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The Nature of Nature: An Exploration of Botanical Themes, Growth Patterns and Ornamental Traditions and the Operation of Metaphor and Visual Interpretations of Life and Growth as a Means to Abstraction in Painting.

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EXEGESIS

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Abstract

The presentation of this Master of Philosophy thesis consists of studio practice-led research in the form of an exhibition of paintings at the School of Art Gallery from 16 March–1 April 2011, an exegesis giving a full account of the nature and development of the research undertaken during the course of the study, and two coursework components undertaken in the first year.

The work explores botanical themes, growth patterns and ornamental traditions, and the operation of metaphor and visual interpretations of life and growth as a means to abstraction in painting.

Declaration of Originality

I, [signature] (22/12/2011) hereby declare that the thesis here presented is the outcome of the research project undertaken during my candidacy, that I am the sole author unless otherwise indicated, and that I have fully documented the source of ideas, references, quotations and paraphrases attributable to other authors.

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Introduction

> *The artist cannot do without his dialogue with nature, for he is nature, himself of nature, a piece of nature and within the space of nature.*[1] Paul Klee 1923

The initial idea for my research project was to explore abstract painting through multiple historical and personal influences related to ornamental pattern and Chinese brush painting, with emphasis on botanical themes and algorithmic processes.

At the start of the journey my accumulated knowledge of, and interest in, abstraction was overwhelmingly associated with my life experience and immersion in the art and craft of Asia. This foundation informed both my understanding of the notion of abstraction and my practice of painting.

I intended to explore this focussed view, in order to assess the relevance of these influences in the history of abstraction in Western art in the twentieth century and its relevance in a contemporary art practice.

I proposed to consider a set of ideas and thematic considerations that strongly appealed to my knowledge of Chinese brush painting techniques, my attraction to Asian textile patterns, and my love of all things botanical.

My driving motivation for this addressed my inner sense of the insignificance of the self in the grand scheme of things. Avoiding most associations with the limited presence of humanity in the immeasurable distance of time conversely highlighted for me the aeons of habitation on our planet by a world of plants.

I was very familiar with ideas found in Chinese philosophy, calligraphy and painting which encompass inner and symbolic meaning given to all aspects of nature. Highly significant for me were viewpoints that translated directly to painting, such as harmony and balance found in the universe, and order implicit in seasons and life cycles. Style and technique were consequently the basis of my painting experience, where form was simplified, and capturing the essence of an object with only a few marks, rather than any observation of physical details, was overriding.

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[1] Jurg Spiller, ed., *Paul Klee Notebooks Volume 2 the Nature of Nature*, 2 vols., vol. 2, (New York: George Wittenborn, 1970). 6

In other words, I was accustomed to painting that becomes less of a literal practice of representation and more an abstraction of ideas with metaphor, symbolism and colour the means of expression.

In this studio practice research I wanted to explore the proposition that the language of painting is capable of petitioning the senses, by generation of noise with colour or visual vibration, to find a way to imply a state of growth and passage of time.

At the outset, there was also a desire to translate the physical methods of painting in the Chinese method - with diluted water colour and ink on paper - into a form of painting with acrylic medium on canvas. I hoped that homage to the former would sustain a method of research in the context of contemporary Western practice. In the process I did not discount the ancient concept of mastering technique through repetition of mark-making which often accompanies meditative engagement with painting.

In addition, I brought to my research proposal a familiarity with textures and patterns of traditional Asian textiles. In subtle ways they may have influenced my natural preferences towards exploration of decorative pattern. Spiritual connections between all things in nature also generally influence designs of traditional textile patterns across the generations. Geometry often lies within their foundations, supporting mesmerising effects of simplified forms and lines meandering like tendrils in ingenious regularity.

Places and things botanical also highly influenced my proposal through a reverence for plants and gardens, and a sense of peacefulness in their presence. This aspect seemed to be connected to significant personal recollections from my life, such as the duckweed carried in little bags of water for the terrapins on our city balcony. I recall this outdoor haven had no garden except for a few large languishing leaves of potted plants, but it was so high, we could enjoy a bird's-eye view of the tree tops and manicured gardens below. My homes were always temporary where gardens were refuges, places to settle in and cogitate about the waves of culture shock that usually accompanied relocation.

My attention has also always been captured by venerable trees and extravagant variations in plant form. I can remember inspirational landscapes of enormous ornamental avenues and plantations of rubber trees and patterns of diagonal furrows on their trunks. One of my favourite pastimes has been attempting to replicate ancient trees in the very slow growing process of shaping, trimming, and ornamental styling of plants into tiny living tree specimens, in the manner of the Japanese and Chinese miniaturization art of growing trees variously called *bonsai* or *penjing*. Philosophically, the

process condenses the ages and somehow intensifies the inspiration of growth forces and seasonal rhythms that facilitated the emotional connection to my painting and the proposed metaphor.

Inevitably botanical themes provided a means by which I could begin to explore this. My intention was to discover connections between the various avenues of interest, developing a holistic cohesion of form, colour and composition.

The first year of the studio practice research was dedicated to the exploration of materials, methods and formats which I will discuss in Chapter 1, ***The Golden Key***. It coincided with two semester-long, coursework research projects, *Arguing Objects* and *Points of View*, undertaken with Nigel Lendon.

The first of these provided an opportunity to view, and consider in depth, Imants Tillers' painting *Terra Incognita* (2005), at the National Gallery of Australia. In particular I was interested in the golden hues of the painting, which seemed to recall the grasses of the vast Monaro Plains near where the artist lives, and the visual dialogue with Emily Kame Kngwarreye's wandering yam paintings that traverse the expansive pictorial plane. Tillers' approach informed the early period of the research project when I explored stencil application of paint.

The second coursework project concerned the *Treasure of Seeds* exhibition at the CSIRO Discovery Centre from 7–18 August 2009. Seeds are saved for humanity in the event of catastrophe through an international alliance between the Svalbard Seed Vault in Sweden, the World Crop Diversity Trust, CSIRO, the Jenolan Caves Trust and the Mount Annan Botanical Gardens Trust. This project gave me an opportunity to explore the links between botanical science, art and public education in the interests of global food crop security, and additionally the way in which artists interpret a botanical theme.

In the early stages of the studio research, I attended to plant material that I collected and pressed as my way of assigning emotional status to the botanical them, and in this way maintained a tangible readymade resource of shapes and colours at my disposal for exploration in painting.

It also occurred to me that the painting, *Autumn Willow* (1938), by Murakami Kagaku (1888–1939), which had influenced the calligraphic paintings of my undergraduate and Honours study, was still deeply ingrained in my consciousness, and remained with me in an unobtrusive yet significant way (Fig. 1). It was described as *'...soft organic lines of willow tree branches [that] appear and disappear*

in shade and mist, creating a composition that flows with rhythmic energy of life and growth'.[2] I realized that I absorbed from this painting a desire to find a way to express an oscillating yet synchronized sense of rhythm or movement that one might associate with a vision of growth.

I hoped for an outcome to the studio research proposal which was an abstract form of painting that represented an idea of growth rather than an object or form that is observed. This drew me to artists who explored botanical themes in their efforts to make sense of nature in this way, such as Philipp Otto Runge (1777–1810), Paul Klee (1879–1940), and Philip Taaffe (1955–). Elements of their work that I planned to explore were botanical themes, geometry and pattern.

I established my methodology by organizing ideas and identifying the elements for investigation: *botany, ornament, abstract, algorithm* and *visual illusion; gesture, layering, transparency* and *metaphor.*

All of this related in some way to my knowledge and attraction to abstract and ornamental painting and pattern. I imagined an integration of them as collective ideas and material experiments in order to discover a way of painting, just as one might develop a formula for manipulating a hybrid plant form, or work out a puzzle.

During the second semester I experimented with my habitual practices of painting with watercolour line and wash informed, in the context of my proposal, by the work of Chinese painter Gu Gan (1942–) and a seventeenth century text, *The Mustard Seed Garden Manual of Painting* translated into English in the mid twentieth century by Mai Mai Sze.[3]

Subsequently I researched ornament, as it appeared in the origins of Western abstraction, and found that the tendril and intricate geometry have permeated the art and craft of many cultures for centuries. I discovered the paintings of the nineteenth-century European, Philipp Otto Runge, and the early twentieth-century Paul Klee, and others including the American, Philip Taaffe, whose contemporary work is often informed by traditional ornamental pattern and design.[4] I explored stylized botanical and geometric forms of Asian batik and chintz textiles, and combined watercolour painting and plant material in collage works composed to convey symbolism of Chinese garden gates and windows.

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[2] Torao Myagawa, ed., *Modern Japanese Painting: An Art in Transition* (Tokyo: Kodansha International, 1967). 86

[3] Mai-mai Sze, ed., *The Mustard Seed Garden Manual of Painting*, facsimile of 1887-1888 edition ed., vol. 1, Bollingen Series (New York: Princeton University Press, 1956; reprint, 1963).

[4] Markus Bruderlin, ed. ,Markus Bruderlin, ed., *Ornament and Abstraction* (Basel: Foundation Beyeler 2001).

Herbarium collections and pressed plants commonly appear in the work of artists who interpret nature and Paul Klee, who devoted extensive diaries to his theories about movement and growth,[5] was a constant reference throughout the first half of the research project.

Exploration of mathematical descriptions of growth patterns inevitably followed, with intensive experimentation and development of practice research methodology based on mathematical codes and a characteristic mathematical symbol from *The Algorithmic Beauty of Plants*.[6] I will discuss the details in Chapter 2, ***Negotiating Tendencies***.

By the second year, my studio exploration had expanded to embrace a system of branching, based on a self-perpetuating symbol, to develop ornamental structure in the paintings. This process seemed to echo the very act of pruning and shaping a plant which in nature's plan will strive to survive and grow anew.

Like a maturing tree, my research grew into exploration of growth patterns in other fields of research – philosophy, science, mathematics and digital art – resulting in 'branching'. A symbol called an L-system (a branching device), became a dominating leitmotif throughout the remainder of the project. The evolving process of abstraction based on the leitmotif and self-perpetuating patterns began to emerge in the final body of work which I will discuss, focussing on each painting in turn, in Chapter 3, ***Becoming***.

The relevance of botanical themes as the seed for abstraction became clearer when I encountered Piet Mondrian's serial transformation of an apple tree into abstract paintings through the use of a reductive process of lines and marks. This was in the exhibition *Paths to Abstraction 1867–1917*, at the Art Gallery of New South Wales, from 26 June–19 September 2010.

I was also able to participate in an ANU field studies expedition to western Sydney with John Reid which involved responding with other artists to the debate about sprawling urban development encroaching on valuable fertile agricultural land. This was a valuable aspect of my studio research and exploration of the relevance of botanical themes in contemporary art practice.

Uniquely, my studio practice research was devoted to exploration of perennial botanical themes throughout art history in the context of very personal painting experience and cultural associations.

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[5] Zentrum Paul Klee, *In Paul Klee's Enchanted Garden*, trans. Deborah Ann Arnfinsen, Nathaniel McBride, and Margaret Powell-Joss (Osfildern: Hatje Cantz Verlag, 2008). 55

[6] Przemyslaw Prusinkiewicz and Aristid Lindenmayer, ed., *The Algorithmic Beauty of Plants - the Virtual Laboratory* (New York: Springer-Verlag New York, 1990).49

Botanical characteristics that appear widely in traditional and modern forms of Asian, indigenous and western art forms, patterns and paintings, together with interlocking codes and mathematical systems, informed my journey.

Bringing together all these elements sustained my immersion in the activity of painting through different phases of transformation. These ranged from expressive mark-making and wash techniques, experimenting with materials and methods of application, to detailed line work with a fine brush, which shifted from watercolour effects to meditative geometric patterns on canvases in a novel and committed relationship with acrylic paint.

The resulting distinctive adaptation of abstraction in painting within an immense field of abstraction arose from my exploration of the metaphoric capacity of botanical themes and the influences of science and information technology in our age.

Fig. 1 Murakami Kagaku, *Autumn Willow* (detail), 1938, colour on paper, 22x53.8cm

> *The true Golden Key is the possession of a complete body of information on materials and techniques that must be acquired at least in part before the secrets of the art of painting are revealed.*[7] Jonathan Stephenson 1989

In this chapter I will discuss my exploration of materials and methods that occurred mainly during the first year, reporting on each exploration separately, though each informed the others. The practical experimentation began to stabilise early in the second year as the emphasis in the studio changed to subject matter.

Herbarium Practice

I have always thought that variegation in plants – which can be caused by various conditions, such as lack of chlorophyll or masking of green pigment[8]– and the pressed forms of plants compares to abstraction in paintings. They can share anomalous shapes, odd combinations of colours that work together and suggest 'designs' that lie outside human agency. Similarly, they share attributes that suggest invention, rather than representation or regularity. This was something I could explore in painting.

Pressing plants was a starting point as my means of producing a material source for referencing. I made several large presses approximately 35cm square from laminated boards. Corner wing nuts create the force necessary for pressing plants between layers of corrugated cardboard and sheets of newspaper. This absorbs the moisture, helping the drying process. A very firm, brutal procedure counteracts the fate of normal disintegration and decay. In this way, their beauty can be preserved in paper-like form with colours muted like paint diluted with water.

I visited the Australian National Herbarium, where plants are preserved for biodiversity research. Generally they are dried in loose lattice frames, not heavily pressed. Most of the colour is lost in this process. This proved to me that my method of extreme pressure more readily preserves the colour and flatness that I desire.

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[7] Jonathan Stephenson, *The Materials and Techniques of Painting* (London: Thames and Hudson, 1989).11
[8] Wikipedia, "Variegation," Wikimedia Foundation, http://wikipedia.org.wiki/Variegation. accessed 30 3 2010

To Template or Not to Template

Philip Taaffe made many successful contemporary paintings using mechanical methods to transfer shapes of leaves, and other patterns, on to his canvases (Fig. 1.1).[9] These processes seemed worthy of exploration to me.

Initially I conducted a number of experiments making stencils. A plastic contact stencil worked only with simple shapes (Fig. 1.2). It cut easily with a paper knife but was not easy to handle because it had no stiffness. I tried soaking manila card with linseed oil, which gives it a kind of waxy property that cuts easily with a paper knife. This held its shape after wetting with paint and could be reused repeatedly without disintegrating totally (Fig. 1.3).[10]

The pressed forms of a lily leaf and a tulip petal lent themselves perfectly to stencilling. I used the positive and negative shapes of the card in a series of small experimental drawings with watercolour pencils on paper. Creating fusions of forms in this way was something new for me (Fig. 1.4).

Methodically moving through ideas for painting tools, I tried using a length of rubber mat with an open net-like construction, and acrylic paint, to transfer grid-like effects on to surfaces that I returned to later in the project.

Using a dry brush, acrylic paint and lily stencils I experimented on a set of three paintings carrying the forms in overlapping patterns across the whole picture plane. Colour shadowing occurred and I was pleased with the illusion of floating shapes (Fig. 1.5).

In the second term I combined a representational painting of a tulip petal, and stencils of the same shape, in a test of the viability of juxtaposing different styles (Fig. 1.6). Not convinced, I proceeded to 100cm square canvas and made several acrylic paintings. I started by stencilling the tulip petal in radiating multiple layers and concentric rows of transparent colours. The painting developed like a dynamic pulsating image, much like a large symmetrical flower (Fig. 1.7). Effects like this successfully alluded to growth, however, by the end of the first semester stencilling as a means of painting reached saturation point. I then briefly considered silk screening to transfer botanical images onto canvas for painting.

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[9] Julia Wallner Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008* (Ostfildern, Germany: Hatje Cantz Verlag, 2008). 200

[10] Lynn Le Grice, *The Art of Stencilling* (London: Penguin Group, 1988).

Philip Taaffe accumulated a large collection of printing frames which he described like working proofs.[11] He said they were for *'locational purposes'*.[12] While I enjoyed the pictorial effects of Philip Taaffe's paintings made with prints and stencils, I quickly became aware in some limited experimentation that this way of working disengaged me. It required planning and severe restriction of any possibility for spontaneity that seemed necessary in my studio practice. I abandoned reliance on stencils as a means of painting by the second semester.

Wash and Line

My intuitive inclinations result from early formative training in painting techniques of traditional Chinese brush painting. This style of painting requires practiced skills in controlled and gestural movements of the wrist and forearm with a soft brush. Lines are made in a manner much like drawing, and watercolour paint and ink are usually applied in thin layers of wash. Horizontal surfaces and no preliminary sketching are features.

Having been trained in this way, I found it difficult to manage paint differently. In the second semester I intensified experimentation to overcome my entrenched practices. I explored a paper-priming product that seemed to provide a 'tooth', slowed down paint flow, and allowed pigment to pool, sediment and separate, with chance effects I enjoyed.

I tried ink drawing on primed paper surfaces in a series of six small patterned works (fig. 1.8). In these I found that I could use familiar techniques in a different way with this material. These represented incremental steps in my process of exploration.

Rather than abandoning Chinese brush painting habits I decided to revisit this genre, and explore clues concealed in the traditional ways of transforming subjects from nature (fig.1.9). I found a *'method of outlining and colouring of leaves'* in *The Mustard Seed Garden Manual of Painting* (Fig. 1.10).[13]

I practiced expanding groups of three-lobed leaf motifs, with outlining in unconventional rhythmic patterns on 40cm square primed paper, which I then coloured following the instructions. I integrated this with the mathematical symbols and unfolding patterns which I found in *The Algorithmic Beauty of Plants* (Fig. 1.11).

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[11] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008*. 226, 229
[12] Ibid. 226
[13] Sze, ed., *The Mustard Seed Garden Manual of Painting*. 71

My concentration on the rhythmic counting of marks and groups of motifs was enlivening. By the second year these influences began to intensify my evolving way of working with sequencing.

Material Girl

In the New Year I decided to confront the thinness of line and wash techniques in my painting to explore the absence of a sense of material tactility which I more readily associated with printed and digital images. On a visit to her studio, Vivienne Binns illuminated for me the role that instruments, tools and various mediums can play in extending surface tactility in paintings.

I decided to try and replicate the 'grabbing' effects of paper primer on a manageable 60cm square canvas, by applying impasto medium with broad brushes and a spatula to rough up the gesso surface before painting with acrylic. This resulted in low level three-dimensionality.

Next, I sealed a bubbly diamond-patterned kitchen paper with binder medium to use as a tool, as well as the grid pattern of a rubber kitchen mat. I imprinted these in wet painting surfaces as geometric texture. These grids added underlying patterns connected to inherited growth patterns that I thought of as activators of the metaphor. Sometimes I repainted the patterns in the surface layers, foreshadowing the development of the branching system upon a grid which I explored in the final semester.

Book of Flowers

In the second semester of the first year I explored other uses for pressed plants in conjunction with paints. I melded the traditions of Victorian pressed flower parlour crafts, including pictures made with verses in frames,[14] with ornate gateways and windows of traditional Chinese gardens,[15] which commonly appear as shapes of the moon, petals, flowers, and fruit (Fig. 1.12). I simulated garden-scapes on primed paper with combinations of these shapes and plant material applied with Japanese rice glue, often used in bookbinding. I began by substituting real plant material for floral patterns of chintz and batik textiles. I was able to compose fanciful and exaggerated renditions of hybrid plants, seen as landscapes through doors or windows. I thought of these compositions as venues for contemplating my theme, similar to the symbolism of the Chinese garden *'...where one could sit all*

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[14] Joan Rendell, ed., *Your Book of Pressed and Dried Flowers* (London and Boston: Faber and Faber, 1978).
[15] Maggie Keswick, *The Chinese Garden History Art and Architecture* (New York: St.Martins Press New York 1986; reprint, second revised edition).109, 205

day contemplating metaphysical movements...making manifest and sensual, the fundamental principles of the universe...'.[16] (Fig. 1.13).

I developed the borders with watercolour painting, restricting the palette to Prussian blue tinted with burnt sienna. This seemed to me an appropriate association with Chinese brush painting that I was familiar with.

Borders, frames and similar pictorial devices appeared in the German Romantic movement expressed by Philipp Otto Runge in paintings and illustrations of nature.[17] (Fig. 1.14) This was important to me for no other reason than that windows into nature, symmetry and line were features of both Western and Eastern art. It seemed to strengthen my resolve to integrate both influences in my practice research.

Some of the collage work was hung in the *Masterpieces from Canberra* exhibition held in the Painting Workshop in February of the second year. Disappointingly, the plant collage process was problematic. The glue and the uneven material dimensions of the plants eventually caused the unstretched paper to warp markedly when exposed to air. I resolved this by constraining the pictures between custom-made clear Perspex sheets. This also acted to protect the fragile surfaces but the unsealed frames required protection from silverfish.

David Sequeira made a series of pressed plant pictures called *My Mother's Garden* which I viewed at the Canberra Museum and Gallery, in September. They were assembled plant pressings, arranged according to size, colour and variety, and stitched in place with an all-over pattern like a net, to secure them in place. The support layer was completely concealed and glue seemed to be absent. I decided if I were to make more collage work, this method could be explored to avoid unwanted buckling.

Colour-Coding

An important aspect of my ongoing studio research was keeping the botanical theme philosophically buoyant while I was gradually reducing literal floral representation. In the third semester I began using specific plant colours to operate the metaphor. Colours until then I selected randomly.

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[16] Ibid. 143
[17] http://www.wikigallery.org

Sometimes colours were difficult to define. Picking plants usually transforms their vibrancy – though still beautiful, colours often become muted or changed in some other way.

The French Impressionists exhibition at the National Gallery of Australia, and the accompanying Painting Workshop symposium in the third semester provided an excellent opportunity to observe the Impressionists way of capturing perceived colours momentarily on the canvas.

I began relying purely on my intuitive responses to natural colours rather than any colour theory. Johannes Itten spoke about *'bringing about a balance of colour distribution'*,[18] as being one of the main aims of composition. Adhering to this rule informed my work practices, particularly throughout the final series of paintings. My aim was to generate a visual sense of harmony and balance with colour and composition.

The Sphere and the Square

The circle and the square are symbols of heaven and earth in ancient Chinese thought.[19] In my thoughts, the energy for photosynthesis and the growth of plants comes from a round body, the sun.[20] The tides of the ocean change with the movement of the moon in a ring around the heavens. The earth spins on an invisible axis. These bodies are all spheres which fit perfectly in a square, leaving only the corners free. I imagine this relationship of sphere to square as one of cradle and universe. The sphere is invisible but the cradle is defined by the square format, the heaven and earth, or east and west, so to say. Chosen for all the major series of works in this studio practice research, the square represents these metaphors to me.

Besides a number of small landscape works the square has been constant but I have at times increased and decreased the scale of the format throughout the course of the studio practice research. This helped me adjust to experimental developments with mediums and painting facility.

For instance I had to keep the size of paper within dimensions appropriate to the delicate handling of the plant material in the collage work. Practising intricate brush work made it imperative for me to stay within workable limits to accommodate the intricate detail that required close attention.

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[18] Johannes Itten, *The Art of Colour* (United States of America: John Wiley & Sons, 1973; reprint, 1973). 144
[19] Gu Gan, *The Three Steps of Modern Calligraphy*, trans. Hu Yunhuan, The English Version ed. (Beijing: China Books Publishing House, 1990). 15
[20] Oliver Morton, *Eating the Sun* (New York: Harper Collins, 2008).

In view of my conceptual connection to the square I did not consider altering it, except for the introduction of the diagonal in the fourth semester. The idea of physically turning the square into a diamond arose during discussions with Nigel Lendon. This act seemed to change the pictorial reading of the paintings by visually dissolving the frame. It seemed to draw the viewer into the picture space. A forty-five degree tilt in the format, whether a diamond or a square, did not seem to affect my reasoning of a square cradle for a round sphere.

Kermit Swiler Champa explained intriguing diagonal effects in Piet Mondrian's paintings as *'...dynamism of opposing shapes and field impulses'*.[21] I responded to an increasing interest in this idea by exploring the introduction of diagonals within the square format. The visual effects provided for helpful dialogue with Peter Maloney.

I also experimented with off-centre patterning with diagonal devices which resulted in simultaneous patterning, one inside another, increasing the capacity for visual impact - another step in the evolving practices. I accommodated these developments late in the year with another incremental increase in the square format.

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[21] Kermit Swiler Champa, *Mondrian Studies*, first ed. (Chicago The University of Chicago Press, 1985). 108

Fig. 1.1 Philip Taaffe, *Sanctuary*, 2002, mixed media on canvas, 221x302cm

Fig. 1.2 Studio process – first stencil experiment, contact, acrylic on canvas, 30.5x30.5cm

Fig. 1.3 Studio process – stencil, manila card, lily leaves

Fig. 1.4 Studio process – four stencil experiments, watercolour pencil on paper, 42x42cm

Fig. 1.5 Studio process – three stencil experiments, acrylic on canvas, 50x60cm

Fig. 1.6 Studio process – juxtaposing styles, stencil, acrylic on canvas paper, 40x40cm

Fig. 1.6.1 Tulip petals and seeds

Fig. 1.7 Kerry Shepherdson, *Tulip* (work in progress), acrylic on canvas, 100x100cm

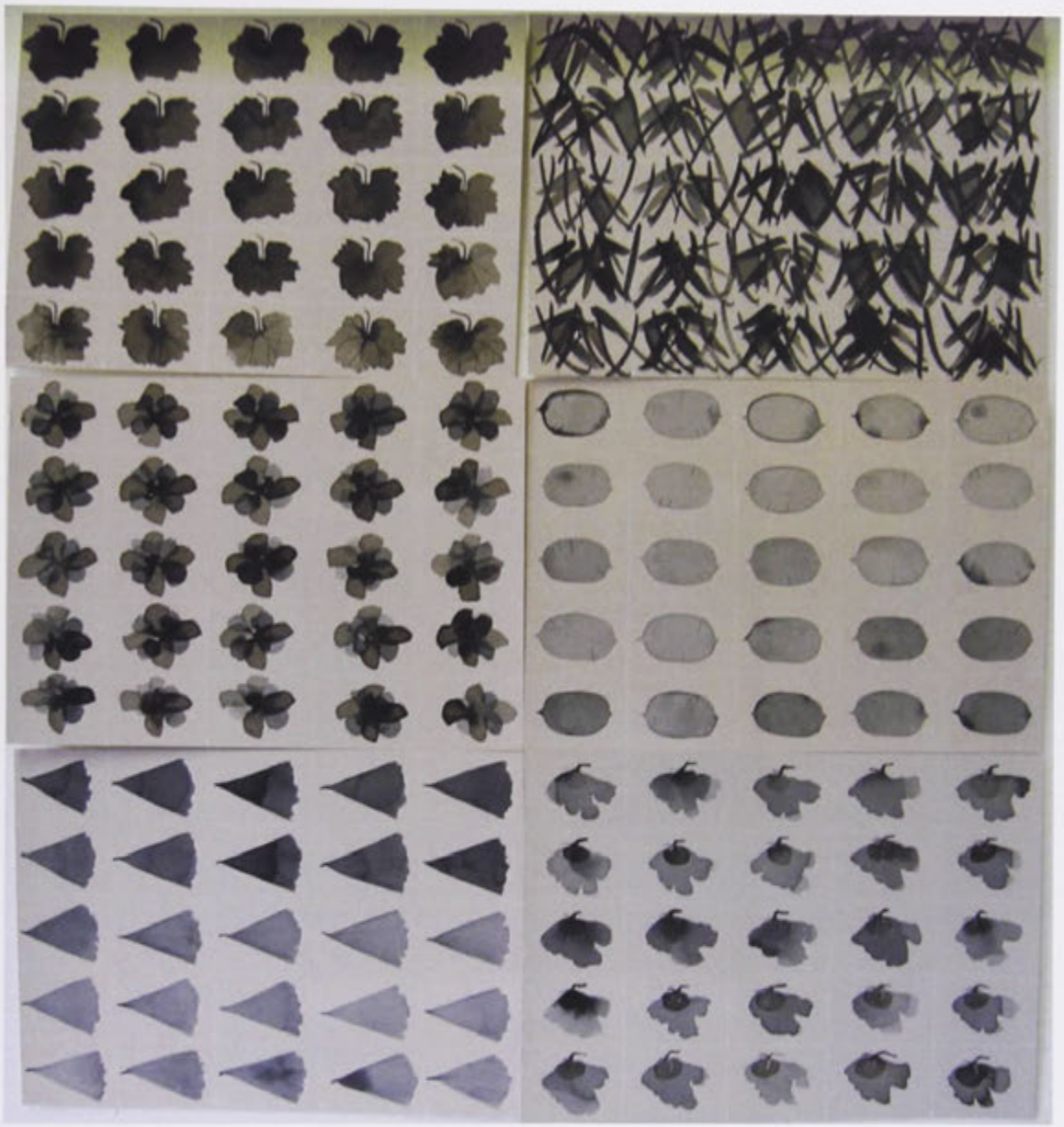

Fig. 1.8 Studio process – series of six ink and sepia experiments on primed paper, 21x30cm

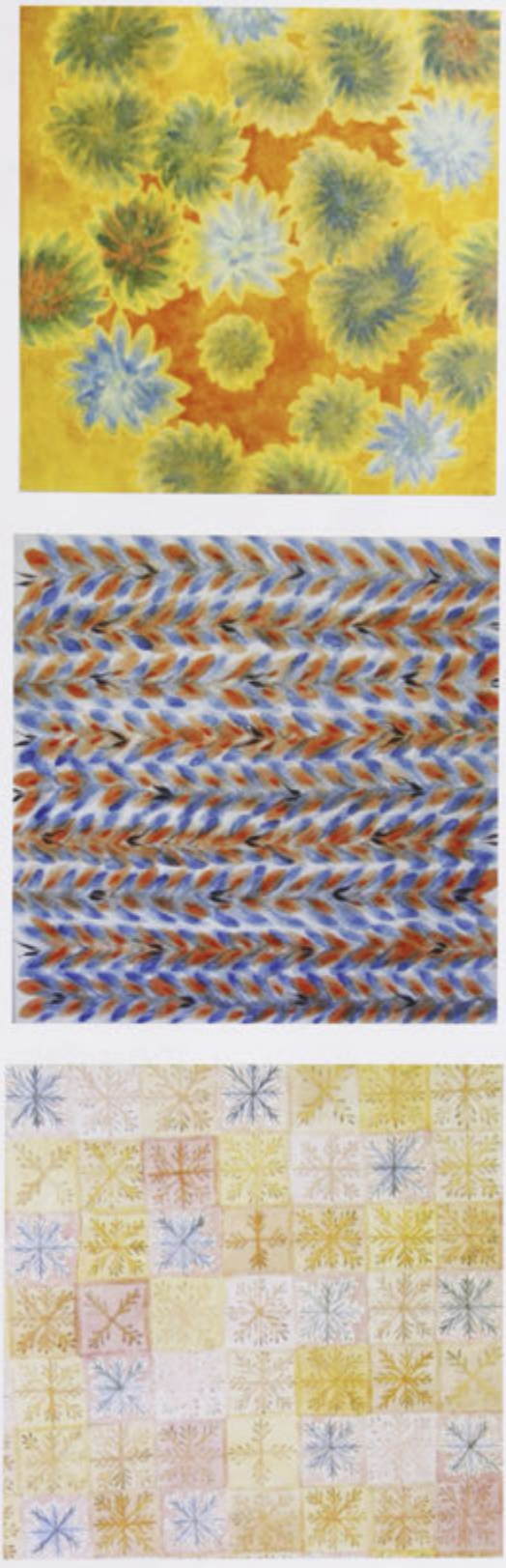

Fig. 1.9 Studio process – three watercolour paintings on primed paper, 40x40cm.

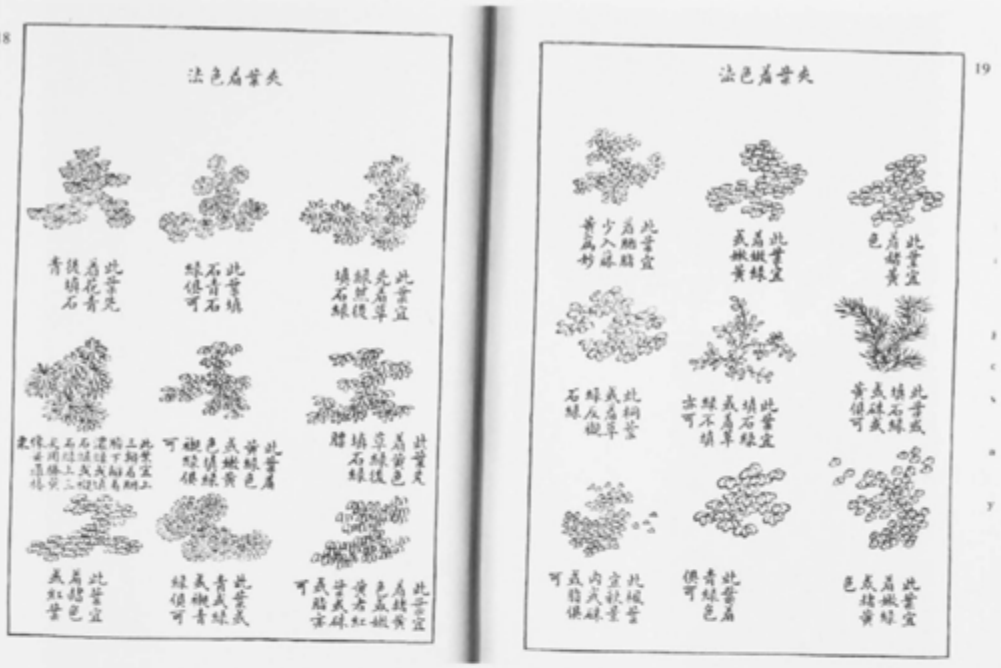

Fig. 1.10 Methods of outlining and colouring leaves

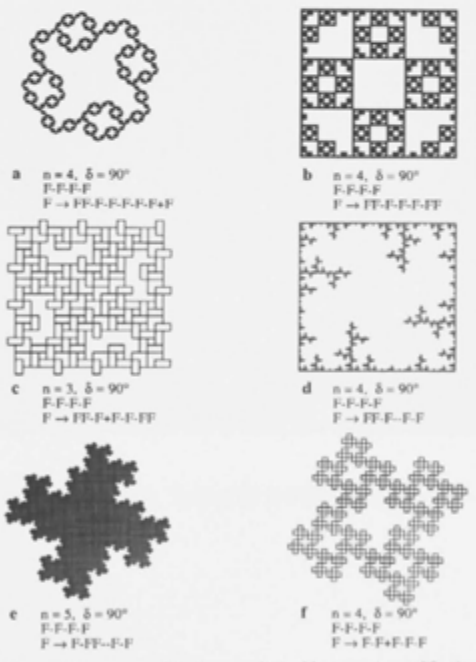

Figure 1.9: A sequence of Koch curves obtained by successive modification of the production successor

Fig. 1.11 Sequences of Koch curves

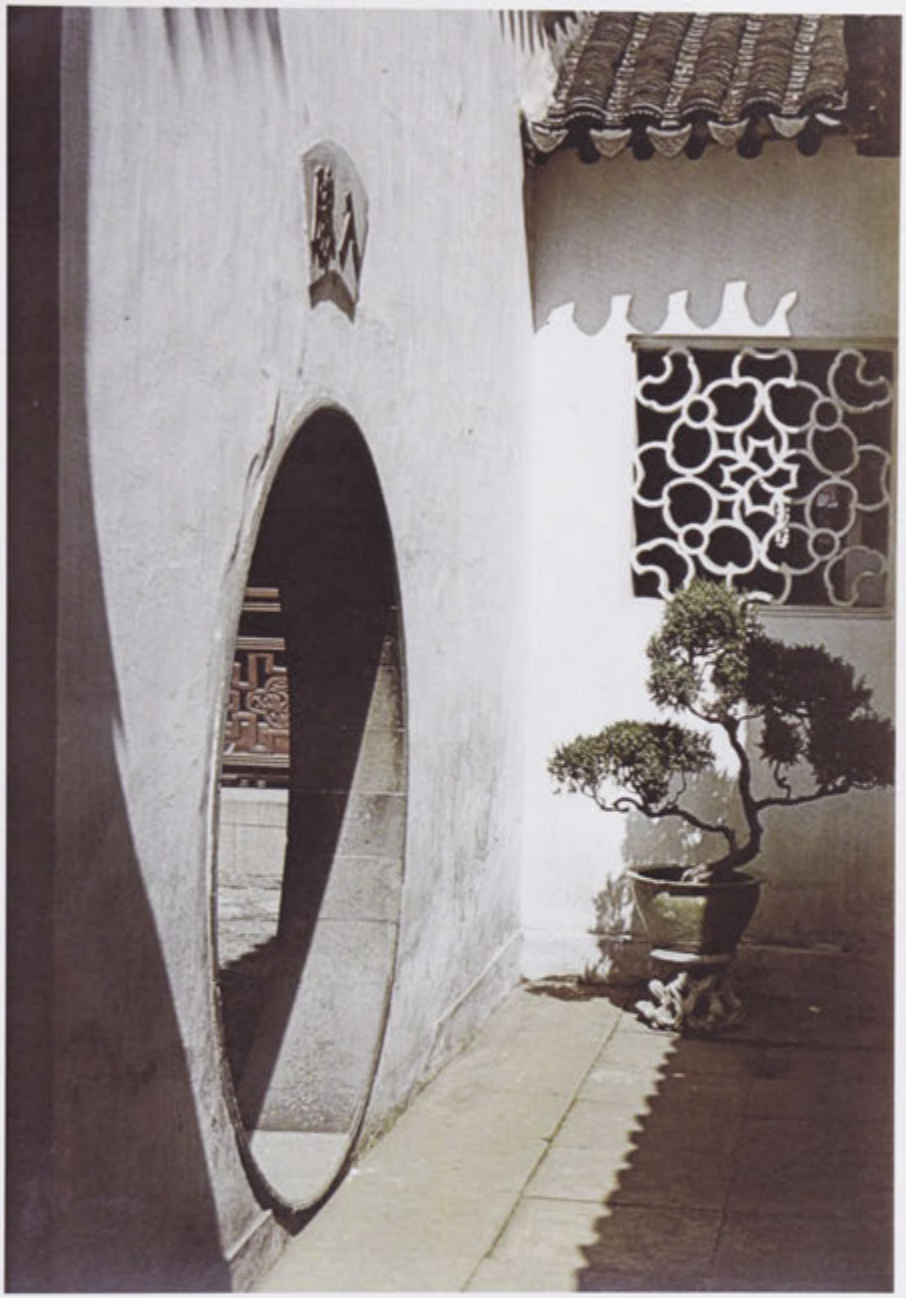

Fig. 1.12 Tiny courtyard Shih Tzu Lin, Suchow (1335), moon door and ornate lattice window

Fig. 1.13 Studio process – two pressed plant collage and watercolour paintings, 40x40cm

Fig. 1.14 Philipp Otto Runge, *The Morning*, 1808, oil on canvas, (dimensions unknown)

> *...the philosopher of art... must reflect on the relation between art and being. In the same way a blade of grass, when properly examined, unveils the whole carbon-based way of life on earth, so a work of art, philosophically considered, reflects the fact of existence.*[22] Didier Maleuvre 2010

Explorations of the origins of ornament in abstraction, artefacts of textile culture, expressions of visual illusion and time, painting practices and geometry in science and art formed branches of enquiry through the changing seasons of the research project.

The Mind Map

During the first semester my Mind Map came into being. I drew ideas on paper and pinned it to the studio wall. This was my attempt to visually organize my understanding of abstraction and to identify where in the universe of its origin, and versatility, my own ideas might be placed (Fig. 2.1).

The very nature of abstraction in painting seemed to grow in complexity as my comprehension of what it means became more extended. Kobena Mercer wrote in *Discrepant Abstraction*, about its being divided, by philosopher Peter Osbourne (1991) into three main tendencies.[23] The first was a spiritual self-understanding, seen in the work of Kandinsky, Mondrian and Malevich which comes from within and from the heart. This seemed to resonate with my own leanings. The second, he said, was a modern pure form of abstraction, whereby the emotional content of the physical properties of paint were explored, referring to the Clement Greenberg modernist painting tradition. The content of my research eliminated this category for me. The third tendency, he said, was abstraction with no single meaning, plurality of reading or resistance to fixed meaning, which did not seem to fit my preference either.[24]

My journey to understanding was initiated by thoughts of Brian Green's theories about the 'strings of the universe, deeply entwined with the fabric of space and time'. These strings, Green says are *'richly intertwined multidimensional labyrinths which endlessly twist and vibrate, rhythmically*

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[22] Didier Maleuvre, "Art and Being," (Canberra: Australian National University, 2010). 2
[23] Kobena Mercer, ed., *Discrepant Abstraction*, four vols., Annotating Art's Histories (London: Institute of International Visual Arts and The MIT Press, 2006). 16
[24] Ibid. 17

beating out the laws of the cosmos'.[25] Doing just that in painting seemed to me a feasible way of developing a visual language for interpreting growth, and it gave me ideas for constructing the Mind Map like a heavenly constellation.

Development of abstraction in the twentieth century resulted, Markus Bruderlin says, from *'the modern artist's preoccupation with the ornamentation found in distant cultures'*.[26] Given my own life experiences and conditioning that absorbed the aesthetics of exotic cultural artefacts and traditions, this was a resounding declaration for me.

Early in the research project, artists like Tim Johnson and Brice Marden seemed to express my concerns about these aesthetics in their work. Tim Johnson used design elements like circles, symmetry, narrative and ceremonial teaching of Buddhist art, and Brice Marden's meditative and calligraphic glyphs and ritualistic painting were highly influenced by Eastern art and practices.

Paul Klee's notebook diaries from the early twentieth century, *The Thinking Eye* and *The Nature of Nature* are published, and his many profound insights began to permeate my intentions to discover an individual means to abstraction in painting. His extensive painting practice uncovered for me sensitive visual delights, that were as reassuring as his philosophy:

> *... Algebraic, geometrical, mechanical tasks are training elements en route to the essential, the functional, as against the impressive. One learns to look behind the false front, to go to the root of things. One learns to perceive the flow underneath...to dig deep and lay bare. To find reasons, to analyse.*[27]

My Mind Map, developed as I characterised more loose philosophical tendencies in abstract paintings that seemed to arise such as invention and intuition emanating from the mind; cultural storytelling, spirituality and way of life; big questions about existence to be understood, and learnt traditions and styles such as calligraphy or appropriation.

In the centre of the map I placed a sphere representing the core idea, accompanied by a compass with eight radiating points to some initial thoughts that might contribute in some way; Fine and Folk, Modern Art and Community, Secular and Sacred, Art and Craft.

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[25] Brian Green, *The Elegant Universe* (London: Vintage, 2005).18
[26] Bruderlin, ed., *Ornament and Abstraction*. sleeve
[27] Spiller, ed., *Paul Klee Notebooks Volume 2 the Nature of Nature*. 35

I dedicated spheres to the triple tendency theory and the others to artists in whose work I found points of interest; Gu Gan, Brice Marden, Imants Tillers, Emily Kngwarreye. Overlapping and cross-fertilization of ideas occurred. For instance, Brice Marden addressed the spiritual and cultural in Eastern art and also questions about nature and existence. I connected the spheres with sweeping intersecting lines I thought of as pathways or Green-like strings.

At first I did not consider that my practice research fitted squarely in any single category. I recognized a tendency towards the intuitive with spiritual connections to nature. It could not be said that I aimed at a pure self-limiting attachment to physical properties of the paint, but studio research did entail borrowed and learned influences from the art of other cultures.

The production of the Mind Map accompanied the establishment of my studio practice methodology in the first semester. Its usefulness as a tool helped clear a pathway in my thinking about abstraction in art history. As the studio practice research developed the Mind Map became less important and eventually abandoned.

Batik and Chintz

The great attractions of abstract, floral patterns, mainly from Indonesia and India, have long influenced European arts and crafts. My attachment to textiles of this nature is a legacy of my expatriate experience when I was able to see many traditional textiles being made and used in everyday life. In the studio research context, the elaborate patterns of chintz[28] and batik[29] seemed to suggest to me ways of making paintings. Precise patterning seemed less interesting to me than random and sometimes chaotic arrangements, but only when balanced colour and composition prevailed. I explored collage with plant material based on some of these botanical textile patterns in the first year.

Illusion and Space-Time

My studio practice research was dedicated to uncovering interpretations of the illusion of growth and visual energy associated with organic life. Growth is something we all know of, but can actually see only when technology flips time into fast-forward mode.

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[28] Rosemary Crill, *Chintz Indian Textiles for the West* (London: Victoria and Albert Museum, 2008).
[29] Robyn Maxwell, ed., *Sari to Sarong Five Hundred Years of Indian and Indonesian Textile Exchange*, first ed. (Canberra: National Gallery of Australia, 2003).

I encountered the notion of 'space-time', quoted in the preface of The *Algorithmic Beauty of Plants* (as D'Arcy Thompson put it):

> *...organic form itself is found mathematically speaking to be a function of time...We might call the form of an organism an event in 'space-time' and not merely a configuration in space.*[30]

In a painting called *Growth of Plants* (1921, Fig. 2.2), Paul Klee developed a diagonal aerial view of a group of towering shapes in a gradated palette emerging from the surface, giving rise to the idea of plants growing in the picture space. His various visual depictions of growth and his drive to create the allusion of it, was described by Anke Daemgen as *'...observations of nature (turned) into pure geometry'*.[31]

I explored similar sequencing in the second year of the studio research by reducing the size of forms, layering them within themselves.

Paul Klee theorised that an object of nature, be it plant, animal or man:

> *...grows beyond its appearance through our knowledge of its inner being, through the knowledge that the thing is more that its outward aspect suggest.*[32]

This concept, that our mind's eye tells us what we know already about living things, faltered somewhat when I attempted to apply it to my painting process. Without planning my paintings came into being semi-autonomously, motifs freed into the picture spaces without the knowledge of what they would grow to become.

In 1951 Joseph Beuys produced in a small drawing of a spinning seed pod (Fig. 2.3). It was:

> *...composed of only a few pen strokes, yet the sense of vitality it expresses is surprisingly intense. It seems as if one could almost hear the last, quiet rotation of the small wings.*[33]

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[30] Lindenmayer, ed., *The Algorithmic Beauty of Plants - the Virtual Laboratory*. V. (143) d'Arcy Thompson. *On growth and form*. University press, Cambridge, 1952

[31] Dieter Scholz and Christina Thomson, ed., *The Klee Universe* (Ostfildern: Hatje Cantz Verlag, 2008).206

[32] Jurg Spiller, ed., *Paul Klee Notebooks Volume 1 the Thinking Eye*, first English ed., 2 vols., vol. 1 (London: Lund Humphries Publishers Limited 1961). 63

[33] Sbine Schultz, ed., *The Painter's Garden - Design Inspiration Delight* (Ostfildern: Hatje Cantz Verlag 2007). 347

In my later works I attempted to exploit intense pictorial vitality like this, produced by a flickering of the eye from mark to mark.

Philip Taaffe created a *'pulsating field of imagery'* when *'one print would be slightly more deformed or degraded, then one would be perfect, then the next one would be terrible'* (Fig. 2.4). His choice of stencils and prints, he said, make his paintings *'seem more immediate, more palpable, more exciting sooner'*.[34] These ideas that vibration could be made visible with a few lines and by offsetting forms permeated my attempts to create visual illusion of growth in my studio practice work.

In ancient Chinese painting, ideas of *'the harmony of heaven and earth'* inextricably unite rhythms of life and nature.[35] It was said *'Ch'ang-k'ang applied his colours, sprinkling and splashing, and the grass and flowers seemed to grow at the movement of his hand'*.[36] In the studio I found that partaking in the life of a painting like this, by engaging with gesture and control of paint, made capturing the essence of growth seem more attainable.

Seems Familiar

The issue of audience familiarity with images arose in the *Arguing Objects* coursework research in the first semester. My choice of object was Imants Tillers' painting *Terra Incognita* (Fig. 2.5). The artist almost completely covered the painting with an adaptation of Emily Kame Kngwarreye's painting of a food plant (Fig. 2.6).

Born in Australia of Latvian parents, Imants Tillers worked with a myriad of images from art history and a canvas board system he named the *Book of Power*. He said, *'...All modes of art can be accommodated within this book...'*.[37]

Philip Taaffe and Imants Tillers both applied extensive referencing to many historical and cultural areas of art in their work. Holger Broeker said of Philip Taaffe's forms, *'Standing in front of them, it is impossible to escape their effects; and.....seemingly familiar times and places.'*[38]

Neither Tiller's cultural multiplicity, blended with a drive to seek out and perpetuate historical art, nor Taaffe's invention of something new from old seemed to provide me with useful methods for reiteration. However, some mechanical processes of masking and peeling, and application of botanical subjects, acted as helpful leads in my studio research. I constantly referred to Philip

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[34] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008*. 212
[35] Sze, ed., *The Mustard Seed Garden Manual of Painting*. *Xvii*
[36] Ibid. 17
[37] Wynstan Curnow, ed., *Imants Tillers and the Book of Power* (Sydney: Craftsman House, 1998). 71
[38] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008*. 193

Taaffe's many floating leaf paintings in the early stages of my research. They addressed my topic and a fluctuating conflict between abstraction and representation in my painting.

The Painter in the Garden

In the second term I found a comprehensive resource of botanically-related painting in an exhibition catalogue, *The Painter's Garden – Design, Inspiration and Delight,* from the Stadel Museum, Frankfurt.[39] Significant contributions in this publication helped me define studio practice connections between botanical themes and abstraction.

Philipp Otto Runge's drawing of a tulip blossom (undated) was a pivotal revelation (Fig. 2.7). The artist placed the flower in a *'...mathematical, geometric co-ordinate system...'.*[40] It occurred to me that explicit geometry could carry the symbolism of nature's design within painting.

I made drawings of these and others by Joseph Beuys (1921–1986) and Johann Wolfgang von Goethe (1749–1832) to try and follow the minds and hands of these artists who explored plants. Harlan wrote of von Goethe's *Metamorphosis of Plants 'an imaginary ideal type, a construct deriving from morphological investigations that therefore flourished exclusively in the garden of natural philosophical abstraction.'*[41]

In the second semester the *Point of View* coursework was based on research of The *Treasure of Seeds* exhibition, which was inspired by the connection between the Svalbard 'doomsday' Seed Vault in Sweden that provides the ultimate safety net for the world's crop seeds, and the vault-like Jenolan Caves in the Blue Mountains where decimation of the wildflowers for shows in Sydney occurred in the mid–1880s. Lady Carrington, wife of the then Governor, became aware of this, and she refused to attend the wildflower shows again. This led to a turning point in the popularity of the shows and the attempt at conservation of the native flora. [42]

The interpretations of 'seeds' by invited international artists varied greatly. It offered no material value for the studio practice research, but it did confirm for me the value of botanical themes as subjects for art and for collaborations between artists and scientists to raise awareness of global issues related to the importance of plant life.

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[39] Schultz, ed., *The Painter's Garden - Design Inspiration Delight*
[40] Ibid. 365
[41] Ibid. 358
[42] Jacqueline Martin-Miller de Velasco, "Lily - Lady of the Cave," in *Jenolan Caves explore marvel stay Blue Mountains Australia* (printed artist statement 2007).

Rice Paper Rituals

In the enormous field of Oriental art, a Chinese artist, Gu Gan, provided me some insights into cultural crossover in painting in a translated publication called *Three Steps of Modern Calligraphy*. In addition to instructions on technique and symbolism, many of the similarities and differences between Chinese painting and Western art are analysed by Gu Gan. He discusses similarities to calligraphy with Vassily Kandinsky's *Points, Lines and Planes* (Fig. 2.8) and his ability to achieve, with a number of intersecting lines, a perfect sense of balance.[43] I practiced the study, step by step, in my diary and absorbed useful ideas about balance that somehow explained some of those intuitive responses that often occur in the studio practice, such as *'complicated pulse...extreme (counter-balancing) centrifugal extension of diagonals...dramatic sounds on the touching points...the balance extension of horizontal and vertical lines...'*.[44] (Fig. 2.8.1)

Ruth Waller alerted me to *The Mustard Seed Garden*.[45] This centuries-old translated text is a revered masterpiece from the annals of Chinese painterly wisdom and philosophy. It explained to me the derivation of my early lessons in formal techniques which I revisited and explored in watercolour painting during my research.

This led to the idea for the composition in the plant collage work in the second semester, from the framing effects of symbolic windows and gateways of traditional Chinese gardens (Fig. 2.9). Author on the subject, Maggie Keswick, describes them as places *'...providing calm and harmony, serving as a backdrop for the vibrating shadows and silhouettes of plants.'*[46]

Ornamental garden philosophy Keswick described was insightful and provided me with a way to think about invoking the metaphors, encompassed in the many elements I was integrating with my botanical theme, such as growth, passage of time and illusion.

The Gestural Trace

The tendril epitomises plant growth and during the third semester its linear form easily made its way into the growing body of intertwining ideas, as a flexible formal element to be explored. This was reinforced for me during a master class in the ANU Painting Workshop with a Persian miniaturist

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[43] Gan, *The Three Steps of Modern Calligraphy*. 93
[44] Ibid.123
[45] Sze, ed., *The Mustard Seed Garden Manual of Painting*.
[46] Keswick, *The Chinese Garden History Art and Architecture*. 109

Hossein Fallahi. Participants followed his lead developing fine and delicate floral, leaf and tendril motifs, outlining and colouring, in traditional border patterns that have existed for centuries.

Marcus Bruderlin says abstraction in contemporary art emerged from such traditions with ornamental arabesque of Philipp Otto Runge: [47]

> *...it manifested itself... in two ways: as an organic line and as a geometric line, or put differently: in the gestural trace and in compositional structure.* [48]

Owen Jones, who was influential in the evolution of the decorative arts in the nineteenth century, declared that *'art of all ornament is based upon observation of the principles which regulate the arrangement of form in nature, [rather] than on an attempt to initiate the absolute form of those works.'* [49] He devised a number of propositions, or rules, for artisans to follow that were useful concepts for growth patterning in my studio work compositions:

> *In surface decoration all lines should flow out of a stem. Every ornament, however distant, should be traced to its branch and root.* [50]

According to Holger Broeker, ornament is differentiated from decoration as 'carriers of meaning'. She explains a principle of *'context-sensitivity depending on the ornament's contents'* [51] which addressed my concerns about decorative connotations in my studio work. Broeker says:

> *...when asking whether the ornaments are images or only signs must also be reviewed because unlike the sign or the symbol, an image does not find fulfilment in its referential function, but innately partakes in that which it illustrates.* [52]

This idea seemed to contrast with Paul Klee's interest in *'bringing fixed ornamental forms to life by changing them into mobile elements'* and to developing *'... their inherent formal language further, independent of its meaning.* [53]

Giving forms new meaning seemed to parallel Philip Taaffe's preoccupation with ornament of all cultures, which Broeker says also *'...developed a form of universal iconoclasm...'* in his work. [54]

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[47] Bruderlin, ed., *Ornament and Abstraction*. (Basel: Foundation Beleyer 2001). 87
[48] Ibid. 87
[49] Owen Jones, ed., *The Grammar of Ornament*, second ed. (New York: Van Nostrand Reinhold 1982 1856). 6
[50] Ibid. 6
[51] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008*.193
[52] Ibid. 193
[53] Bruderlin, ed., *Ornament and Abstraction*.178

These various hypotheses served as a way for me to link my disparate ideas, including ornament, algorithm and metaphor together, coinciding with my exploration of geometric motifs morphing in gestural traces in ornamental linear compositions. Ensuring that content and context remained intact was becoming important to me.

Branching Algorithms

Remko Scha refers to algorithms being *'a sequence of formal (mechanical) rules operating on symbolic representations (codes)'* and algorithmic art is called *'meta-art, autonomous algorithms that produce visual art or are themselves (meta-) artworks'*. It is not a new concept, as he says, since from ancient times systems of rules have been used to ensure objectivity and precision.[55] These ideas, and *The Algorithmic Beauty of Plants*, produced in 1990,[56] on the work of mathematicians Przemyslaw Prusinkiewicz and Aristid Lindenmayer, helped germinate the seeds of optimism for a way forward in my studio research.

Initially descriptions of *'bi-lateral symmetry of leaves, rotational symmetry of flowers and helical arrangements of scales on pine cones'*[57] directly suggested ways I could describe dynamic patterns in my painting (Fig. 1.9). This facilitated visual energy in the content while also maintaining the botanical context.

Then a self-determining mathematical system called a Koch curve enticed me to explore further with self-avoiding arrangements of four motifs.[58] (Fig. 2.10)

Subsequently, I identified a geometric symbol called the L-system, named after its author Lindenmayer, as a motif for intensive exploration during the second year of the research project. The L-system, an algorithmic device, is a way to describe plant development in time, in mathematical terms (Fig. 2.11).[59] I found branching growth patterns using the L-system adapted to development of ornamental structure in compositions. A central concept of rewriting occurs when complex objects or shapes are defined by successively replacing the initial object or shape using a set of rules.[60] In practice at each arm of the L or right angle a subsequent pair of similar arms was added and so on, mechanically creating a branching network.

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[54] Ibid. 81
[55] Remko Scha, "About Algorithmic Art," http://radicalart.info/AlgorithmicArt/intro.html.
[56] Lindenmayer, ed., *The Algorithmic Beauty of Plants - the Virtual Laboratory*.pvi
[57] Ibid. v
[58] Ibid. 10
[59] Ibid. v
[60] Ibid. 1, v

I also found that the L-system capacity for describing growth appeared in various other academic spheres of science and mathematics and computer graphics.

Although complicated mathematical equations of Professor Michael Barnsley's work on *Superfractals – Patterns of Nature* [61] (Fig. 2.12) were outside the scope of my research, Barnsley's digital imagery, often created with branching systems and continuous transformations by code, reflected ideas for my practice research[62] (Fig. 2.13).

I embraced the process of building branching formations and structure in the paintings, using the singular L-system as a constant in all the final year paintings. By now established as a leitmotif, the L-system appeared to me to be capable of being the subject of endless variations and as a concept 'branching' actively evolved in my exploration of abstraction.

In a geographical text book, *Fractal Cities,* that I encountered during the fieldwork studies, an image showed 'hierarchy and network structures' that also looked like branching L-system diagrams. The authors link fractal geometry with urban form and function and refer to Mandelbrot's 'geometry of nature'.[63] They had the idea that the world is chaotic, but beneath this first impression lies an order which is regular, unyielding, and of infinite complexity.[64] I explored this concept of the underpinning order of growth forces in nature in the painting by submerging the grid in surface pattern in the final semester. This was also becoming a constant in the studio research.

Widespread references to 'branching' appeared across various fields of endeavour, affirming for me a motivation for artistic interpretation of these concepts as a subject for my studio research in a contemporary practice.

I found a branch of biology called Systematics, which *'seeks to identify species and to organize them into higher taxa, such as genera, families, orders, and kingdoms'*.[65] In the *Philosophy of Biology* (2000), I noted Elliot Sober refers to a diagram of Darwin's *Origin* showing how the process of descent with modifications generates a 'tree of life'. The generational branching systems in this textbook closely resemble L-system generated branches (Fig. 2.14).[66]

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[61] Michael Barnsley, *Superfractals Patterns of Nature*, (New York: Cambridge University Press. 2008) .
[62] Ibid.184
[63] Michael Batty and Paul Longley, ed., *Fractal Cities a Geometry of Form and Function* (San Diego London: Academic Press 1994). 59
[64] Ibid. v
[65] Elliott Sober, *Philosophy of Biology* Dimensions of Philosophy Series (Boulder, Cumnor Hill Westview Press, 2000; reprint, 2000).165,166
[66] Ibid. 146, 164

J. Mishra and S.N. Mishra also devoted a text book for mathematicians and engineers to L-System Fractals. They created an L-system fractal to replicate an event called traumatic reiteration, otherwise known as a shooting branch. They observed:

> *During the normal development of the tree, buds are created, but many buds do not produce new branches, and remain dormant. These buds may be subsequently activated by the removal of leading buds from the branch system* (Fig. 2.15).[67]

These same conventions apply to real-life management of plant growth in horticulture. While engaging with metaphor, I explored these ideas in the process of constructing ornamental frame works in painting, using the branching system but sometimes terminating lines and sometimes allowing others to develop in opposing directions.

I discovered the virtual realm of digital art and Gabriel Mulzer's experimentations with the *Flash Math* program, which explores tree effects that can be created using a 'recursive' pattern. Mulzer's tree images appear in varying style effects in branching canopies that I found fascinating (Fig. 2.16). Mulzer's lighthearted suggestion *'let's play with the variables again',*[68] encouraged me to experiment with spontaneity and chance more boldly when I was orchestrating L-system compositions in my painting.

Shades of Becoming

Paul Klee's *Rock Flora* (1940, Fig. 2.17) was an important painting as a foundation for my research project. It was described by Will Grohmann as *'a continuous tapestry of straight and round, bar strokes, behind which one feels the process of life.'*[69] Initially I enjoyed its colours and forms and it was useful to me as an example of abstraction emanating from a botanical theme, but it came to represent much more later on when similarities to Klee's painting appeared in my work by chance rather than design.

In the fourth semester a watershed moment of realization also occurred. Ruth Waller mentioned *'no representation whatsoever'* in the context of abstraction. At that point it finally seemed possible in

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[67] J. Mishra and S. N. Mishra, ed., *L-System Fractals* vol. 209 (Mathematics in Science and Engineering 2007). 143

[68] Steve Rycroft, ed., *Flash Math Creativity*, Friends of Ed Designer to Designer (Berkeley: an Apress Company 2004). 90

[69] Will Grohmann, ed., *Klee* (New York: Harry N. Abrams, 1967). 158

my search for a means to abstraction to actively oppose any sort of emblematic representation. For instance that meant I now felt free to purposely avoid shapes that looked like leaves or flowers even if they occurred in the process of system generated composition I was researching.

I was reminded that Philip Taaffe said *'I like to define the parameters of the work indirectly, by gradually eliminating considerations that are not essential to what needs to be stated.'*[70] Deleting non-essentials was a notable feature of abstraction that I decided to concentrate on. I accepted that the metaphor invoked by my botanical theme fully represented my concept and I could be free to concentrate on developing something new and succinctly abstract.

There was much enquiry and reflection on the development of abstraction in painting highlighted in the 2010 *Paths To Abstraction 1867–1917* exhibition which I visited. I was able to view two of Piet Mondrian's paintings, which were visually and philosophically illuminating for me, due to the heavy material qualities of the paint and the thematic context of his abstraction (Fig. 2.18).

Terence Maloon wrote in the exhibition catalogue, *'...[t]rees, facade and ocean, for Mondrian progressively converge upon his plus-minus compositions. Mondrian called this process evolution...an evolution he thought of as a progressive unveiling.'*[71] (Fig. 2.19).

Frank Elgar tells us that Mondrian went on tirelessly reproducing the same apple tree, each time varying the colour and simplifying form, becoming more and more abstract until he had reduced it first to the skeletal structure of the model, and finally to a purely linear rhythm. The trunk became no more than a vertical axis, around which 'branches' were indicated by a tangle of broken, repeated horizontal lines.[72]

This resounding model of abstract transformation of a branching tree, made in 1912, seemed totally relevant in the context of my studio research proposal based on my growing resolve to eliminate visual representation of plant forms.

As this occurred the shades of many colours of my pressed plants became a more prominent vehicle for activating the botanical metaphor and my abstract voice began to emerge in my studio research.

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[70] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008*. 128
[71] Terence Maloon, ed., *Paths to Abstraction 1867 - 1917* (Sydney: Art Gallery of New South Wales, 2010). 38
[72] Frank Elgar, *Mondrian*, trans. Thomas Walton,
(London: Thames and Hudson, 1968). 46

In *The Art of Colour*, Johannes Itten expressed the view that there were four main problems to deal with in the study of colour impressions – intrinsic colour, colour illumination, shadow, and reflection. Itten wrote:

> *Colored light reflected from colored objects variously modifies the color of other objects. Every colored object reflects its color into the surrounding space...*[73]

I noted that Paul Klee considered that *'nature is full of ideas about colour'*. He theorized that *'... one colour phenomenon that arises above all the rest as a symbol of all use of colour...'*. Referring to the rainbow,[74] Klee variously defined it as an arc of prismatic colours refracting and reflecting rays of sun in drops of rain.
In the studio I explored atmospheric and illusionistic features present in rainbows by combining and overlaying with soft washes of colour, shadowing, and shifts in tone that both Itten and Klee alluded to.

I found that Richard Larter discovered a form of colour abstraction in the late 1970s, using mini rollers. Larter said, *'one inch rollers and three inch rollers - if you rolled them into white paint and then painted real [art] paint into the top of that you could roll stripes and dot patterns and all sorts of things...'*.[75] Continuing to work with these methods for decades, Larter went on producing vibrant dynamic paintings with the same basic elements of the circle, the arc (a rainbow), and the square in many different configurations.[76] Larter's discovery of abstraction through colour and paint in this way seemed to me to be a form of pure abstraction, which I came to realize was unlike my exploration of colour which I resolved should maintain a botanical context.

Colour effects of simultaneous contrast that Itten described sometimes contributed to unexpected results in my studio research. Knowing acrylic paint always darkens as it dries, and anticipating these changes, meant I had to invite and accept chance results in the research.

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[73] Itten, *The Art of Colour* , (New York: John Wiley & Sons, 1973). 124
[74] Spiller, ed., *Paul Klee Notebooks Volume 1 the Thinking Eye*. 467
[75] Deborah Hart, ed., *Richard Larter*, Richard Larter: A Retrospective 20 June - 14 September 2008 (Canberra: National Gallery of Australia, 2008). 46
[76] Ibid. 146

An untitled work (circa 1990) by Emily Kame Kngwarreye (Fig. 2.20) became important to my exploration of colour in the second year.[77] Kngwarreye's colours in this painting seemed straight from the earth, and muted like dried plants. There was a sense of intimacy with the hand of the maker. A linear pattern was submerged and barely visible just below the surface of dots appearing like scattered seeds. This painting was a powerful revelation that stimulated similar explorations in my studio research.

Another Kngwarreye painting, the white on black *Big Yam Dreaming* (1995, Fig. 2.6) that featured in Imants Tillers' work *Terra Incognita* (2005) suggested other abstract interpretations of plant life to me. As Jenny Green described it:

> *... organic tracery of interconnecting lines in the yam paintings bear an uncanny resemblance to the crazed pattern of cracked earth on the ground where the yam vine grows, mirroring the network of arterial roots below the surface...*
>
> *Emily sat cross legged on the canvas and painted her way to the edges, 'knitting' one section onto another without preliminary sketching, scaling or reworking...*[78]

For me this painting resonated with a tendency I share in my emerging form of abstraction. It relates towards development of a self-determining pattern, sometimes intuitively, upon a surface, imbued with cultural and philosophical meaning, by means of connecting lines and thoughts of meanings contained in my thematic metaphor.

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[77] Margo Neale, ed., *Utopia: The Genius of Emily Kame Kngwarreye* (Canberra: National Museum of Australia Press, 2008).84
[78] Ibid.168

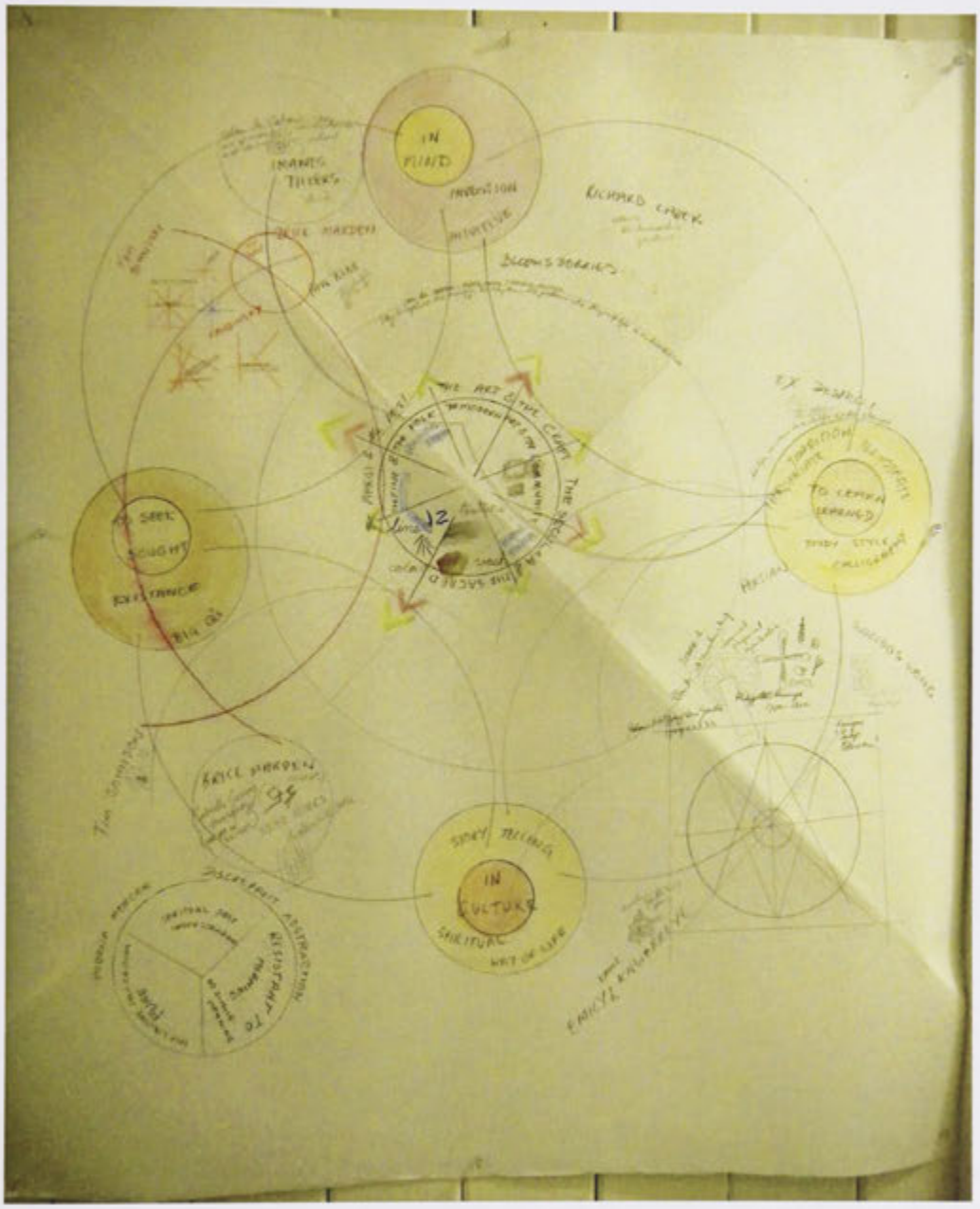


Fig. 2.1 Kerry Shepherdson - *The Mind Map*, drawing on paper, 60x100cm.

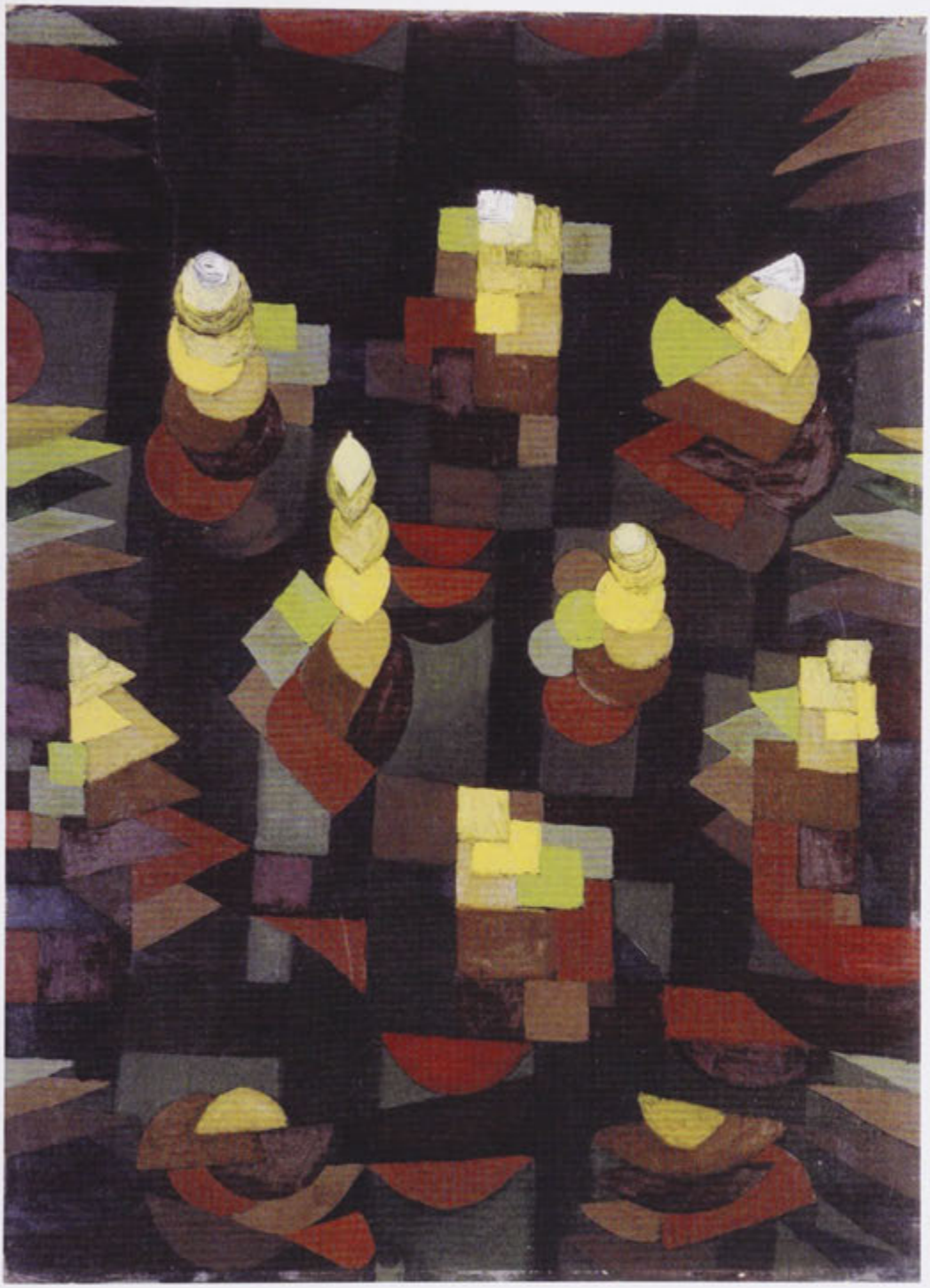


Fig. 2.2 Paul Klee, *Growth of Plants*, 1921, oil on black priming on cardboard, 54x40cm.

Fig. 2.3 Joseph Beuys, *Spinning Seed Pod*, 1951, dark blue ink pen on gray water colour paper, left and right edges unevenly torn, 16.9 (left)x 16.5 (right)x17.1cm.

Fig. 2.4 Philip Taaffe, *Pteris Viscosa*, 1996, mixed media on canvas, 168.3x140.9cm.

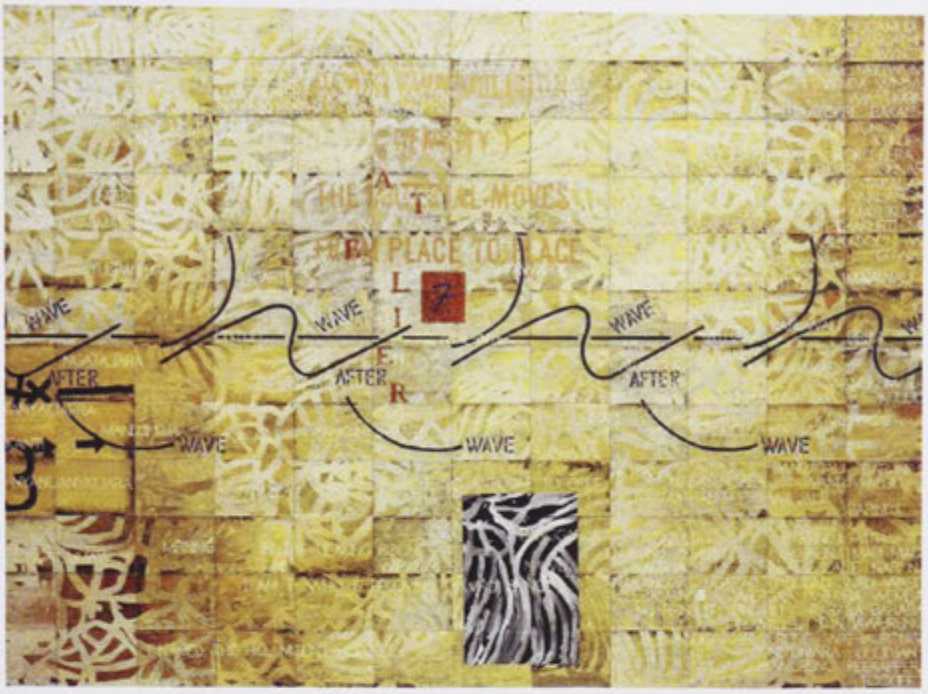


Fig. 2.5 Imants Tillers, *Terra Incognita* (detail), synthetic polymer and gouache on 288 canvas boards of 120x336cm (304.8x853.4cm).

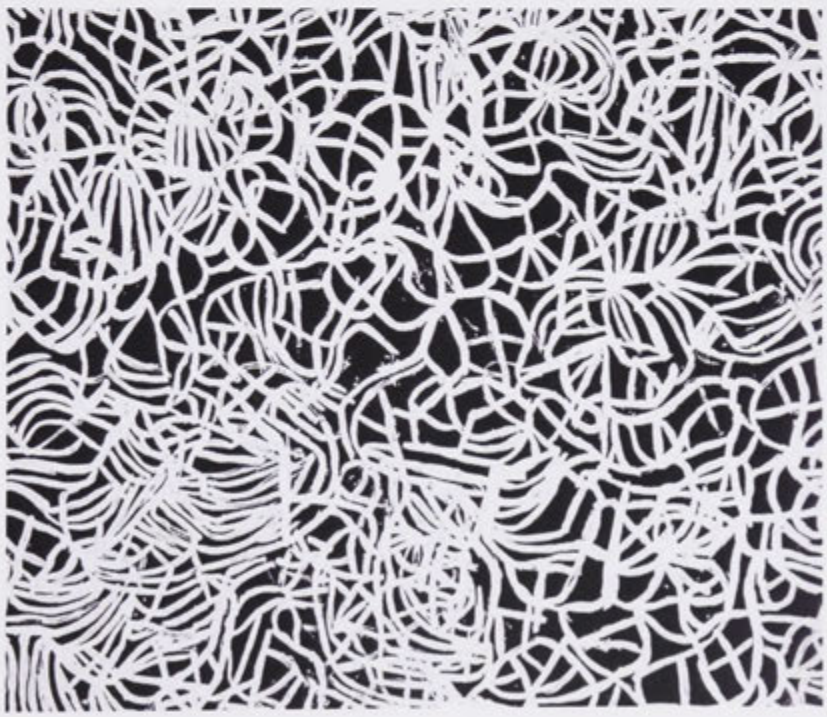


Fig. 2.6 Emily Kame Kngwarreye, *Big Yam Dreaming* (detail), 1995, synthetic polymer paint on canvas, 291.1x801.8cm.

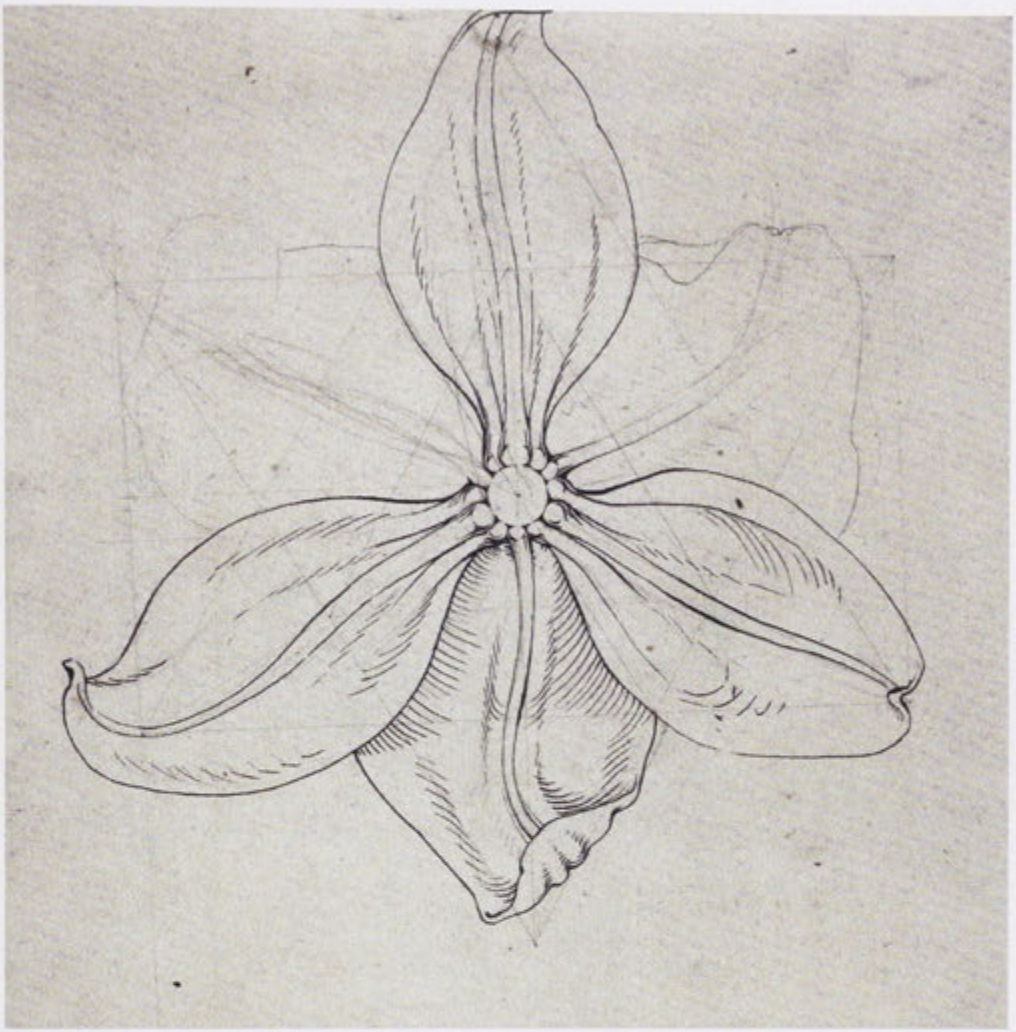
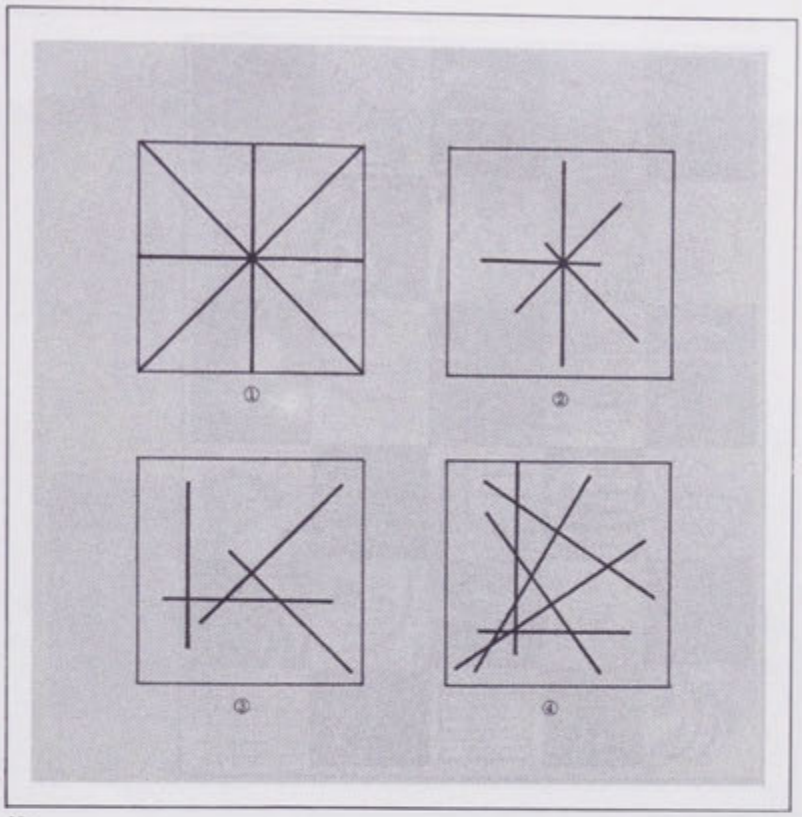


Fig. 2.7 Philipp Otto Runge, *Tulip Blossom* (detail, undated), black ink over pencil, 29.4x 23.5cm.



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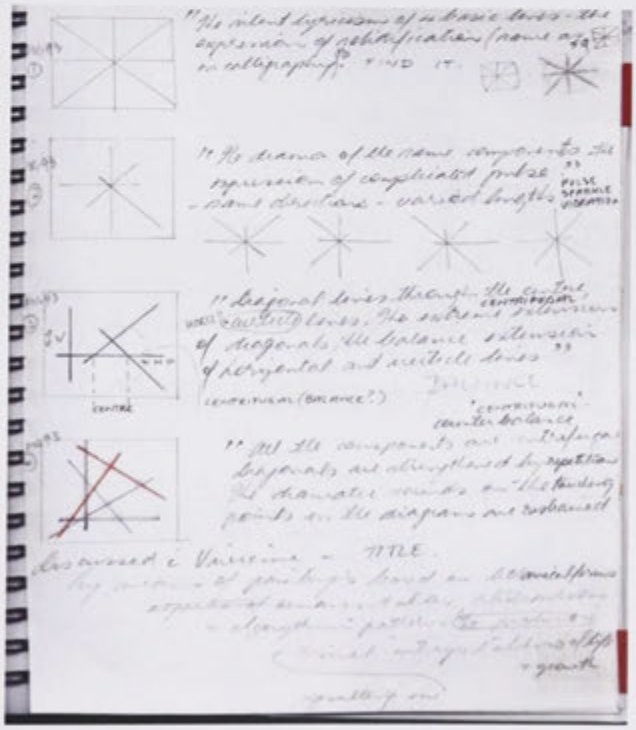


Fig. 2.8 Kandinsky's *Points, Lines and Planes*.

Fig. 2.8.1 Studio process – diary page

Fig. 2.9 Plum Door, Shih Tzu Lin, Suchow (early Ming period).

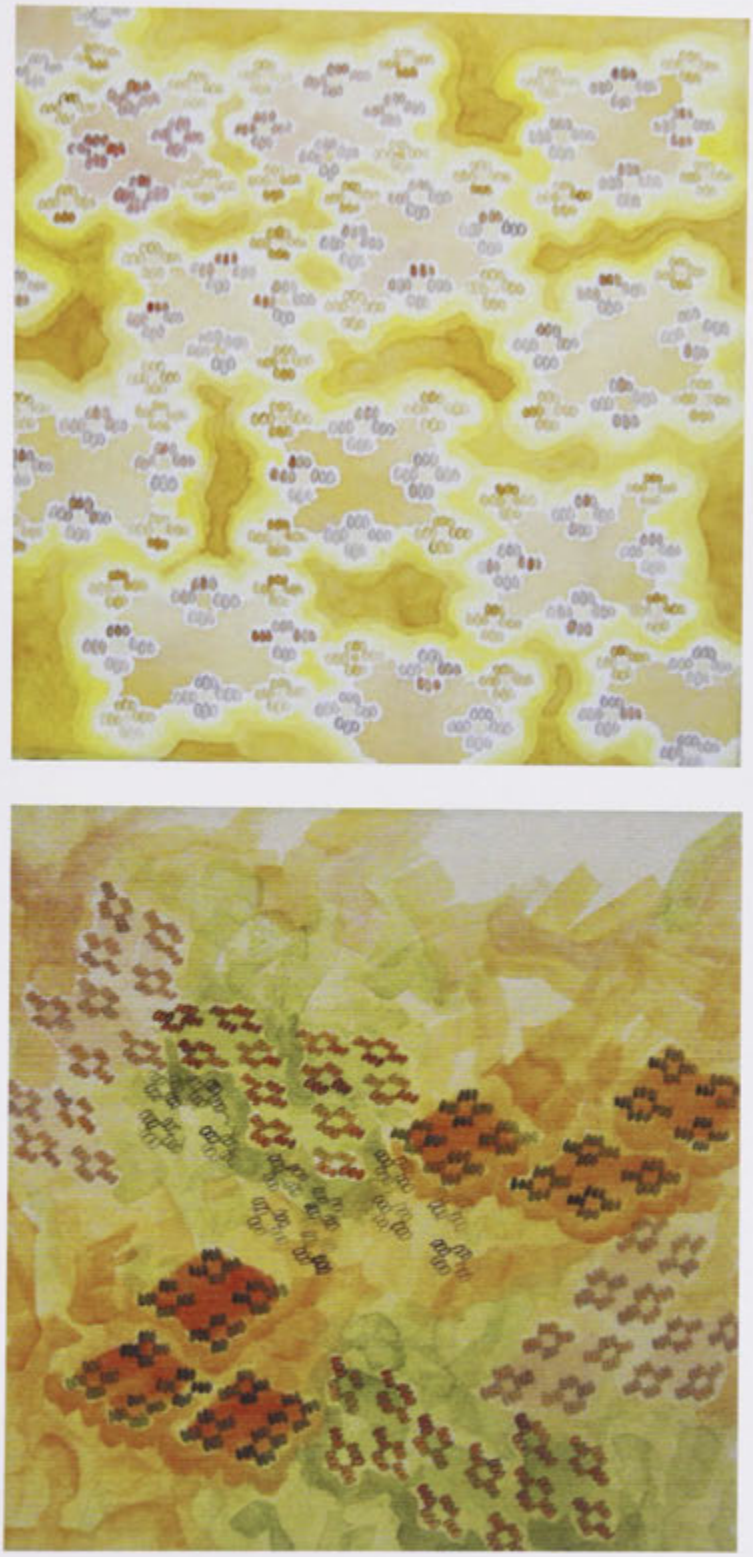


Fig. 2.10 Studio process – two watercolour paintings, Koch curve, 40x40cm.

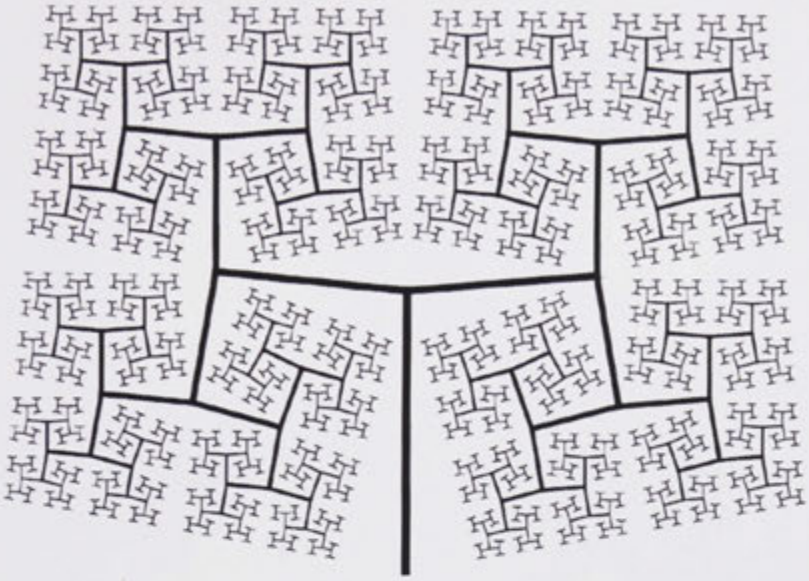
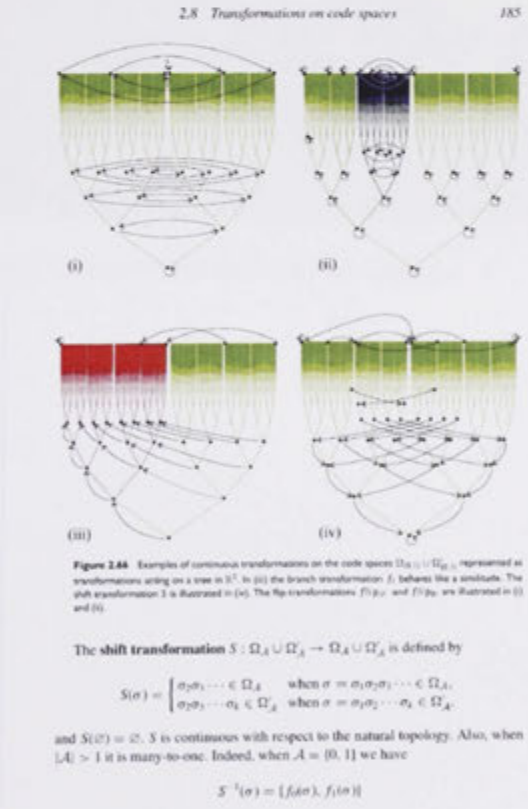


Fig. 2.11 A branching pattern generated by the L-system.



2.8 Transformations on code spaces 185

(i) (ii)

(iii) (iv)

Figure 2.66 Examples of continuous transformations on the code spaces $\Omega_{A\cup\Omega'_A}$ represented as transformations acting on a tree in $\mathbb{R}^3$. In (ii) the branch transformation f_1 behaves like a similitude. The shift transformation S is illustrated in (iv). The flip-transformations $f(\cdot)_{\sigma\bar{\sigma}}$ and $f(\cdot)_{\bar{\sigma}\sigma}$ are illustrated in (i) and (iii).

The **shift transformation** $S : \Omega_A \cup \Omega'_A \to \Omega_A \cup \Omega'_A$ is defined by

$$S(\sigma) = \begin{cases} \sigma_2\sigma_3\cdots \in \Omega_A & \text{when } \sigma = \sigma_1\sigma_2\sigma_3\cdots \in \Omega_A, \\ \sigma_2\sigma_3\cdots\sigma_k \in \Omega'_A & \text{when } \sigma = \sigma_1\sigma_2\cdots\sigma_k \in \Omega'_A. \end{cases}$$

and $S(\bar{\varnothing}) = \bar{\varnothing}$. S is continuous with respect to the natural topology. Also, when $|A| > 1$ it is many-to-one. Indeed, when $A = \{0, 1\}$ we have

$$S^{-1}(\sigma) = \{f_0(\sigma), f_1(\sigma)\}$$

Fig. 2.12 Examples of continuous transformations on the code spaces.

Fig. 2.13 The panels have been assigned various colours.

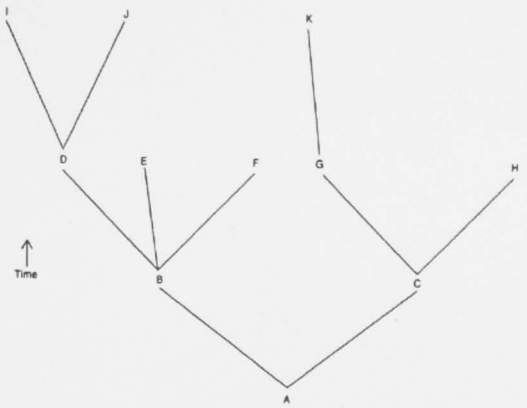


FIGURE 6.1 In a pure branching process, lineages split but never join.

Fig. 2.14 In a pure branching process, lineages split but never join.

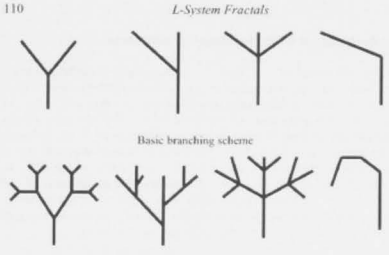


Figure 5.2: Branching structures of interest in two dimensions

A sample structure from Figure 5.2 has been taken initially. This is 1st structure from the second row of the figure 5.2, which is an ordered one. By using the above structure, one can construct the following sample structure as shown in Figure 5.3, where nodes and branches are represented using numbers.

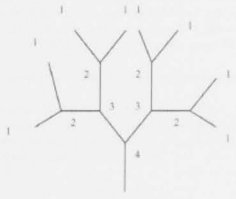


Figure 5.3: Ordered tree from basic branching schemes.

The following arbitrary tree as shown in Figure 5.4 closely follows that of Viennot and demonstrates the relationship between the ramification matrix and the plant structure.

Fig. 2.15 Branching structures, resulting from repeated application of a single branching scheme.

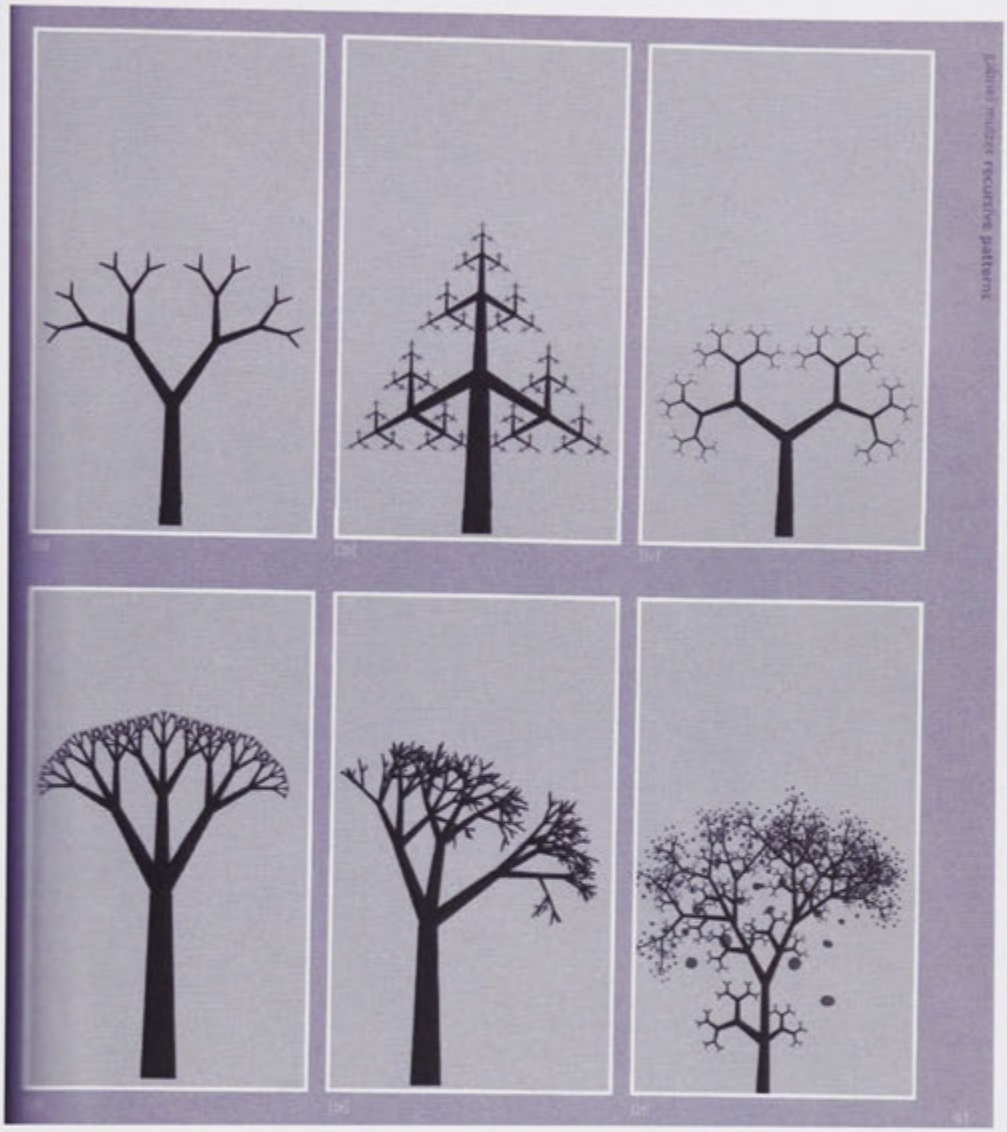


Fig. 2.16 Gabriel Mulzer recursive patterns.

Fig. 2.17 Paul Klee, *Rock Flora*, 1940, oil and tempura on burlap, 35 3/8 x 27 5/8 in.

Fig. 2.18 Piet Mondrian, *Trees* (detail), 1912, oil on canvas, 94x70.8cm.

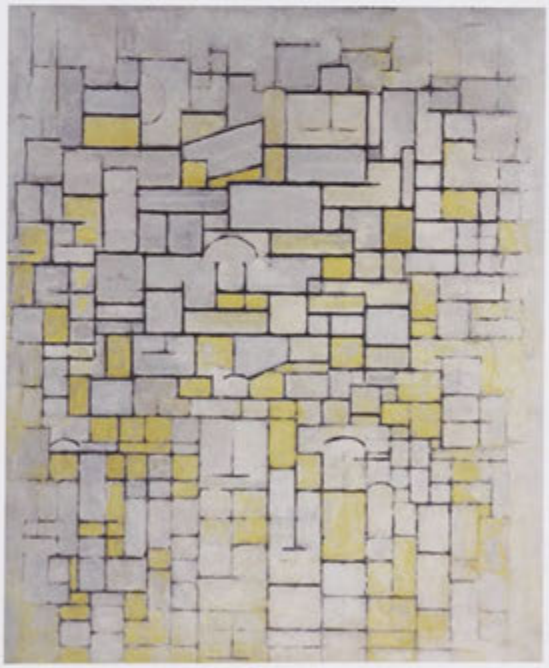


Fig. 2.19 Piet Mondrian, *Tableau no 1/Composition no 1/ Composite 7* (detail), 1914, oil on canvas, 120.6x101.3cm.

Fig. 2.20 Emily Kame Kngwarreye, *Untitled*, circa 1990, synthetic polymer paint on canvas, 216.9x125.8cm.

> *What is really essential, really productive is the Way- after all, Becoming is superior to Being*. (Klee, Diary (1914), No 928) [79]

In this section I will discuss the development of my body of paintings from the beginning to end of the project. My initial desire to explore ornamentation and maintain a strong emotional link to the process of abstraction through metaphorical use of botanical themes did not wane throughout the research project despite the evolution of a self-determining, form of abstract visual language that arose in the final semester.

Late Summer 2009

It was the time of the devastating bushfires in Victoria and I felt compelled to start a painting about the great tragedy for inhabitants and the environment. Not yet sure of my direction, I talked about this painting, *Black Saturday*, in the 10-minute postgraduate student introductions (Fig. 3.1). The painting looked like an aerial aftermath scene with ground layers revealing hopeful signs of new growth in the tracks of the masking tape.

I attentively reproduced Paul Klee's painting *Rock Flora* (Fig. 2.17)[80] in my diary. Germination of ideas for the later development of compositional branching systems in the studio research began then, with little realisation.

The extravagant floral patterns of a familiar Indian Tree of Life coverlet provoked my thoughts at this time also. I began drawings of simple botanical shapes with watercolour pencils on paper. For a reason not yet obvious, I glued rock rose petals to one of them. I made a number of stencil paintings and drawings that I discussed in Chapter 1, **The Golden Key**, and a number of small square acrylic paintings on canvas (Fig. 3.2).

To know them better, I reproduced some of the floating shapes from Philip Taaffe's painting *Siraspatha* (1993–94, Fig. 3.3)[81] in my diary and experimented briefly with juxtaposing styles, reductions of form and ornamental design.

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[79] Grohmann, ed., *Klee*. 11
Tagebucher 1898-1918. Edited by Felix Klee. Cologne, 1957. English translation: the Diaries of Paul Klee, 1898-1918 . Berkeley, California, 1964.167

[80] Ibid. 158

[81] Kunstmuseum Wolfsburg- Holger Broeker, ed., *Philip Taaffe the Life of Forms, Works 1980 - 2008.*

At this time Imants Tillers' large-scale painting *Terra Incognita* (Fig. 2.5)[82] was the subject of the coursework research. It occurred to me that the artist's process of stacking small canvases, then assembling them in a two dimensional way, was much the same way a bedcover can be made. I wrote *'bed of roses'* in my diary, but after a brief concentration on similar small format combinations, I began to recognize the essential importance of the act of painting in my research.

Autumn 2009

The idea of composing structures that could carry botanical motifs within began taking shape in my mind. There was the shape of a Japanese paddle fan, with a landscape fitting snugly inside, and others like the arch of an open fan, decorated with a spray of branches with blossoms (Fig. 3.4).

A second stage of plant deconstruction was also taking place. I interrogated Philip Otto Runge's tulip blossom drawing (Fig. 2.7), a loose symmetry of the six petals divided into a *'geometric co-ordinate system'*[83] in my diary, along with Johann Wolfgang von Goethe's stalk and flower parts of carnations[84] and Joseph Beuys airborne seed pod (Fig. 2.3).[85]

I decided it was time to experiment with painting on a large, one metre square canvas, primarily based on the Philip Otto Runge geometric tulip flower. It seemed important to retain the history of its making in the painting. This represented for me a timeline associated with life and growth I was interested in. A number of large paintings followed which were experiments in visual vibration and illusion of movement, in which I used offsetting shapes, layering and colour shadowing techniques (Fig. 3.5, 3.6, and 3.7).

I realised with this studio research the possibility of producing the visual manifestation of growth and expression of time in painting. D'Arcy Thompson's 1952 theory that growth related to a factor of space-time made this even more cognitively accessible to me.[86]

I wrote in my diary that the paintings appeared to take on a life of their own. In *Eye and Mind*, Maurice Merleau-Ponty said *'[i]nevitably the roles between painter and the visible switch. That is why so many painters have said that things look back at them.'*[87] The dynamic momentum of rotational symmetry seemed to cause such an experience of role reversal between me the maker,

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[82] Curnow, ed., *Imants Tillers and the Book of Power*.136-139
[83] Schultz, ed., *The Painter's Garden - Design Inspiration Delight* 153
[84] Ibid.358
[85] Ibid.347
[86] Lindenmayer, ed., *The Algorithmic Beauty of Plants - the Virtual Laboratory*. (New York: Springer-Verlag 1990). v
[87] Maurice Merleau-Ponty, "Eye and Mind."129

and my paintings. However, the central object within the work became emblematic, which was problematic for me at this time.

I turned to Owen Jones who addressed imperfection and asymmetry in his Proposition no. 9, and what the eye actually sees.[88] In my diary I converted the words of Jones' principle into diagrammatic grids (Fig. 8). In part it states, *'[t]hose proportions will be the most beautiful which it will be the most difficult to detect...'*.

The way we see things is affected by what we know or what we believe,[89] and I began to carry through the project this idea that harmony may be based on irregularity and asymmetry that is difficult to detect. In the next work I arranged irregular groups of six petals in a soft, undulating grid structure. This had the pleasing effect of balance and gentle dispersing of the visual activity away from any central emblem (Fig. 3.9).

Understanding balance was becoming essential in my compositions. I turned to Chinese painter Gu Gan who, for example, noticed that Vassily Kandinsky *'analysed not only points, lines and planes.... but also their inner spirit and inner acoustics'*.[90]

Winter 2009

The second semester began with a fresh exploration of the plant subject, beginning with exploration of pressed and dried plants in art and culture.

The idea of composite pressed plant arrangements as pictorial elements in painting appeared to me in the form of fan shapes with pictures within, and framing effects of gates and window shapes of Chinese gardens of pleasure.[91] Transfixing a virtual doorway into the paintings generated for me a way of 'being' in and part of the collection of ideas about nature that I was exploring.[92] I made a series of nine, 42cm square plant collage and watercolour paintings on paper. The first four were compositionally based on details of patterns found in chintz[93]and batik[94] textiles arranged in Chinese garden shapes; a six-petal flower (Fig. 10), a four-petal flower (Fig. 11), a moon (Fig. 12), and a peach (Fig. 13).

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[88] Jones, ed., *The Grammar of Ornament*. (New York: Van Nostrand Reinhold 1982). 5
[89] John Berger, *Ways of Seeing* (London: British Broadcasting Corporation and Penguin Books, 1977). 8
[90] Gan, *The Three Steps of Modern Calligraphy*. (Bejing: China Books Publishing House 1990). 92
[91] Keswick, *The Chinese Garden History Art and Architecture*.135
[92] Ibid.134
[93] Crill, *Chintz Indian Textiles for the West*. 49, 82
[94] Maxwell, ed., *Sari to Sarong Five Hundred Years of Indian and Indonesian Textile Exchange*. Cover, 203

I structured a number of following plant composite collage paintings based purely on imagination not linked to, but inspired by, the textile patterns and Chinese garden gates. I wrote in my diary, *'as fantastical as I could within the bounds of pictorial balance'* (Fig. 14).

This freedom initiated useful play with tiny plant motifs in the framing areas with Chinese brush work, and developed as a cameo collection of composite ideas on paper, made with plant material and watercolour painting. Custom-made Perspex frames helped with difficulties I was experiencing with buckling paper, and protected it from environmental damage. However, I was developing concerns about the representational quality of the assembled pictures. I was hesitant to relinquish my enjoyment of the plant material but was experiencing a conflict with painting. Ruth Waller suggested to me that plants are what they are, and this is not painting. This made sense to me and was at last a liberating factor in my research. I found I was able to let go of my attachment to the physicality of the plants and concentrate on painting.

Simultaneously, the coursework *The Treasure of Seeds* exhibition was my opportunity to maintain the focus of my research on botanical themes and explore research collaborations between scientists and artists. At this time I changed format and material and made two experimental paintings, 100cm square, with acrylic paint on canvas. They were fusions of Philip Taaffe's *Devonian Leaves* (Fig. 15), Philip Otto Runge-inspired geometric tulip blossoms, and the Chinese garden gate. I again tested the juxtaposition of different painting styles but found these two paintings were unsatisfactory in the sense that I I was unable to take anything from them forward in the research (Fig. 3.16).

Spring 2009

Returning to small format, primed paper and watercolour painting, I commenced a new series, initially retaining the Chinese garden gate idea. I also became totally engaged in the detailed markmaking of Chinese brush painting. I practiced a triple-lobe leaf arrangement, referring to the wu'tung tree outline style,[95] working it in a self-avoiding pattern filling the picture space. I then coloured it following a corresponding lesson for colouring (Fig. 3.17).[96] This painting was a pivotal step in my studio practice research. Possibilities for using other leaf motifs following algorithmic growth patterns emerged.

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[95] Sze, ed., *The Mustard Seed Garden Manual of Painting*. (New York: Princeton University Press 1963). 117
[96] Ibid.71

Then, with the discovery of a sequence of Koch curves (turtles)[97] made up of successive groups of four geometric symbols, I worked several paintings using self-avoiding, irregular patterns in island groups of four in the outline style and with a different leaf motif (Fig. 3.18).

I discovered responsive effects of the 'tooth' on the primed paper by working up each layer progressively. In more experiments I rotated conifer leaf motifs, floral forms and lineal leaf ropes testing the limits of the primer medium with watercolour (Fig. 1.9).

A pivotal point in the studio practice research occurred when I identified Lindenmayer's L-system growth mechanism for pattern making.[98] It facilitated the making of five watercolour paintings on primed paper in the same format, based primarily on the expanding L-system motif, each varied from the others in new configurations (Fig. 3.19).

It became evident to me that, although stemming from the practice of Chinese brush painting, my method of painting with line and wash technique was adaptable to contemporary practice. I found I was able to build upon my growing capacity to manipulate the medium and compose satisfactorily with pattern and colour. By exploiting the effects of similarity, the process of abstracting a pattern with the basic L-system motif came into play. Almost like another sense, the fifth painting of this new body of work unexpectedly seemed to recall Paul Klee's *Rock Flora* painting.

Summer 2010

My investigation continued to be influenced by strong recollections of Paul Klee's plant world paintings, schematic simplified shapes and evocation of motion related to growth processes. I experimented with landscape format, one on paper and the other on canvas. This format was short-lived as I found the rectangular, landscape shape was unsympathetic to my rationale of the square as a receptacle for the sphere.

I prepared eight stretched canvases 60cm square in anticipation of a series of explorations with acrylic paint, surface texture, and configurations of L-system compositions.

This time, materiality and texture received my concentrated attention. I imprinted embossed kitchen paper and non-slip kitchen mat in impasto medium and clear gesso, to create a sort of tactile grid - a template for nature's plan, so to speak. I rotated groups of L-system branches like overhead tree 'canopies' (Fig. 3.20).

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[97] Lindenmayer, ed., *The Algorithmic Beauty of Plants - the Virtual Laboratory*. (New York: Springer-Verlag 1990). 10
[98] Ibid. 49

In the next two paintings I composed the L-system branches vertically. Sequencing and methods of counting related to fractals began to dominate my studio research.

I wrote in my diary, *'the challenge is to create in paint, work separated from flat (seductive and beautiful) computer generated images but to borrow from the principles'*. There were links to mathematical growth patterns to be found there.

Next I radiated L-systems around the centres, separating colours, maintaining the canopy idea, achieving balance with tone resulting in clouds appearing and cast shadows of a tree canopy being features in these two paintings (Fig. 3.22).

In the fourth painting, a flexible flower-like form emerged as I carried the algorithmic sequence to an infinite extension towards the centre. To my disappointment, it emerged further towards representation than abstraction, prompting my deliberate strategy to use straight rather than curved branches in the next painting. In marked contrast, a geometric and angular type of fractal city map[99] emerged (Fig. 3.23).

In these exploratory paintings I played out the self-replicating branching system according to criteria I set in place before commencing.

In preparation for the next series of eight paintings, I began colour matching plant material on my diary pages.

This studio research coincided with an immersing experience with John Reid, and the importance of plants for food crops surfaced again in the context of collaboration between artists and scientists and served to augment my attachment to and relevance of botanical themes in contemporary art practice.

Autumn 2010

I ambitiously increased the format for a new series of eight paintings to 80cm square, still incorporating plant colours, L-system mechanics and continuing with my earlier decision to avoid floral iconography. My fascination with branching formations, their widespread applications, and the prospect of multiple interpretations stimulated my resolve to persevere with this way of working towards locating my abstract voice.

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[99] Longley, ed., *Fractal Cities a Geometry of Form and Function*. (London: Academic Press 1994). Plate 3.4

I developed a protocol for painting, using the L-system motif to simulate an expanding branch and generate pattern according to a set of predetermined options: length of line, concave or convex arms. I established a primary modus operandi with the L-system motif, and this evolved into its use as a leitmotif. More than just a repeating sequence of motifs, it became the central enduring theme and mode of abstraction in the painting. I attached selected pressed plant specimens to the diary pages with the paint colour tests, which by now were necessary for the conceptual emphasis on colour only, while maintaining the implicit metaphor. I thought of each painting as the next step forward and numbered them sequentially with the plant of colour origin.

No 1 of 8 Liquidambar

The first of the paintings I based on the colours of the liquidambar leaves that fall annually in carpets of yellow, red, orange and brown (Fig. 3.24).

This painting emerged fractal city-like, and joined the *Contested Landscapes of Western Sydney* field studies exhibitions at the ANU School of Art Foyer Gallery and Sassafras Gallery during the semester.

No 2 of 8 Begonia

The begonia leaf did not retain its colours when pressed, so working from life and a photo I developed the painting in a hierarchical colour sequence. This was the first painting to have ground colour brought forward into the surface expressly as an integrating feature.

Five originating points based on five radiating L-systems produced floral-like patterns and a pictorial problem that was difficult to avoid with this number of starting points (Fig. 3.25).

No 3 of 8 Eucalyptus

Just to see what happened, I experimented in this painting with a single L-system originating from one side. Simultaneous colour contrasting of multiple muted tones of eucalyptus created a foil for what became a contrasting branch pattern in the foreground. This painting also failed in my intention to avoid representation that seemed to find its way from a single starting point. I decided not to repeat this pattern (Fig. 3.26).

No 4 of 8 Plane Tree

The pinks and dark reds of a plane tree leaf came next with a double outward canopy of the L-system motif. A graphic effect emerged with outlining, weaving of lines, and blocks of various leaf

colour tones. I abandoned this type of construction as it seemed to portray monotony and lack of visual interest for me despite the colour variations (Fig. 3.27).

No 5 of 8 Gingko

The true range of yellow in the gingko leaf was too limited. I introduced complementary purple tones of colour wheel for visual balance. This painting showed that it was possible and sometimes necessary for me to be flexible about palette choices (Fig. 3.28).

The ornamental tendril of the arabesque inadvertently sprouted in this work, by virtue of an organic extension of the loose end of the sequence. I orchestrated this with a dry brush flourish of spreading bristles, emulating the natural striations on the gingko leaf. I satisfied myself that this painting with its tendrils had both content and context and therefore could not be seen as purely decorative.

No 6 of 8 Deciduous Shrub

With each of these paintings I increased my effort to develop the underpainting before introducing the leitmotif and algorithm. The figurative element occupied space and I left adjoining traces uncovered in the subsequent layers, revealing the underpainting. This strategy provided me opportunity to re-examine and engage with the working process.

Exaggerating asymmetry by concentrating smaller shapes in some areas of this painting I found also created focus and visual intensity. This increased the depth in the picture space and in between the positive and negative aspects, emerging closer to my expectations than any previous experiments (Fig. 3.29).

No 7 of 8 Banksia

The 'none whatsoever factor' was beginning to become an internal mantra, like the ancient Eastern religious practice of meditative concentration on repetition of a sound in order to attain a higher level of consciousness or focus on a goal.[100] It paralleled my attentive consideration of Piet Mondrian's pathway to abstraction. He abandoned naturalism eventually reducing his apple tree to *'...a network of lines and tints'*.[101]

The connection to plant colours remained important to me as the way to activate the thematic metaphors. Peter Maloney suggested that representation may still exist in the work. It seemed to

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[100] Gyan Rajhans, "The Power of Mantra Chanting," http://hinduism.about.com. 1
[101] Elgar, *Mondrian*. (London: Thames and Hudson 1968). 51,52

me that the non-representational idea was tenuous because the L-system itself was a motif representative of a mechanism for depicting growth and the colour was representative of the plant. Applying this logic to the form, which was by now for me a collection of shapes and lines, I found it was possible to visually maintain the idea of non-representative abstraction in the painting (Fig. 3.30).

No 8 of 8 Ground Iris

I worked this painting with dots in the ground layers, trying to challenge and develop the underpainting. The spotting on the dried petals of the iris, digital pixel images and Emily Kngwarreye's untitled 1995 painting seemed to meet as an idea. The result was a vibrant visual flickering, a sign of life or a pixel field. My diary records that playing with variables[102] was central to my creation of the structure in this painting (Fig. 3.31).

In this series of paintings I established the plant colour palette and embraced the L-system leitmotif.

Winter 2010

The final semester began with a new set of canvases for preparation and another increment in size to 90cm square. Naming the paintings by the plant names seemed irrelevant now, with the reduction of true representation. I simply titled them *Compositions*, in numerical sequence. This seemed to me to be the result of a positive shift in my level of confidence about the topic, the abstraction process and the use of colour.

An evolutionary state of composition dominating the painting above colour was occurring. It seemed to me that avoiding, terminating and extending branches in a painting was comparable to a real tree scenario where buds are activated as a result of pruning. The compositions as manifestations of their own capacity to become paintings through the leitmotif process reminded me of Didier Maleuvre's idea that *'an artwork carries its share of being in a mood of wonder ... the philosopher of art ... must reflect on the relation between art and being.'*[103]

I reintroduced the grid to emphasise continuance of the metaphor associated with the template for nature's plan (Fig. 3.32). I painted random signs, like mathematical symbols of the language of fractals, into the tracks of the leitmotif. The counterplay between the stable grid and the unstable dot began asserting itself (Fig. 3.33).

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[102] Rycroft, ed., *Flash Math Creativity*. (Berkeley: an Apress Company 2004). 98, 99
[103] Maleuvre, "Art and Being." (Canberra: Australian National University 2004). 2

I explored vibration effects previously achieved with offsetting stencils, and colour shadowing with only a paintbrush as the tool. The synthesis that occurs when separate colours intersect in transparent layers became an important aspect of all the paintings. As a way of exploring pictorial instability and complexity I also introduced diagonals into the square format. Referring to Mondrian, I was trying to capture dialogue between the perpendicular and the horizontal, diagonals and directions extending the compositional experiments to almost look like a rotating body (Fig. 3.34).

The idea of using colour to simulate areas of hierarchy of data or concentration of pattern that appeared in fractal images of cities and Michael Barnsley's colour panels[104] was useful in building up the visual structure of the fourth painting (Fig. 3.35).

Spring 2010

The pronounced diagonal shift in the painting occurred when I started to concentrate on geometric foundations of the compositions. Intersecting lines automatically resulted in triangles which, end to end, created directional pulls. The challenge for me was creating visual balance of colour and composition with ornamental leitmotif construction, while embedding the dynamics created by horizontal, vertical and diagonal pulses. The next painting went some way to achieving this, with a curved leitmotif mechanism appearing like an organic form emerging in the pulsating field of colour and geometry (Fig. 3.36).

Kermit Swiler Champa referred to Piet Mondrian's diagonal impulses in his pictorial field that *'...remained perpendicular despite diagonal edges'* (Fig. 3.37). I wanted to try and achieve a similar sort of equilibrium to Mondrian's *'opposing shapes and field impulses,'*[105] still within in the square format.

I created the fifth painting by exploiting the interplay between the opposing forces of stable and unstable, which were becoming important to the evolving style of abstraction that I continued to pursue during the summer from December to March (Fig. 3.38).

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[104] Longley, ed., *Fractal Cities a Geometry of Form and Function*. (London: Academic Press 1994). 58
[105] Champa, *Mondrian Studies*. (Chicago:The University of Chicago Press). 105

Fig. 3.1 Kerry Shepherdson - *Black Saturday*, acrylic on canvas, 60x60cm.

Fig. 3.2 Studio practice - stencil, acrylic on canvas, (2) 30x30cm.

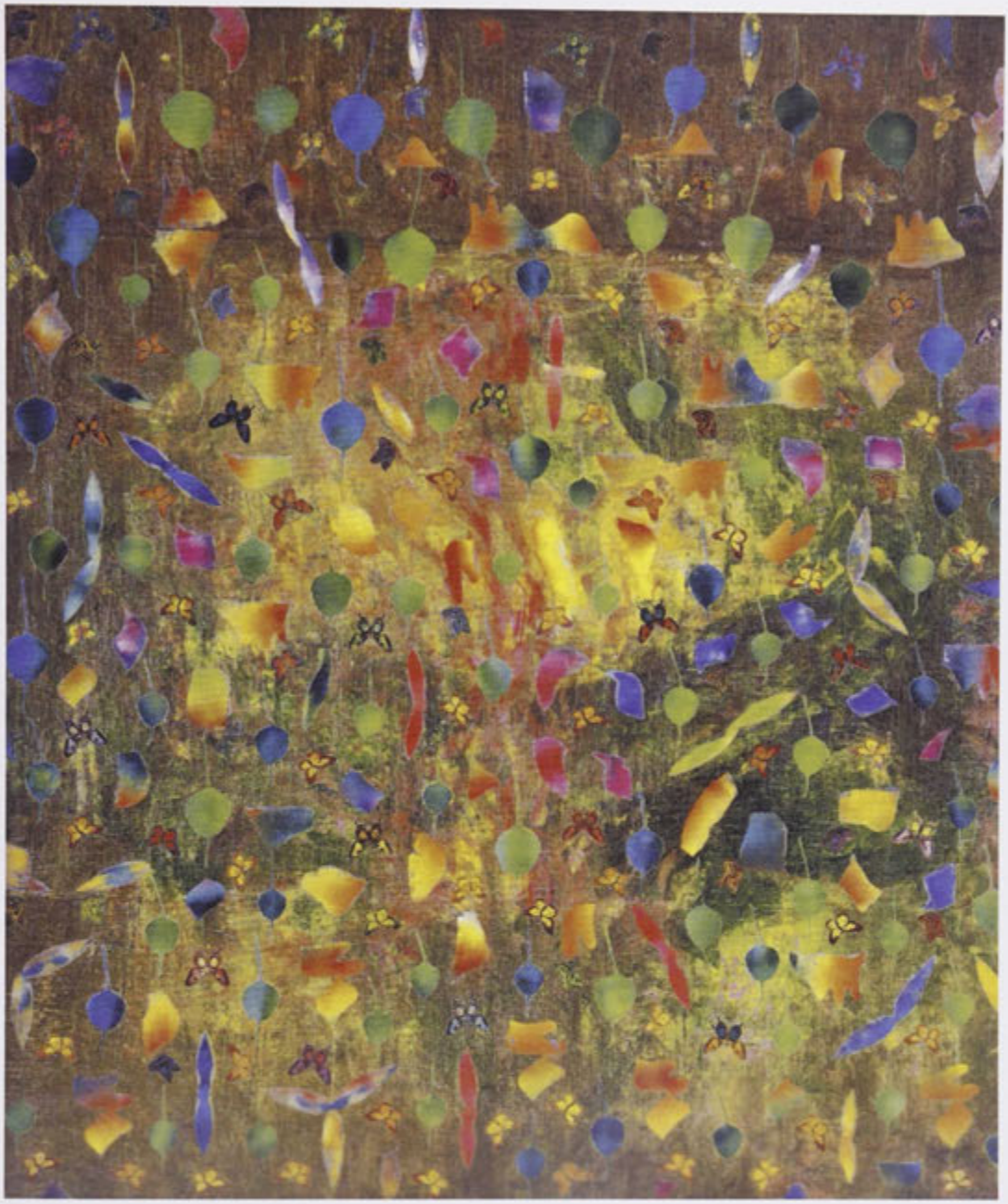

Fig. 3.3 Philip Taaffe, *Siraspatha*, 1993–94, mixed media on canvas, 293.5x277cm.

Fig. 3.4 Diary page – fans.

Fig. 3.5 Kerry Shepherdson, *painting 1*, acrylic on canvas, 100x100cm.

Fig. 3.6 Kerry Shepherdson, *painting 2*, acrylic on canvas, 100x100cm.

Fig. 3.7 Kerry Shepherdson, *painting 3*, acrylic on canvas, 100x100cm.

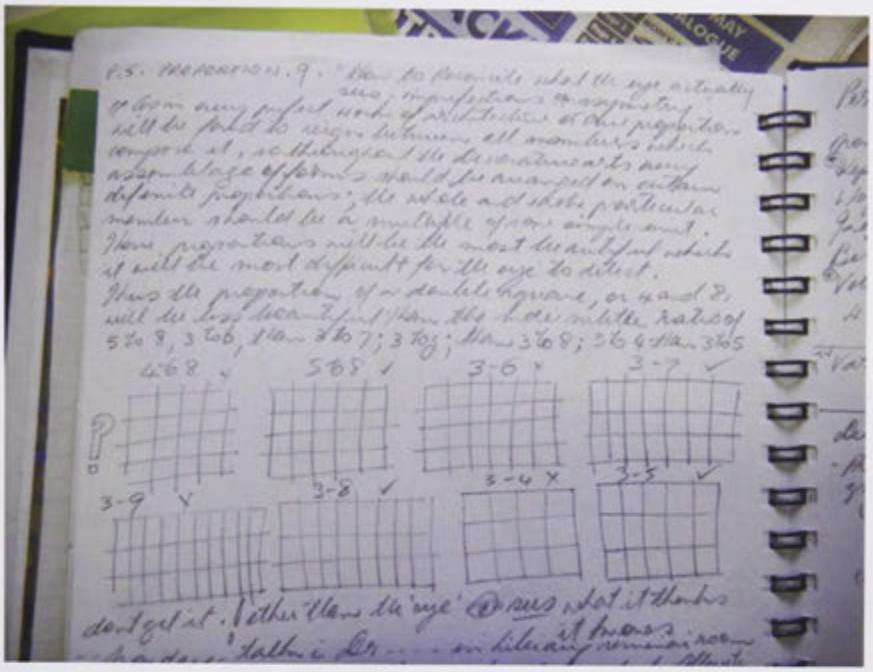

Fig. 3.8 Diary page - Owen Jones Proposition no. 9.

Fig. 3.9 Kerry Shepherdson, *painting 4* (in progress), acrylic on canvas, 100x100cm.

Fig. 3.10 Kerry Shepherdson, *Six Petals*, plant collage and watercolour painting on paper, 42x42cm.

Fig. 3.10.1 Hanging (detail), circa 1720–50.

Fig. 3.11 Kerry Shepherdson, *Four Petals*, plant collage and watercolour painting on paper, 42x42cm.

Fig. 3.11.1 Ceremonial cloth and sacred heirloom (palampore), mid eighteenth century (detail), handspun cotton, natural dyes, mordants; mordant painting, dyeing, 100.2x293.4cm.

Fig. 3.12 Kerry Shepherdson, *Moon*, plant collage and watercolour painting on paper, 42x42cm.

Fig. 3.12.1 Heirloom hanging (palampore, detail), late seventeenth century, cotton, natural dyes, mordant painting, 164x106cm.

Fig. 3.13 Kerry Shepherdson, *Peach*, plant collage and watercolour painting on paper, 42x42cm.

Fig. 3.13.1 Hanging (detail), circa 1725–50.

Fig. 3.14 Kerry Shepherdson, two plant collage and watercolour paintings on paper, 42x42cm.

Fig. 3.15 Philip Taaffe, *Devonian Leaves 11*, 2004, mixed media on canvas, 127x89.5cm.

Fig. 3.16 Kerry Shepherdson, *Floating Leaves*, acrylic on canvas, 90x90cm.

Fig. 3.16.1 Kerry Shepherdson, *Forms*, acrylic on canvas, 90x90cm.

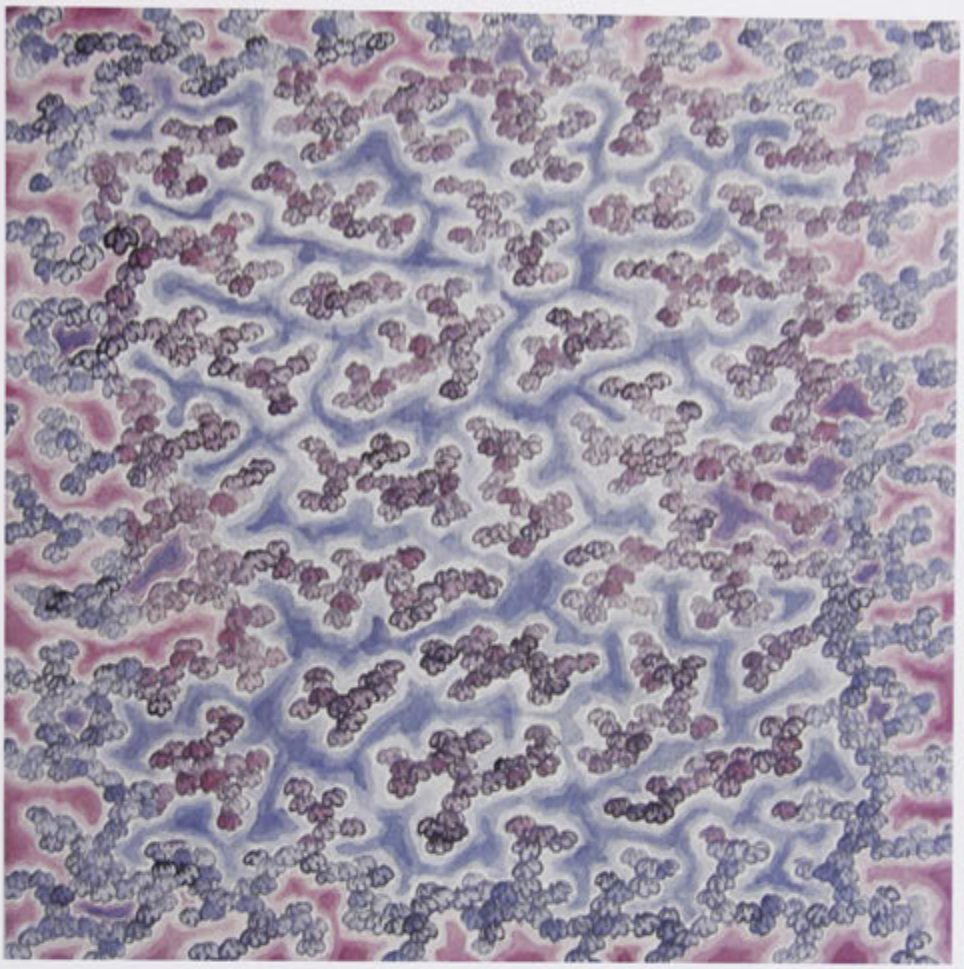

Fig. 3.17 Kerry Shepherdson, *Triple Lobe*, watercolour on primed paper, 42x42cm.

65

'The *wu t'ung tree*' done in outline style (*Hsieh I*); may be seen in the painting by Wang Wei of his home *Wang Ch'uan*, which was also the title of the picture.

Fig. 3.17.1 The wu t'ung tree.

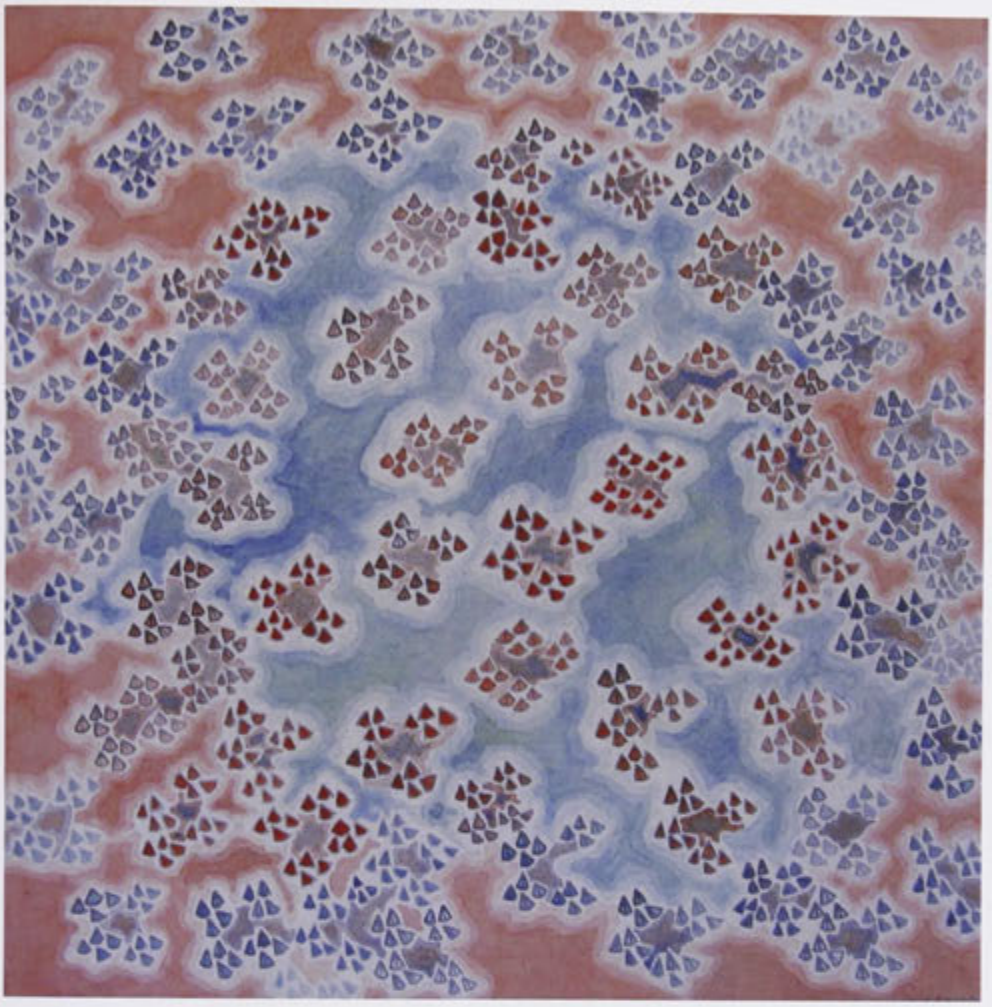

Fig. 3.18 Kerry Shepherdson, *Turtle*, watercolour on primed paper, 42x42cm.

Fig. 3.18.1 Turtle interpretations of strings.

Fig. 3.19 Kerry Shepherdson, *L-systems,* watercolour on primed paper, 42x42cm.

Fig. 3.19.1 Kerry Shepherdson, *L-systems,* watercolour on primed paper, 42x42cm.

Fig. 3.19.12 Kerry Shepherdson, *L-systems,* watercolour on primed paper, 42x42cm.

Fig. 3.19. 3 Kerry Shepherdson, *L-systems,* watercolour on primed paper, 42x42cm.

Fig. 3.19. 4 Kerry Shepherdson, *L-systems,* watercolour on primed paper, 42x42cm.

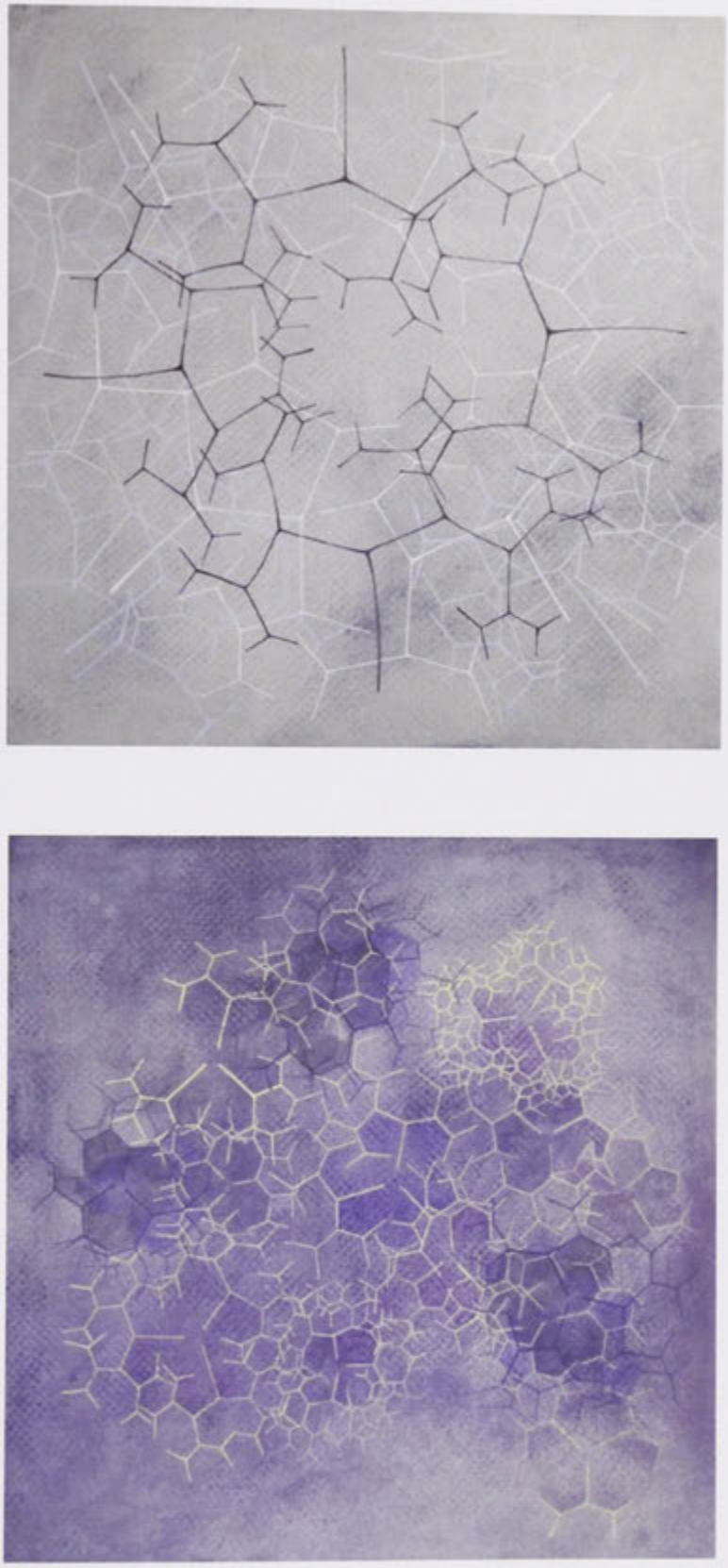

Fig. 3.20 Kerry Shepherdson, *L-system Canopy* 1 and 2, acrylic on canvas, 60x60cm.

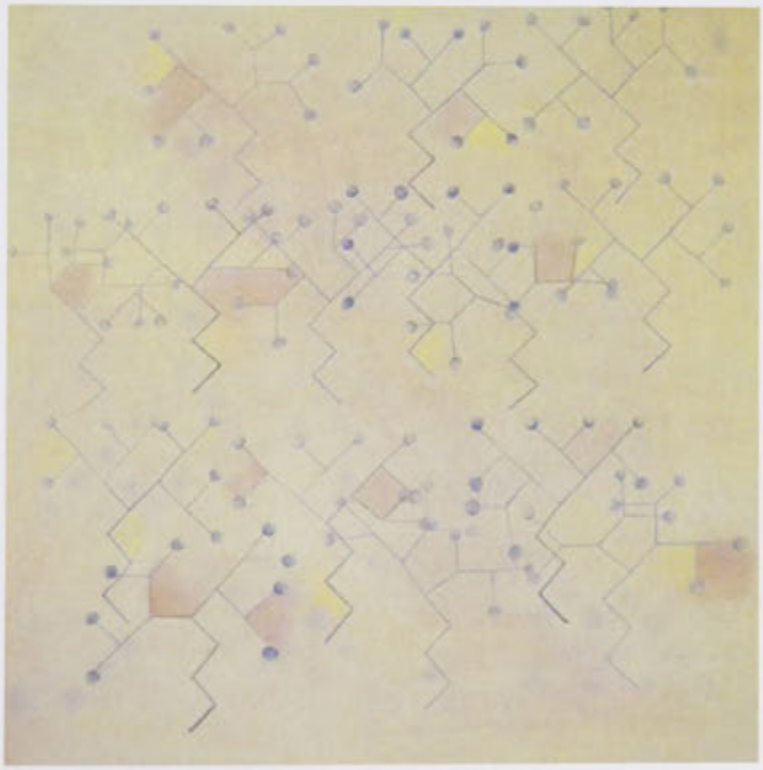

Fig. 3.21 Kerry Shepherdson, *Geometric Forest* 1 and 2, acrylic on canvas, 60x60cm.

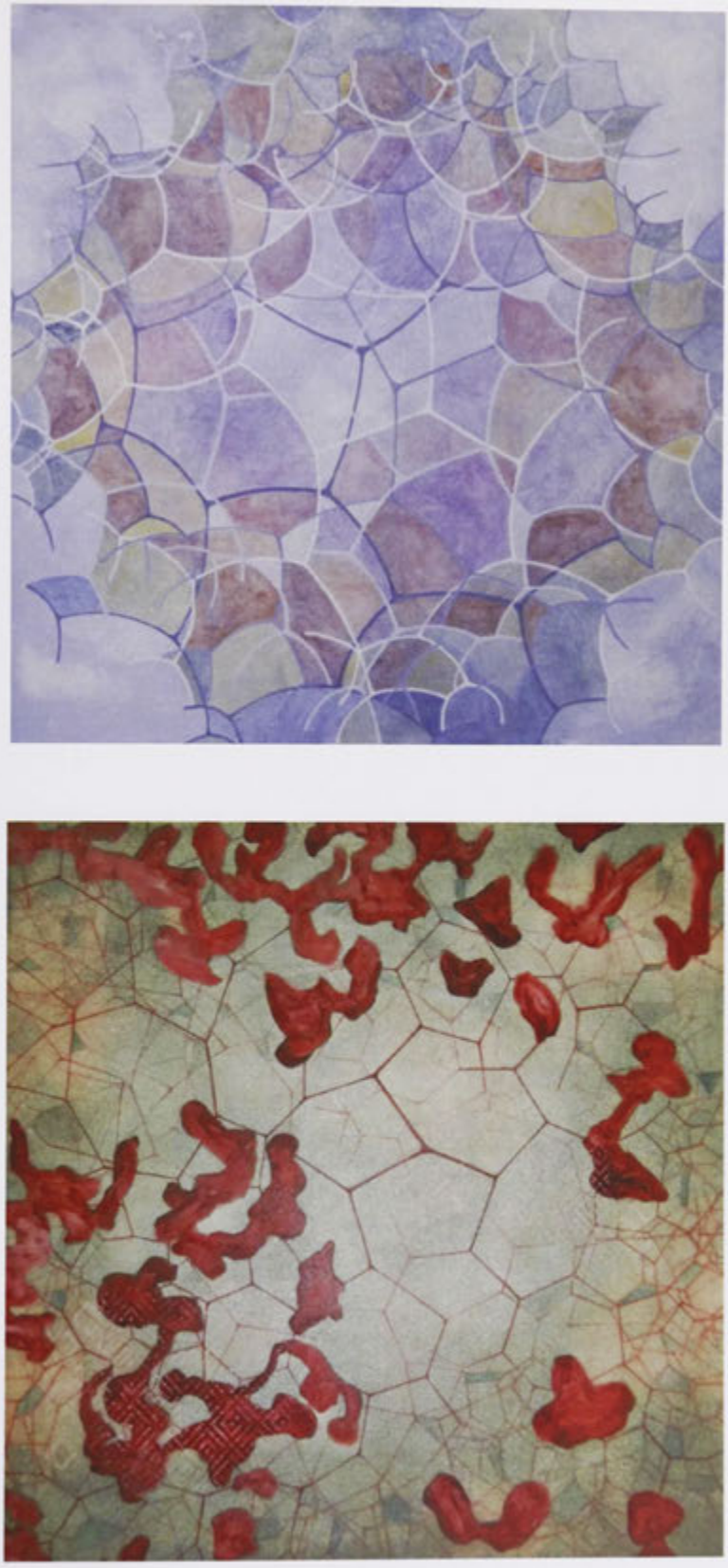

Fig. 3.22 Kerry Shepherdson, *Cloud* 1 and 2, acrylic on canvas, 60x60cm.

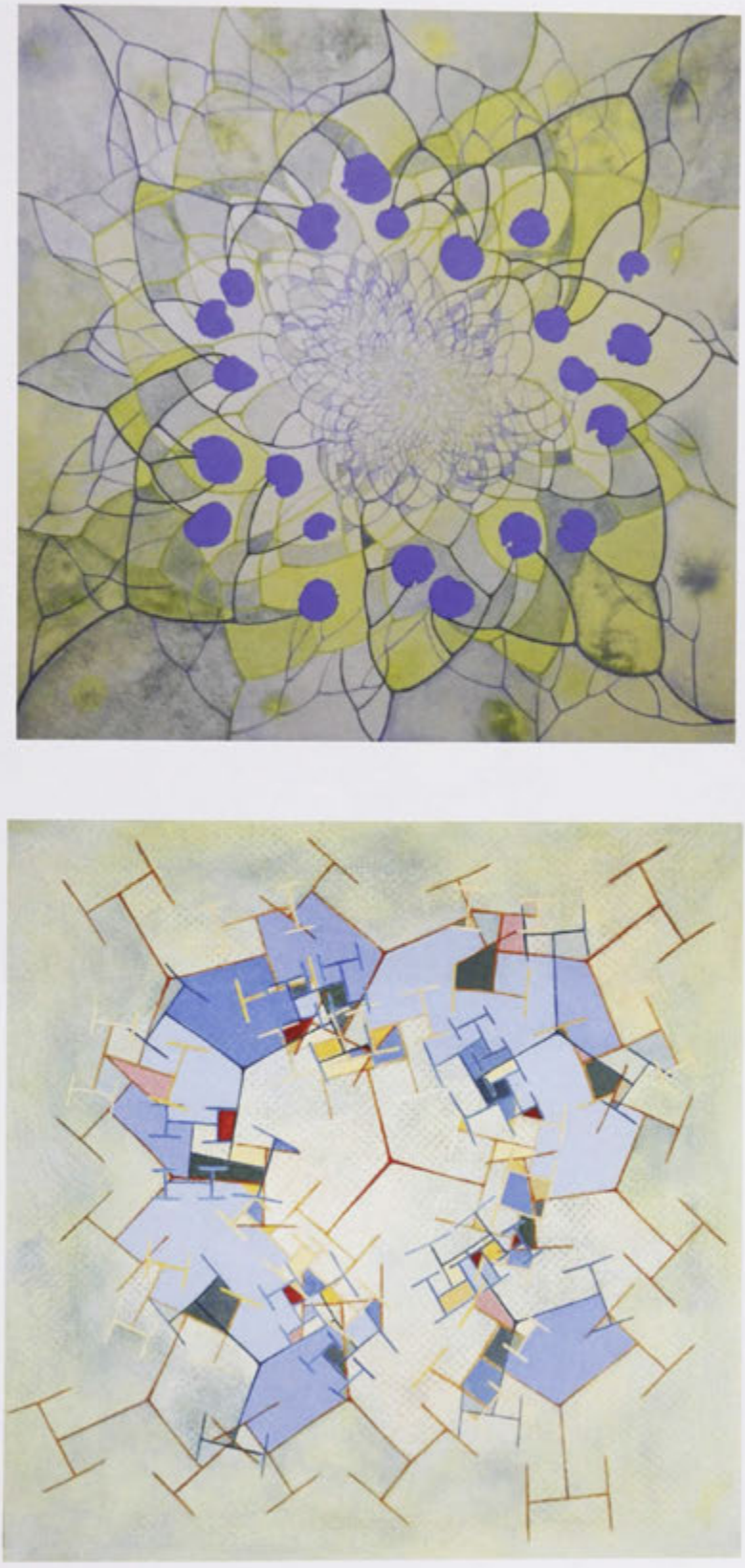

Fig. 3.23 Kerry Shepherdson, *Branching* 1 and 2, acrylic on canvas, 60x60cm.

Fig. 3.24 Kerry Shepherdson, *No. 1 of 8, Liquidambar*, acrylic on canvas, 80x80cm.

Fig. 3.24.1 Diary page – liquidambar.

Fig. 3.25 Kerry Shepherdson, *No. 2 of 8, Begonia*, acrylic on canvas, 80x80cm.

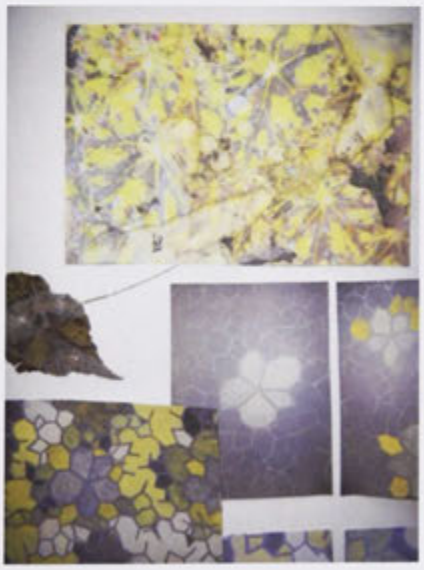

Fig. 3.25.1 Diary page – begonia.

Fig. 3.26 Kerry Shepherdson, *No. 3 of 8, Eucalyptus*, acrylic on canvas, 80x80cm.

Fig. 3.26.1 Diary page – eucalyptus.

Fig. 3.27 Kerry Shepherdson, *No. 4 of 8, Plane*, acrylic on canvas, 80x80cm.

Fig. 3.27.1 Diary page – plane.

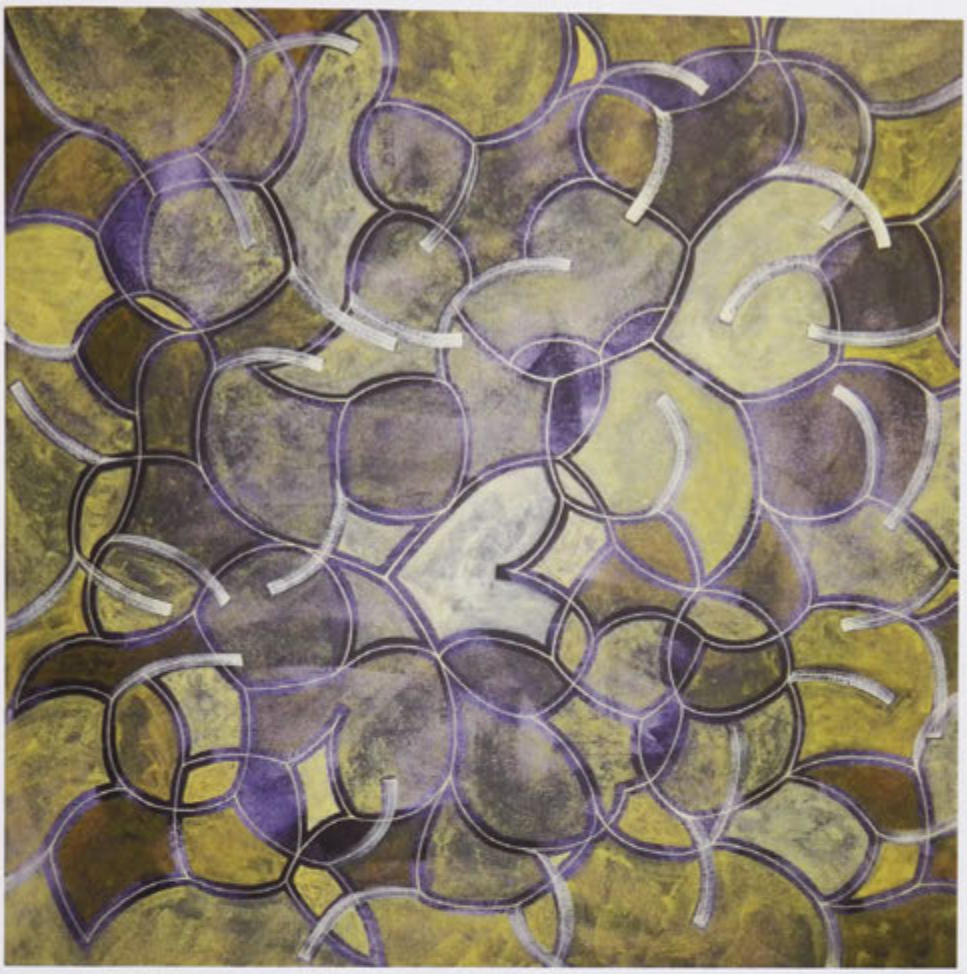

Fig. 3.28 Kerry Shepherdson, *No. 5 of 8, Gingko,* acrylic on canvas, 80x80cm.

Fig 3.28.1 Diary page - gingko

Fig. 3.29 Kerry Shepherdson, *No.6 of 8, Deciduous Shrub*, acrylic on canvas, 80x80cm.

Fig. 3.29.1 Diary page – deciduous shrub.

Fig. 3.30 Kerry Shepherdson, *No.7 of 8, Banksia*, acrylic on canvas, 80x80cm.

Fig. 3.30.1 Diary page – banksia

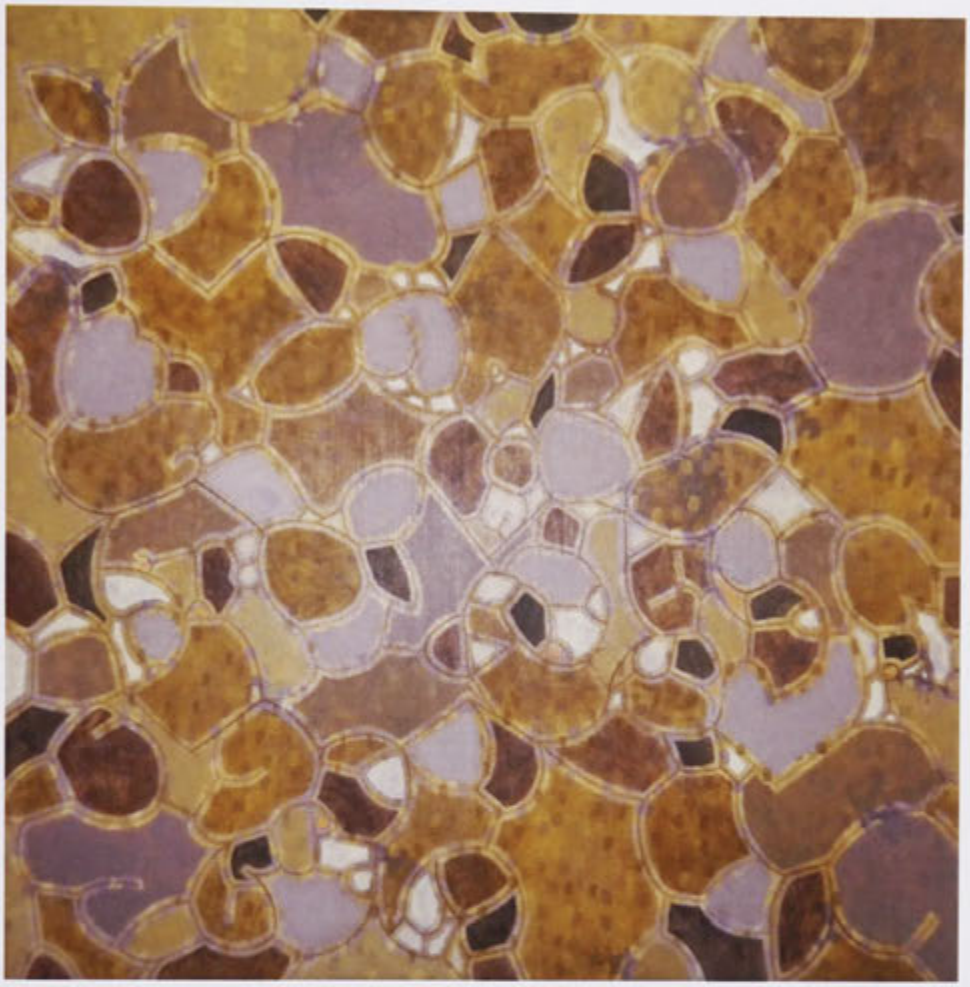

Fig. 3.31 Kerry Shepherdson, *No. 8 of 8, Ground Iris* , acrylic on canvas, 80x80cm.

Fig. 3.31.1 Diary page – ground iris.

Fig. 3.32 Kerry Shepherdson, *Composition 1*, acrylic on canvas, 90x90cm.

Fig. 3.32.1 *Composition 1*, diary page and germination phases.

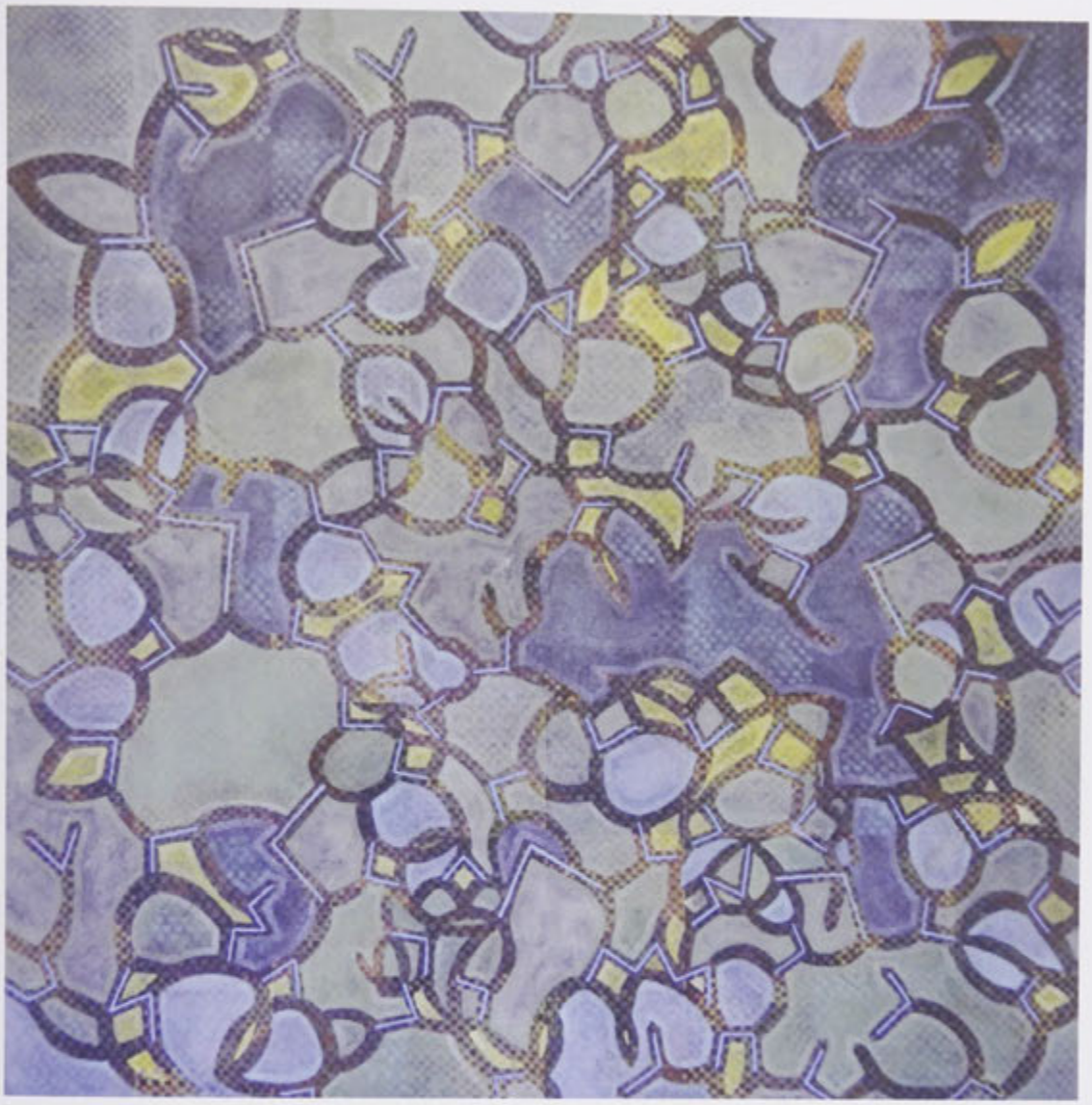

Fig. 3.33 Kerry Shepherdson, *Composition 2*, acrylic on canvas, 90x90cm.

Fig. 3.33.1 *Composition 2*, diary page and germination phases.

Fig. 3.34 Kerry Shepherdson, *Composition 3*, acrylic on canvas, 90x90cm.

Fig. 3.34.1 *Composition 3*, diary page and germination phases.

Fig. 3.35 Kerry Shepherdson, *Composition 4*, acrylic on canvas, 90x90cm.

Fig. 3.35.1 *Composition 4*, diary page and germination phases.

Fig. 3.36 Kerry Shepherdson, *Composition 5*, acrylic on canvas, 90x90cm.

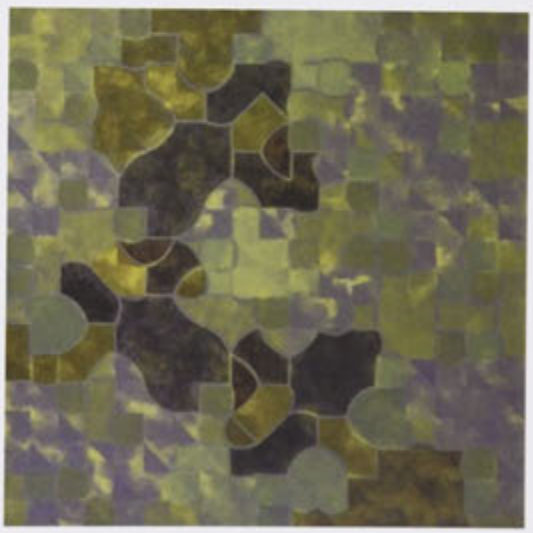

Fig. 3.36.1 *Composition 5*, diary page and germination phases.

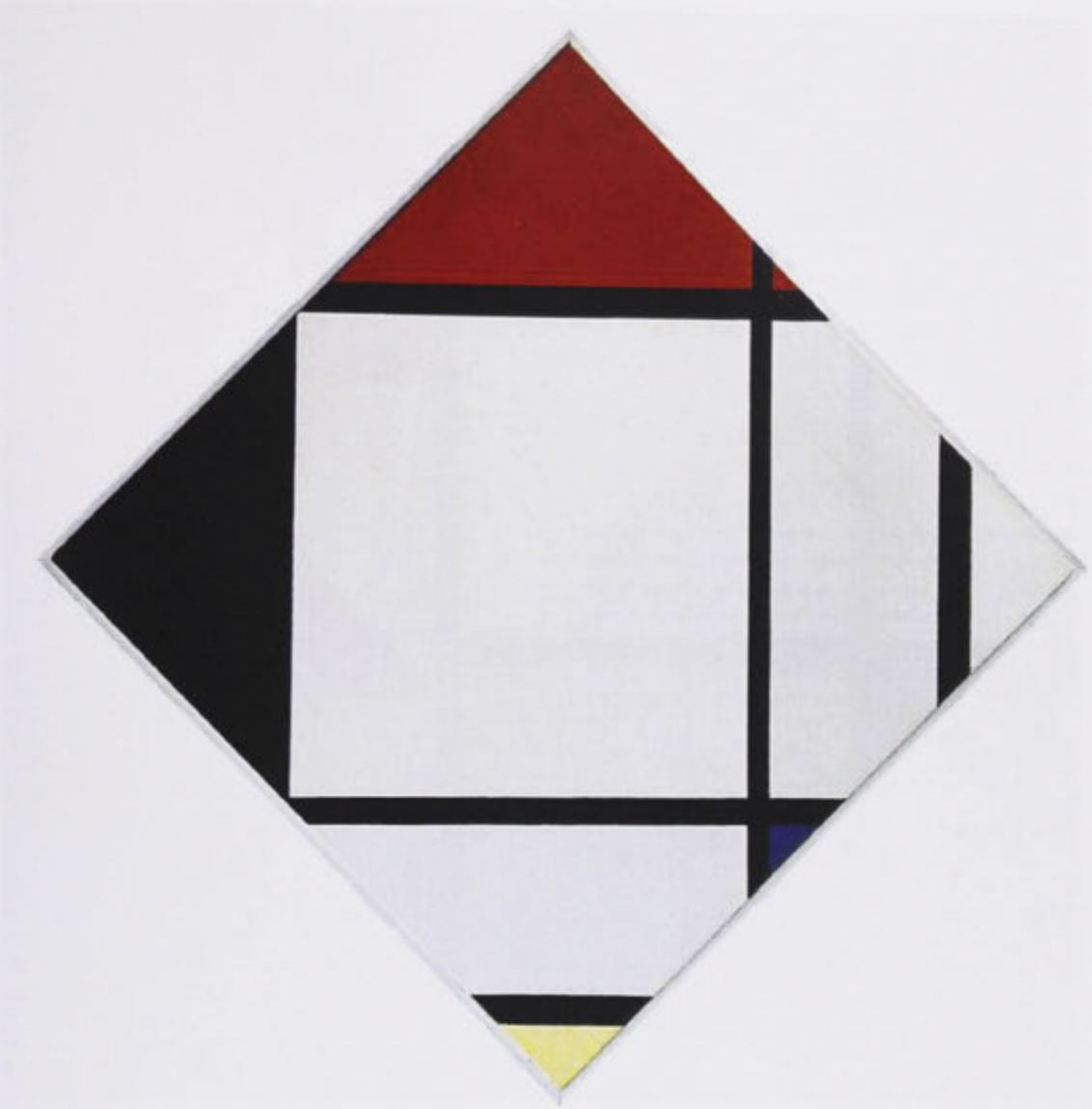

Fig. 3.37 Piet Mondrian, *Composition with Red, Yellow and Blue*, 1925, diagonal 109cm.

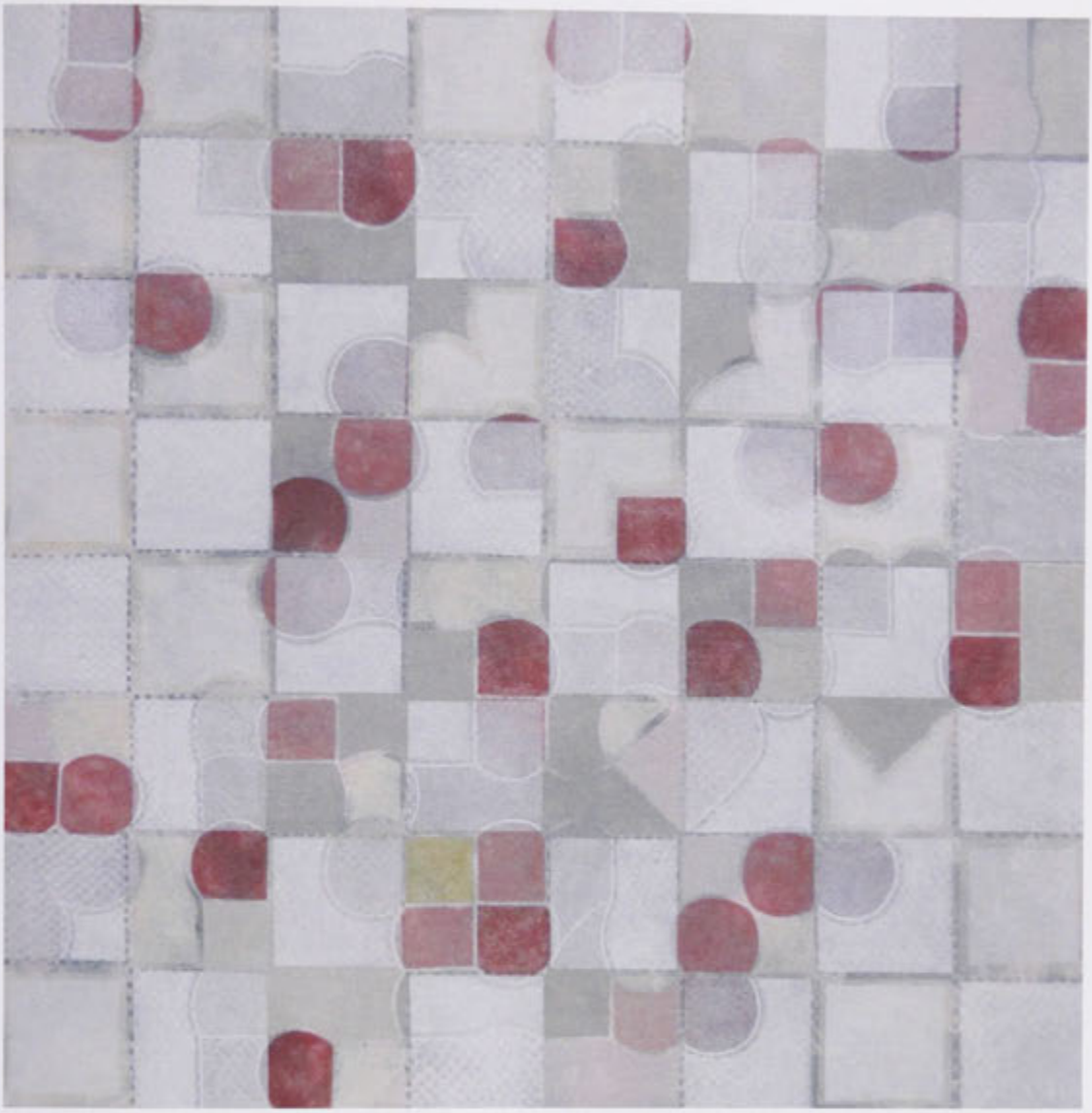

Fig. 3.38 Kerry Shepherdson, *Composition 6*, acrylic on canvas, 90x90cm.

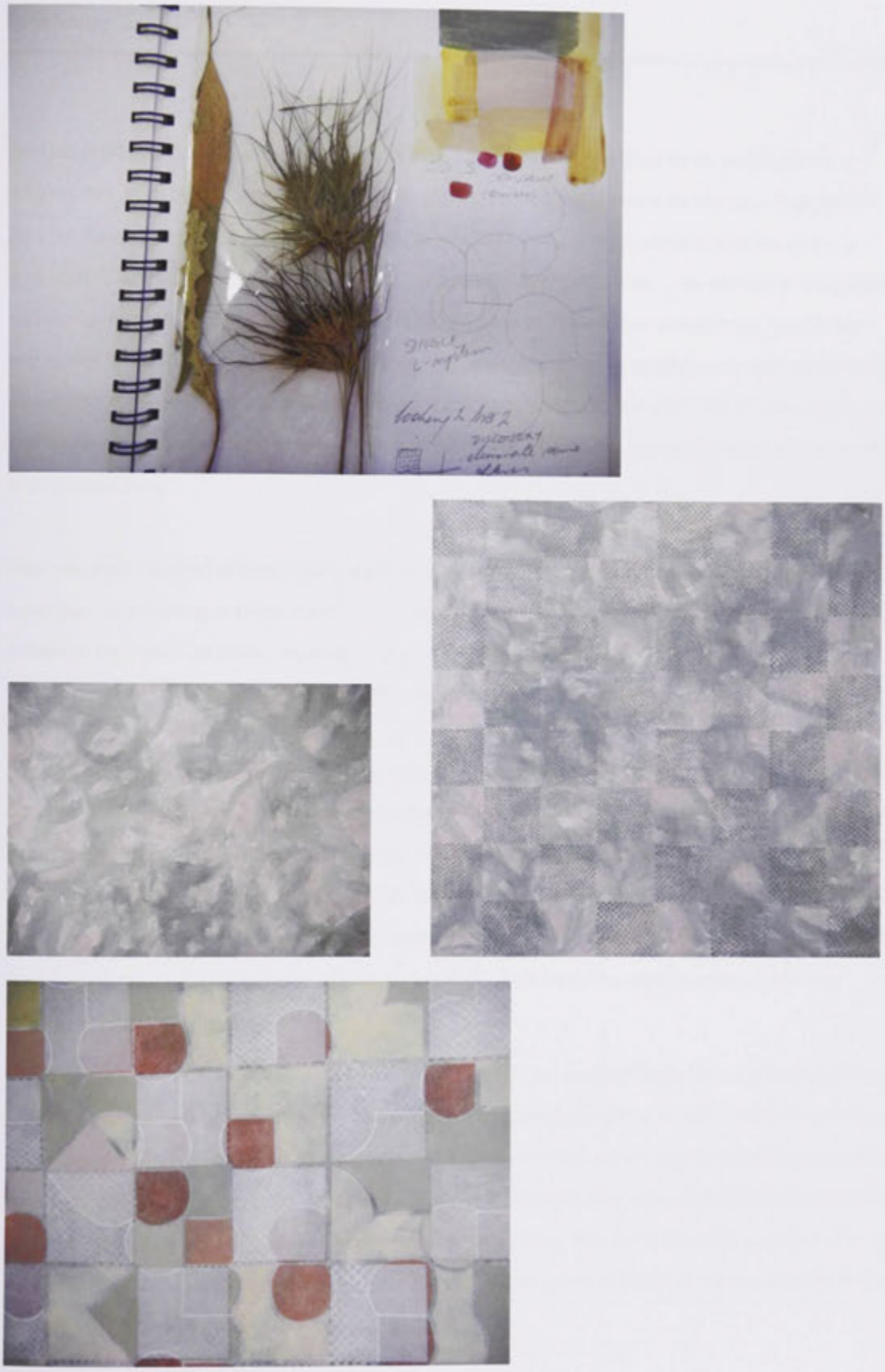

Fig. 3.38.17 *Composition 6*, diary page and germination phases.

Conclusion

Unsure of where my studio research would eventually lead me, I cultivated an emphasis on a progressive, step by step methodology. In doing so, I increasingly relied on the development of pattern through repetition, based on a symbol of a branching growth pattern and the grid – a metaphoric template for order in nature. I made a significant discovery with the use of visual cues such as asymmetry rather than symmetry, and similarity as opposed to preciseness, becoming engrossed in exploring composition based on the orderly underpinning grid and a self-perpetuating manual painting process. I thoroughly tested ideas both historical and personal as they applied to the research aims to do with amalgamation of elements of interest, and exploration of colour, form and composition.

Over the major period of exploration a set of rules for creating a form of abstraction in painting emerged, culminating in three main issues becoming core practices: maintaining the relevance of botanical themes in painting; representing growth of plants; and exploring cyclical rhythms in painting informed by algorithmic, scientific and mathematical descriptions of growth patterns.

I explored some of the numerous ways in which botanical themes appeared during the hundred years since abstraction began to emerge in western painting. Philip Otto Runge's geometric dissection of a tulip, Joseph Beuy's vibration of life in a spinning seeds made possible with a few lines, Paul Klee's growth sequences described in geometric patterns and Philip Taaffe's floating stencilled and printed leaves. Significant ramifications for the outcomes at various stages occurred. I found most compelling the mode of abstraction that arose from the sprouting tendril in the ornament of other cultures.

My attraction to this idea about a universal plant form at the roots of abstraction matured into my focussed exploration of branching mechanisms that depicted growth in science, mathematics and computer graphics. The enduring growth cycles and rhythms of nature paralleled the growth of my understanding about abstraction and the discrepant tendencies that Marcus Bruderlin referred to.[106] My motivations for painting in abstraction seemed to partake of a spiritual understanding of a mysterious connectivity between myself as 'the dot' in the grand scheme of things, and the forces of nature epitomised by growth processes.

This pathway was informed by many aspects of the work of artists who also engaged with plants, not as observed objects of beauty but as themes for exploration.

I engaged with the chemical, physical and symbolic properties of plants, interrogating the state of forward propulsion of time that accompanies growth forces, by exploring visual vibration and metaphor in the painting. I tracked plant growth patterns and geometric branching systems in the studio research, fulfilling many of the aspects of inquiry.

The visual and physical joy experienced in painting algorithmic growth patterns liberated my exploration of the language of painting and became the paramount consideration in the second year of my project. I discovered that the principles related to 'branching systems' in science and mathematics became transportable to painting. It was for me a rich and relevant foundation for building an abstract visual language.

I bestowed a seasonal timeline, like a diary, to each new step, and, with each new painting, aligned the research in my mind to the passage of real time I associated with growth processes and the research journey itself.

By winter 2009, a refreshing exploration of work involving plant material, collage, watercolour painting on paper and ideas about gates and windows of Chinese pleasure gardens materialised. I produced a series of intense and informative, small exploratory works before I realised I was beginning to become unduly attached to the reality of the visual qualities of the plant specimens. It was moving my research outside the initial aims of the project. The material value of the plant material diminished completely as a result and their preserved colour became a primary resource for the subsequent painting. However this exploration of plant collage and watercolour painting did initiate my complete engagement with detailed mark making in spring 2009. This was a significant step towards the development of algorithmic growth patterns in the painting. I identified the expanding Lindenmayer's L-system growth mechanism for patternmaking which became the basis for exploration of various configurations in composition, mediums and materials and testing of surface tension.

In summer 2010, my attention turned again to Paul Klee's visual analysis of growth and motion with simplified geometric shapes and schematic forms. I embarked on a series of small acrylic paintings focused on materiality and texture and Klee's ideas for creating movement. I also introduced the

grid into the surface of my painting which developed from the concept of sequencing related to fractals and the self-replicating branching system.

By autumn 2010 the necessity to increase the format arose as I fully embraced a system for developing composition based on branching systems, proceeding to various, and potentially endless, numbers of interpretations of it.

Each exploratory step holistically brought together the various thematic considerations that existed at the outset of the research project and now had a sense of forward momentum.

Revelations about the language of painting occurred through experiments with composition, using originating points, hierarchical colour sequencing, transparency, positive and negative play, visual flickering with pulsating fields of colour and geometry, counterplay between stable grid and unstable dots, and opposing perpendicular and diagonal impulses. These resulted in the emergence of my own approach to the language of abstraction.

Working with visual links between geometric structures, reiterating codes, and a leitmotif associated with branching mechanisms, significantly enabled my method of painting to develop. Operating in this way, the passage of time became a reality in the making of the work and also in the visual impact of the painting. I was able to reveal the process within fields of colour and transparency that perpetuated the sense of my participation in the actual process of growth taking place in the work, which I hoped would engage an audience. It was as if each painting, once begun, was also determined to be revealed, expanding according to a set of predetermined options or rules. I related this to the way in which automatism influenced abstraction in Western art in the mid twentieth century.

The journey began in the studio in late summer 2009, with simple botanical shapes made with stencils derived from pressed flowers, leaves and petals. In spring 2010, it concluded with abstract acrylic paintings that appeared like fields of pulsating colour and geometry.

I thought of the journey as a process of *Becoming* that was inspired by Paul Klee's reference to *Being*, much as life is more about the journey than the destination. Playing with variables by way of examples I found in computer graphics encouraged me to experiment more boldly, lending itself to

spontaneity. Significantly, this became a reminder of the conflict I explored continuously in the studio practice research, between the immediacy associated with expressive line and wash techniques of Chinese brush painting, and the reworking and persistence I more readily associated with Western painting.

The outcome of this studio practice research project is a constantly evolving dynamic form of abstraction in painting, which emulates growth processes visually and metaphorically. What has been established is an amalgamation of ideas that is individual, with persistent characteristics of ornamental structure developed with hand-worked line, in multilayered abstract compositions that vibrate and evoke a sense of life.

Addenda:

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Final Approved Study Program

Curriculum Vitae

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Final Approved Study Program

Kerry Shepherdson
Mphil (Painting - *Option D)*

First Annual Plan June 2009

THESIS TITLE

Studio practice-led research by means of paintings based on botanical forms, ornamentation, abstraction and algorithmic patterns resulting in visual interpretations of life and growth.

OUTLINE OF THESIS

My research is based on investigation of forms which can be derived from pressed and preserved plant material, and the development of these forms to create organic-like visual results alluding to growth and passage of time in the paintings.

My research will encompass the dissection and remodelling of botanical forms and the application of algorithmic structures within the painting, to develop metaphoric expression of life cycle rhythms, cross-fertilization and hybridisation.

Painting investigation will be based on multiple historical influences of ornament, abstraction, pattern and Chinese brush painting.

1. Context

- nature of materials to be explored

Primarily I will explore painting with acrylic paint on canvas.

I will also explore water-based materials, such as gouache, aquarelle pencils and ink, as well as water-based mediums for use on canvas and paper.

I will explore materials for masking and stencil techniques such as tape and paper, linseed oil and latex.

I will investigate the preservation of botanical material and vehicle for presentation of it.

- context of art forms of relevance to your themes/questions/approach

I aim to examine in painting markers of my own identity entwined in cross-cultural experience, related to many years of living in south-east Asia. Botanical designs found in the crafts of this region, Chinese brush painting, and interest in gardens and plants are linked to questions of abstraction, ornament and pattern in painting.

I will approach the pictorial vocabulary of the painting by:

- investigation of the shapes obtained by the transformative process of pressing flowers, seeds and leaves;

- breaking down and remodelling of natural arrangements found in botanical structures and growth cycles.

In developing a form of abstraction in painting I aim to investigate:

- juxtaposition of visual organic and geometric elements with use of botanical shapes and linear structures;
- visual vibration in the form of repetition and overlay, scale and tone;
- combination of mark-making and pigment wash with stencil application of paint.

- references to precedents and cultural contexts which are relevant

Investigation of text, painting s and drawings of plants, and discussion about abstraction in traditional and contemporary Chinese and Western painting is relevant to the context of my research.

Abstraction as an artform influenced by culture is the theme of Kobena Mercer's discussion in *Discrepant Abstraction* (2006) that is contextually relevant. Kobena Mercer has considered the creative dynamics when different visual languages are bought into dialogue and how our received understanding of abstraction, modernism and modernity is modified once these interconnected relationships are re-examined.

The 2008 Kunstmuseum, Wolfsburg survey exhibition *Philip Taaffe: Life of Forms,* featuring many of his works from 1980–2008, is relevant. The exhibition catalogue of the same name highlights the artist's abstract paintings which are based on themes of nature (including botanical forms) and cross-cultural ornament. The artist's paintings which include stencil work are visually dynamic, multilayered works that in combination with his themes are informative precedents for research for this project.

The research of Aristid Lindenmayer into plant development over time is published (posthumously) in *The Algorithmic Beauty of Plants* by Przemyslaw Prusinkiewicz (1990). Aristid Lindenmayer made observations relevant to the development of geometric divisions of botanical forms in the painting research. In part he observed in plants, conspicuous geometric features, such as bilateral symmetry of leaves, the rotational symmetry of flowers and the helical arrangements of scales in pine cones.

Sabine Schultze discusses the plant drawings of Philip Otto Runge (1777–1810) in *The Painter's Garden: Design, Inspiration, Delight*. Included is an undated work titled *Tulip Blossom.* Sabine Schultze notes that in the drawing the artist has divided the leaves, stalk and seeds into a mathematical geometric co-ordinate system. This particular image is particularly relevant to the painting research as it informs an avenue for investigation of abstraction in division and reforming of botanical shapes.

Three Steps of Modern Calligraphy by Gu Gan, 1990 (translated by Hu Yunhuan), is of interest, particularly for the philosophical discussion about Chinese brush painting and as he sees it, the transformation of calligraphy in modern times. The practical links examined by Gu Gan between skills, such as the use of wash and line, tone and composition to create space in a painting are elements of research which are elementary to the investigation of the painting.

Volumes of particular relevance for further detailed investigation of pattern, ornament, abstraction and the use of plants as pictorial elements in the painting research are-

Ornament and Abstraction –Dialogue Between Non-Western, Modern and Contemporary Art by Markus Bruderlin (2001)

Chinese Ornament: the Lotus and the Dragon by Jessica Rawson (1984)

The Grammar of Ornament by Owen Jones (1856, reprinted 1982)

2. Issues to be addressed

- implications of subject matter and forms your studio practice will take

Botanical forms are transformed in the pressing process, to preserve leaves, seeds and flowers as a body of research material used to inform colour and abstract shapes for painting. Not all 'pressings' are successful due to the fragility of the subject or the disintegration of the form. Not all forms will be selected for painting. A single form may be used to inform the work many times over in the development of a painting. I aim to continue collection, pressing and preservation of plants and investigate a way of presentation of the resource material.

The painting of botanical forms and pattern or ornament may engender risk associated with ideas of banality or decoration. The research will endeavour to overcome these issues in terms of inclusion of visual content and thematic context in the painting and the use of imperfect symmetry and proportions while maintaining a pictorial sense of balance.

- theoretical issues raised by your proposed work (indicate specific reference points and discourses of relevance to your topic)

Combining rearranged plant forms and geometrical structures in a painting that also represents an interpretation of life and growth, and cross-cultural influences, is the basis of my engagement with abstract theoretical ideas. It is an attempt to discover a way of grouping separate elements of transformed objects from nature and mixed influences from history of art and modern times to result in an aesthetically satisfying and visually cohesive outcome in painting.

The issues raised by the research project about abstraction and influences are discussed by Kobena Mercer in *Discrepant Abstraction* (2006). He refers to *'three main tendencies'* found in abstraction in art. Briefly, he states these are *'the Kandinsky/Malevich/Mondrian tradition of spiritual self-understanding of abstraction', 'the Greenbergian tradition of understanding abstraction as the consequence and means of self-limiting, self-critical purism which reduces the task of modern art to the 'pure' one of exploring the emotional content of the physical properties of traditional artistic media'* and the third *'can be seen in contemporary studies of ...post-structuralist, psychoanalytical and deconstructive concepts to reveal how abstraction resists the fixity of 'meaning' that*

essentialism requires and gives rise instead to a plurality of readings which are generated by a process of semiosis that cannot be fully closed by any one interpretation'. [107]

Philip Taaffe engages with relevant theoretical issues related to the development of visual cohesion of abstracted forms from nature within his paintings. This is discussed by Markus Bruderlin in *Philip Taaffe: Life of Forms* (2008). He states *'Taaffe is not interested in an eclectic collection of ornaments and their decorative dissemination on the canvas. He instead deliberately selects groups of motifs that influenced a collective, an ethnic group or a society as a style over a long period of time...he penetrates into their structures, assimilates them physically ...and reshapes them in order to apply them as individually experienced patterns and forms to the canvas.'*[108]

In the chapter *Forms in Time* of this volume, Holger Broeker discusses relevant theory about ornaments and whether they are *'images or only signs'*. She supposes an image *'does not find fulfilment in its referential function, but innately partakes in that which it illustrates'* and she states, *'the same is true of the ornament which aside from the classic allegorical and symbolic content, form possesses its own mode of referencing and establishes it s own type of contextuality where one can certainly differentiate between the ornament as a decoration and the carrier of meaning....In principle the answer to the question remains, context-sensitive depending on the ornaments contents.'* [109]

Algorithmic systems and time factors in growth are discussed in *The Algorithmic Beauty of Plants* (1990) by Aristid Lindenmayer (posthumous) and Przemyslaw Prusinkiewicz. A quote from d'Arcy Thompson's *On Growth and Form*, University Press Cambridge, (1952), is theoretically relevant to the concept of creating a sense of growth and time in painting as follows: *'...organic form itself is found mathematically speaking to be a function of time...we might call the form of an organism an event in space time, and not merely a configuration in space.'*[110]

Gu Gan in *The Three Steps of Modern Calligraphy* (1990) discusses the theory of creating a *'three dimensional space'* on a two-dimensional plane, and formation of the space on multiple levels with compositional elements of scale, mark and tone that is directly informs the development of the painting research. [111]

3. Methods and outcomes

- proposed forms and technologies you plan to employ

I propose using a multifaceted approach to my research. I will employ elements of traditional Chinese brush painting and ornamental patterning with water-based paints, mediums and inks. It will incorporate layering of paint, ranging from thin washes to heavy application of pigment,

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[107] Kobena Mercer, ed., *Discrepant Abstraction*, first ed. (London UK and Cambridge MA: co-published the Institute of International Visual Arts (inIVA) and the MIT Press, 2006).16,17

[108] Kunstmuseum Wolfsburg, ed., *Philip Taaffe: Life of Forms Works 1980 - 2008*, First ed. (Ostfildern, Germany: Hatje Cantz Verlag, 2008).6

[109] Ibid.193

[110] Przemyslaw Prusinkiewicz and Aristid Lindemayer, ed., *The Algorithmic Beauty of Plants*, first ed. (Regina, Saskatchewan: Springer-Verlag, 1990). Preface v

[111] Gu Gan, ed., *The Three Steps of Modern Calligraphy*,
The First Chinese/English Edition ed. (Beijing: China Books Publishing House, 1990).169

controlled and loose brush work, intuitive and experimental mark making and ruled lines. Use of rollers, masking and stencil will also be employed.

- planned experimentation

I plan to experiment with combinations of various painting and mark-making methods including transparent overlaying of shapes and embedding brush and line work. I will investigate stencil-making materials and surface binding materials on the canvas, to create cohesive and satisfying grounds for the succeeding development of the painting. I plan to experiment through building of layers, with creation of a sense of history and time in the making of the painting, which is relevant to the concept of the painting research.

- **planned outcomes (exhibitions, review presentations etc)**

I plan to implement my proposed studio based research by:

- developing the research methodology through focused practice and theory;
- developing a method of abstraction in painting derived from botanical forms and geometric structures that are metaphor for natural processes, hybridization and cross-fertilization;
- developing a book, box or collage form of presentation for the preserved botanical material;
- producing a body of work of at least eight paintings on canvas 80x80cm (each)

4. Fieldwork or other travel

- intentions with regard to research away from Canberra

Opportunity presenting, I plan to continue to visit gardens, botanical collections and observe varieties of plants.

- necessity in relation to research questions

This will allow for continued seasonal collection of botanical material and general investigation of scientific and artistic representation of plants and their growth patterns.

Bibliography

Bruderlin, Markus, ed. *Ornament and Abstraction - the Dialogue between Non-Western, Modern and Contemporary Art*. First ed. Basel: Foundation Beleyer 2001.

Gan, Gu, ed. *The Three Steps of Modern Calligraphy*. The First Chinese/English Edition ed. Beijing: China Books Publishing House, 1990.

Jones, Owen, ed. *The Grammar of Ornament*. second ed. New York: Van Nostrand Reinhold Company, 1856. Reprint, Library of Congress catalogue card number 72-1444.

Lindemayer, Przemyslaw Prusinkiewicz and Aristid, ed. *The Algorithmic Beauty of Plants*. first ed. Regina, Saskatchewan: Springer-Verlag, 1990.

Mercer, Kobena, ed. *Discrepant Abstraction*. first ed. London UK and Cambridge MA: co-published the Institute of International Visual Arts (inIVA) and the MIT Press, 2006.

Rawson, Jessica, ed. *Chinese Ornament the Lotus and the Dragon*. first ed. New York: Holmes & Meier Publishers, INC., 1984.
Schultze, Sabine, ed. *The Painter's Garden: Design Inspiration Delight* Frankfurt: Hatje Cantz Verlag, 2007.
Wolfsburg, Kunstmuseum, ed. *Philip Taaffe: Life of Forms Works 1980 - 2008*. First ed. Ostfildern, Germany: Hatje Cantz Verlag, 2008.

PERSONAL DETAILS – Art practice CV

Name	Kerry Shepherdson (Visual Artist)
	Master of Philosophy, School of Art ANU 2009 – 2011
	Bachelor of Arts (vis) (hons) School of Art, ANU 2001 - 2004
Address	14 Whitty Crescent, Isaacs, ACT 2607
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Solo Exhibition

2005 May	Contemplation, Tuggeranong Arts Centre ACT

Selected Exhibitions

2011 Mar	Graduate Season Exhibition ANU School of Art Gallery, ACT
2010 Oct	This Way Up, ANU painting Workshop Abstraction Symposium, M16 Gallery, ACT
2007 July	Winter Solace:Simply Red-with Don Burrows, Cowra Regional Gallery, NSW
2006 Sept	Duality, with Susan Harper, Mawson Gallery ACT
2006 June	Continuum 3, with Penny Stott and Bev Bruen, Tuggeranong Arts Centre ACT
2006 April	Picture This, 30 Anniversary Alumni Showcase, ANU School of Art Gallery, ACT
2005 Aug	EASS Exhibition, with Penny Stott and Bev Bruen, Alliance Francaise ACT
2005 Feb	Two of Us with Liliana Johnson, Mawson Gallery ACT

Group Exhibitions

2011 Sept/Nov	Far Horizons, Eden Project, ANU Field Study, Bega Valley Regional Gallery, NSW
2011 Sept	Contested landscapes of Western Sydney, ANU Field Studies NCEPH, ANU, ACT
2011 July	Statement of Intent Eden Project, ANU Field Study, Foyer Gallery, SOFA Gallery ACT

2011 Jan/Feb	Contested Landscapes of Western Sydney, ANU Field Studies, Sassafras Gallery, NSW
2010 Aug	Contested Landscapes of Western Sydney, ANU Field Studies, See Street Gallery, NSW
2010 June	Contested Landscapes of Western Sydney, ANU Field Studies, SOFA Gallery,ACT
2008 Sept	The Gate, Artemesia Alumni Group, ANU School of Art Foyer Gallery ACT
2008 June	Contemp. Aus. Landscape Frank Thirion's Class Exhib, Centre for Cont. Ed. ANU
2007 Aug	I am, We are, ANU School of Art Foyer Gallery, ACT
2006 Sept	Beside the Creek Reprise, Strathnairne Gallery, ACT
2006 July	Beside the Creek, ANU School of Art Foyer Gallery, ACT
2004	Green - Graduating Student Exhibition ANU School of Art, ACT
2004	We Stayed Up Late Last Night, ANU Honours Showcase Exhibition, ANCA, ACT
2003	Art of Diplomacy Exhibition, Cuppacumbalong, ACT

Participating Exhibitions

2011 Sept	ANU School of Art Open Day Exhibition, ACT
2011 Aug	XXX, CCAS Members Exhibition, CCAS, Manuka, ACT
2010 Sept	Bold and Beautiful, CCAS Members Exhibition, CCAS, Manuka, ACT
2010 May	Masterpieces, PG Students and Teachers, ANU SofA Painting Workshop
2009 Sept	Fakes and Forgeries, CCAS Members Exhibition, CCAS Manuka, ACT
2008 Sept	The Garden of Good and Evil, CCAS Members Exhibition Manuka, ACT
2008 Sept	Heavenly Bodies Exhibition, Hibiscus Gallery, Burrill Lake, NSW
2008 May	Brindabella Exhibition, Tuggeranong Arts Centre, ACT
2007 Sept	Pets, Canberra Contemporary Arts Space Members Exhibition, CCAS Manuka, ACT
2007 Sept	Body Language Exhibition, Hibiscus Gallery Burrill Lake, NSW
2007 Aug	B8 Group Exhibition, Raglan Gallery Cooma, NSW
2007 May	Brindabella Exhibition, Tuggeranong Art Centre ACT
2000	Community Mural with Carol Pickelman, Jerrabomberra, NSW
1990	Group exhibition National Museum, Nairobi, Kenya
1980	Solo exhibition (Chinese Brush Painting) – DSS Canberra, ACT
1976	Joint exhibition with Maureen Singh, Equatorial Hotel, Kuala Lumpur, Malaysia

1976 Solo exhibition, One Woman– Anthony Sum Gallery, Kuala Lumpur, Malaysia

AWARDS ANU School of Art EASS 2004 - Mallesons Stephen Jacques Acquisition Award

ANU School of Art EASS 2004 - Alliance Francaise Exhibition Award

REVIEWS City News, Continuum 3 Exhibition, Stephanie Scroop, July 2006

Canberra Times, Times 2, Contemplation Exhibition, Sonia Barron, 27 May 2005

Arts Sound FM, Interview Peter Georgiopolos, February 2005

Chinese Language Newspaper and Television, Sum Gallery Exhibition, 4 Sept.1976

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