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**JOCK MACDONALD:
THE SEARCH FOR THE UNIVERSAL TRUTH IN NATURE**

Allison J. Colborne

A Thesis
in
The Department
of
Art History

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montréal, Québec, Canada

August 1992

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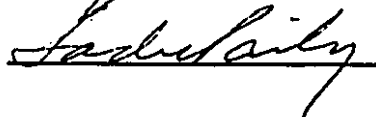
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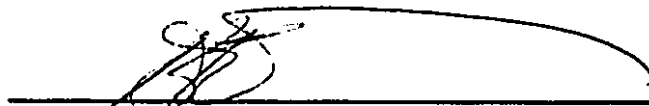
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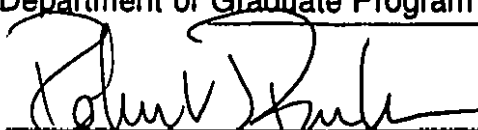

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ABSTRACT

Jock Macdonald: The Search for the Universal Truth in Nature

Allison J. Colborne

This paper is a study of the artistic philosophy of J.W.G. (Jock) Macdonald (1897-1960). It examines the implications of his initial break with representational art and his development of an abstract imagery between 1934 and 1941 in the context of the ideological tradition from which he emerged and the immediate cultural situation in which he worked. His personal writings are discussed and the iconographic content of his work is analyzed in relation to the evolution of his abstract style.

The roots of Macdonald's vision are located in the Romantic tradition, which assumes that the laws of nature and of art are the same and which inspired his use of the organic analogy. Macdonald's concept of nature is discussed in relation to the influence of significant scientific discoveries. A close study of his oeuvre reveals that his pictorial vocabulary of archetypal forms corresponds to a tradition of morphological research in biology and that his treatment of pictorial space was informed by scientific theories and by speculation about the "fourth dimension." Macdonald found in Theosophy and Anthroposophy a means to reconcile his fascination with science with his innately mystical apprehension of nature. Contradictory as they may appear, science and occultism formed the matrix of his semi-abstract and abstract art by suggesting ways to visualize nature's hidden energies.

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Finally, I should like to thank my children, my family, and friends for their understanding, confidence and continuous support.

This thesis
is dedicated to my children
Wade and Robin
and
to the memory of my mother

Lois Kathleen Colborne (née Pears)

June 5, 1933 - September 28, 1984

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INTRODUCTION

This thesis studies Jock Macdonald (1897-1960) in the context of the ideological tradition from which he emerged and the immediate cultural situation in which he worked, by focusing on the implications of his break with representational art and his development of an expressive abstract imagery between 1934 and 1940. My goal is to demonstrate how Macdonald's highly personal response to and reverence for nature brought a personal flavour to the range of intellectual ideas and artistic concerns of his time. To do this, I have focused on his special vision which accommodated his belief in science and his need for spiritual faith.

Since his death in 1960, Macdonald's oeuvre has been treated almost exclusively in exhibition catalogues which have provided primarily biographical and descriptive data. Of these, the most notable are Ann Pollock's retrospective survey *Jock Macdonald*, 1969, for its pioneering work, and Joyce Zemans' *Jock Macdonald: The Inner Landscape*, 1981, for its comprehensive survey and for setting Macdonald's late abstracts in the context of his earlier work. Ann Davis' catalogue *The Logic of Ecstasy: Canadian Mystical Painting 1920-1940*, 1989, is a thematic analysis which re-evaluates the origins of modern non-representational Canadian art by focusing on three key figures: Lawren S. Harris, Bertram Brooker and Emily Carr. The connection between Macdonald and Theosophy is less clearly defined.

The sources for this present study have been: The large body of Macdonald's correspondence in the National Gallery of Canada Archives and the

McCord Museum of Canadian History Archives; the artist's unpublished writings which are in the possession of Marilyn Westlake in Toronto; and the archives and artist files at the Art Gallery of Greater Victoria, the British Columbia Archives and Records Service (Victoria), the Vancouver Art Gallery Library, the City Archives of Vancouver, the Vancouver Public Library Fine Arts and Music Division, the University of British Columbia Special Collections and Archives, the Emily Carr College of Art and Design Library, the Burnaby Art Gallery, the National Gallery of Canada Archives, the National Archives of Canada, and the Montreal Museum of Fine Arts. Leslie Planta, Paul Goranson and Edna Morris (née Goranson) were kind in enough to grant me interviews and answer numerous questions during the course of my research. The John Vanderpant papers at the National Archives have not been consulted, as access was gained only in July, 1992.

In order to focus on the multiple levels of correspondence and intrinsic allusions which are the essence of Macdonald's art, the strictly chronological approach has been avoided. This study will focus first on the ideological tradition of Romantic thought from which Macdonald emerged. It is only through perceiving him in the context of his connection with the past that the distinctive character of his achievement can be understood. Succeeding chapters will discuss how Macdonald's art is firmly rooted in the more immediate context of his intellectual concerns: science, the occult, and religion.

CHAPTER 1

MACDONALD AND ROMANTICISM

Art is not found in the mere imitation of nature, but the artist does perceive through his study of nature the awareness of a force which is the one order to which the whole universe conforms. Art in all its various activities is trying to tell us something, something about nature, something about the universe, and something about life. Art must include in its study of nature the whole universe, if it is to envisage some aspect of the universal truth and help humanity to become conscious of the meaning of life.¹

Jock Macdonald

Nature and the Romantic Tradition

Nature--its forces, laws and elemental rhythms--was the underlying theme and organizing principle of Jock Macdonald's art. It was the source of his motifs and the basis of his artistic philosophy. It was the *raison d'être* of his creation--for thinking about the meaning of life. His personal writings, lecture notes and correspondence are filled with statements giving evidence of his conviction that there could be no art of aesthetic value that did not draw its inspiration from Nature.² Through the close study of Nature, Macdonald sought to capture on canvas the essence of the life force, the universal truth in Nature. In a letter to H.O. McCurry at the National Gallery of Canada in March of 1937, Macdonald expressed his need to "live with Nature [and] be in constant touch with its life forces."³ He made further testimony to his deep reverential feeling for the infinity and coherence of Nature in his lecture "Art in Relation to Nature" (c.1940). In this lecture, he stated:

To observe nature, as it were, in a picture plane, it is nearly always apparently chaotic; the wild flowers in a meadow are not in orderly arrangement, the branches of trees are without rhythm [sic], the paths of snow on the hillside are unbalanced in relation to their areas and the stones from broken crags of a mountain are static and without vitality. One cannot become aware of the hidden laws of Nature from this perspective, the laws which awaken in us the universal truth of all-relating harmony and the sense of unity, the laws which are found in every department of man's activity, an expression of order, relation, union and unity.⁴

This expressed bond and reverential feeling determined Macdonald's response to the immediate challenge of modernism, but it also rooted his vision in the traditions of the nineteenth century.

As a first-generation modernist in Canada, Macdonald was a revolutionary who broke with the conservative British landscape tradition practised by most Vancouver artists during the 1920s and 30s.⁵ Stimulated by the ideas he encountered through a small circle of artists, in particular Frederick Horsman Varley (1881-1969), John Vanderpant (1884-1938), and Harry Täuber (born c.1900, death date unknown), Macdonald became keenly aware of the latest artistic developments in Canada and abroad.⁶ He began experimenting with abstract painting in 1934, when there was no precedent in Vancouver and little precedent in Canada for vanguard activity of any kind in the visual arts.⁷ In a climate hostile to the innovations in the arts of the late nineteenth and early twentieth centuries, Macdonald pioneered a mode of expression which encompassed his consciousness of modern art and which served as a paradigm for future Canadian artists, particularly members of the Painters Eleven.⁸

Yet, while the works Macdonald created between 1934 and 1941, called "Modalities," are pictorially innovative, and are informed by the various intellectual currents of his day, they are nevertheless firmly rooted in the past of the larger Romantic tradition.⁷ It is only by viewing his accomplishment of this period as a marriage of innovation and tradition within this context that his early abstract art acquires its full meaning.

Deliberately or not, what Macdonald was emphasizing in the quote introducing this chapter, was an aesthetic concept of the German Romantic Nature philosophy which had a formative influence on the development of Canadian culture.⁹ According to this belief, explicated in the writings of Johann Wolfgang von Goethe (1749-1832), Friedrich Wilhelm Joseph von Schelling (1775-1854) and Johann Cristoph Friedrich von Schiller (1759-1805), there is but one realm of truth which includes both art and Nature. Because they derive from the same source, they share the same laws and the same aim. Both are avenues to spiritual understanding. Art is meant to reflect the laws of Nature, as Nature reflects the cosmos. By making these correspondences discernible and their significance

Macdonald called these later works "Thought Expressions" and then later renamed them, "Modalities." He defined them as: "Expressions of *thought* in relation to Nature...considered by Kant to relate to creative expressions which could not be said to relate to Nature (objectively); nor relate to abstract thoughts (subjectively) about Nature, but rather included both expressions." (Jock Macdonald to H.O. McCurry, 22 July 1938. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.)

known, upholders of the Romantic tradition believed they could bring about a more complete understanding of life, including its most mysterious aspects.

German Romanticism was quickly transmitted to England in the nineteenth century by way of Samuel Taylor Coleridge (1722-1834) and Thomas Carlyle (1795-1881) and to the United States by way of Ralph Waldo Emerson (1803-1882), Henry David Thoreau (1817-1862) and Walt Whitman (1819-1892). Canada's romantic tradition was strongly informed by the American Romanticist philosophy of Transcendentalism--particularly that of Emerson and Whitman.¹⁰ In fact, Transcendentalism was integral to the development of North American culture. Like Romantic philosophy in general, Transcendentalism held that Nature is formed and informed by spirit and that every element in Nature is a symbol of a greater spiritual reality. Both decreed that God is not only the creator of Nature, but is in Nature as well. Leaves or stones, mountains or stars, are all symbols of that greater spiritual reality, beyond and within. This investment in the physical world by Transcendentalism is in part what differentiates the Romantic vision associated with the Group of Seven, and other artists such as Emily Carr (1871-1945), from that of their European contemporaries.¹¹ Canadian art history is discontinuous and derivative in many ways. However, this philosophy, this implicit mystical mode of apprehending the world, provided one foundation for Canadian culture.

Transcendentalism, particularly that of Emerson and Whitman, was a source for the artistic expression in the landscapes of the Group of Seven.¹² Lawren S.

Harris (1885-1970), J.E.H. MacDonald (1873-1932) and Arthur Lismer (1885-1969), through their influence and philosophical framework, directly prefigure the abstract paintings of Jock Macdonald. Although his "Modalities" were created in response to vanguard European art, his content--the concept of Nature which underlies his abstract form--is directly indebted to Frederick Varley and the Group of Seven's vision of painting.¹³

However, concerns central to the Romantic imagination had been abundant in Macdonald's life prior to his move to Vancouver in 1926. As a youngster, perhaps under the influence of his father, a naturalist, Macdonald drew flora and fauna and painted watercolours of the landscape surrounding his native Thurso in Scotland.¹⁴ Later, Nature became the source of inspiration through his training in Art Nouveau design at the Edinburgh College of Art. Drawing on the aesthetic of Art Nouveau, Macdonald employed organic forms, particularly plant forms, as the basis of his designs for Morton Sundour Fabrics from 1922 through 1925.¹⁵

His reverence for Nature quickened, after his arrival in Vancouver, through sketching trips to outlying areas near Vancouver and sojourns to "the virgin country" of Garibaldi Park, Fraser Canyon and the Gulf Islands.¹⁶ Varley was Macdonald's frequent companion on sketching trips and it was he who guided Macdonald's artistic development for the first years after the two men arrived in Vancouver. Through the direct personal influence of Varley, attention was brought to the Group of Seven's work and vision. This attention intensified following a barrage of newspaper editorials arising from an exhibition of the Group of Seven's

work in Vancouver in 1928. Attacks and subsequent defences by artist-photographers Harold Mortimer-Lamb and John Vanderpant put a greater emphasis and focus on Varley's and the Group's romantic vision.¹⁷ This exhibition and the resulting discussions had a far-reaching effect. A former student, Irene Hoffar Reid, described her experience of the exhibition:

It was a long narrow room and I didn't know what to expect. I came in and there at the end was a Lawren Harris great triangular mountain. Oh, I felt, just carried away. I'd lived here all my life and seen mountains all around me and I felt I'd never seen a mountain before. It was just an overwhelming experience. I think we understood Varley better too, and what he was trying to tell us.¹⁸

Here Harris' "triangular mountain" is a symbol of spiritual reality, of God's presence within Nature, and is a characteristic representative of his and other Group members' belief that physical reality is formed and informed by spirit.¹⁹ At approximately the same time as this 1928 exhibition was held, Varley began to make known his hope of forming a "B.C. Group"--a group that would act as a Western counterpart to the Group of Seven. Varley worked towards this goal by promoting the Group of Seven--the first genuine school of Canadian art--by instilling in his students and fellow artists the Group of Seven's determination and objectives.²⁰ Similar to the Group, the aim of the B.C. Group was to develop an art symbolic of a specific landscape, in this case that of British Columbia, an art that would be representative of Canada's unique identity.²¹ Macdonald came to share Varley's and the Group of Seven's perception of the landscape. Thus, it was through Varley that Macdonald came to join a national Romantic movement

in art and embrace a vision of Nature based on the northern romantic landscape tradition and the larger romantic tradition in art.

Varley, however, was never a strict adherent of the Groups of Seven's "narrow creed of painting the Canadian scene in a Canadian fashion."²² He revered the northern romantic tradition in art, especially Turner, and was too much of an individualist to be bound to the Group's narrow vision of art.²³ As Fred Amess, a student and later President of the Vancouver School of Art, recalls:

[Varley was] a spout through which flowed all the new excitements of the world, spiced rather than tamed by sound academic training....We were deluged by prints[,] trips to China-town...Chinese food...Chinese horses, Persian manuscripts, Matisse and Japanese prints. Puvis de Chavannes was dragged in to defend the Occidental title to the decorative arts with Whistler--Aubrey Beardsley...following up behind."²⁴

Thus, Varley was a fount of knowledge from whom Macdonald could draw diverse influences and gain an enthusiasm for the larger romantic traditions of the nineteenth century.²⁵

In addition, Varley and Macdonald were prominent figures amongst a small circle of artists who frequented John Vanderpant's Wednesday evening "Musicales." Here, ideas current with vanguard artists in Europe, and the mystical and occult ideas of the religious philosophies of Theosophy and Anthroposophy, were avidly discussed. Vanderpant, who shared Varley's and the Group of Seven's Romantic perception of nature, saw the artist's duty as achieving new insights in the operation of the laws governing the universe and expressing it in form relationships by creating abstract images which would emphasize the rhythm

and beauty of design in nature's architecture, the relationship of the parts in the purpose of the whole.²⁶ Täuber, similarly, advocated that the purpose of art, as an "essential expression of the soul and mind," was to represent nature "stripped of its concrete accompaniments," to express something found in the phenomenal world, an essence which is superior to surface reality, because the "essence" "breathes the relationship to the source of all that is."²⁷ These ideas, which were congenial to Macdonald's own Romantic temperament, made a deep and lasting impression on his imagination and, enriched the expression of his art.

Thus, it was in response to ideas from Vanderpant and Täuber, as well as from Varley and other members of the Group of Seven that Macdonald began to develop a conception of Nature that went beyond that of the physical phenomena perceived by the eye. He responded to this newly developed vision by working towards developing a new, universal language of art.²⁸ His lecture "Art in Relation to Nature" (1940) stands as a personal interpretation of the relationship between art and Nature. In turning these concepts into concrete works on canvas, Macdonald resolved that:

The artist must first of all study nature at close quarters...[to] become aware of the hidden laws of Nature...the laws which awaken in us the universal truth of all-relating harmony and the sense of unity, an expression of order, relation, union and unity.²⁹

Similar sentiments underlay such characteristic examples of Varley's landscapes as Howe Sound (1928) and West Coast Inlet (c.1933). Nature is rendered as a majestic panorama in order to aggrandize the perspective, and the foreground is pushed back from the picture plane to prevent access into the scene,

making the view all the more exalted. Nature is portrayed not as the setting for human habitation, but as a primeval paradise unconsecrated by history or civilization. It is infinite, solitary and replete with mythic possibility, the consummate incarnation of a pantheistic philosophy which possesses an Edenic, spiritual character. Yet, while Howe Sound and West Coast Inlet are replete with philosophical implications, they are also brimming with concrete facts. Their titles make reference to particular locations; the time of day and conditions of the weather are also recorded. Thus, these paintings are both analytic and lyrical, specific and mythic, and are full of physical details which have been infused with spiritual value.

As noted above, this polarity in the artist's vision is an integral quality of North American Transcendentalist art and is one which has considerable implications. From its inception Romanticism has been, in part, about the resolution of opposites, and it is within Romanticism's limits that the true character of Macdonald's art can be understood. The blend of reason and faith in Transcendentalism was the most cogent solution to the dual need for the real and for the ideal.³⁰ As will be seen, it was in his "Modalities" that Macdonald made his first sustained effort to see beyond appearances to that order where oppositions are reconciled, to break through the barrier between objective fact and subjective value, and to realize the ideal order inherent in the physical world.³¹ Like his nineteenth-century forebears, Caspar David Friedrich (1774-1840), John Constable (1776-1837) and Joseph Mallord William Turner (1775-1851),

Macdonald sought the pictorial means which could encompass this dualistic conception, but through formal means consonant with vanguard art. Thus, while his bold move into abstraction was a refutation of the continued viability of realist painting, and of the past, his vision of Nature rooted him in the Romantic tradition of the nineteenth century. Macdonald's interest in this dualism between physical and spiritual reality explains how he could be attracted to the use of mathematics and mechanical aids to comprehend the structure of the physical world (see Chapter 2) and at the same time could take part in the contemporary enthusiasm for spiritualism (see Chapter 3).

The "Modalities" and Romanticism

One of the fundamental artistic problems which artists of Macdonald's generation inherited from their late nineteenth-century forebears, the Impressionists and Post-Impressionists, was how to depict the dialectic between art and Nature. This dialectic was the *sine qua non* of modernism. How Macdonald, Wassily Kandinsky (1866-1944), Paul Klee (1879-1940), and all the other modernists confronted this problem is an important consideration in understanding their accomplishments. The solutions to this dilemma were several. Whereas Symbolist and Symbolist-inspired artists tended to downplay the tension between art and Nature, the Cubists emphasized the tension between them with their visual puns and spatial ambiguities. Others, like Macdonald, reconciled the opposition by perceiving art and Nature to be based on the same laws.

To reconcile the tension between art and Nature, Macdonald employed a characteristically Romantic convention: the organic analogy.³² It is the analogy which underlies his choice of imagery as well as his statements on colour, line, form and space. Before these pictorial elements were the instruments of art, Macdonald believed they were aspects of Nature, a part of the living universe. Neither a formula nor an aesthetic solution, this analogy was the guiding principle by which he was able to maintain his own distinctive identity as an artist while assimilating diverse influences.

As it originated from Romantic Nature theory, the convention of organic analogy assumes that there is an inherent correspondence between organic growth and artistic creation. Like Nature, art is vital. Nature is represented by a plant, growing spontaneously from a bulb or a seed and unfolding its form gradually outwards. As a plant grows from its soil, it manifests characteristics which are indigenous and national. Similarly, the artist, instead of following preordained rules, follows the dictates of his own sensibility and creates without forethought, as does unconscious Nature. The artist's work acquires the vitality of Nature by embracing those principles which portray the structure and development of Nature. Thus, comprehension of Nature's inner function and laws is essential for artistic creation. Macdonald's use of the organic analogy meant that he perceived his art to be immediately akin to Nature.

Therefore, Macdonald's "Modalities" were subjective representations of the impressions which the laws of Nature made upon his imagination. In fact,

Macdonald could not envisage a world apart from his own felt response.

Macdonald conveys his intuitive apprehension of the world in passages such as:

In viewing a sunset we feel the symbols of approaching rest, peacefulness after the striving of the day, the passing of light into darkness, the shadow of death. In viewing the sunrise we feel the birth of the new day, the awakening warmth of life, the enduring and everlasting power of creation and the Spirit of God.³³

This statement confirms Macdonald's basically teleological interpretation of natural processes.

For Macdonald, artistic creation was a process of discovery as much as invention. The principles of his art were deduced from those laws which he understood to be operative in the natural world. He accepted the idea that Nature expressed itself in a few universal forms which appear in an infinite number of contexts and which undergo a constant process of change. In a process of creation and invention, Macdonald experimented with providing visual representation to these infinite contexts. Thus, a multitude of various motifs can be identified in his "Modalities," like the Futurist-inspired imagery of growth and movement in Chrysanthemum (1938) (fig. 1) and Flight (1939) (fig. 2), the cosmogonic scenes representative of primal matter and the union of the celestial and terrestrial in Etheric Form (1935) (fig. 3) and Departing Day (1935) (fig. 4), the depictions of the forces of Nature in Rain (1938) (fig. 5) and Winter (1938) (fig. 6), and the genesis of all life in Birth of Spring (1939) (fig. 7). Yet, there is continuity, because he never wavered from the underlying principle on which these works were based: the force which is the one order to which the whole universe

conforms--the universal truth in Nature.³⁴ Goethe's statement that "A work of art must be treated like a work of Nature, a work of Nature like a work of art, and the value of each must be developed out of itself and regarded in itself,"³⁵ epitomizes the organic analogy.

Thus, in his "Modalities," Macdonald was seeking a means to provide iconographic representation of his ideal conception of reality which would be aesthetically valid. Though he was undeniably influenced by the specific concerns of his intellectual milieu, he had an innate temperamental proclivity for that philosophic tradition which attempts to comprehend the underlying connectedness of all things and which emphasizes Nature as the site of that connectedness. It is an outlook towards reality which is ahistorical and which explains, at least in part, Macdonald's gravitation towards certain kinds of scientific and religious thought (see Chapters 2 and 3). It also illumines his bold move towards abstract art, for the relation between Platonism (as one of the oldest and most enduring organic theories of art) and abstraction, as Macdonald envisaged it, was implicit.³⁶

Macdonald sought to create an art that would not be its own end in a formalist sense, but an art which would redirect humanity's attention to the world and discover value therein. He sought to suggest a deeper, more sensate relation to life, to effect a unity of being within and without, to elicit that ultimate moment at which the visible world connects with its ineffable source. To this end, he painted numerous cosmogonic landscapes and seascapes, works of solar and planetary imagery, and themes of growth and primitivism. By selecting motifs

whose power of evocation could far exceed their literal form, Macdonald sought to elicit the sensation of Nature as a living force. To that effect, each of his "Modalities" exemplifies his efforts to see the world anew, to transcend history and enter into an original relation with the universe.

NOTES - CHAPTER 1

1. Jock Macdonald, "Art in Relation to Nature," handwritten lecture notes. Collection of Marilyn Westlake, Toronto.
2. Jock Macdonald to H.O. McCurry, 2 December 1939. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.
3. Jock Macdonald to H.O. McCurry, 26 March 1937. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.
4. Jock Macdonald, "Art in Relation to Nature," op. cit.
5. Behind an enthusiasm for nature lay a moral British conservative tradition. For most artists, European avant-garde movements or trends held little interest. Lorna Farrell-Ward, "Tradition/Transition: The Keys to Change," in *Vancouver: Art and Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983): 14-32. Gerald Tyler: Interview with Ann Pollock, January 1969. National Gallery of Canada, Ottawa. Archives. Audio and Visual Box 12.
6. Vanderpant Galleries, opened in 1926, became the meeting place for Vancouver's intellectual circle. Local artists (Varley, Macdonald, Carr, Surrey, Täuber) frequented the cultural centre for poetry readings and lectures on advanced art and mysticism. Helga Pakasaar, "Formulas for the Picturesque: Vancouver Pictorialist Photography 1930-1945," *Vancouver: Art And Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983): 50.
7. The first artist to create works with no recognizable subject matter was Bertram Brooker in 1922. Lawren Harris first pronounced his interest in painting abstractly in 1927; he began to actively work towards this goal in 1932 and produced his first non-representational work in 1934. Max Bates and Roy Stevenson were expelled from local society shows in Calgary for exhibiting abstract canvases and L.L. FitzGerald passingly tried his hand at abstract painting in 1928. In 1934, the same year Harris produced his first non-representational painting, Macdonald produced his first semi-abstract painting Formative Colour Activity. J. Russell Harper, *Painting in Canada: A History* (Toronto: University of Toronto Press, 1981) and Dennis Reid, *A Concise History of Canadian Painting* (Toronto: Oxford University Press, 1973).
8. This hostility to modernism was augmented in Canada by Western resentment at the Eastern bias of the Group of Seven artists, whose art exhibited distortions subordinating natural representation to formal design, and who claimed to capture the spirit of the Canadian landscape. Complaints were lodged against the Group, citing their undue influence, the exclusiveness of their vision of

Canadian art, the continual selection of their work by the National Gallery as being the art representative of all Canadian art. Lorna Farrell-Ward, "Tradition/Transition," op. cit.: 15; 32.

9. For a general discussion of this philosophy see, Meyer Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (New York: Oxford University Press, 1953): 201-213. This is a principal work on Romantic theory.

10. Ann Davis, *The Logic of Ecstasy: Canadian Mystical Painting 1920-1940* (London: London Regional Art and Historical Museums, 1989): 33-46; and Michele Lacombe, "Theosophy and the Canadian Idealist Tradition: A Preliminary Exploration," *Journal of Canadian Studies* 17 (Summer 1982): 100-117.

11. The writings of both Whitman and Emerson were important to Emily Carr. See, Emily Carr, "Talk About Art," typescript notes of lecture read at the Normal School, October 22, 1935. University of British Columbia. Special Collections. Nan Lawson Cheney Papers. File 3-2.

12. Roald Nasgaard, *The Mystic North: Symbolist Landscape Painting in Northern Europe and North America 1890-1940* (Toronto: University of Toronto Press, 1983): 166.

13. Joyce Zemans, *Jock Macdonald: The Inner Landscape* (Toronto: Art Gallery of Ontario, 1981): 27.

14. Zemans, *Ibid.*: 15, 22. Also, Margaret Williams: Interview with Ann Pollock, January 1969. National Gallery of Canada, Ottawa. Archives. Audio and Visual Box 12.

15. Sundour's designs were associated with William Morris. Zemans, *Ibid.*: 16-17; and Williams interview, *Ibid.* The inspiration for Art Nouveau designs came from new explorations in botany and zoology.

16. Beatrice Lennie: Interview with Ann Pollock, 30 December 1968. National Gallery of Canada, Ontario. Archives. Audio and Visual Box 11. The first of the trips to Garibaldi commence in 1927. Zemans, *Ibid.*: 23. Jack Shadbolt, "A Personal Recollection," *Vancouver Art and Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983): 34.

17. Two such articles were entitled "Art Attacked" and "Vancouver Hardly Grown-Up Enough to Judge New Art." Cited in Lorna-Farrell-Ward, "Tradition/Transition," op. cit.: 16.

18. Cited in Lorna Farrell-Ward, *Ibid.*: 16.

19. The triangle was an important symbol for Harris as it held great mystical meaning. In Theosophy, it represented the great principles of spirit, force and mater.
20. Roald Nasgaard, *The Mystic North* op. cit.: 158.
21. Zemans, op. cit.: 27. The artistic sojourns Varley and Macdonald took between 1927 and 1934 ceased due to increased financial constraints and additional responsibilities as directors of the British Columbia College of Arts between 1933 and 1935 and due to Varley and Macdonald's falling out in 1935. Also, Williams and Lennie interviews, op. cit.
22. Arthur Lismer, "The Twenties," *F.H. Varley, Paintings and Drawings 1915-1954* (Toronto: Art Gallery of Ontario, 1954): 4-6.
23. Lismer, *Ibid.*
24. Cited in Lorna Farrell-Ward, op. cit. 16; and quoted in part in Christopher Varley, *F.H. Varley, A Centennial Exhibition* (Edmonton: Edmonton Art Gallery): 90; 92.
25. C. Varley, *Ibid.*: 94.
26. Charles C. Hill, *John Vanderpant Photographs* (Ottawa: National Gallery of Canada, 1976): 27.
27. See, Ann Hillier McMenemy notes, Book 1. National Gallery of Canada, Ottawa. Archives. Ann Hillier McMenemy file. Ann Hillier was a student of the British Columbia College of Arts, Ltd.
28. These discoveries and spiritual ideas were the focus of many discussions Macdonald and his circle of artists held at the Wednesday night "Musicales" held at the Vanderpant Galleries beginning in 1927. Williams and Lennie interviews, op. cit. See also, Ada F. Currie, "The Vanderpant Musicales," *The Paint Box* (Vancouver: The Vancouver School of Decorative and Applied Arts) 3 (3) (1928): 48; Ann Pollock, *Jock Macdonald* (Ottawa: The National Gallery of Canada, 1969): 6; and Charles C. Hill, *John Vanderpant Photographs* (Ottawa: National Gallery of Canada, 1976): 18.
29. Jock Macdonald, "Art in Relation to Nature," op. cit.
30. For a discussion of how Transcendentalism affected Canadian modernism, see, Ann Davis, *The Logic of Ecstasy* op. cit. For the importance of transcendentalism to American art, see, Barbara Novak, *American Painting of the Nineteenth Century: Realism, Idealism and the American Experience* (New York: Praeger, 1969); and Max Kozloff, "What Whitman and American Art," in *The*

Artistic Legacy of Walt Whitman, ed. by Edwin Haviland Miller (New York: New York University Press, 1970).

31. See, William Levi, "The Concept of Nature," in *The Origins of Modern Consciousness*, ed. by John Weiss (Detroit: Wayne State University Press, 1965).

32. Ibid.

33. Jock Macdonald, "Art in Relation to Nature," op. cit.

34. Although the author recognizes the importance of colour and light as evocative of Nature and spiritual phenomenon, the pictorial analysis in the "Modalities" has been necessarily limited throughout this thesis to theme, form and space. Of the fourteen "Modalities" paintings analyzed here, only three are readily accessible for viewing, and only two of these have been reproduced in colour. Of the remaining eleven works analyzed, seven are in private collections while four are known through reproduction alone. The locations of these latter four paintings remain unknown.

35. Johann Wolfgang von Goethe, *Essays on Art and Literature*, ed. by John Gearey; trans. by Ellen von Nardroff and Ernest H. von Nardroff (New York: Suhrkamp Publishers, 1986).

36. For a discussion of this relationship, see E.H. Gombrich, "Iconae Symbolicae: The Neo-Platonic Tradition in Art," *Journal of the Warburg and Courtauld Institutes* 11 (1948): 187.

CHAPTER 2

MACDONALD, SCIENCE AND MATHEMATICS

All Nature is mathematically related and all the infinite structures of Nature are based on the relationships of Nature which Pythagoras discovered.... This is the first law of Nature--the dynamic symmetry of form--the relationship of the part to the whole, whether in line contour) or area.¹

Jock Macdonald

Science as a Model and Logical Basis For Abstract Art

Because Macdonald's thinking about art was rooted largely in the aesthetic of the Group of Seven, his art and theories were profoundly committed to Nature. However, the concept of Nature he derived from this aesthetic would change over the course of his career due to the impact of significant scientific discoveries. A close study of Macdonald's writing reveals that he was well-informed by scientific theory. His notes "Art in Relation to Nature" (c.1940) and "Science and the Infinite (Sydney Klein)" (c.1932-1935) contain numerous references to current ideas in biology, physics and higher mathematics. Beginning with Formative Colour Activity (1934) (fig. 8), the first work to experiment with abstraction, the certainties of science were used as an underlying rationale for his artistic creation. It was not simply a matter of transposing material from one realm to another. Science provided Macdonald the basis upon which he could indulge his Romanticist background by establishing a correspondence between his innermost, personal self and the objective, universal order of reality. This chapter will focus on three

aspects of science and mathematics in particular: geometry, electromagnetic fields, and space and the "fourth dimension."

In the first decades of this century, science held great cultural authority. It was a measure of knowledge and a paradigm of reasoned order. For Macdonald, science was a means of comprehending the world as part of a universal whole. It was a stimulus which prompted Macdonald to reach beyond the portrayal of the readily visible surface relations of Nature, to paint the invisible forces giving shape to Nature and the universe. Macdonald's attraction to science was thus rooted in the nineteenth-century Romantic sensibility examined in Chapter 1. Biology and physics proceeded from the same premise as Romantic philosophy--that Nature is a totality, ordered and harmonious in its laws; every element inexorably bound up in the structure of the whole. Science was seen to provide a coherent vision of life.

Advances in science were regularly reported in newspapers such as *The Christian Science Monitor*, and popular journals like *Scientific American* and *The National Geographic*. Illustrating these articles were a multitude of photographs, similar to those in Amadée Ozenfant's (1886-1966) *Foundations of Modern Art* (1931).² Macdonald was familiar with Ozenfant's book as well as Oswald Spengler's (1880-1936) *Decline of the West* (1926) and Jay Hambidge's (1867-1924) book on the Golden Mean, *Dynamic Symmetry: The Greek Vase* (1920).³ Spengler's philosophy of history asserted that artists must be familiar with science and mathematics in order to endow their art with scientific validity. Hambidge

endeavoured to apply pseudo-scientific ideas to art, and to identify the latter's aesthetic value as being rooted in these ideas.

The celebration of science as the means to reach fundamental laws of expression--the use of geometrical forms, for example, to give art universal appeal--was frequently expressed in the writings of art critics in the first decades of this century, when science, because of its self-critical and open-ended research of possibilities, was seen as an exemplum for modern art. For example, Willard Huntington Wright (1888-1939), in his *Modern Painting* (1916),⁴ contended that if art was going to advance like science, it had to discover new laws of Nature. Geometry was cited as the means of achieving objectivity and investing art with timeless, universal appeal.

Reinforcement for this view was readily available to Macdonald through a close circle of artist friends.⁵ Artists such as John Vanderpant, Frederick H. Varley, Harry Hood, Harry Täuber, W.P. Weston, Gerald H. Tyler, Barbara Macdonald and a coterie of students would gather on Wednesday evenings at the Vanderpant Galleries during the late twenties and early thirties to listen to music and discuss issues and theories of contemporary art and science.⁶ Frequently, issues such as the scientific verity of the correspondence between art and music were hotly debated.⁷ Vanderpant, "as the voice of the new," probably inspired Macdonald's initial interest in the underlying structure of reality.⁸ In 1928, he wrote:

Knowledge is the keystone to completeness in expression.... Correct axioms are demonstrable.... If one has established through reason

and analysis firm contact of one's individual mentality with the infinite laws of life, one has created the correct attitude essential to artistic self-expression in the material appearance of fine art. Appearance is not essence, appearances nowadays specially are made up.⁹

Substantiation for this view came from Täuber who, after 1931, not only taught courses on contemporary art movements in Europe, especially German Expressionism, Russian Constructivism, Kineticism and Vorticism, but gave lectures on the fourth dimension and "organic art."¹⁰ After 1940 new authority and reinforcement for this approach towards abstraction were given by Bess and Lawren Harris.¹¹

For Macdonald, Formative Colour Activity (1934) (fig. 8), and the series of studies associated with this work, were a decisive turning point. This development was further explored in ensuing works painted between 1935 and 1941.¹² These works remained secret, known only to a close circle of friends. Only after creating these works for a period of three years (1935-1937) did Macdonald attempt to specify their intention.¹³ By painting the laws underlying the phenomena in Nature and not imitating its appearances, Macdonald was following a path of modernism set a generation before him by artists in Europe and America. Science thus provided Macdonald the means of depicting Nature in a way which was consonant with the demands of modernism.¹⁴

Geometric Forms and Nature

In associating art with "mathematical laws" and geometric forms found in Nature ("Art in its Relation to Nature," c.1940) Macdonald was expressing the idea

that Nature is based on mathematical proportions which oversee the growth process and determine the structure of organic form--an idea widely discussed by scientists and aestheticians alike. This was the orientation of his art and thought between 1935 and 1941, a period when Macdonald concentrated on producing the "Modalities."

The notion that all material forms have an underlying mathematical/geometrical basis has a long history. In the late nineteenth and early twentieth centuries, for example, theorists such as Adolpho Best-Maugard (1891-1964), Oswald Spengler, P.D. Ouspensky (1878-1947) and Jay Hambidge asserted that organic form possessed the same qualities that make art visually satisfying. Art was considered to correspond to forms in Nature because of the regularity in the structure of the latter. There are, it was argued, a few underlying forms, such as spirals, which constitute the basis of a wide array of motifs and forms. The aesthetic appeal of natural forms could be immediately attributed to the mathematical principles on which those forms were based.

This idea represents an older and fundamental tradition in biology, a tradition which, as noted above, grew directly out of German Romantic Nature philosophy.¹⁵ Early in the nineteenth century, it inspired a direction of scientific inquiry in which the concept of archetypal organic form was applied to the study of all organic matter. "Idealistic morphology" was given its initial expression by Johann Gottfried von Herder (1744-1803), Johann Wolfgang von Goethe and Carl-Gustave Carus (1789-1869).¹⁶ Research in biology intensified following the

publication of Charles Darwin's (1809-1882) epochal work *On the Origin of Species* (1859),¹⁷ which inspired intense debates. As a result, biology made spectacular headway and gained widespread popular attention. This prestige provided an important stimulus to the philosophies of Arthur Schopenhauer (1788-1860), Henri-Louis Bergson (1859-1941) and Wilhelm Ostwald (1853-1932),¹⁸ all of whom contributed to the reinforcement of the development of an abstract art based on biological principles.

The continuing interest in the geometric properties of organic form reached its climax in the early decades of the twentieth century, and provided intellectual support for Macdonald's developing a personal abstract pictorial vocabulary. The idea that there was a new, inner truth to Nature, and that this truth was manifested in the existence of archetypal mathematical principles underlying the formation of all natural forms, was thus so prevalent during the first years of this century that it is almost impossible to trace its influences.¹⁹ In addition to those named above, others included Ernst Philipp August Haeckel (1834-1919), D'Arcy Wentworth Thompson (1860-1948), Jay Hambidge, Adolph Best-Maugard, and Amadée Ozenfant. Heir of Herder and Goethe, Haeckel was the leading exponent of the belief in archetypal form and a chief interpreter of Darwin's theory. In his best-selling and profusely illustrated work *The Wonders of Life: A Popular Study of Biological Philosophy* of 1905, drawings on overlays emphasize the symmetry and geometric properties of organic life.²⁰ Morphological research culminated in D'Arcy Thompson's monumental work *On Growth and Form* (1917). Drawing on

Plato and Pythagoras to support his hypotheses, Thompson identified numerous correspondences between mathematical laws and organic forms.

Although most scientists did not draw metaphysical conclusions from this discovery, others who shared the Romantic conviction that art and Nature were analogous did. In their texts, the belief that mathematics are the necessary foundation of organic morphology thus had immediate aesthetic applications. Art theorists such as Hambidge, Best-Maugard and Ozenfant asserted that the proportions which regulate organic growth were universal and were the key to discovering that the hidden laws of life are the necessary basis of all artistic composition. Their work had an ardent following early in the century.

It is therefore not surprising that, by combining his own deep feelings for Nature and his milieu's respect for scientific research, Macdonald's early semi-abstract and abstract works are compelling evocations of the geometric order which lies behind organic form. For Macdonald, the mathematical laws on which Nature was based were the means by which he could give his 1935-1941 "Modalities" substantive meaning and pictorial direction. Organic form, for Macdonald, was not merely an unchanging configuration of distinct elements, but a whole equalling more than the sum of its parts. It contained a geometric structure based on laws which are constant while illustrating the process of growth and change. The stylistic diversity of these works reflects the spirit of discovery in which they were created. Nonetheless, the high degree of coherence which he brought to his expressions of natural laws provides a common point of departure.

These semi-abstract and abstract works are comprised of geometric elements which consistently evade the mathematical proportions superficially observable in natural phenomena. Macdonald was attempting to simplify the variety and multiplicity of the visible world and extract what is essential and expressive of life. Thus, his geometry is distinctively biological and suggestive of the procreative energies of organic life.

Geometric shapes are the point of departure in his Chrysanthemum (1938) (fig. 1), Fall (Modality 16) (1937) (fig. 9) and Spring Awakening (c.1937) (fig. 10), in all of which Macdonald renders highly stylized evocations of the forces of Nature by consciously employing mathematics as an underlying pictorial structure. Chrysanthemum is an example of this imaginative assimilation of geometry to art. In this work, Macdonald simplifies the variety and multiplicity of the visible world and extracts what is essential and expressive of life. The entire picture surface is filled with thrusting stylized spiral forms which are compressed in a shallow space. The spiral forms used here are both geometric and organic, and their mathematical proportions can be observed in numerous natural phenomena. The formal repetition of the spiral forms endow this work with a high degree of order and coherence, which were to Macdonald artistic goals and expressions of natural laws. Chrysanthemum renders visible nature's latent order and procreative force, both form and formation. However, despite his interest in mathematics in general and geometry in particular, it is clear from the inventive shapes, the license with scale and proportion and the irregular perspectives that Macdonald did not submit

Nature to rule or measurement. Although he employed geometry to elicit its inner order and growth process, his methods as an artist were essentially non-mathematical and unscientific. He balanced organic structure and geometric form with his own intuitive response. Because of this intuitive response, there is no literal application of Nature's mathematical laws or systematic use of the biological paradigm. By avoiding a literal content and allowing his art to be ambiguous, he employed organic form as a departure for his deeply personal reflections on the meaning of Nature. What he aimed to do was to establish a correspondence between Nature--its forms and its laws--and his own sensibility. His "Modalities" are early expressions of his incorporation of the outer world to his inner life.

Indeed, Macdonald's reliance upon personal intuition in his exploration of ways in which Nature's logic and laws could be utilized in his art echoed the approaches of other artists concerned with issues of the relationship between Nature and mathematics: Wassily Kandinsky, Paul Klee, Franz Marc (1880-1916), Piet Mondrian (1872-1944) and Franz Kupka (1871-1957).²¹ The significant variations in the approaches taken by each of these artists to their art suggest that the organic analogy was not an artistic resolution but a common point of departure. For Macdonald, as for these artists, his exploration into abstraction was as much a process of self-discovery as it was one of creation. While Macdonald grappled with and eventually rejected Nature's appearances as a viable direction for the future of art, he respected what he believed to be its underlying laws and sought to endow his painting with the life force of organic matter. Though it is not always

possible to perceive, diffused as it is by the artist's imagination, Nature remained integral to Macdonald's art and theory.

Electromagnetic Fields

Under the influence of German idealistic Nature philosophy, scientists in the first half of the nineteenth century, such as Michael Faraday (1791-1867), James Clerk Maxwell (1831-1879) and Heinrich Rudolf Hertz (1857-1894), set out to prove that the infinite forces of Nature were all interconnected.²² By the early decades of this century, the concept of Nature's electromagnetic fields was being widely disseminated and frequently discussed in popular journals; and because it led to such spectacular discoveries as radio, X-rays and telegraphy, it had a profound impact on society's imagination.²³

Many early twentieth-century artists would put the discovery of electromagnetic fields to artistic use. The Italian Futurist Umberto Boccioni (1882-1916) employed "force-lines" and "force-line-forms" as visual metaphors for almost any dynamic phenomenon.²⁴ The Russian Constructivists Naum Gabo (1890-1977) and Antoine Pevsner (1886-1962) considered line to be the direction and rhythm of forces within their sculpture.²⁵ Klee developed a variety of abstract and linear formations to suggest the invisible field of energy which lies behind visible Nature. Kandinsky, in *Concerning the Spiritual in Art* (1912), employed the concept of force fields to justify abstraction and wrote that the concept of matter was being replaced by "the theory of electrons" or "waves in motion."²⁶

Kandinsky alluded to it again in his *Point and Line to Plane* (1926), in a section entitled "Force from Within and Force from Without," wherein he discussed the perceived tension and attraction which can exist among compositional elements.²⁷

The idea of force fields stimulated the interest of artists during the first decades of this century for several reasons. First, the knowledge demanded a change in the visualization of Nature and presented a direct challenge to the traditional methods of representation. While the propositions of classical physics reflect the structure of the world given by ordinary comprehension, the discovery of force fields suggested a world view which is inimical to direct observation, and implied that what is visible is fragmentary and illusory--merely a fraction of what is actually present. The discrepancy between appearance and reality, of enduring interest to artists, was thus given dramatic documentation. Force fields offered a scientific basis for abstraction as a more accurate and complete representation of that which is concrete, albeit invisible, in Nature. Second, this knowledge countered positivist conjecture and verified the existence of an non-material order of reality which was dynamic and unified. Accordingly, there are important parallels between the scientific discovery of force fields and modernists' analyses of appearances, their conviction that appearances are transitory, and their use of abstraction to represent what is essential, enduring, and invisible. The subject of force fields bears directly on the intellectual context in which Macdonald was working and, on one level, accounts for the stylistic innovation which occurs in his art between 1934 and 1941. Yet, although he was no doubt aware that the

expression "force lines" carried scientific connotations, the vibratory patterns visible in several of Macdonald's "Modalities" held other meaning as well--meaning which relates directly to his interests in Romantic Nature philosophy (Chapter 1) and the occult (Chapter 3). They are expressive representations of the life energy which extends beyond the visual limitation of three-dimensional forms.

This ultimately is what Macdonald sought to express--not the surface relations of Nature but the life energy giving it form. Macdonald was intrigued by the mysterious interaction between matter and energy which lies behind the surface of phenomena. Analogous in his mind to artistic creation, these dynamics suggested the forms and spatial structure of his art in a fundamental way, as is evident for example in Formative Colour Activity (1934) (fig. 8). Although the scale of the single radiating form in this painting has a nearly autonomous presence, the barbed vertical shape in the lower left corner reads as the stem of a rose. The latter object thus ties Formative Colour Activity to a physical object in Nature, while the radiating energy of the wavy contours imbues the picture surface with the suggestion of charged space. The Wave (fig. 11), Rain (fig. 5) and Birth of Spring (fig. 7) also invoke those invisible forces which form and inform the natural world. Etheric Form (1935) (fig. 3), Departing Day (1935) (fig. 4), and May Morning (c.1935) (fig. 12) call to mind the kind of "solar" imagery seen in the work of many American modern artists, such as Georgia O'Keeffe (1887-1986), Arthur Garfield Dove (1880-1946), John Marin (1870-1953) and Oscar Bluemner (1867-1938), and invoke the sun's mythical association with fertility, growth, and life-forces.²⁸

However, the proportional relationship between the elements in these compositions by Macdonald negates a single reading of a sun seen within a landscape space, and suggests an analogy with atoms and molecules, thus providing a vision of Nature's dynamic inner structure as well. By uniting celestial and terrestrial, the macrocosmic and microcosmic, in single images, these works become visual metaphors for the whole of Nature and imply the underlying connectedness of all things. Similarly (and as with his use of underlying geometric patterns of organization in the "Modalities") the combination of natural forms, and visual representations of "lines of force," emphasizes Macdonald's attempt to ground this romantic ideal in scientific rigor.

Space and the Fourth Dimension

By invoking those invisible forces which form and inform the natural world, Macdonald was imbuing his art with a quality of motion and energy which strikingly corresponded to the new theories of the physical universe. Similarly, his art reflects significant advances that were made during his lifetime in the fields of physics and higher mathematics, and which prompted widespread debate on the nature of space.²⁹ Early in the nineteenth century, the development of n-dimensional geometry had raised the possibility of a mathematical space beyond the known three dimensions. Later, in the latter half of the century, the non-Euclidean geometries of Karl Friedrich Gauss (1775-1855), Georg Friedrich Bernhard Riemann (1826-1866), Nikolai Ivanovich Lobachevsky (1792-1856) and

Farkas Bolyai (1775-1856) demonstrated alternative methods of delineating spatial structure.³⁰ After Michael Faraday's discovery in 1831 that magnetism and electricity are reciprocal forces, the theory of space as a continuously charged field gradually supplanted the Newtonian view of matter as being simply located in the emptiness around it. The field concept--in addition to Ernst Mach's (1838-1916) research on rotational motion at the turn of the century and Hermann Minkowski's (1864-1909) formulation of the time-space continuum in 1908--was used by Albert Einstein (1879-1955) to refute the existence of absolute, Euclidean space.³¹ In his Special Theory of Relativity (1905) and General Theory of Relativity of (1916), Einstein applied this knowledge to the structure of the universe itself. His concept of space was so comprehensive that it altered not only the understanding of physical reality, but deeply affected philosophical thought as well. As a result of such discoveries and the dialogue they engendered, the word *space* acquired meaning on many levels.

A great deal of the conjecture pertaining to the nature of space centred on a widely popular concept known as the "fourth dimension".³² (Einstein, who by 1920 had become a celebrity, had popularized the notion of the fourth dimension in his concept of "space-time.")³³ The great virtue of the theories of relativity is the immense coherence they bestow on natural phenomena.³⁴ On the simplest level, they state that in order to locate or define an event in the physical world, all of that event's dimensions must be taken into account. Space and time, matter and energy, are seen as interdependent coordinates which cannot be understood

without reference to each other. Space is not the empty field in which matter sits, but an extension of matter's field; matter is not static and unchanging but is envisaged as an event or an activity. Each determines the structure of the other and the ancient, metaphysical dualism between them is dissolved. Thus, the physical world, according to Einstein, is seen as energy manifested as matter in varying levels of concentration. Other physicists, such as Louis-Victor de Broglie (1892-1987) and Erwin Schrödinger (1887-1961), added the idea that the energy which makes up the essential fabric of Nature is transmitted through the atmosphere by waves which are imperceptible to direct observation.³⁵ According to them, the most rigorous description of physical reality is that of wave motion.

However, the fourth dimension, arising from n-dimensional and non-Euclidean geometries, was soon identified with ideas and phenomena outside the field of mathematics. By the beginning of this century, it had an extensive history, and had also acquired philosophical and mystical meanings in the writings of such authors as Charles Howard Hinton (1853-1907), Claude Bragdon (1866-1946), and P.D. Ouspensky.³⁶ As Linda Henderson demonstrates, the concept had a significant impact on artists in virtually every major modern movement. Because it signified an ideal plane of reality existing beyond the visible, three-dimensional world, it inspired the invention of radical formal innovations. For many artists, it was the primary stimulus for the development of a new art. (The occult implications of the fourth dimension are explored at length in Chapter 3.)

Macdonald probably came to his appreciation of Einstein through his association with close circle of friends, particularly Vanderpant and Täuber. Täuber, especially impressed with the Constructivist artists of Russia, probably instilled in Macdonald these artists', as well as his own, enthusiasm for the advances of science and technology.³⁷ Macdonald's high regard for science is manifested in his lecture "Art in Relation to Nature" (1940) wherein he employed the theory of relativity to substantiate the move the avant-garde artists made to abstraction.³⁸ Among Macdonald's personal writings, there are several references to Einstein and other scientists in relation to the rhetoric of physics, and he shared other artists' concern with Einsteinian space. Like the European artists who had begun their investigation a generation before him, Macdonald tried to give his pictorial form a higher, ideal level of reality. It is this ambition which became a chief artistic concern and one which underlies the numerous references to space in his personal writings. It is also this ambition and artistic concern which, as will be seen below, accounts for the dramatic change in the spatial structure of his art in 1935. Nevertheless, for Macdonald, the fourth dimension was not an excuse to repudiate all reference to the physical world. Rather, this concept inspired him to find new ways of portraying Nature: ways of conferring on it enhanced import. In this regard his references in his art to the fourth dimension share a basic characteristic already seen in his use of geometry and of the idea of force fields.

The first documented application of the fourth dimension amongst the members of Macdonald's circle occurred in a 1928 essay in the Vancouver School

of Decorative and Applied Arts annual publication, *The Paint Box*, by the photographer John Vanderpant. Vanderpant's views probably set an important precedent for Macdonald's own thinking on the subject.³⁹ In 1943, for example, Macdonald described the "Modalities" as:

Idioms of Nature--not completely geometrical, but containing Nature form in extension. It means the same as saying the 4th dimension is an extension of the third dimension; it contains an essence of the 3rd, but has a different space and a different time, and through its added value of motion, it is an entirely new dimension.⁴⁰

With the arrival in Vancouver of Täuber in 1931 or 1932, Macdonald learned of the modern art movements of German Expressionism, Russian Constructivism, Kineticism, and Vorticism, and the different intellectual concerns motivating modern artists. In a lecture entitled "Fourth Dimension Sight: How Man's Conscious Develops" (1935), Täuber spoke of the possibility of seeing things through the fourth and possibly even the fifth, sixth and seventh dimensions.⁴¹ By drawing a correlation between the fourth dimension and the visual arts, Vanderpant and Täuber gave Macdonald the stimulus to seek further theoretical justification from textual sources such as P.D. Ouspensky's *Tertium Organum* (1920). Ouspensky identified the fourth dimension as a realm which could be reached through consciousness, and which is made possible by the physical, material world. He also described it as existing in Nature, in the space surrounding objects. Ouspensky implied that pure abstraction was not necessary for the realization of this ideal--a notion that, as argued earlier in this thesis, would have been particularly attractive to Macdonald.

The meaningful role which the fourth dimension played in his artistic milieu, and the heightened awareness of *space*, had a decisive impact on Macdonald. His "Modalities" thus have another level of meaning in addition to those discussed above. By imbuing the picture surface with the suggestion of energy and motion and by implying more space than is actually represented, they invoke a higher space, a space of the fourth dimension. The unique achievement of these works is that they provide a pictorial similitude for the time-space continuum, suggested through the means by which he organized the picture surface. By keeping his imagery flat, and avoiding the illusion of three-dimensional space, Macdonald successfully negated illusionistic perspective and limited pictorial space/depth. The fourth-dimensional sensation of space is achieved in Departing Day (1935) (fig. 4) and in Pacific Ocean Experience (c.1935) (fig. 13) by dramatizing the proportional relationship between forms and the surrounding void by dramatically altering the viewer's vantage point. Viewed from directly above, this latter work is a representation of the artist in a mandorla-shaped boat engulfed by a single centripetal wave of the sea. The sea billows out like a fan towards the frame, thus emphasizing a sense of radiant motion. It intimates that ordinary perception has been replaced with an imaginative kind of vision in which the world has a portentous character. In these works, no part of the picture plane is inert. This is true for other works as well. Two other examples are Chrysanthemum (1938) (fig. 1) and Flight (1939) (fig. 2). Chrysanthemum is comprised of swirling lines and intersecting diagonals, encompassed by parallel lines of motion that bisect the

canvas to create a scene of frenetic action. Similarly, Flight illustrates concentric and diagonal forms doing battle in a futuristic space. The overall effect is that these canvases are charged with energy.

Though Macdonald frequently used rhetoric similar to that found elucidating theoretical points in philosophical and scientific texts, he generally adapted scientific data to his own comprehension of things and the needs of his art. For example:

Art, in its fullest expression, is knowledge, made concrete, of the inner truths of Nature, or creation--all being.

The discoveries of empirical science help humanity to form new conceptions about Nature and has a definite share in the evolving of a new consciousness.

The creative genius of today whose consciousness has advanced to concepts of the 4th dimension of thought, carry the torch of a new understanding together with the Philosophers and Scientists.⁴²

In these passages, Macdonald was grappling with the new knowledge about physical reality and exercising it through his own intuitions. Yet, because he needed to reconcile these ideas with his own spiritual intimations of reality, he could, at the same time, write:

Art now reaches the plane where it becomes the expression of ideals and spiritual aspirations.⁴³

Macdonald's "Modalities" can now be understood as pictorial analogues of Nature's invisible forces. They suggest the view of the physical universe as a charged, multi-dimensional field, and at the same time suggest both the regular

rhythms of growth in Nature and the latter's underlying geometric order. Derived from scientific verity, they are examples of Macdonald's desire to bind his art more closely with the essence of life. Biology, physics and mathematics were not separate from his life and art, but mutually informing influences on his imagination. Because they suggest a hidden order where imperceptible forces give form and structure to life, they provided the rational justification for Macdonald's spiritual investigations into reality.

NOTES - CHAPTER 2

1. Jock Macdonald, "Art in Relation to Nature," handwritten lecture notes. Collection of Marilyn Westlake, Toronto.
2. Beatrice Lennie: Interview with Joyce Zemans, 25 February 1978. Cited in Zemans: 253, fn. 33. Similar photographs also cover the pages of Ann Hillier McMenomen's notes, Book 1. See, Ann Hillier McMenomen, Notes, Book 1. National Gallery of Canada, Ottawa. Archives. Ann Hillier McMenomen file.
3. Jack Shadbolt, "A Personal Reflection," in *Vancouver Art and Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983): 38.
4. Willard H. Wright, *Modern Painting: Its Tendency and Meaning* (New York: John Lane & Co., 1915).
5. Lorna Farrell-Ward. "Tradition/Transition: The Keys to Change," in *Vancouver Art and Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983): 17-20; 26.
6. The names that appear here are based on Jack Shadbolt's recollections. See, Jack Shadbolt to Carol Lowry, 14 January 1976. University of British Columbia. Special Collections. Shadbolt Papers.
7. One of Macdonald's students and colleagues, Beatrice Lennie, recalls Täuber talking about the colour organ at this time. Lennie also recalls that the theories of Arthur Compton were particularly popular with these artists. See, Beatrice Lennie: Interview with Ann Pollock, 30 December 1968. National Gallery of Canada, Ottawa. Archives. Audio & Video, Box 11. See also, B.C. Binning: Interview with Ann Pollock. December 1969. Cited in R. Ann Pollock, *Jock Macdonald Retrospective Exhibition* (Ottawa: National Gallery of Canada, 1969): 6.
8. This phrase was used by Jack Shadbolt to describe Vanderpant's role in the Vancouver art scene during the 1930s. See, Jack Shadbolt to Carol Lowry, op. cit.
9. John Vanderpant, "Artery," *The Paint Box* (The Vancouver School of Decorative and Applied Arts) 3 (3) 1928: 46, 55.
10. Beatrice Lennie: Interview with Ann Pollock, op. cit.
11. Jack Shadbolt to Carol Lowry, op. cit.

12. A study which is similar to Formative Colour Activity still exists from the same period.
13. Jock Macdonald to John Varley, 19 January 1937. Burnaby Art Gallery.
14. the label of "modernism" here refers to those artists who sought to create a new language of art which would dissolve the distinction between subject and object. See, Ann Davis, *The Logic of Ecstasy: Canadian Mystical Painting 1920-1940* (London: London Regional Gallery and Historical Museums, 1989): 10-11.
15. Meyer Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (New York: Oxford University Press, 1953): 180-225.
16. Sixten Ringbom, "Paul Klee and The Inner Truth to Nature," *Arts Magazine* 52 September 1977): 113-114.
17. Charles Darwin, *On the Origin of Species By Means of Natural Selection, or, The Preservation of Favoured Races in the Struggle for Life* (London: J. Murray, 1859).
18. Macdonald and his circle were particularly familiar with the philosophy of Schopenhauer. See Gerald H. Tyler: Interview with Ann Pollock. December 1969. Bergson was the first to elaborate what came to be called a process philosophy which rejected static values in favour of values of motion, change, and evolution. Ostwald, who took a strong philosophical approach to science, preferred energy as the explanation for all physical phenomena. He believed that energy is the substrate of all phenomena and that all observable changes can be interpreted as transformations of one kind of energy into another. In the late twenties and early thirties, his physical and psychological investigations of colour were followed by artists with interest.
19. Sixten Ringbom, "Paul Klee and the Inner Truth to Nature," op. cit.: 115.
20. Ernst Haeckel, *The Wonders of Life: A Popular Study of Biological Philosophy* (New York; London: Harper & Brothers, 1905).
21. For a general discussion of these artists, see Robert Rosenblum, *Modern Painting and the Northern Romantic Tradition: Friedrich to Rothko* (New York: Harper & Row, 1975).
22. Michael Faraday set out to prove the existence of non-material reality in 1831. He was followed by James Clerk Maxwell, who formulated the mathematical expression relating the change in magnetic flux to the induced

electromotive force. This relationship is referred to as Faraday's Law of Induction. The ensuing work of J.J. Thompson and Ernest Rutherford proved that the atom was not solid matter but an open structure of vast spaces and minute corpuscles.

23. Marconi invented the radio in 1895. Röntgen discovered X-ray emissions, also in 1895. For a discussion of the popular interest in scientific discoveries of the period, see Ernest Victor Heym, *Fire of Genius: Inventors of the Past Century: Based on the Files of Poplar Science Monthly Since Its Founding in 1872* (Garden City, N.Y.: Anchor Press/Doubleday, 1976).

24. Marianne Martin, *Futurist Art and Theory, 1909-1915* (Oxford: Clarendon Press, 1968): 157-158.

25. Naum Gabo and Antoine Pevsner, "The Realistic Manifesto," 5 August 1920. English translation in Herschel Browning Chipp, *Theories of Modern Art: A Source Book By Artists and Critics* (Berkeley: University of California Press, 1968): 325-330.

26. Wassily Kandinsky, *Concerning the Spiritual in Art* (New York: Wittenborn Schulz, 1947): 32.

27. Wassily Kandinsky, *Point and Line to Plane* (New York: Wittenborn Schulz, 1947): 53.

28. For an account of the role of nature in American art see, Charles C. Eldredge, "Nature Symbolized: American Painting From Ryder to Hartley," *The Spiritual in Art: Abstract Painting 1890-1985* (New York: Abbeville Press, 1986): 113-130.

29. Max Jammer, *Concepts of Space: The History of Theories of Space in Physics* (Cambridge: Harvard University Press, 1954).

30. Karl Friedrich Gauss was a pioneer in applying mathematics to gravitation, electricity, and magnetism. His theorem or law provided the basis of unified electromagnetic theory. In 1829, Nikolai Ivanovich Lobachevsky published his theory of non-Euclidean geometry. He is considered the founder of non-Euclidean geometry. Lobachevsky's discovery was corroborated by Farkas Boyai in 1832.

31. Before the first quarter of the nineteenth century, heat, magnetism, electricity and light were considered imponderable fluids without weight. Mach's contribution was in the philosophy of science between 1893 and 1905. He advanced the concept that all knowledge is derived from sensation; thus, phenomena under scientific investigation could be understood only in terms of "experiences" or "sensations" present in the observation of the phenomena.

32. For evaluating the history and meaning of the fourth dimension to modern artists, see Linda Henderson, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art* (Princeton: Princeton University Press, 1983).
33. For a more complete account, see Henderson, *Ibid.*: 358-359, wherein she traces the impact of Einstein's physics on the popular conception of the fourth dimension in America.
34. In contrast to the Theory of Relativity, there are no empty spaces in Newton's theory of the plane.
35. Louis-Victor de Broglie was best known for his research on quantum theory and for his discovery of the wave nature of electrons. In 1927, Clinton Davisson, Lester Germer, and George Thomson found the first experimental evidence of the electron's wave nature. Schrödinger and Heisenberg reduced the wave particle to a conventional symbol for the description of sub-atomic events using quantum physics. See, James Jeans, *The New Background of Science* (Cambridge: Cambridge University Press, 1933): 208-229.
36. Ouspensky was probably Macdonald's primary source for attaining knowledge of the fourth dimension, the specific source for Ouspensky's views was Charles Howard Hinton. See Linda D. Henderson, "Mysticism, Romanticism and the Fourth Dimension," *The Spiritual in Art: Abstract Painting 1890-1985*, op. cit., 221. Some passages of Macdonald's notes from "Science and the Infinite (Sydney Klein), also make reference to the fourth dimension.
37. Täuber also could have shared the contents of his voluminous library of books, slides and other data. Leslie Planta to the author, 2 September 1990.
38. Jock Macdonald, "Art in Relation to Nature," op. cit.
39. John Vanderpant, "Artery," *The Paint Box* 3 (3) (Vancouver: The Vancouver School of Decorative and Applied Arts Annual Publication, 1928): 46; 55.
40. Jock Macdonald to H.O. McCurry, 10 May 1943. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.
41. "Fourth Dimension Sight: How Man's Consciousness Develops," *Vancouver Sun* (1 April 1935): 10.
42. *Ibid.*
43. *Ibid.*

CHAPTER 3

MACDONALD AND THEOSOPHY

The Holy Mountain or High Place of God...the first Temple of the Mysteries, the first structure created as a repository of those sacred truths which are the certain foundation of all arts and sciences.... Though the modern world may know a million secrets, the ancient world knew one--and that one was greater than the million, for the million secrets breed death, disaster, selfishness, lust and avarice, but the one secret confers life, light and truth. The day will come when secret wisdom shall again be the dominating religion and philosophical urge of the world. The day is at hand when the doom of dogma shall be shrouded. The unfolding of man's spiritual Nature is as much an act of science as astronomy or medicine.¹

Jock Macdonald

Science and Religion

Science, while an indispensable means of understanding the natural world--the stimulus by which Macdonald rationalized his perceptions and validated his quest--could not answer his deeper ontological questions or deal with his innately spiritual perceptions of the world. Although (as demonstrated in Chapter 2) certain theorists endowed scientific discoveries with spiritual and/or aesthetic significance, numerous mysteries still existed which the analytical methods of science were incapable of solving--mysteries to which Macdonald was most responsive. Although science made remarkable strides during Macdonald's lifetime, it had little to proclaim in the area of spiritual beliefs and values, areas which were closely intertwined with Macdonald's pursuit of reality. Scientific inferences could be used to provide "proof" or justification where the study of the essence of reality, or ontology (i.e., the formation and structure of that world view), was concerned.

Macdonald had the invincible need to believe in a transcendental reality--one in which a dynamic interplay of forces, a ceaseless productive activity, which held the whole universe together--which issued from the Absolute itself. As an artist it was his purpose to give expression to this reality--invisible and interior--which eluded scientific measurement.

The dialogue between science and religion, central to Macdonald's oeuvre, was of larger cultural concern as well. Between 1920 and 1940, a substantial number of books were published by such authors as Joseph Needham (1900-), Bertrand Russell (1872-1970) and Havelock Ellis (1859-1939) attempting to formulate a philosophy which could accommodate them both.² In the *Dance of Life*, for example, Havelock Ellis wrote:

...not only is there no opposition between science and mysticism but their essence and at their outset they are closely related.... When all deduction has been made of the mental and emotional confusions which have obscured men's vision, we cannot fail to conclude that science and mysticism are nearer to each other than some would have us believe.³

The topic of science and religion was also discussed in contemporary art criticism. For example, in his *Expressionist Art*, Sheldon Cheney (1886-) argued that the innovations of modern painting had been necessitated by the coming together of these two realms.⁴

Several factors can account for this cultural preoccupation. First, the new physical theories had strikingly demonstrated the inadequacy of narrow materialist views. They had proved the vastness of the unknown and demonstrated that the division between mind and matter was not so clear after all. Second, renowned

scientists such as Sir Oliver Lodge (1851-1940), James Hopwood Jeans (1877-1946) and Thomas Alva Edison (1847-1931) were people with strong spiritualist leanings. Third, other scientists, such as Arthur Holly Compton (1892-1962) and Sir Arthur Stanley Eddington (1882-1940), believed that the scientific disclosure of Nature's unity required religious interpretation.

Thus, Macdonald was not adopting a maverick position in concluding that the choice between science and religion was a false alternative. Like many of his contemporaries, he understood these two levels of reality to be deeply interdependent. Religion without fact was ludicrous, and science without value was barren: each was an aspect of that indivisible unity in which he earnestly believed. His notes "Art in Relation to Nature" (c.1940) and excerpts from "Science and the Infinite (Sydney Klein)" (c.1932-1935), both make frequent reference to science in relation to spirituality and to the meaning of existence. In "Art in Relation to Nature," for example, Macdonald enlists the aid of scientific authorities Joseph John Thompson (1856-1940), Hermann Minkowski, Sir Arthur Eddington, Sir Oliver Lodge, Albert Einstein and James Jeans, to prove that "the universe is a universe of Thought and its creation must have been an act of Thought...."⁵ He also excerpts passages like the following from Sydney Klein's "Science and the Infinite":

In every Human Being there are 2 Personalities--The Real and its Image, the Spiritual and the Material, Shadow, or the Transcendental and the Physical Ego. The former is not conditioned in Time and Space, is independent of Extension and Duration, and must therefore be Omnipresent and Omniscient whereas the latter, being subservient to Time and Space, can only think in finite words,

requires succession of ideas to accumulate knowledge, is dependent on perception of movements for forming concepts of its surroundings, and, without this perception, it would have no knowledge of existence.⁶

Theosophy

Because painting captured "the inner meaning of apparent reality" Macdonald saw it as a means to consciously press towards a deeper understanding of himself in relation to Nature and the universe around him. Remarks about Macdonald's art commonly characterize it as having a pervasive pantheism--as demonstrating the sort of transcendental Nature worship seen in the art of the Group of Seven and in much of the art of the nineteenth century. Indeed, the primal immediacy of Macdonald's abstract works, the cosmogonic themes and the imagery with which he was preoccupied in his "Modalities" painted between 1935 and 1941, support this view. However, this quality has not been defined in terms any more specific than the vague word "pantheism" allows. The decidedly spiritual character of Macdonald's art--its way of imbuing Nature with the suggestion of ultimate value--was not simply the unconscious extension of a Romantic temperament; nor was it a conditioned reflex to Canadian and/or European art history. Rather, it was a deliberate, highly conscious effort to give form to the spiritual feelings he had toward life. What has not been sufficiently examined up to this point is the source from which these feelings issued or the specific way in which they informed the structure and the content of his early abstract art.

Macdonald's interest in mysticism had important Canadian precedents.⁷ Transcendentalism, a philosophy integral to American culture, had made firm inroads into Canada. It also provided a sympathetic framework for Eastern thought. During the late nineteenth and early twentieth centuries, partly in reaction to positivist thought, a strong interest in mysticism was expressed in writings of authors such as William James (1842-1910), Edward Carpenter (1844-1929), and Canada's own Richard Maurice Bucke (1837-1902). Important respects distinguish North American mysticism as expressed in the writings by these and other Western authors from writings by their Eastern counterparts. There is an anti-clerical stance, a rejection of institutional allegiances and an emphasis on the part of the authors on locating the source of spiritual authority in themselves. Transcendentalism, for example, is typically associated with Nature rather than with sacred scripture or the Church, and is given naturalistic interpretation without reference to any religious leader or doctrine. Thus, in contrast to Eastern mysticism, North American mysticism is imbued with individualism. Macdonald's occult sources are thoroughly subsumed by the Nature contexts he provides, and his concern with individualism is demonstrated by his departure in 1935 for the remote area of Nootka where he experimented with developing a personal abstract language of art.

Yet, transcendentalism also provided a sympathetic framework for Eastern thought; Oriental culture as a whole was of immense fascination to North America in the late nineteenth and first decades of the twentieth centuries.⁸ There were

learned societies devoted to the East, and Oriental literature was readily available. Works such as Percival Lowell's (1855-1916) *Soul of the Far East* (1896) and Edwin Arnold's *Light of Asia* (1861) enjoyed tremendous popular success.⁹ Attempts were made in the realm of criticism to erect a new social ethic based on Buddhist values, while a synthesis of Eastern and Western art practices was being advocated by such figures as Ernst Francisco Fenollosa (1853-1908) and Arthur Wesley Dow (1857-1922). The teachings of Fenollosa and Dow were important catalysts for the development of modernism in North America, as they both deplored an art of factual verisimilitude as lacking in spiritual value.¹⁰ Due to these influences, most especially the latter of them, Oriental art was often cited by the supporters of modernism as a stylistic paradigm.¹¹

The synthesis of Eastern and Western art was meaningful within Macdonald's intellectual circle as well. Varley's taste for the foreign and exotic was awakened by his study of Buddhism and his reading of *Light of Asia* while studying in Antwerp between 1900 and 1902. This study carried through in his art, which took on titles derived from Buddhism and borrowed motifs from eleventh- and twelfth-century Chinese art.¹² His enthusiasm did not stop there; he also had ambitions to procure art instructors from the Far East and to link the British Columbia College of Arts (1933-1935) with art schools in the Orient. His aims for the College also included having "50% oriental students" in order to create an atmosphere wherein an "interchange of ideas and influence" would engender a "unique form of expression."¹³ Täuber, while lecturing on "Consciousness and

Dimensions" in 1935, showed works of art from all parts of the world and from all ages, and made the critical remark that the arts and crafts of the East made Japan "the awakening country of the future."¹⁴ Thus, side by side with the better-known traditions of realism and pragmatism, there was a fascination with Eastern art and thought. The West, as it became increasingly industrialized, seemed to these artists to have become increasingly spiritually impotent. The East represented spiritual consolation and, at the same time, provided the spiritual path for the affirmation of higher values.

The pseudoscientific, religious philosophies of Theosophy and Anthroposophy had had a profound impact on the development of Macdonald's art by the early thirties. It was in these religious philosophies that Macdonald found the means to reconcile his respect for scientific fact with his need for faith. These philosophies provided him with the justification, and a meaningful rationale for his experiments in abstract art at a time when abstract and non-representational art were very much under fire in Canada.¹⁵ Illumined by theosophical and anthroposophical beliefs, themes and imagery previously discussed in relation to morphological research in contemporary science take on another dimension of meaning which contributes to the manifold richness of Macdonald's art.

The grounds for Macdonald's interest in the occult were prepared by readily available works of contemporary art criticism. Kandinsky's book *Concerning the Spiritual in Art* praised highly the work of Madame Blavatsky and the Theosophical Society as "a tremendous spiritual movement."¹⁶ Inspired by Kandinsky, the

association between art and "the spiritual" continued to be a concern in the works of authors such as Adolpho Best-Maugard and Sheldon Cheney. Best-Maugard, in his *A Method for Creative Design* (1926), discussed archetypal forms which give expression "to the occult and undiscovered forces of the universe."¹⁷ Cheney's "Abstraction as Mystic Revelation," in his book *Expressionism in Art* (1934), states, "The abstract form fixed in a picture is a direct revelation of cosmic architecture...which carries with it cosmic and spiritual implication."¹⁸ Kandinsky's spiritual concerns are also reflected in Canada in the *Yearbook of the Arts 1928-1929* which was edited by Bertram Brooker (1888-1955). Brooker wrote: "The highest faculty of the artist is...essentially a religious sense--a sense of the mystery of the whole life."¹⁹

How Macdonald was initially introduced to the intellectual concerns of the occult remain open for speculation. An obvious link between Theosophy and art in Canada was Lawren Harris. Harris, who was deeply spiritual, wrote on the relationship between Theosophy and art for the *Canadian Theosophist* in 1933.²⁰ Macdonald's association with romantically-minded artists within the Vancouver art scene is probably the more likely source, since Vanderpant, Varley and Täuber were all deeply influenced by Christian Science, Anthroposophy or, at a minimum, by mystical thought in general.²¹ However, it is just as conceivable and more likely that Macdonald's introduction came through his wife. Barbara Macdonald, who was born and raised in India, had a decidedly mystical character and a unequivocal and enduring interest in Theosophy.²² Regardless of who introduced

Macdonald to occult concerns, the years he spent in and around Vancouver were a time of intellectual stimulation and artistic exploration.

Theosophy was very much in the air in the first decades of the twentieth century. Founded in New York in 1875 by Helena Petrovna Blavatsky (1831-1891), Colonel Henry Steele Olcott (1832-1907), and others, the Theosophical Society satisfied spiritual needs at a time when existing forms of spiritualism were beginning to wane.²³ Its teachings represented a curious mixture of Hermeticism, Platonism, and Hinduism which Madame Blavatsky claimed to have learned by mental transference from "the masters" in a Tibetan monastery. A Greek term meaning "God wisdom" or "divine wisdom," "Theosophy" denotes metaphysical teachings and systems, derived from personal experience and esoteric tradition, which base knowledge of Nature and the human condition upon knowledge of the divine nature or spiritual powers. The primary aim of theosophical teaching was to enhance awareness of the relationships between Nature and spirit, and thus to enable individuals to achieve direct, intuitive knowledge or wisdom, and personal experience of the spiritual.

Anthroposophy, also known as *Geisteswissenschaft* (spiritual science), was a system of occult teachings founded in 1913 in Germany by Rudolf Steiner (1861-1925). Steiner, who was a dominant figure in the German Theosophical lodges, founded Anthroposophy after rejecting the strong oriental emphasis of Theosophy. Anthroposophy, literally meaning "human wisdom" or "wisdom concerning man," was a "path of knowledge" to guide the Spiritual in the human to the Spiritual in

the Universe. Although meant to stand in pointed contrast to Theosophy, Anthroposophy was profoundly influenced by Madame Blavatsky's theosophical writings after 1889. In fact, Madame Blavatsky and Steiner shared almost identical attitudes towards the inner or higher reality.

Essentially, Theosophy teaches that there is one truth which was given to mankind in the beginning of civilization. Though it has been obscured by centuries of religious schisms, it has been kept alive in the continuous tradition of esoteric literature. In its doctrines, Theosophy pictured a universe which was fundamentally composed of consciousness, and which was governed by correspondences. A central premise of its teachings was the hermetic identification between the microcosm and the macrocosm.

Because it posed an alternative to the materialist and mechanistic view of Western culture, Theosophy had great appeal to those disenchanted with orthodox religions. It offered a comprehensive philosophy which claimed to be the unifying element behind all human activity--art, science, industry, and religion. Moreover, it was reassuring and optimistic. By using the controversial theory of evolution for its own ends, Theosophy promised that life is immortal and that it not only evolves, but progresses, in an upwardly-moving spiral. Given the progressive thrust of North American society in those years, it was a timely doctrine.

In general, the occult represents a way to assuage a sense of personal isolation by fostering an attachment to a larger order. For Macdonald, it offered a means to project onto life a coherence and value which his contemporary culture

could not provide. Given his Romantic temperament and his need to believe in a transcendental reality, he was inherently susceptible to the promise and particular slant of theosophical thought. It fulfilled his craving for religious belief by providing some form of spiritual focus.

Most importantly, however, it did not contradict his respect for scientific knowledge. An important aspect of Theosophy, and a source of its intellectual appeal, was that it promoted and encouraged the study of science, believing that one day physical science would catch up with what occult science had been saying for centuries. In fact, the first volume of Madame Blavatsky's *Isis Unveiled* (1877) is devoted to the ways in which discoveries like electricity, radium, and x-rays confirm the existence of an immaterial and invisible order of reality whose effects can nevertheless be felt.²⁴ The relative longevity of the Theosophical Society, as compared to other religious cults, can be attributed to the way it adapted itself to progressive alterations in current knowledge.²⁵ At the same time as the more orthodox faiths were buckling under the assault of the theories of evolution and relativity, Theosophy cleverly assimilated these into its philosophy, taking what was congenial and rejecting what was not.²⁶ By giving religious interpretation to scientific discoveries, Theosophy always acknowledged the existence of scientific facts.

By the 1930s, the decade when Macdonald's work first manifested a relationship to its teachings, the secrecy and closed rites associated with the early theosophical movement had been eliminated. In 1922 it had reached the height

of its popularity when Theosophical Society membership peaked in Canada.²⁷ It gained much of its popularity not only from its interest in science, but even more from the fact that it closely paralleled the work being done in the field of psychic research.²⁸ Although Theosophy and psychic research had fundamental differences, they had enough in common to have an overlapping appeal. Growing out of the nineteenth century's fascination with spiritualism, psychic research was an attempt to verify by objective, empirical standards the existence of an incorporeal reality. From the outbreak of World War I until the late 1930s, psychic research had a large audience which included a cross-section of the North American public. It was attractive to the scientific and lay communities alike, and there was an enormous groundswell of interest in psychic events. Seances were a popular pastime, mediums thrived, and many instances of automatic writing, spirit photography, and levitation were reported.

Because Theosophy's teachings were supposedly open to empirical demonstration, they were frequently identified with the activities of psychic research. Both Theosophy and psychic research sought to expand the limits of the natural world and redefine the rational. Both made claims on invisible reality by demonstrating the affinity between mind and matter. Both claimed their findings were "scientific." For many people, Theosophy and psychic research represented an attractive example of collaboration between science and religion.²⁹

One reason why Macdonald was drawn to Theosophy was the latter's claim that the hidden order of reality was accessible through intuition. It could be

observed and represented. It was not just metaphor but fact. Theosophy's emphasis on the visualization of a supernal realm understandably attracted artists. Macdonald, in his wish to discover the hidden laws and forces of Nature and his interest in how these inform the physical world we experience, adapted theosophical concepts to his own ideas and experience with Nature. In this way the vitalistic attitude towards organic form, first expressed in In the White Forest of 1932, was, by 1935, integrated with new spiritual content.³⁰

Most significantly, Macdonald associated the investigation of an invisible reality directly with the efforts of modern artists. He wrote:

The new art of today express[es]...the 4th dimensional space concept. This is first found in the work of Cezanne...Cezanne felt 4th Dimensional Space intuitively--before it became the conscious thoughts of Philosophers and Scientists. The expression of the new art cannot help itself evolving--it is the art which is the conscious expression of our time.³¹

In his mind Theosophy, scientific discovery and modern art were efforts in the same direction: they all represented imaginative insight into the essential reality. To Macdonald, "modern" was less a temporal designation than a qualitative one. It could mean a return to the wisdom of the past, or represent the latest scientific discoveries. As the occultists claimed, science was simply finding the mechanical means to perform what clairvoyants have been able to do for centuries--triumph over time and space.

Although, as will be seen, Macdonald's paintings contain specific analogies with theosophical concepts and although echoes of the occult can be found in his correspondence and unpublished writings, there is no extended or explicit

discussion of the subject. Macdonald was generally secretive about his interest in the occult.³² Nonetheless, allusions to Theosophy are found in his lecture notes, as he wrote around 1940:

Pure creative thought knows not chaos, only the material side of life can become chaotic. The creative geniuses of today, whose consciousness has advanced to concepts of the 4th dimension of thought, carry the torch of a new understanding together with the Philosophers and Scientists.³³

Allusions to Theosophy are also made in an article he wrote reflecting on his trip to the 1950 Canadian International Seminar at Breda, which states:

The creative artist's duty is to convey new reflections about life which the masses have not yet become aware of and it should be understood that the conscious level of the creative artist is above the conscious level of the masses.³⁴

This was Theosophy's boast--that it held within its teachings the secrets of those who are the most spiritually advanced, and "the secrets" which are at long last being shared with mankind. These quotes reveal how closely Theosophy and modern art were identified in the Macdonald's mind.

In other of his writings--specifically, in letters to H.O. McCurry at the National Gallery of Canada in 1938 and 1943--Macdonald articulated his goals:

expressions of thought in relation to Nature"...considered by Kant to relate to creative expressions which could not be said to relate to Nature (objectively); nor relate to abstract thoughts (subjectively) about Nature, but rather included both expressions.³⁵

This statement corresponds to a passage in *Thought Forms* (1901) where Theosophists Annie Besant (1847-1933) and Charles Leadbeater (1847-1934) discuss the painter's role as being to "put in space" his mental image.³⁶ By

referring to his works as "expression of thought," Macdonald was alluding to the theosophical concept of a receptive consciousness which can receive messages--thought waves--from the mental body. He is referring to experience unmediated by intellectual observation, which has always been the mystic's quest. Thus, Macdonald assimilated occult ideas directly into his artistic theory. These ideas did not necessarily provide him with artistic solutions, but they did offer a meaningful idealism on which to base his art.

It should be noted that, corresponding to Theosophy's use of the visible to affirm the invisible, the "Modalities" are good examples of how Macdonald integrated scientific fact with his mystical perception of the world (see Chapter 2). The relation between his art and Theosophy is, however, much more fundamental. The themes, imagery and pictorial structure characterizing his work during the period of the "Modalities" all have their origins in the occult. If the "Modalities" are compared with Macdonald's earlier efforts, for example, it quickly becomes apparent that there has been a decided switch in perspective--one which is pictorial as well as philosophical. Small fragments of Nature are examined closely and enlarged to reveal the harmonies and rhythmic proportions in organic form. In Pacific Ocean Experience (c.1935) (fig. 13), Macdonald shifts the view from the microcosm to the macrocosm by adopting a God's-eye view of the world and renders Nature as a philosophic abstraction, devoid of detail and the particularities of place. Correspondingly, a fragment of Nature has been represented in The Wave (1939) (fig. 11) without any surrounding context, and all references to time

or place have been eliminated. There are no clues to indicate how far the viewer should stand from the subject. The composition is radically simplified, consisting only of sand and water, and its perspective is unclear. Space has been flattened by the use of a diagonal division of the canvas. Through the use of this vantage point, Macdonald was able to introduce a sense of space and a sense of motion. In his "Modalities," he thus rendered Nature in a highly stylized way so as to endow the composition with symbolic import, and in its most primal elements. These paintings are statements in which Nature is reduced to its most primal elements of earth, water, air and fire. The elements and seasons are represented in works such as Rain (1938) (fig. 5), Pacific Ocean Experience (fig. 13), and The Wave (fig 11). The seasons also are represented by Winter (1938) (fig. 6), Fall (Modality 16) (1937) (fig. 9), Spring Awakening (c.1938) (fig. 10) and Birth of Spring (1939) (fig. 7). Birth of Spring and Spring Awakening recall to mind the work of God in Genesis. The end result is that Nature is rendered so as to show all its immensity, as an impersonal force whose laws and meanings transcend human life.

Departing Day (fig. 4) is one of Macdonald's examples of the use of solar imagery. The sun, comprising concentric bands of expansive, alternating colour, appears above two intersecting spheres from which dust-like particles emanate, thereby connecting the celestial and terrestrial realms. Although the conjunction of abstract shapes in this canvas confounds a literal reading, the composition is illumined by another passage in *The Secret Doctrine* which describes the creation

of the material universe: "The Central Sun Fohat [cosmic electricity] to collect primordial dust in the form of balls, to impel them to move in converging lines and finally to approach each other and aggregate."³⁷ Because of the bold simplicity of the composition, Departing Day (fig. 4) is not literary, although the textual source provides it with an enlarged frame of reference, a means to imbue physical reality with cosmic dimension.

The idea of a magnetic attraction between heaven and earth was given pictorial form in May Morning (fig. 12). Again the sun is represented by radiating bands of vital force which flows earthward a stream of lava. It is an idea fundamental to occultism as presented again in *The Secret Doctrine* in a section called "sun force/earth force": "the Sun is the storehouse of Vital Force, which is the Noumenon of Electricity;...it is from its mysterious, never-to-be fathomed depth, that issue those life currents which thrill through Space, as through the organisms of every living thing on Earth."³⁸

Despite the almost naive simplicity of these paintings, the direction Macdonald pursued in them is important to his later development; the themes of primal purity and mythic import are ones with which he remained consistently preoccupied throughout his career. Thus, the "Modalities" represent a transitional phase in which Macdonald consciously began to redefine his artistic purpose. His friendships with Varley, Vanderpant and Täuber, and his immersion in idealistic philosophy, contributed to the enlarged vision of these works and the experimentation with form and space. It is against this background that the

paintings of the artist's later career should be appraised.

Macdonald also endowed the element of space with mystical import in the "Modalities," and this too reflects the impact of Theosophy. Moreover, the various ways in which Macdonald structured the space of his art distinguish the major stylistic shifts in his oeuvre and are an important indicator of his broader intellectual concerns. In Chapter 2, his treatment of pictorial space was discussed in relation to the contemporary interest in force fields and Einstein's physics; the organization of pictorial space in several of his "Modalities" was discussed as an expression of Nature's invisible energies. In addition, however, according to Theosophy the whole universe is a continuous medium of energy manifested as vibrations which organize themselves as mind and matter. These vibrations account for all forms in the natural world and are a defining characteristic of the transcendental realm as well. Ultimately they signify a cosmic principle whose effects on all life are pervasive. Drawn from esoteric Indian teachings, this concept of the vibrating cosmos was of central importance in occult thought because it represented a physical link between the macrocosm and microcosm and provided the unitary basis by which all dualisms could be dissolved. This belief is one example of how Theosophy appeared to be in perfect accord with the contemporary physics which contended that the essential reality of Nature consists of waves in motion. As Annie Besant wrote:

There is one key word, vibration, which is becoming more and more the keynote of western science, as it has been that of the east, Motion is the root of all. Life is motion. Consciousness is motion. And that motion affecting matter is vibration.... So again in physical

Nature, we mark off different ranges of vibration by different names, calling one set light, another heat, another electricity, another sound, and so on, and yet all are of the same nature, all are modes of motion in ether, though they differ in rates of velocity and in the character of the waves.³⁹

Thus, to Theosophy, it was not only physical, but psychic phenomena--thoughts and feelings--which manifest themselves as radiating vibrations. Precepts such as this were empirically verified in *Thought Forms* by illustrations such as E.F.F. Chladni's sound plates.

For Macdonald, the concept of a vibrating cosmos suggested a means to envision the invisible energies in Nature. It also provided a meeting ground for a scientific and a mystical view of reality. Macdonald's first "Modality," Formative Colour Activity (fig. 8), uses vibrations as a pictorial device. The image, suggesting flowers, extends visually beyond the border, leaving no sense of surrounding space. Motion is suggested by progressive curves. The visual complexity of Nature is reduced to a single form and a few colours to suggest its inherent order and procreative energy. By eliminating the clear division between figure and ground, Macdonald dramatized his own emphatic response and effaced the separation between subject and object.

In Formative Colour Activity shapes which spiral out from the centre imply progression from point to line to plane, a dimensional movement into higher space, thus making this composition analogous to the principles of Jay Hambidge's "Dynamic Symmetry"--a design philosophy Macdonald championed.⁴⁰ Epitomizing the century-long romance with the concept of numerical

correspondences between Nature and art, Hambidge's philosophy went beyond the scientific level in connection with which it was discussed in Chapter 2, to demonstrate how the mystical proportions of the spiral can be adapted from a curvilinear configuration to a rectilinear one, thus becoming directly applicable to the two-dimensional format of a canvas or board. Hambidge also recommended using a diagonal axis to make the composition dynamic, like Nature, and to approximate the laws of natural growth.⁴¹

For Macdonald, Hambidge, Adolpho-Best Maugard and other writers on art provided a unified knowledge or a holistic conception of art and Nature which had the rigor of science and the verity of mathematics. Their teleological world view was one which Macdonald found useful because it articulated his own mystic faith in the unity of life.

The Fourth Dimension

In Macdonald's understanding of space, the fourth dimension played an important role. Greatly discussed in his cultural milieu, this concept was not only important in the realm of higher mathematics and physics (see Chapter 2), but held philosophical and mystical associations as well. Though the fourth dimension was originally dismissed by Madame Blavatsky, it later acquired occult import in the writings of other Theosophists.

Although Richard Maurice Bucke was probably the most eloquent spokesman in Canada on the mystical meanings of higher space, the most potent

stimuli for Macdonald were the writings of the Russian mathematician and mystic P.D. Ouspensky. Ouspensky, like Bucke, Bragdon, Hinton and other writers on the fourth dimension, believed the mathematical construction of the fourth dimension was empirical proof of an unseen, spiritual reality. This idea, and others, often parallel Macdonald's, and therefore it is necessary to summarize them briefly. In *Tertium Organum: The Third Canon of Thought* (1920) and *A New Model of the Universe* (1931), Ouspensky contended that there is no difference between physical and psychical reality. He located this transcendental order within the natural world, and believed that organic growth is one of its most comprehensible and extra-ordinarily interesting diagrams of the fourth dimension. By the time that Ouspensky wrote these works, his belief in the fourth dimension had been corroborated by the important role it played in Einstein's physics. He expropriated the scientific application of his concept to suggest how modern science, in perfect agreement with the occult, refutes a materialist view of reality. To encompass these various applications, Ouspensky, Bragdon and Hinton viewed the fourth dimension as a designation of consciousness--a way for the mind to transcend the limits of mundane vision and comprehend infinity. Ouspensky's book *Tertium Organum* provided a means for people to achieve this higher consciousness.⁴² Bragdon more succinct than Ouspensky, defined this consciousness:

The idea of hyperdimensionality provides the mind with a conception by means of which it is enabled to establish so clear and definite a relation between the perceived part of the world and the transcendental.... By the application of these analogies to our human

predicament, we are enabled to glimpse a world-order which resolves all paradoxes and reconciles all contradictions, relating in a logical unbroken sequence, the visible to the invisible, the "real" to the ideal, time to eternity, the self to the Self, the moth to the star.⁴³

A host of texts on the fourth dimension appeared in magazines such as *Popular Science* and *Harper's Weekly*, prior to the important definition of the fourth dimension given by the artist Max Weber (1881-1961) in his article "The Fourth Dimension From A Plastic Point of View" of 1910.⁴⁴ He wrote:

In plastic art, I believe, there is a fourth dimension which may be described as the... consciousness of great and overwhelming sense of space-magnitude in all directions at one time, and is brought into existence through the three known measurements....It is the immensity of all things. It is the ideal measurement....

...The ideal dimension is dependent for its existence upon the three material dimensions, and is created entirely through plastic means, colored and constructed matter in space and light. Life and its visions can only be realized and made possible through matter....Even thought is matter. It is all the matter of things, real things or earth or matter.⁴⁵

A crucial aspect of these definitions is that for Ouspensky, Bragdon and Weber, the fourth dimension was conceived as a way of seeing in which Nature and spirit coexist.

The problem Macdonald faced, then, as a painter, was how to employ fourth-dimensional seeing in his art, how to unveil the ideal in the real, and how to endow the physical world with transcendental value. To this end, he relied on the animation of the picture surface, and on iconographic imagery similar to that found or described in theosophical texts to aid his exploration in painting abstract pictorial space. The idea of a higher space is invoked by allowing his imagery to

visually extend beyond the margins of the picture frame. In this way, Macdonald endowed his depictions of the world with portentous import.

In Etheric Form (1935) (fig. 3) and Departing Day (1935) (fig. 4), the celestial orbs, not anchored to the frame at any point, seem to float with the immensity of the universe. In depicting the fourth dimension, Macdonald suggests the dimension of infinity or the immensity of all things by using only a few large pictorial elements in relation to the frame. By employing this technique in these works and in others such as Rain (1938) (fig. 5), The Wave (1939) (fig. 11) and May Morning (c.1935) (fig. 12), Macdonald endows these relatively small works with the appearance of imposing dimensions. Further, the circular form used in these works was the primary form, which Kandinsky considered to indicate most clearly the fourth dimension.⁴⁶

As a link between physics and metaphysics, the fourth dimension provided Macdonald with the means to reconcile scientific knowledge with spiritual insight--fact with value. Whereas the fourth dimension prompted artists of the generation before him such as Piet Mondrian and Kasimir Malevich to transcend the physical world and formulate an abstract pictorial idiom, it inspired Macdonald, following the tradition of certain members of the Group of Seven, to suggest the supernatural in the natural, the ideal in the real. His mysticism was not rarefied and otherworldly, but was tempered by native pragmatism and grounded in a love of Nature.

Synesthesia

The mystical content in Macdonald's "Modalities" is so thoroughly assimilated in the Nature motifs, that it cannot always be isolated as a discrete element in his paintings. This is especially apparent in those works where he employed the concept of synesthesia--the analogy between art forms or between faculties of their perception. Though synesthesia was the logical consequence of the theosophical world view, it was hardly original to it. Pythagoras understood that:

the music of the spheres implied cosmic fusion: that the universe embodies a divine geometrical harmony that is mirrored in all natural phenomena, both in the microcosm and macrocosm.... The bases of these correspondences are mathematically precise vibrations that are manifested as light, sound, fragrance, and other sensual stimuli. Fusing one's perception of these seemingly discrete sensory inputs constitutes synesthesia, which Pythagoras considered to be the greatest philosophical gift and spiritual achievement because it ultimately reconciled the illusory quotidian world with the authentic world of universal, enduring, abstract concepts.⁴⁷

Synesthesia also had a long tradition in occultism. Evidencing as it does the Hermetic Renaissance, synesthesia was revived in the eighteenth century by Emanuel Swedenborg (1688-1772) and Jakob Boehme (1575-1624) and became an integral part of Romanticism. Within this tradition, the experience suggested that the universe is a storehouse of correspondences and analogies, horizontal and vertical, and it was believed that it was the role of the artist to perceive these as a way of drawing on the source from which all life springs. In 1857, synesthesia was given one of its most influential artistic expressions by Charles

Baudelaire (1821-1867). In his sonnet "Correspondences," the data of the various senses--colours, scents, sounds, and textures--are poetically analogized, expressing his belief that everything in the natural world as well as the spiritual is reciprocal because it is all derived from "the universal analogy."⁴⁸

Synesthesia, especially "coloured audition," became a characteristic preoccupation of the Symbolists, and received musical, poetic, and artistic expression throughout the nineteenth and early twentieth centuries.⁴⁹ Characteristic of its manifestation were Richard Wagner's (1813-1883) "Gesamtkunstwerk" (universal art work), A.W. Rimington's sound and light machine, Oskar Fischinger's (1900-1967) films, and James Abbott McNeill Whistler's (1834-1903) "Symphonies," "Nocturnes" and "Rhapsodies."⁵⁰ In Canada, it was manifested in Bertram Brooker's music-inspired paintings. Thus, while synesthesia has its roots in occultism, it had in the early decades of this century a popular and artistic currency quite apart from the occult.⁵¹

In Theosophy, synesthesia extends well beyond the "interart" analogy and becomes a part of that larger correspondence pervasive in the world. It is not merely a physical experience but a metaphysical one in which the arbitrary, illusory distinctions between mind and matter, self and world, sight and sound are magically dissolved. To Madame Blavatsky, "sounds and colours are all spiritual numbers...radiations of the Unity, the central, spiritual sun."⁵² In *Thought Forms*, Annie Besant and Charles Leadbeater illustrated how music engenders configurations of coloured forms which characterize the emotional content of the

work.⁵³ Some theosophists devised elaborate charts correlating the colours with musical keys, attempting the literal translation of one faculty to another. Macdonald's interest in synesthesia probably was inspired by Täuber, who enthusiastically talked of the "colour music" produced by sound and light machines or "colour organs."⁵⁴

The real purpose for the music and art analogy was to elucidate the point of correspondence underlying them both. Synesthesia represents an experience in which it is possible, however briefly, to transcend a prosaic reality in which relations are neatly compartmentalized. Like the fourth dimension, it offers an escape from fixed feelings and finite limitations, through imaginative perception. Thus, Macdonald's interest in synesthesia probably was derived from a need to see behind physical experience, to reach its metaphysical root.

Only one direct reference is made to synesthesia in Macdonald's notes. In "Colour III (C)" (c.1932), he cites Kandinsky's declaration that, "if a musician can weave melodies without reference to natural sounds, the artist can construct colour harmonies without reference to natural forms."⁵⁵ In addition, the "musicales" held at the Vanderpant Galleries were an early vehicle for stimulus and enlightenment which was carried through at the British Columbia College of Arts. The College united under one roof all the arts where jazz and other music was played with the idea that music could be translated into something for the eye.⁵⁶

Macdonald's interest in synesthesia in the paintings of this period seem to have been motivated solely by his wish to create enduring abstract imagery which

evokes the underlying affinity between the microcosm and the macrocosm. In The Wave (1939) (fig. 11) and in Rain (1938) (fig. 5), he created representations of the reconciliation of opposites, the divine union between the eternal and the earthly.⁵⁷ By representing the resounding crashing of the wave and water in The Wave, and of the cracking sound of thunder and bright flashes of lightning in Rain, Macdonald was representing symbols of heavenly union, of the male/female principles of the universe which suggest the coming together of opposites--a symbol which Madame Blavatsky incorporated into her version of cosmogenesis. At the same time, these works are orchestrated images of the forces of nature. While rushing water, crashing waves, air and sand converge in The Wave, electrically charged clouds, peals of thunder and charged etheric space are joined in Rain. These paintings give the viewer the sense of the dynamic interplay of the primal elements and are at once representations of the synesthesia inherent in the forces of nature. Space no longer is the arena in which things happen but is identical with the image of sound activity. Rendered imaginatively, these works dramatize the ephemerality of a moment of unified being in which the senses come together. In this way, synesthesia represents an experience in which it is possible, however briefly, to transcend prosaic reality in which relations are compartmentalized. Like the fourth dimension, it offers an escape from fixed feelings and finite limitations through imaginative perception. Without any contrivance, these works conjoin sight and sound, form and feeling, line and circle, sense and Nature into an imaginative whole. Whatever the immediate source of inspiration for these "Modalities," it is

clear that Macdonald's vision of Nature is rooted in an ideological tradition which is at once Romantic and occult.

Theosophy as Instrument

Though many of the theoretical, thematic, and formal aspects of Macdonald's art have their origins in occultism, it is important to emphasize that he was not painting solely to illustrate theosophical truths. He was striving to give visual expression to his own intuitive and innately mystical apprehension of the world. He used Theosophy as a departure for the interpretation of Nature; like most Romantics, Macdonald believed in the gnostic function of art. The problem he faced as a painter was how to invest pictorial form with ineffable content, and how to envision the invisible: how to make the inner reality known. He had to determine the means which would give the elusive spiritual force perceptible form and endow his art with the power of revelation and illumination. Theosophy was thus useful to him as a instrument, not as an end. It was a means by which Nature could be celebrated as something sacred. It was a way to reinvest the world with wonder. To this end, Macdonald used celestial and cosmogonic imagery, archetypal organic forms, symbols of vitality and regeneration, and complex surface patterns and spatial structures. Ultimately, the purpose of his highly personal abstract expressions was to restore knowledge of that eternal correspondence between the visible and the invisible and, make it felt.

NOTES - CHAPTER 3

1. Jock Macdonald, "Colour Notes," (c. 1932), handwritten notes. Collection of Marilyn Westlake, Toronto.
2. Examples of these works are: Joseph Needham's: essay "Mechanistic Biology and the Religious Consciousness," in *Science, Religion and Reality* (1925) and his book on Morphogenesis *Order and Life*; Bertrand Russell's books: *An Inquiry Into Meaning and Truth* (1940), *Mysticism and Logic, and Other Essays* (1918) and *Religion and Science* (1935); and Havelock Ellis' book *The New Spirit* (1926).
3. Havelock Ellis, *The Dance of Life* (Boston: Houghton Mifflin, 1923): 209.
4. Sheldon Cheney, *Expressionism in Art* (New York: Liveright Publishing, 1934): 100.
5. Jock Macdonald, "Art in Relation to Nature," handwritten lecture notes. Collection of Marilyn Westlake, Toronto.
6. Jock Macdonald, "Science and the Infinite (Sydney Klein)," handwritten notes. Collection of Marilyn Westlake, Toronto. Macdonald probably excerpted these notes from, Sydney Turner Klein, *Science and the Infinite: or, Through a Window in the Blank Wall* (London: William Rider, 1912) which was in its fourth edition in 1929. Other popular titles by Sydney Klein (1853-?) include, *From the Watchtower; or, Spiritual Discernment* (1918), *The Way of Attainment* (1924) and *The Garden of Enchantment* (1929).
7. For the inroads Transcendentalism made in Canada, see: Ann Davis, *The Logic of Ecstasy* (London: London Regional Art Gallery, 1989). See also: Michele Lacombe, "Theosophy and the Canadian Idealist Tradition: A Preliminary Exploration," *Journal of Canadian Studies* XVII (Summer 1982): 100-117; and Linda Dalrymple Henderson, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art* (Princeton: Princeton University Press): 179.
8. Arthur Christy, *The Orient in American Transcendentalism* (New York: John Day, 1945): 38-43.
9. Percival Lowell, *Soul of the Far East* (Boston: Houghton, Mifflin and Co. 1896); and Edwin Arnold, *Light of Asia* (London: John Lane, 1926).
10. Marianne W. Martin, "Some American Contributions to Early Twentieth Century Abstraction," *Arts* 54 (June 1980): 8-14.

11. Ibid.
12. Christopher Varley, *F.H. Varley* (Edmonton: Edmonton Art Gallery, 1981): 20, fn. 178; 94.
13. Frederick H. Varley to H.O. McCurry, 16 April 1934. National Gallery of Canada, Ottawa. Archives. 7.1 Frederick Horsman Varley.
14. "Fourth Dimension Sight: How Man's Consciousness Develops," *Vancouver Sun* (1 April 1935): 10.
15. For example Franz Johnston took great exception to the non-representational art exhibited by the Société Anonym in Toronto in 1927. See, Franz Johnston, "Modern Art and Aesthetic Reactions: An Objection," *Canadian Forum* VI, (80) (May 1927): 241-242.
16. Wassily Kandinsky, *Concerning the Spiritual in Art* (New York: Wittenborn Schulz, 1947): 13. Macdonald makes reference to Kandinsky in his "Colour Notes," of c.1932. See, "Colour Notes," op. cit.
17. Best-Maugard refers his reader to Claude Bragdon's works. See, Adolpho Best-Maugard, *A Method For Creative Design* (New York: Knopf, 1926): 155.
18. Sheldon Cheney, op. cit.: 321.
19. Bertram Brooker, "When We Awake," *Yearbook of the Arts in Canada 1928-1929* (Toronto: MacMillan, 1929): 16. Jack Shadbolt recalls that he brought the yearbook to the Vancouver School of Decorative and Applied Arts summer art colony at Hornby Island in 1931 which was run by Macdonald. Joyce Zemans, *The Inner Landscape* (Toronto: Art Gallery of Ontario, 1981): 45, fn. 16, 250.
20. Lawren Harris, "Theosophy and Art, Part I," *Canadian Theosophist* 14 (5) (July 1933) and "Theosophy and Art, Part II" *Canadian Theosophist* 14 (6) (August, 1933). The premise that Annie Charlotte Dalton introduced Macdonald to Lawren Harris' work and writing, as indicated by Zemans, is not likely as Dalton was deaf and a mute and all business transactions, etc. were carried out by her husband, Willie Dalton. See, Zemans, op. cit.: 29-30. Nevertheless, Macdonald could have known Harris' paintings, including Mountain Forms, during this period by viewing them in popular magazines between 1927 and 1930. See the Canadian Periodical Index 1920-1937 (Ottawa: Canadian Library Association, 1988): 294.
21. Christopher Varley, *F.H. Varley* op. cit.: 78-128. See also, Ann Davis, *The Logic of Ecstasy: Canadian Mystical Painting 1920-1940* (London: London Regional Art and Historical Museums, 1989). For a discussion of how

mysticism was popular amongst Macdonald's circle see, Ann Pollock and Dennis Reid, *Jock Macdonald Retrospective Exhibition* (Ottawa: The National Gallery of Canada, 1969-70). For a general discussion of how mysticism was popular among Vancouver artists of the period see, Lorna Farrell-Ward, "Tradition/Transition: The Keys to Change," *Vancouver: Art and Artists 1931-1983* (Vancouver: Vancouver Art Gallery, 1983).

22. Beatrice Lennie: Interview with Ann Pollock, 30 December 1968. National Gallery of Canada, Ottawa. Archives. Audio and Visual Box 11.

23. R. Laurence Moore, *In Search of White Crows* (New York: Oxford University Press, 1977): 232.

24. Blavatsky also predicted that in some point in the twentieth century her writings would replace scientific texts in schools. Madame Blavatsky, *Isis Unveiled*, Vol. I (Pasadena: Theosophical University Press, 1877).

25. The Theosophical Society moved its headquarters from New York to India in 1879. From the 1880s on, the society attained notable popularity in England, in the United States and Canada, and in India. After Madame Blavatsky died in 1891, the second generation leaders, Annie Besant and Charles W. Leadbeater extended the society's activities to promote the young Hindu boy Krishnamurti as the human vehicle in whom "Maiterya," the coming "World Teacher" or "Buddha," would be manifested. However, with Krishnamurti's repudiation of this role in 1929 and the deaths of Besant and Leadbeater a few years later, the society declined in influence.

26. See, J. Stillson Judah, *The History and Philosophy of Metaphysical Movements in America* (Philadelphia: The Westminster Press, 1967); Robert Ellwood, *Religious and Spiritual Groups in Modern America* (Englewood, New Jersey: Prentice Hall, 1973): 88-100; and Bruce Campbell, *Ancient Wisdom Revised: A History of the Theosophical Movement in America* (Berkeley: University of California, 1980).

27. Ann Davis, *The Logic of Ecstasy: Canadian Mystical Painting 1920-1940*, op. cit.: 47.

28. See, Janet Oppenheim, *The Other World: Spiritualism and Psychical Research in England, 1850-1914* (London: Cambridge University Press, 1985): 85-159; and Laurence R. Moore, *In Search of White Crows*, op. cit.: 221-243.

29. Laurence R. Moore, *Ibid.*

30. In the White Forest is reproduced in Zemans' *The Inner Landscape*, op. cit.: 41. This work forms part of the collection of the Art Gallery of Ontario.

31. Jock Macdonald, "Art in Relation to Nature," op. cit.
32. In January 1937, Macdonald wrote to John Varley, "I am keeping my own thoughts on experimental work entirely to myself at present." Only later, in 1938, did his Modalities become known outside a small circle of friends. See, Jock Macdonald to John Varley, 19 January 1937, transcribed copy of the original letter on deposit at the Burnaby Art Gallery.
33. Jock Macdonald, "Art in Relation to Nature," op. cit.
34. Jock Macdonald, "Reflections on a trip to the Canadian International Seminar in Breda," *Highlights* 9 (1) (March 1950): 6. Cited in Zemans, op. cit.: 43; 250, fn. 9.
35. Jock Macdonald to H.O. McCurry, 22 July 1938. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.
36. Annie Besant and C.W. Leadbeater, *Thought Forms* (Adyar, Madras: The Theosophical Publications, 1952): 37.
37. *Ibid.*, Vol. 1: 201.
38. *Ibid.*, Vol. 1: 64.
39. Annie Besant, *Thought-Power* (Los Angeles: Theosophical House, 1918): 13; 17.
40. Jock Macdonald, "Art in Relation to Nature," op. cit.
41. Jay Hambidge, *The Elements of Dynamic Symmetry* (New York: Dover Publications, 1967).
42. P.D. Ouspensky, *In Search of the Miraculous: Fragments of an Unknown Teaching* (San Diego: Harcourt Brace Jovanovich, 1949): 116.
43. Claude Bragdon, *The New Image* (New York: Knopf, 1928): 158.
44. Linda Dalrymple Henderson, "Mysticism, Romanticism, and the Fourth Dimension," in *The Spiritual in Art: Abstract Painting 1890-1985* (New York: Abbeville Press, 1986): 224.
45. *Ibid.*
46. Rose-Carol Washton Long, "Expressionism, Abstraction, and the Search for Utopia in German," *The Spiritual in Art: Abstract Painting 1890-1985*: 214.

47. William Moritz, "Abstract Film and Color Music," *The Spiritual in Art: Abstract Painting 1890-1985*: 297.
48. See, Frank Kermode, *Romantic Image* (London: Routledge and Kegan Paul, 1957): 112.
49. Maurice Tuchman, "The Hidden Meanings in Abstract Art," *The Spiritual in Art: Abstract Painting 1890-1985*, op. cit.: 20, 24, 32.
50. Arthur Jerome Eddy, "Color Music," *Cubists and Post-Impressionism* (Chicago: A.D. McClurg & Co., 1914): 140-147.
51. See, Howard Risatti, "Music and the Development of Abstraction in America," *Art Journal* 39 (Fall 1979): 8-13. See also, Charles Eldredge, *The American Imagination and Symbolist Painting* (New York: New York University Press, 1979) for a general discussion of the revived interest in synesthesia in America.
52. Helena Petrovna Blavatsky, *Isis Unveiled: A Master-Key to the Mysteries of Ancient and Modern Science and Theology*. Vol. I. (Pasadena: Theosophical University Press, 1960): 514.
53. The last chapter of this book is entitled, "Forms Built by Music." See, Annie Besant and Charles Leadbeater, *Thought Forms* op. cit.
54. Beatrice Lennie: Interview with Ann Pollock, op. cit.
55. Jock Macdonald, "Colour Notes," op.cit.
56. Beatrice Lennie: Interview with Ann Pollock, op. cit. and Paul Goranson: Interview with the author, July 1990.
57. John Vanderpant, named one of Macdonald's Modalities "The Song of the Sea," probably Pacific Ocean Experience or The Wave. See, Jock Macdonald to John Varley, 19 January 1937. Burnaby Art Gallery.

CONCLUSION

To find a pictorial language which could encompass his idealistic vision of life and be, as well, aesthetically satisfying, humanly moving, and sympathetic to the artistic situation in which he worked--this was Macdonald's quest. He identified wholly with modernism as a cause, viewing it as a means of embodying in his art "a new awakening consciousness" while invoking the timeless order of things.¹ Grounded in the most important intellectual and artistic issues of the period, Macdonald's "Modalities" are an idiosyncratic fusion of diverse stimuli which he adapted to the needs of his personal vision.

On a purely formal level, Macdonald's "Modalities" are characterized by formal simplicity. Yet, they also render visible cosmogonic visions. Characteristically both Romantic and Modern, it is a vision analogous to his European forebears' interest in reaching life at its least conditioned point. Returning to a work discussed piecemeal in previous chapters, Pacific Ocean Experience (fig. 13) reveals this synthesis and adaptation, demonstrating how Macdonald's thematic and stylistic concerns coalesced in a single painting.

Inspired by theosophical literature, Macdonald's "Modalities" present Nature's primal elements--water and air. The sea as painted from a God's-eye view in Pacific Ocean Experience lets the viewer experience these elements at once. The powerful centripetal spiral of the sea, which comprises the dominant aspect of this work's composition, is an organic form which carried for Macdonald universal symbolic meaning. The geometric proportions of the spiral attest to

Nature's laws of harmonic growth and suggest Theosophy's dualistic cosmogony-- the earthly and the eternal aspects of life, the noumena and phenomena of the world. By using the God's-eye view, the hermetic bond between the celestial and terrestrial realms is made visible. The enormous size of the single dominant form of the spiral gives the image frontality and reinforces the sense of its charged potency. Because of the radiating movement, the space seems to continue beyond the frame into infinity, and thus suggests modern physics' concept of Nature as a continual field of energy which is radiated in different concentrations as matter and space. This device also invokes the fourth dimension. As the interface between physics and metaphysics, the fourth dimension was a concept which Macdonald used to reconcile his attraction to science and his need to believe in a transcendental reality. It also inspired him to imbue his work with dynamic spatial presence.

Although the "Modalities" correspond to passages of theosophical literature, they are not "literary" in any way. Because they deny a fixed meaning, the forms and their associative values are completely intelligible within the pictorial context. They are large and close to the surface, giving the composition the impact of sudden conflation of multiple influences. The paintings are distinctively Macdonald's in the way they have been located in the context of Nature.

Heir to the Romantic tradition, Macdonald accepted the gnostic function of art while he grappled with the possibilities of abstraction. Although a pioneering member of Canada's first vanguard, Macdonald still had one foot in the nineteenth

century. Relying on form to convey content, he was, like many artists of this tradition, an iconographer. He adhered to the symbolic image as a way to insure that his art, though abstract and highly personal, still had the power to communicate. However, his imagery is modern in every sense, vacillating as it does between the poles of Nature and art, visual fact and autonomous form. Like the tradition from which it emerged, his art represents a way of locating meaning in reality without reducing meaning to reality, and a way of structuring reality into art. Abstraction for him was not only a style; it was a strategy, a way of integrating his art with the underlying essence of life. To give his "Modalities" the power of revelation and illumination, it was necessary to distract the viewers' attention from the surface appearances and destroy the mental barriers which kept viewers from seeing the essential reality. Like other first-generation modernists with whom his art shares so much, Macdonald feared that unless his abstractions were grounded in significant ideas which go beyond the realm of art, art itself would suffer a loss of meaning.

Because Macdonald strove to develop an iconography which could encompass his idealistic vision, he did not subordinate his subject matter to the requirements of an overall pictorial structure. With each new painting, he faced the challenge of integrating the Nature motif with the demands of art, never having devised a consistent foundation for the evolution of his style. Every painting was like beginning all over again. His "Modalities," although all different, have a powerful visual presence quite apart from their thematic content and connotative

implications because the imagery is carefully integrated within the picture surface. What they suffer from is the absence of a governing style.

All the conceptual concerns which find expression in Macdonald's "Modalities"--biology and physics, Theosophy, the pictorial inventions of his contemporaries, the fourth dimension and higher space, and the musical paradigm--place his art right on the pulse of contemporary intellectual life. The concurrence of interests among his generation of abstract painters was a shared experience in the social and intellectual milieu. Yet, though Macdonald's "Modalities" are experimental and assimilative--absorbing from his artistic and intellectual environment those ideas which could broaden his own range of thought--they have an implicit coherence and distinctive identity. Dense with metaphor, they address experience on many levels as he was consciously exploring new avenues of expression. Although discussion of Macdonald's later works is beyond the scope of this thesis, it should be noted they manifest the same philosophical vision with new pictorial means. Creatively receptive to new ideas, his art evolved through time to accommodate his changing world view, and the maturation of his personal vision.

NOTES - CONCLUSION

1. Jock Macdonald to H.O. McCurry, 10 May 1943. National Gallery of Canada, Ottawa. Archives. 7.1 J.W.G. Macdonald.

Fig. 1



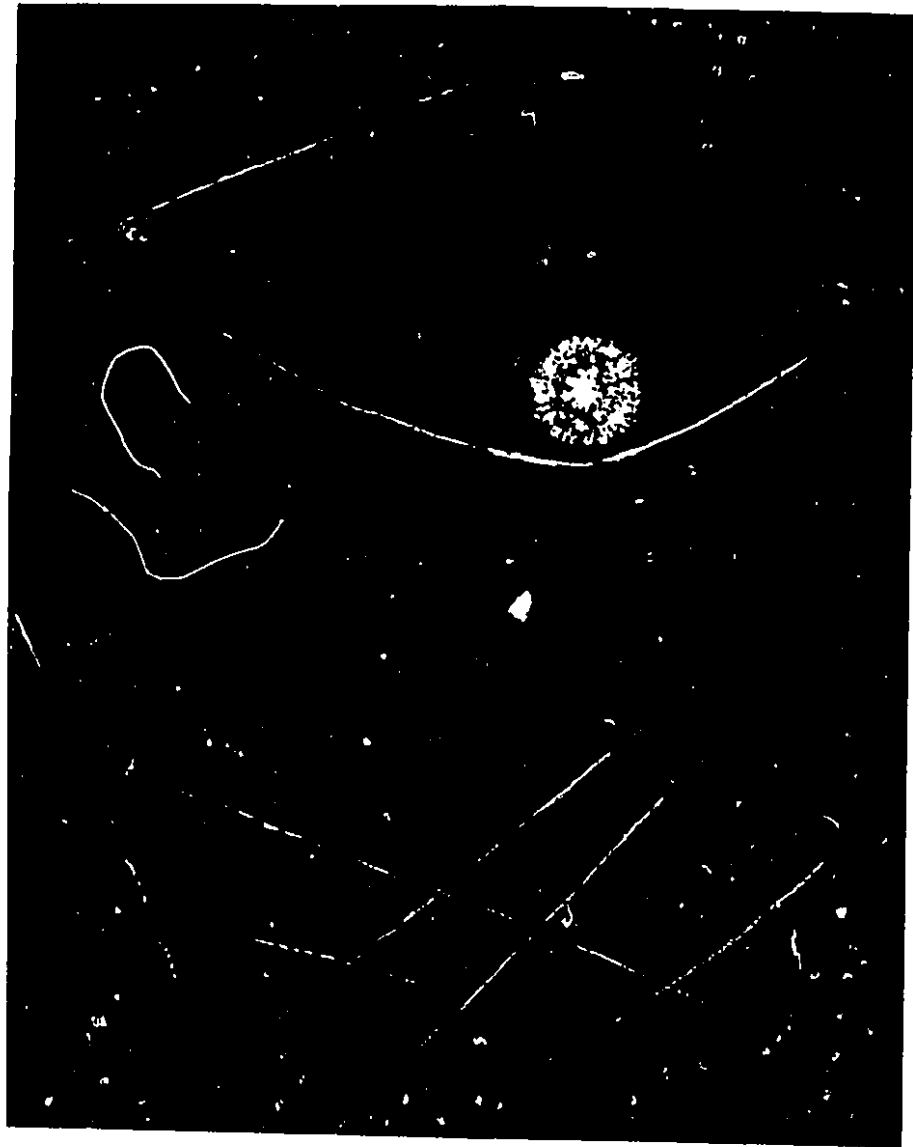
Chrysanthemum, 1938.

Fig. 2



Flight, 1939.

Fig. 3



Etheric Form, 1935.

Fig. 4



Departing Day, 1935.

Fig. 5



Rain, 1938.

Fig. 6



Winter, 1938.

Fig. 7



Birth of Spring, 1939.

Fig. 8



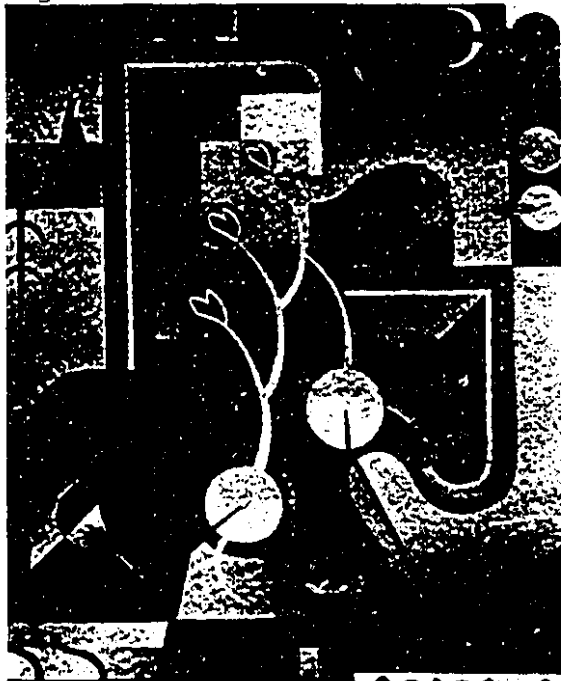
Formative Colour Activity, 1934.

Fig. 9



Fall (Modality 16), 1937.

Fig. 10



Spring Awakening, c. 1937.

Fig. 11



Winter, 1938.

Fig. 12



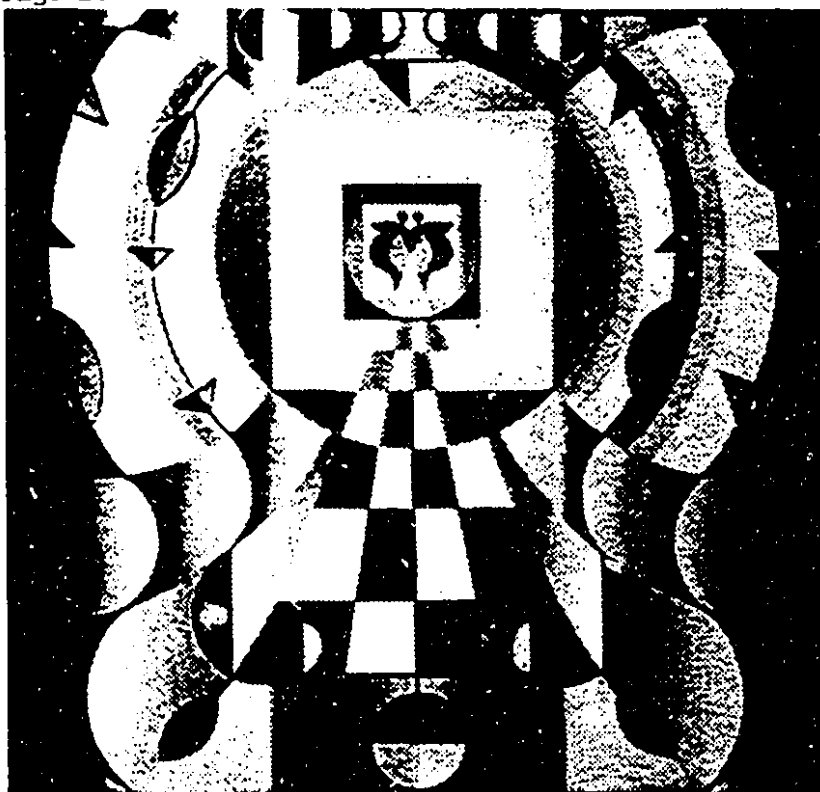
May Morning, c.1935.

Fig. 13



Pacific Ocean Experience, c. 1935.

Fig. 14



Untitled Modality, c. 1938.

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APPENDIX

CHRONOLOGY OF PEOPLE AND EVENTS: 1881-1968

1881

·Frederick Horsman Varley is born in Sheffield, England;

1884

·John Vanderpant is born in Alkmaar, in the Netherlands;

1892

·Varley enters the Sheffield School of Art;

1897

·James Williamson Galloway "Jock" Macdonald is born in Thurso, Scotland;

1900-1902

·Varley studies at the Académie Royale des Beaux-Arts, in Antwerp, Belgium; reads Edwin Arnold's Light of Asia at this time; returns to Sheffield;

1903

·Varley spends 1903-1908 living and working as a commercial illustrator in London, England;

1908

·Varley returns to Sheffield; stays until 1912;

1911

·Vanderpant arrives in Canada;

1912

·Varley arrives in Toronto, Canada;

1913

- Vanderpant settles in Okotoks, Alberta;
- Armoury Show, U.S.; Harry Täuber speaks of this show to his colleagues and students in Vancouver c.1932-1935;

1914-1918

- World War I;
- Macdonald serves as a Lewis Gunner with the 14th Argyle and Sutherland Highlanders in France; wounded 1918;

1916-1917

- Täuber spends two years in the Building and Surveying Section of the Technical School in Vienna and three years at the Vienna School of Arts and Crafts;

1918

- Macdonald enrolls at Edinburgh College of Art in the design program; studies with Charles Paine and John Platt; encounters work by Van Gogh during this period at the Victoria & Albert Museum in London;
- John Vanderpant moves to New Westminster, B.C., becomes an executive member of the B.C. Art League;
- Varley is commissioned to paint for the Canadian War Records (February); sent to Glasgow in March;

1919

- Macdonald is demobilized;
- Vanderpant moves to New Westminster, British Columbia;
- Varley returns to Canada;
- Täuber trains in the Architectural School of Professor [Josef?] Hoffman; trains also under Franz Cizek; studies technical drawing under Dr. Oscar Strnad; Studies "Lettering and Heraldry" under Professor Rudolf von Larisch;

1920

- Vanderpant inaugurates his Photographic Salon, initially included antiques, but soon exhibitions of contemporary art and photography replaced these antiques, becomes international in 1923;
- Varley is demobilized from his commission as one of Canada's official war artists;
- Group of Seven officially become a group;
- Exhibition of the Group of Seven's work is held in Vancouver;

1921

·British Columbia Art League meets for the first time February 3, 1921;

1922

·Macdonald graduates, marries Barbara Niece and begins full-time work at Morton Sundour Fabrics in Carlisle, England, 1922-1925; gains valuable knowledge of colours here;

·Group of Seven are exhibited at the New Westminster Provincial Exhibition; Vanderpant views this exhibit;

·Varley teaches summer courses for the Ontario College of Art;

·Täuber is the Film Scenario Designer for the Allianz Film Co. Ltd. to 1924; Stage Designer at the Imperial "Castle Theatre" and First Choreographic Dance Scenario for Sebastian Droste in the Great Concert Hall, Vienna;

·Bertram Brooker begins to quietly experiment with abstraction;

·Exhibition of the Group of Seven's work in Vancouver;

1923

·Vanderpant organizes the first New Westminster International Salon of Photography;

1924

·Vanderpant addresses Photographers Association of America convention in Milwaukee; visits Chicago; opens new studio in New Westminster;

·Vanderpant is one of the Directors of the British Columbia Arts League 1924-1925;

1925

·Macdonald leaves Sundour's to become the head of design at the Lincoln School of Art in London, England;

·Vanderpant has a solo exhibition at Hotel Vancouver, Vancouver and with the Royal Photographic Society of Great Britain, London; exhibition tours Great Britain;

·Vancouver School of Decorative and Applied Arts opens [VSDAA], with a practical 3 year program;

·Täuber wins Gold medal at the International Exhibition of Decorative Art in Paris; also the Scenario to Choreographic Dances by Thea von Ujj in "Max Reinhardt's Theatre";

1926

- Macdonald becomes the head of design, and instructor of commercial advertising at the Vancouver School of Decorative and Applied Arts [VSDAA];
- Varley arrives from Toronto to take position as head of drawing and painting at VSDAA;
- Macdonald lectures on the "Symbolism in Design," "Colour Theory," and "Art History" during his years teaching at the VSDAA;
- Marius Barbeau gives lecture "The Art of the B.C. Indians" at the University in the fall to advocate fostering a new art spirit among British Columbians which would produce work with the unmistakable imprint of B.C.;
- Adolpho Maugard-Best's A Method For Creative Design is published, passages are transcribed Macdonald's notes c.1932;
- Vanderpant enters into partnership with Harold Mortimer-Lamb to open the "Vanderpant Galleries"; partnership lasts one year; Galleries continued by Vanderpant alone;
- Vanderpant meets Varley and Macdonald through Mortimer-Lamb;
- Vanderpant holds meetings of the B.C. Art League, of the Vancouver Poetry Society at his gallery;
- Vanderpant exhibits Varley's and Charles Scott's work;
- Vanderpant elected Fellow of the Royal Photographic Society;
- B.C. Art League completely renovates its galleries which will later become the new Vancouver Art Gallery;
- Täuber exhibits at the International Exposition of New Theatre Technique in New York; is the First Stage Scenario at the Viennese Imperial "Burg Theatre" and Deutsche Volks Theatre in Vienna, Budapest and Berlin [legitimate; also the film stage] and Costume Designer to dramatic Dance Evenings at the "Vigado Theatre," Budapest;

1927

- Emily Carr meets the Group of Seven in Toronto;
- First salon in Vancouver of B.C. pictorialist photography;
- Vanderpant begins to hold musical evenings (Musicales); invites artists and students from the VSDAA and later from the British Columbia College of Arts [BCCA] (1927-?); heated discussions concerning various philosophies of art, science and metaphysics take place;
- Vanderpant photographs Eric Brown while visiting Emily Carr; uses Varley's painting The Immigrants as background;
- Vanderpant holds International Salon at the Vanderpant Galleries;
- Macdonald's "The Ever Open Book in the Matter of Design" is published in The Paint Box, refers to nature as the base to all design and God's creations; has

definite tone of nationalism similar to that of the Group of Seven and that of Marius Barbeau;

- Macdonald begins to paint under Varley's tutelage;
- Varley's "Room 27 Speaking" is published in The Paint Box, speaks of inner experiences combined with imagination or vision; his paintings begin to move towards abstraction;
- Lawren Harris instigated the Société Anonym exhibiting at the Art Gallery of Toronto; Harris announced his interest in non-objective painting;
- Täuber is the Scenario and Costume Designer to "Jushny's Russian Art Cabaret," Berlin;

1928

- Group of Seven exhibition held in Vancouver; great controversy over these works erupt; Mortimer-Lamb and Vanderpant both write in defense of the Group in the newspapers;
- Marius Barbeau had popularized in publications and in lectures the art of British Columbia's Indians;
- The Editorial of The Paint Box includes the passage: "we know the power of British Columbian art, the all-prevailing beauty of her landscape, the over-whelming grandeur of her sea and mountains;
- Varley writes about "Moving form, magnificently conceived", also read Vanity Fair which has article of Schnitzler, he speaks of SPIRAL thinking;
- Vanderpant publishes "Artery" in The Paint Box, speaks of infinite axioms, essence, chaos, knowledge and reason, etc.;
- Vanderpant begins to utilize close-up and extreme angles to create abstract compositions;
- Article "Potentialities of B.C. Coast Indian Art" appears in The Paint Box;
- Ada F. Currie writes "The Vanderpant Musicales" in The Paint Box, she parallels the modern music of Ravel and Stravinski with Impressionist art;
- Vanderpant has a solo exhibition which tours the U.S. and another with the Royal Photographic Society in London;
- Täuber is the Choreographic Ballet Scenario at the States Opera, Dresden;

1929

- Stock market crash;
- Rabindranath Tagore lectures at a conference called "Education and Leisure" sponsored by the National Council of Education; and Vanderpant photographs him again using Varley's painting as a background
- Article "Tagore an Art" appears in The Paint Box;
- Vanderpant visits and exhibits Ottawa and Toronto, he takes the famous photograph of the Group of Seven at the Arts and Letters Club;
- Vanderpant begins experiments which confine and isolate forms, uses patterns

- of light and dark, odd angle perspective, resulting in abstract compositions;
- First exhibition of the B.C. Society of Fine Arts;
- Täuber while in Havana, Cuba designs plans and model for the Open Air Theatre;

1930

- Macdonald's notes Symbolism in Decoration are dated approximately to this year;
- Lytton Church is the 1st work by Macdonald for which he does not receive Varley's critique prior to exhibition;
- Vanderpant tours across Canada photographing for the Canadian Pacific Railway;
- Article "The Pasovas Art Club" appears in The Paint Box, credo speaks of oriental, occidental;
- Letter from Beatrice Lennie at the California School of Fine Arts to The Paint Box;
- Jack Shadbolt attends the first VSDAA summer art colony at Tribune Bay, Hornby Island, brings with him Bertram Brooker's Yearbook of the Arts in Canada 1928-1929 which was influenced by the spiritual and aesthetic concerns of Wassily Kandinsky;
- Täuber is the Scenario to the Opera-Ballet, Margaret-Eaton Hall, Toronto;

1931

- Vancouver Art Gallery opens;
- Macdonald is elected a member of the B.C. Society of Fine Arts;
- Vanderpant holds an exhibition of modern B.C. painting concurrently to bring attention to the VAG directors the validity of local artistic expression;
- Also exhibits work by Imogen Cunningham and Edward Weston;
- Shadbolt arrives in Vancouver from Victoria, studies at the VSDAA under Varley in night classes for four months;
- Macdonald illustrates Annie Charlotte Dalton's book of verses The Neighing North;
- Annie Dalton also publishes The Future of Our Poetry which makes a tribute to Lawren Harris' painting Mountain Form as a "sacred symbol implicitly symbolizing objects which lie beyond";
- Amadée Ozenfant's Foundations of Modern Art , popular with the Vancouver artists, first English edition is published this year, makes use of the term "Modalities";
- The Vancouver Art Gallery opens October 5th, opens with 120 works of which only seven are by Canadian artists, the tendency to favour British art continues until the 1960's;
- Canadian Pacific Exhibition includes works by A.Y. Jackson and Lawren Harris; is referred to in the press as "asylum phantasm";
- Vanderpant has a solo exhibit which tours the Netherlands;
- Vanderpant Galleries exhibits Imogen Cunningham and Edward Weston;
- Täuber is the Scene and Costume Designer to the Toronto Skating Club Carnival in Arena Garden, Toronto;

- Täuber arrives in Vancouver and offers private classes in German Expressionism and Stage Design;
- "Art Turns to Mexico," appears in the Vancouver Sun article re: murals;

1932

- All Canadian Exhibition, first time Canadian works were collected for the Vancouver Art Gallery, was organized by the Pacific National Exhibition, August 1931, focuses on the works by Lawren Harris (mountain) and A.Y. Jackson, but includes work by Brooker, and Varley's (Dhârâna); J.A. Radford attacks this exhibition in the Vancouver Star article "Modernistic "Bunk" Attacked by Critic";
- National Gallery of Canada sent exhibitions, augmented by a few American College of Art Association shows which reflected the conservative taste of the time;
- Macdonald's "Colour Notes" dated c.1932, also "Science and the Infinite (Sydney Klein)" undated handwritten notes;
- F.H. Varley exhibition at the Vancouver Art Gallery;
- Vanderpant has a solo exhibition at the Vancouver Art Gallery;
- Täuber lectures on Art and Metaphysics at the Vanderpant Galleries;
- First Annual B.C. Artists' Exhibition (until 1968), Chairman is William Dalton, included in the exhibit is Macdonald and Varley;
- Harris is working actively towards breaking with nature;

1933

- Macdonald and Varley announced their leave from the VSDAA June 14th;
- Varley, Macdonald and Täuber form the British Columbia College of Arts Ltd. [BCCA] which is incorporated July 20th; the aim was to develop a "new art movement";
- British Columbia College of Arts [BCCA] is opened by "three strong and magnetic personalities" who attempted to unite under one roof all the arts in an anthroposophic "Goethemanum" modelled on the teachings of Rudolph Steiner (C. Hill);
- The Aim of the BCCA was to create an environment uniting the best qualities of the cultures present on the Pacific Rim;
- Varley gives lecture "Rebels in Art";
- Macdonald develops a mystical interpretation of the mathematician Jay Hambidge's book on the Golden Mean, Dynamic Symmetry which was "the rage at the time" (Shadbolt);
- Macdonald is elected a charter member of the new group Canadian Group of Painters;
- Vanderpant and Emily Carr are photographed together at her studio;
- Täuber's group of marionette players called the "Täuber's Puppet Players" and produces Petroushka and The Witch Doctor at the Vancouver Art Gallery in February (members of the group include Isobel Wintemute, Liliias Farley, Beatrice

Lennie, Leslie Planta, Ernva Code, Ellen Harris, Rudy Engle, Judy Brown, and Margaret Williams);

-Work Projects Administration [WPA] is begun in the United States;

1934

-Harry Täuber lectures on the "Origins of Culture" after a presentation of Ben Johnson's Volpone in January, brings up the Goetheanum in Switzerland, Ouspensky and Madame Blavatsky;

-Macdonald paints Formative Colour Activity which he considers a breakthrough and later refers to as an "automatic" painting, the subject was not consciously intended, are not entirely non-representative; calls them "Nature Thoughts";

-Bea Lennie recalls that JWG had been studying flowers a lot at this time;

-Macdonald and Varley take students from BCCA on a summer sketching trip;

-Vanderpant lectured on the "Searching Road for Beauty" stressing the importance of genius as the deliverer of the inner values of art to raise the spiritual consciousness of the community;

-Vanderpant lectures at the Seattle Art Museum;

-Vanderpant begins a new series of grain elevator photographs;

-"Where East Meets West" by H.E. Torey [re: BCCA] is published in Saturday Night;

-Täuber's Puppet Players perform Theatre of the Soul at the Little Theatre of Vancouver (1934?);

-Harris paints his first non-representational painting;

1935

-Article reporting on Täuber's lecture series is published in the Vancouver Sun "Fourth Dimension Sight: How Man's Consciousness Develops (April 1);

-B.C. College of Art is forced to close in June, Varley and Täuber had very little sense of business management, (Lennie);

-Macdonald, Täuber, Leslie Planta move to Nootka on Vancouver Island, Macdonald for eighteen months, Nootka has a deep and lasting impression on Macdonald;

-John Varley visits Nootka;

-Real beginning of his automatic painting which took him five months to learn to use, already widely read in aesthetics and philosophy;

-Vanderpant lectures across Canada for the NGC; visits New York

1936

-Varley leaves for Ottawa in the spring;

-Macdonald returns briefly to Vancouver in the autumn, then permanently in November; remains in Vancouver until 1946;

- Vanderpant organizes radio broadcasts of contemporary music;
- Vanderpant begins a new series of plant photographs which strongly resemble Macdonald's "Modalities";
- Harris exhibits four totally non-objective paintings with the Canadian Group of Painters;

1937

- Letter from Macdonald to John Varley supports the close relationship between his Modalities and Vanderpant's work (Vanderpant referred to his photographs as "Thought Expressions in Nature");
- Summer, Macdonald goes to California, reaffirms his feelings about Canada as the "land where artists can find the environment for true creative activity";
- Lawren Harris exhibits his abstracts for the first time in Toronto at the Canadian Group of Painters exhibition;
- Macdonald requests reproductions of Lawren Harris' Lake Superior and Mountain Form from H.O. McCurry (National Gallery of Canada) [NGC];
- Vanderpant has a solo exhibition at the Vancouver Art Gallery;
- Täuber leaves the Vancouver area for an unknown destination 1936-1937?;

1938

- Macdonald exhibits four "Modalities" at the Vancouver Art Gallery; Spring Awakening is reproduced on the cover of the Vancouver Art Gallery Bulletin; exhibits Pilgrimage and Dry Herring Roe at the Tate Gallery;
- Bea Lennie and Macdonald begin sharing a studio;
- Macdonald summers at Garibaldi;
- A Century of Canadian Art exhibition is held at the Tate Gallery in London; England; both Macdonald and Varley exhibit;

1939

- John Vanderpant passes away July 24;
- World War II begins; Canada declares war on Germany September 10th;
- Macdonald writes to the NGC about the outbreak of WW II, continues his search for understanding of life through art;
- Macdonald goes to California in the summer and visits the Fine Art Exhibit at San Francisco;
- Macdonald begins mural for Hotel Vancouver;
- Macdonald exhibits Winter and Black Tusk at New York World's Fair and Indian Burial Ground at San Francisco Golden Gate Exposition; exhibits Rain and Flight with the Canadian Group of Painters at the Art Gallery of Toronto;
- Unconfirmed rumour that Täuber was interned by authorities as a "German spy";
- B.C. Binning studies at the Art Students' League in New York;

·High unemployment results in more than 1200 protesters occupying Vancouver's most important buildings, including the VAG; Macdonald's "Modalities" are on exhibition there at this time;

1940

·Memorial exhibition of Vanderpant's work held at the Vancouver Art Gallery;
·Lawren Harris arrives in Vancouver;
·Maritime Art is founded;

1941

·Macdonald gives a public lecture entitled Art in Relation to Nature for the first time February of this year;
·Macdonald and Jack Shadbolt attend the Kingston Conference;
·Macdonald is the president of the B.C. Society of Fine Arts until 1941-1942;
·Paul-Emile Borduas begins to paint automatics;
·Emily Carr publishes her first book Klee Wych;

1942

·Emily Carr's second book The Book of Small is published;

1943

·Dr. Grace Paillethorpe, a British Surrealist comes to Vancouver with Rueben Mednikoff;
·Paillethorpe lectures at the Vancouver Art Gallery;
·Macdonald writes NGC conveying that Lawren Harris is the artistic "authority" in the city;
·First issue of Canadian Art is published;

1944

·British Columbia At Work exhibition organized by the Labour Arts Guild of Vancouver show new emphasis in art;

1945

·Macdonald spends first summer teaching at the Banff School of Fine Arts;
·Emily Carr dies; memorial exhibitions of her work are presented at the Art Gallery of Toronto; National Gallery of Canada and VAG;

1946

- Macdonald moves to Calgary to become the head of the Art Department of the Provincial Institute of Technology;
- Macdonald writes article "Heralding a New Group" for Canadian Art;

1947

- Macdonald, Maxwell Bates and Marion Nicholl form the "Calgary Group";
- Shadbolt studies at the Art Students' League in New York;
- Macdonald moves to Toronto and begins teaching at the Ontario College of Art;

1948

- Macdonald spends ten days at Hans Hoffman's Provincetown school;
- Macdonald writes article "The Development of Painting in the West" for the Journal of the Royal Architectural Institute of Canada;

1953

- Macdonald is a charter member of the Painters Eleven;

1960

- Macdonald dies December 3rd;

1968

- Varley dies September 8th;