated rectangles. The interactions of the intense juxtapositions of colours must stimulate this effect as much as does an unconscious reading of the intersections of planes as being the lines of an elongated Mach’s book. In any case, here is one good example of how the artist’s unification of the elements of form and colour give dynamism to his compositional structures. Buckling effects – sometimes dramatic, sometimes muted – occur throughout the vertical stripe paintings; this is confirmed by a close perusal of *Homage to Jauran* and of the vertical stripes of *Counterpoint*, indicating as well that the effect is not confined to stripes of equal width. Indeed, while a knowledge of Mach’s book provides one rudimentary tool for understanding

³³ Theodor Lipps, *Raumästhetik und geometrisch-optische Täuschungen* (Leipzig, 1898). M.L. Teuber, in her essay ‘New Aspects of Paul Klee’s Bauhaus Style,’ in *Paul Klee: The Bauhaus Years* (exhibition, Des Moines Art Center, Des Moines, 1973), has convincingly related the art of Klee to several principles of perception explored in nineteenth-century and later Gestalt scientific circles. Although analogies might be drawn between Klee’s use of such principles and the optical phenomena imbedded in Molinari’s art (and described below), the latter’s acknowledged recognition of the involvement of Bauhaus artists with Gestalt principles of perception – he read Wolfgang Köhler’s *Gestalt Psychology*, (rev. ed., New York, 1947), in ca. 1958, and chapters 5 and 6 discuss optical illusions – was coupled with a belief that such ‘notions on perception and organization of space, which maintained the ambiguity of figure-ground relations . . . seemed to me a quite limited problematic’ (Questionnaire).

³⁴ M. Luckiesh, *Visual Illusions: Their Causes, Characteristics and Applications* (New York, 1955), provides a popularized account of optical illusions; G.M. Murch, *Visual and Auditory Perception* (New York-Indianapolis, 1973), offers a more detailed examination of them.

³⁵ Teuber, 13-14, and Seitz, 30-31, illustrate and discuss the use of these illusions within the Bauhaus-Op Art movements.

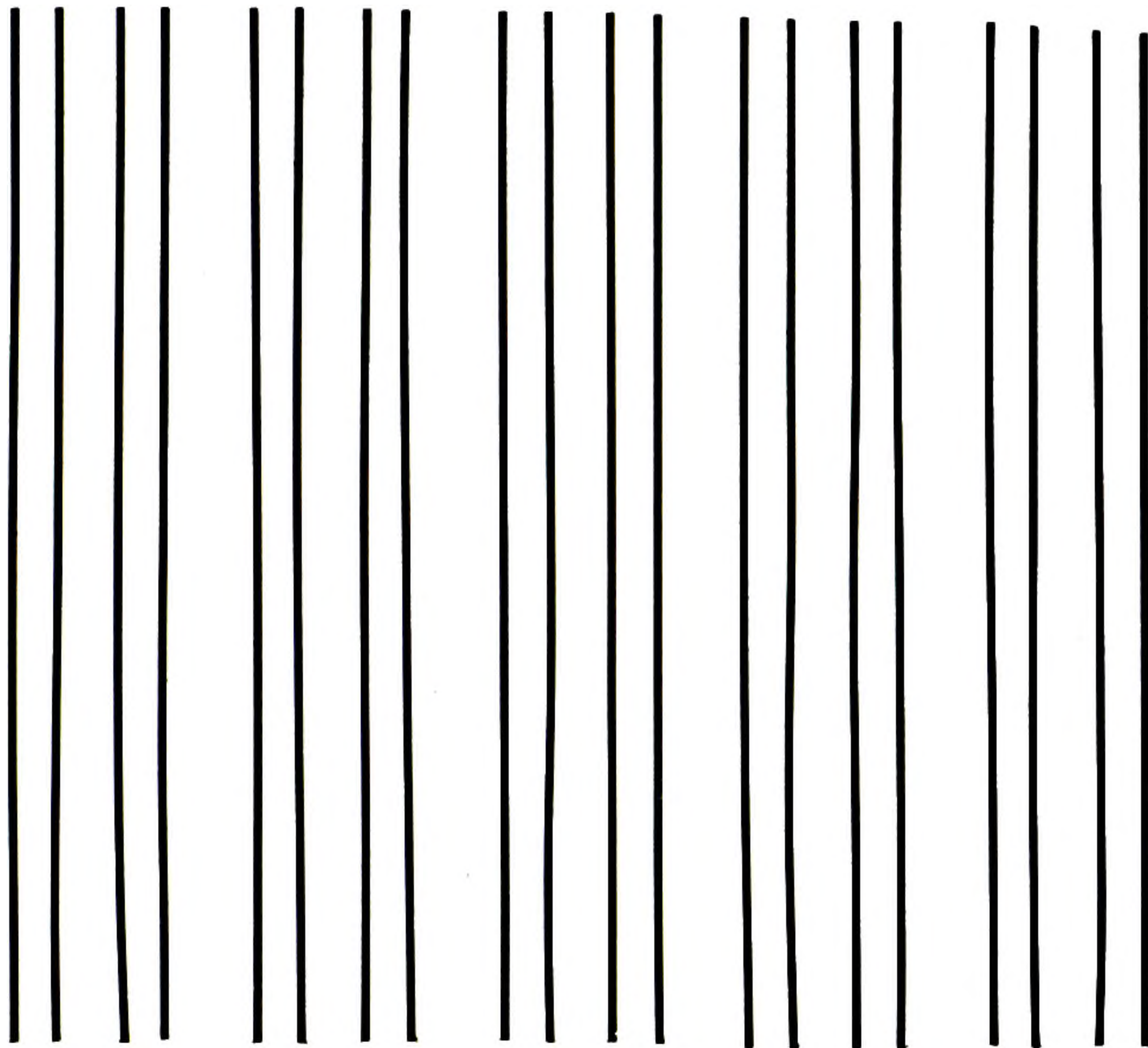


DIAGRAM B. Line Grid Analysis: Grouping by Unequal Distances (Franz Schumann, 1900).

Molinari's plastic language, the intuitive use of novel colour interrelationships is what raises his level of creativity so high above the relative lifelessness of the designs of striped awnings.³⁶

A second student of visual perception who may be considered as being relevant to an understanding of the Molinari washboard effect is Franz Schumann. While he was undoubtedly familiar with late nineteenth-century studies of optical illusions, Schumann was chiefly concerned with habits of human perception as they refer to the organization of pictorial elements in a field. His interests anticipated those of the Gestalt psychologists, whose well-known principle of

closure (seen, for example, in the susceptibility of incompletely bounded geometric figures to be read as wholes) he examined in embryo in his essay of 1900, 'Beiträge zur Analyse der Gesichtswahrnehmungen' – a text which was not known by Molinari.³⁷ Schumann's primary aim was to develop an analysis and formulate principles of the perceptual 'grouping' of various geometric shapes arranged in patterns on a two-dimensional field. His initial approach, based upon the recorded reactions of his students, was to test the limits to which focusing upon small groups of squares or circles within a larger grid (for example, two rows of two units each) could be expanded progressively to include larger groups (ranging from three rows of three to nine rows of nine units each), before the perception of the smaller groupings of units was dissolved in the larger pattern and only a general sense of the overall perimeter of the group remained.

What is most pertinent to a study of Molinari is that the simplest grids analysed by Schumann consisted of rows of vertical lines in a horizontal field. One such line grid contained spatial divisions of regularly disposed but unequal widths (Diagram B), while a second example arranged the lines at uniformly equal distances (Diagram C). In the field of unequally spaced lines, the wider white stripes tend to stand out, and definite implications of grouping are apparent (for example, the five groups of four lines each containing three stripes of which the middle one is larger; or any combination of two such groups into an eight-line pattern in which one of the four widest stripes appears at the centre). In works such as *Counterpoint*, *Red Asymmetrical*, and especially *Homage to Jauran*, Molinari approaches this perceptual exercise by Schumann, while the introduction of multiple colouration, irregular spacing of lines, and dominant asymmetry of his compositions far exceed the other in their complexity.

Schumann's field of evenly spaced lines may be considered to be an even closer approximation to Molinari's use of that grid, granting, of course, that the latter's 'lines' comprise no more than the meeting edges of two adjacent colour planes. As his first principle, Schumann found a common tendency in human vision to perceive each pair of

³⁶ The analogy with awnings was drawn by S. Tillim in 1963 (cited in Théberge, 38).

³⁷ F. Schumann, 'Beiträge zur Analyse der Gesichtswahrnehmungen,' *Zeitschrift für psychologie*, xxiii (1900), 1-32. Molinari has confirmed that he was unfamiliar with this text until it was pointed out by the present writer (Questionnaire).

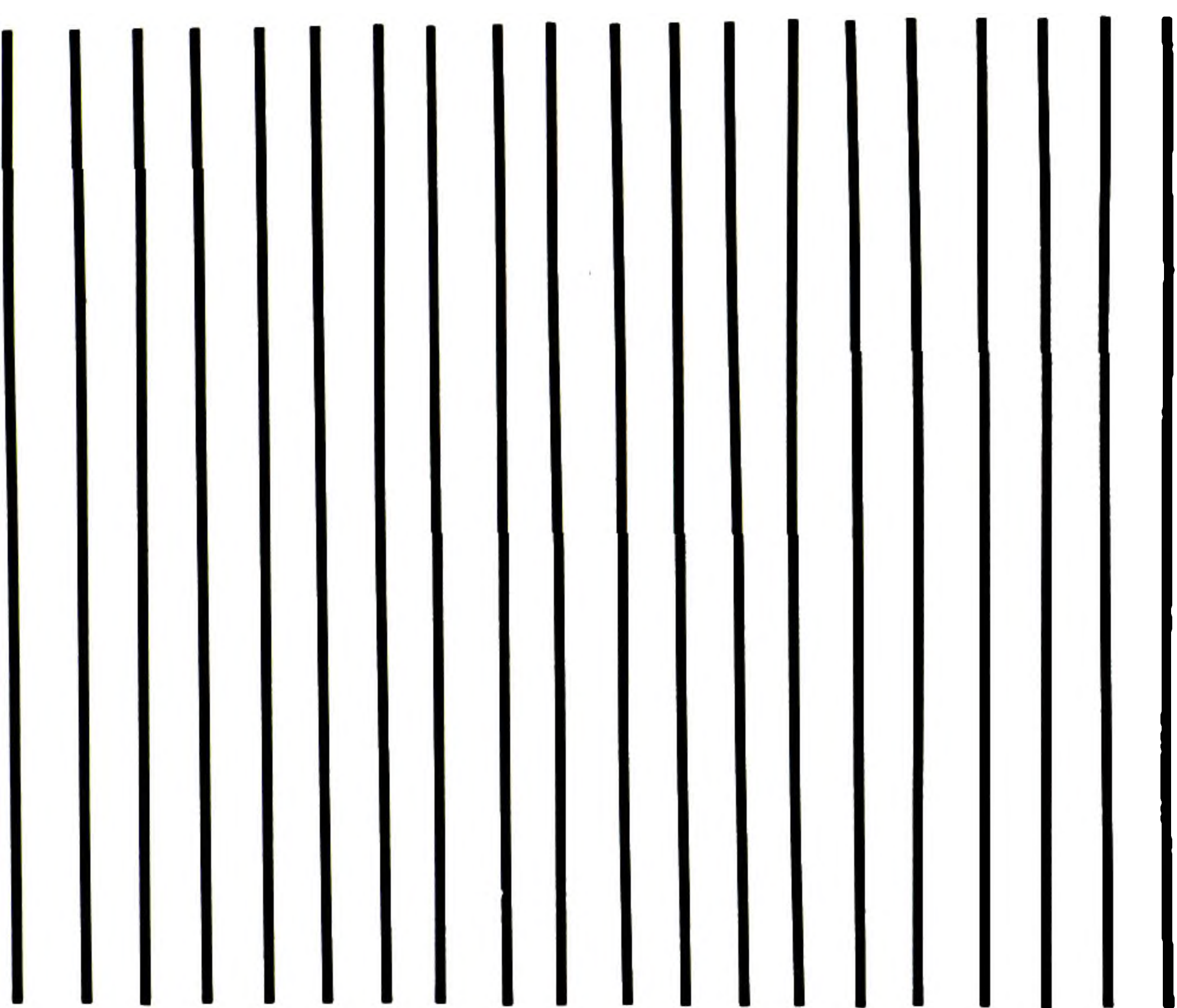


DIAGRAM C. Line Grid Analysis: Picket Fence Illusion (Franz Schumann, 1900).

lines and the white space between them as being the basic unit in the field. Much more important for our purpose, he also noted that when most viewers focus upon a single white stripe, it not only appears to be more prominent than the two adjacent stripes, but it also frequently appears to project from the paper surface. Once this perceptual operation has taken place, it is common to perceive the three stripes as a group, with the centre stripe being the most prominent. By extension it is possible to view the whole field as a kind of 'picket fence' phenomenon, although the open spaces between the pickets remain unshaded. Analogies with the regularly spaced vertical stripe paintings of Molinari are obvious, although here too the use of asymmetrically dispersed colour planes obviates any strict correspondence with the picket fence optical phenomenon. Moreover, since a washboard effect can be observed just as frequently with paintings containing stripes of equal or unequal widths, Molinari's paintings cannot be explained in terms of a single optical principle such as that described by Schumann.

In essence, the Molinari washboard effect may be said to include elements of both Mach's book and the Schumann picket fence, while adding certain unique features. The kinds of buckling that are perceived in his paintings alternate between a simple trough-or-ridge effect, and the tendency for a single stripe either to project in front of or recede behind its two flanking stripes, which, as a result, appear to be bevelled. These flanking pairs of stripes often, but by no means always, are of a single hue. The attentive viewer's cognizance of these pairs and triads of buckled stripes varies as his focus moves across the total field of the painting. While the alteration of seemingly buckled surfaces remains confined between stripes which are perceived as being flat or angled against the picture plane, individual groupings of two or three adjacent stripes never – at least not for the present writer – appear to

fluctuate between trough and ridge effects, as does the reversible illusion of Mach's book. The artist's intuitive choice of specific colour juxtapositions, the potential variety of which would seem to be infinite, must explain the ease with which he can create ever novel effects of surface movement within his painted oeuvre. The washboard illusion is only a single contributing factor to this. Nonetheless, resulting as it does from such fundamental habits of human perception, one can better appreciate why Molinari's concept of energized space is so essential to his basic theory of art.

Apart from his study of modernist artistic tradition, Molinari's intellectual convictions have been formed more by readings in the philosophy of science than by those devoted strictly to the science of colour and line. In particular, he has been fascinated by that body of modern thought known as Structuralism.³⁸ Indeed, his preoccupation with this widely applied mode of analysis may be considered to be no less essential to his practice of abstraction in art than the various artistic and scientific influences cited above.

For Molinari, the initial impetus towards an acceptance of Structuralist thinking occurred with his encounter with the theories of Alfred Korzybski, whose principal book, *Science and Sanity* (first published in 1933), pretends to be part of no less a revolution in human thought than the overthrow of mechanisms of logical, semantic, and philosophical inquiry said to have dominated Western culture since Aristotle.³⁹ Molinari was introduced to the writings of this founder of the Institute of General Semantics by his future wife, Fernande Saint-Martin, whose book *La littérature et le non-verbal* similarly credits Korzybski as a source influence.⁴⁰ Molinari apparently adopted Korzybski's postulates about non-Aristotelian languages as they applied to 'notions of matter, space, time, mathematics and higher order abstractions' to the degree that afterwards other authors and systems of analysis were judged by his own 'understanding of Korzybski's "structural processes" as related to "real space" as related to the "illusionistic" space of painting.'⁴¹

As a consequence, when in 1958 he studied Wolfgang Köhler and other writers on Gestalt psychology for their 'notions of perception and organization of space,' he found that Gestalt theory, along with certain conceptually related paintings by the Bauhaus artists Kandinsky and Klee, constituted 'a quite limited problematic,'

38 For a general introduction to Structuralism, see Michael Lane, ed., *Structuralism: A Reader* (London, 1970).

39 Alfred Korzybski, *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*, 3rd ed. (Lakeville, Connecticut, 1948).

40 F. Saint-Martin, *La littérature et le non-verbal* (Montreal, 1958), cites Korzybski as an important source influence. It was dedicated 'à Moli,' who would have known its contents from her master's thesis of 1952 (information supplied in Questionnaire).

41 See Korzybski, esp. chaps. 17, 18, 24-28, which are concerned with finding analogies among the structure of language, modern notions of matter, space and time, and mechanisms of the abstracting process.

insofar as both phenomena maintained a fundamental ambiguity in figure-ground relationships.⁴² Similarly, it was in the context of Korzybski's teachings that, around 1959, Molinari read Charles Biederman's *Art as the Evolution of Visual Knowledge* and rejected his 'conclusion about "relief art" being a sound development of Mondrian's neo-plastic theories.'⁴³ Korzybski's denial of the Aristotelian categories of 'matter, time and space' doubtlessly appealed to Molinari because of the support this iconoclasm provided to recent scientific contributions such as non-Euclidian geometry, Einstein's theory of relativity, and H. Minkowski's 'four-dimensional world.'⁴⁴ Molinari's rejection of the figure-ground relationship in painting thus depends very much upon his understanding of contemporary philosophy of science. It may be assumed that Molinari saw in this founding father of Structuralism a powerful stimulus for his own novel structuring of space as it evolved during the late 1950s. Along with such other Structuralist authors as Stéphane Lupasco, G. Blanchard, and the 'genetic psychologist' Jean Piaget, Korzybski must be seen as one of the principal, even if one of the least self-proclaimed, intellectual influences upon Molinari.⁴⁵

This is not to say that these various philosophers of science provided Molinari with the specific formal syntax of his personal style. With Korzybski, for example, one may assume that the artist extrapolated from *Science and Sanity* support for his own formal innovations on a general level without any specific compositional schema being imparted. Certainly Korzybski's predication of 'a general consciousness of abstracting' as 'the very key to further human evolutions, and the thesis of this book,' his disassociation of words from real objects (that is, language interpreted as abstract structure), his definition of 'the Non-Aristotelian Language Called Mathematics as a language of structure similar to the structure of the world,' and, above all, his repeated inclusion of 'asymmetrical' and 'relational' aspects within his 'organism-as-a-whole principle' provided much grist for Molinari's creative mill as he ground out his compositional structures with an addiction to basic change.⁴⁶ Nevertheless, Korzybski's text is totally unconcerned with the plastic arts, and one would be hard put to decide who, among Molinari, Biederman, and others, should be considered the true artistic heir to Korzybski's structural semantics.⁴⁷ Lupasco, with his fundamental *Principe d'antagonisme*, may be as devoted as Korzybski to

relativistic, anti-Euclidian precepts of physics which embody an immanent dynamism, but this French author should not be thought to have been concerned with problems of artistic expression in pictorial form.⁴⁸

Jean Piaget, even more than the other writers, has been concerned with modes of visual perception as a means of understanding the functioning of human intelligence. Deriving from his remarkable studies of the development of cognitive powers in infants and children, his 'genetic epistemology' has assumed a position of such commanding importance within the Structuralist movement that for some it represents virtually a self-contained philosophy of science, if not of history as well.⁴⁹ Like other Structuralists, he

42 Questionnaire, where Molinari also cites Rudolf Arnheim, *Art and Visual Perception* (Berkeley, 1954), which he read ca. 1962, as being 'very simplistic' in the analysis of visual forms. This judgment doubtless derives from Arnheim's known dependence upon Gestalt theories of human perception.

43 Questionnaire. C. Biederman, *Art as the Evolution of Visual Knowledge* (Red Wing, Minn., 1948), has also constituted a profound source of inspiration for Eli Bornstein, who in Saskatoon leads a group of artists who are centred around the magazine *The Structurist*. Molinari, however, rejects Biederman's contention (esp. chaps. 18-20) that Korzybski's 'structural processes' relate to an art of 'real space' as contrasted with 'the illusionistic space of painting' (Questionnaire). Whereas Claude Tousignant temporarily experimented with an art of abstract, geometric painted reliefs (see Théberge, cat. fig. 9) before attaining a more dynamically kinetic form of optical painting, Molinari finds both three-dimensional relief art and any art based on optical illusions guilty of the same historical atavism.

44 The general implications of non-Euclidian geometry are discussed by Korzybski in *Science and Sanity*, chaps. 34-39. Molinari is careful to point out ('Colour in the Creative Arts, 1972,' in *Écrits*, 86) that scientific and technological discoveries 'do not *per se* belong to the dynamics of art. They may suggest indirectly new themes to artists, not scientific, but artistic.'

45 Among several books on the philosophy of science mentioned by Molinari in the Questionnaire, G. Blanchard, *La Philosophie du non* (Paris, 1949; English trans., New York, 1968) is concerned, in chap. 5, with the Korzybskian issue of 'Non-Aristotelian logic.' Stéphane Lupasco, whom the painter eventually met in Paris in 1974, had written for several decades in such areas as Einstein's theories and contemporary forms of logic. Jean Piaget's *La construction du réel chez l'enfant* (Paris, 1937), and, with B. Inhelder, *La représentation de l'espace chez l'enfant* (Paris, 1947) provided a basic familiarity with the Swiss psychologist's analysis of human perception (Questionnaire).

46 Korzybski, xxi, 247-67, and *passim*.

47 See note 43 above.

48 S. Lupasco, *Les Trois Matières* (Paris, 1960), esp. 17 and 179-80, relates his fundamental principle of scientific thought to the concepts of Bergson and Einstein, but not at all to art.

49 Suzi Gablik, *Progress in Art* (London, 1976), has attempted to interpret the whole of art history in terms of Piaget's analysis of modes of perceptual processes found within human development from infancy to maturity. However, apart from the relative validity of her general approach in

emphasizes the rôle of relationships above what he calls a 'unitarist' stress on the separate elements of analysis.⁵⁰ With regard to the perception of space, so important in the present context, he denies the traditional view that this occurs as a direct reaction to the external world, as even Gestalt psychology and the mathematician Henri Poincaré had maintained.⁵¹ Instead, as a capacity built up in the child through an involved, multi-staged process of motor-sensory experimentation, the intuition of space is said to involve 'genetic continuity between the structures of perception and those of intelligence.'⁵² In his 'interactionist' theory, Piaget denies the possibility of separating intuition from logic. He holds that 'to extend space beyond the confines of the perceptual field is the task of imagination,' and that even in reference to the most abstract symbolic image, what mathematicians call 'geometric intuition is essentially active in character.'⁵³ No wonder, then, that Gestalt psychology is criticized for stopping with the concept of 'good form,' which in Piaget's view is the equivalent of 'geneticism without structure or a structuralism without genesis.'⁵⁴ Denying that 'perception is linearly connected to operative intelligence,' which is to say that abstract thought images are derived directly from perception, Piaget suggests that the basic awareness or intuition of space comprises an 'action performed on properties of

objects rather than a mere reading of such properties.' These actions work in turn on physical reality and 'create operational schemata which are then formalized.'⁵⁵

It is to this Piagetian genetic epistemology, as it is applied to spatial perception, that the 'relational' paintings of Molinari conform most basically. Having read this author since 1953, Molinari states: 'I have applied Piaget's notion of genetic space to my paintings done while blindfolded and then perceived an evolution relating to the notion of topology and his definition of mathematical space.'⁵⁶ The term 'topology' refers to the most primitive level of seeing in infants, one which is more or less restricted to two-dimensional relationships organized in reference to such basic principles as proximity, separation, order, and enclosure.⁵⁷ Hence, apart from the debt to Surrealist automatism, Molinari's paintings done while blindfolded and in similar circumstances were attempting to simulate a pre-operational, pre-Euclidian (to use Piaget's terminology) experience of space according to motor-sensory rather than purely perceptual processes of analysis. Thus while, in one respect, he was consciously primitivizing, such efforts also reflect a factor in the Piagetian conception of space which is operative to the higher levels of mathematical and geometric intuition, to which Molinari referred in the statement cited above.

It is therefore possible to credit Piaget's overall 'interactionist' theorems with having contributed a fundamental conceptual basis for Molinari's constant involvement with non-Euclidian precepts about space. At the same time, one must realize that Piaget's 'genetic epistemology' could no more provide the basis of a personal style and its associated expressive values than could the other theoretical sources which have been discussed. Despite his Structuralism, one must wonder whether he would be any less antagonistic to abstract art than was Claude Lévi-Strauss when confronted with it.⁵⁸ In more specific terms, Piaget's writings offer little help in explaining the various colour 'mutations' which accompany the 'constance of form' in Molinari's serial paintings, a point which could be made with regard to all of the other theories mentioned above. Yet while the 'reading' of a painting by Molinari is a vastly different (not to mention aesthetically superior) experience from the reading of a scientific text by Piaget, it may be surmised that Molinari would not object seriously to his being classified within the international Structuralist movement.⁵⁹

associating contemporary Western abstract art with the highest levels of the structures of perception as described by Piaget, she ignores the question of which artists (such as Molinari) might, in fact, have read Piaget's Structuralism.

⁵⁰ Piaget, *Les mécanismes perceptifs* (Paris, 1961), chaps. vi and vii, contrasts his own 'interactionist' view of human perception (i.e. that structures of perception interact constantly with operational intelligence) with what he terms the 'unitarist' view held by Gestalt psychologists such as Köhler and M. Wertheimer (i.e. that sensory perception is linearly connected to operative intelligence). This book appeared only after the optical phenomena discussed here were already present in Molinari's paintings, but he read Piaget's other texts cited in note 45 beginning ca. 1953.

⁵¹ Piaget and Inhelder, *Représentation*, chap. xv.

⁵² Piaget, *Mécanismes perceptifs*, 12.

⁵³ Piaget and Inhelder, *Représentation*, 536-37.

⁵⁴ Piaget, *Mécanismes perceptifs*, 14-15.

⁵⁵ Piaget and Inhelder, *Représentation*, 533.

⁵⁶ Questionnaire.

⁵⁷ Piaget and Inhelder, *Représentation*, chaps. I, II.

⁵⁸ A. Michelson, 'Art and the Structuralist Perspective,' in *On the Future of Art*, ed. E.F. Fry (New York, 1970), 56-57, points to the irony of this influential Structuralist having called for a return to *trompe-l'œil* practice in the art of landscape painting.

⁵⁹ F. Saint-Martin, *Structures de l'espace pictural* (Montreal, 1968), 128-41, has, in fact, attempted to situate her husband and the Quebec 'Nouveau Plasticisme' movement within her overall Structuralist interpretation of twentieth-century abstract art.

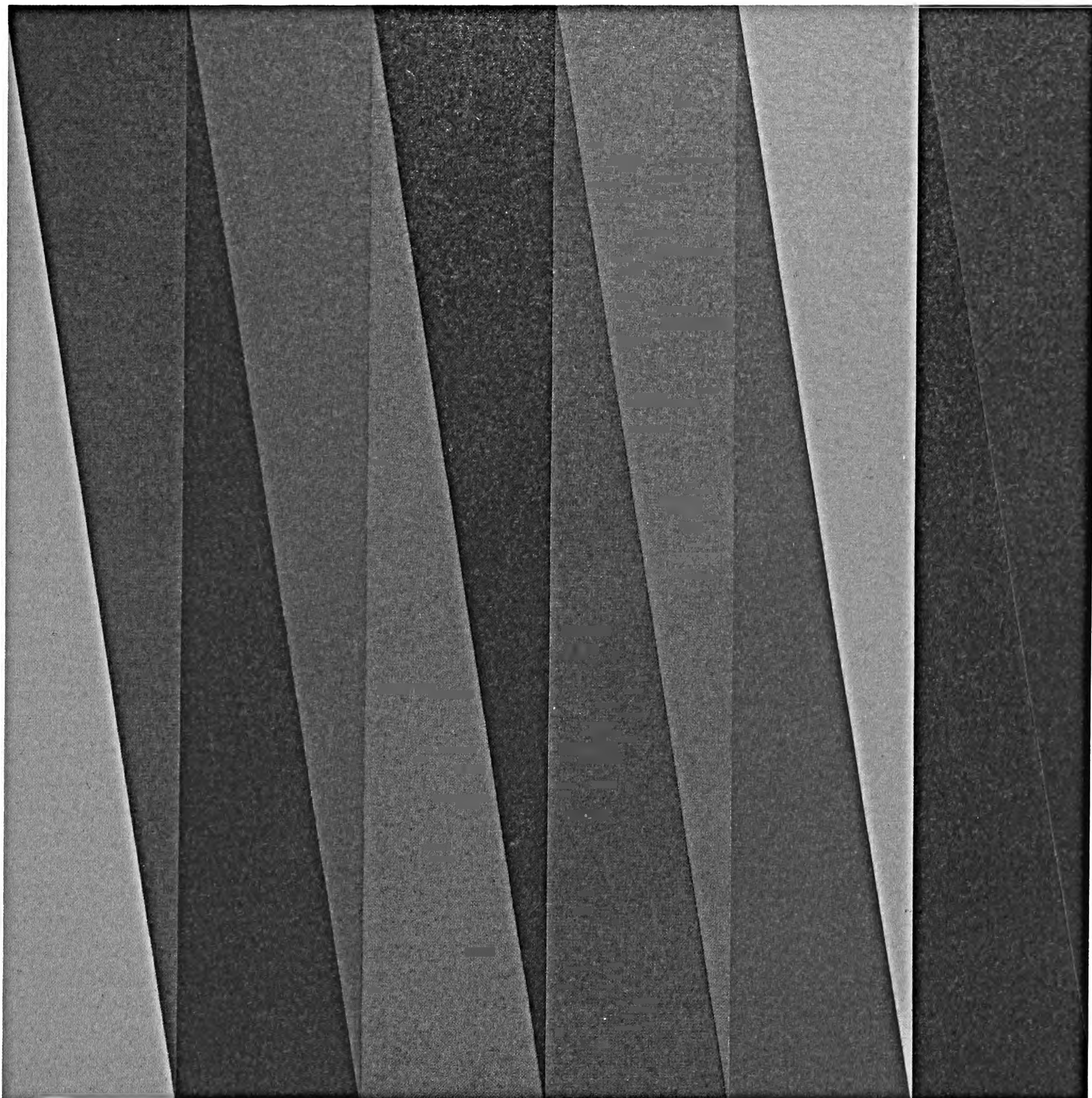


FIGURE 12. Guido Molinari, *Blue-Grey Triangular Structure*, 1971. Acrylic on canvas, 127 × 114.3 cm. Collection of the artist (Photo: G. Molinari).

Molinari abandoned his use of vertical stripes around 1969 in favour of arrangements of modularized triangles and rectangles. One such painting is *Blue-Grey Triangular Structure* of 1971 (Fig. 12), in which each of a series of rectangles is subdivided diagonally into pairs of differently coloured triangles. It seems that in paintings of this kind Molinari may have been motivated by a reading of Piaget's *Les mécanismes perceptifs*, if only in a general way. According to Piaget's investigations, both triangles and rectangles are subject to

degrees of over- and under-estimation of the lengths of their sides.⁶⁰ Although these illusions

⁶⁰ Piaget, *Mécanismes perceptifs*, chap. 1, in which sections 3 and 5 are concerned with illusions of rectangles and angles respectively. One notes that figs. 4-6 on p. 36, which illustrate the tendency of acute angles to be over-estimated and obtuse angles to be under-estimated, bear a superficial resemblance to parts or all of paintings by Molinari (compare fig. 5 with *Homage to Barnett Newman*, cat. no. 47). Yet Piaget's diagrams clearly pertain to only a single aspect of perception whereas Molinari's colour-plane constructions invariably demand multiple successive readings due

vary with the individual viewer and with age, they can be charted according to several factors. Such 'deformations' in human vision, moreover, give rise to secondary illusions which interact with the primary ones and prevent a static or definitive perception of the object-space structures.⁶¹ Apart from the superficial similarity of a few of Piaget's illustrations with Molinari's recent compositions, the latter's search for equilibrium in his spatial structures now depends increasingly upon a principle of interaction among distortions – to which triangles are particularly prone – similar to those described by Piaget.⁶²

Blue-Grey Triangular Structure produces a washboard effect which may seem even more striking than in the vertical stripe paintings. The canvas is slightly wider than it is high. Its troughs and ridges appear as if they are in forcefully dynamic opposition, caused by the tapering or the emphasis upon acute angles. In the monumental *Blue Triptych* of 1973 (cat. no. 50), now at the Art Gallery of Ontario, Molinari himself

to their complex interrelationships. Piaget's related observation (p. 34) that the illusions in judging the lengths of the sides of angles and rectangles are reversed in the direction of error between the two types of figures lends another factor of complication to those paintings which inherently oppose triangular to rectangular elements.

61 Piaget, *Mécanismes perceptifs*, chap. III, concerns 'Perceptual Activities and Secondary Illusions,' which are seen to lead to 'multiple perceptual activities' and 'deformations' through the association of hitherto unrelated elements (p. 253).

62 The artist's own analysis of this innovation is as follows: 'The use of the triangle was a compositional device related to my concern with creating horizontal layers, e.g., creating an equilibrium between top and bottom by producing an up/down effect or flow. Most of my paintings since 1969 have dealt with this notion of equilibrium between the central zones and the triangular nature of the corners of the painting' (Questionnaire).

63 Molinari's full explanation of this interest in distortions along the diagonal reads as follows: 'This type of preoccupation has resulted in "Triptique bleu." I became aware that the distortions along the diagonal edge created in the centre a curvature and that this curve produces an effect of counter-curve from the top left corner to the bottom right corner. Also the two triangles created by the rectangle of the canvas produces a static effect on the color-masses, in opposition to the more complex inter-action of the two smaller different color triangles found in the left bottom corner and right top corner. The "Triptique bleu" does thus produce a concave-convex structure of moving color energy' (Questionnaire).

recognizes 'a concave-convex structure of moving colour energy.' This results from a preoccupation with distortions of curve and counter-curve along the diagonal edges where the three sets of triangles meet.⁶³

In these wedge paintings, as with the earlier vertical stripe paintings, an intuitive use of colour combinations is as central to the art of Molinari as it is foreign to the study of optical illusions by Piaget. Molinari's recent paintings remain innovative and unique in personal style, while continuing to manifest an essentially Structuralist conception of spatial ambiguities and balanced kinetics.

As a product of some thirty years of professional activity, the art of Guido Molinari manifests several underlying paradoxes which have sustained his creative energies. Although he has, since early in his career, been a fervent admirer of the pioneer abstract painters of the twentieth century, his major personal challenge has been to create a novel symbiosis of colour and form which transcends the models of such masters as Mondrian, Malevich, Kandinsky, Pollock, and Borduas. Whereas his spatial structures hover between the relative stasis of much so-called Hard-Edge Abstraction and the often aggressive kinetics of Op Art, his attraction to source readings in the philosophy of science would seem to have affected him more profoundly than any study of writings on optical or colour phenomena *per se*. Despite a justifiable pride in having helped produce a distinctly Canadian – and, in particular, Montreal – mode of geometric abstraction, he firmly opposes any nationalistic urge to separate his personal contribution from the international mainstream of twentieth-century abstract painting.

There is no doubt that one should now expect further innovative contributions from Molinari. These are promised by his recent replacement of stripes by triangles and rectangles as modules of form, and by his allegiance to Structuralism. With respect to the latter, as has been seen, the intuition of higher forms of abstraction is conceived as being a functionally ongoing process.