CHAPTER 4 – THE MIXING OF MEMORY WITH DESIRE

4.1 - The Process towards a Public Artwork

The previous chapter addressed those issues which explored the underlying historical and conceptual foundations underpinning the composition of a body of work whose grouped constituent parts have been assembled under the umbrella title of *The Mixing of Memory with Desire.* In order to map what, in some cases, may appear to be the markedly disparate elements included under this title, Figure 4.1.1 has been designed to provide an overview of the connecting pathways relating each part of the work to another. It also endeavours to highlight individual elements contributing to the fabrication, whilst at the same time documenting the progress of the work from its genesis to the final realization.

The stages of the work which have been concerned with gathering and developing primary visual material are located in the boxes tinted pale green and have been placed under the general heading of *pre-compositional studies*. The topics assembled under the heading *compositional studies* are in green-blue tinted boxes, whilst those aspects of the work related to the combined activities of the artist with co-workers and designated, *the artist and fabricators* have been shaded in blue. The differently coloured boxes have been provided in order to identify the three most significant generative stages in the progression of the entire body of work from its inception to the final realization. The colour designations of pale green, blue-green and blue have been employed as, in most cases, they reflect the various stages of the work from the *studies from nature*, to the painted *compositional works* and

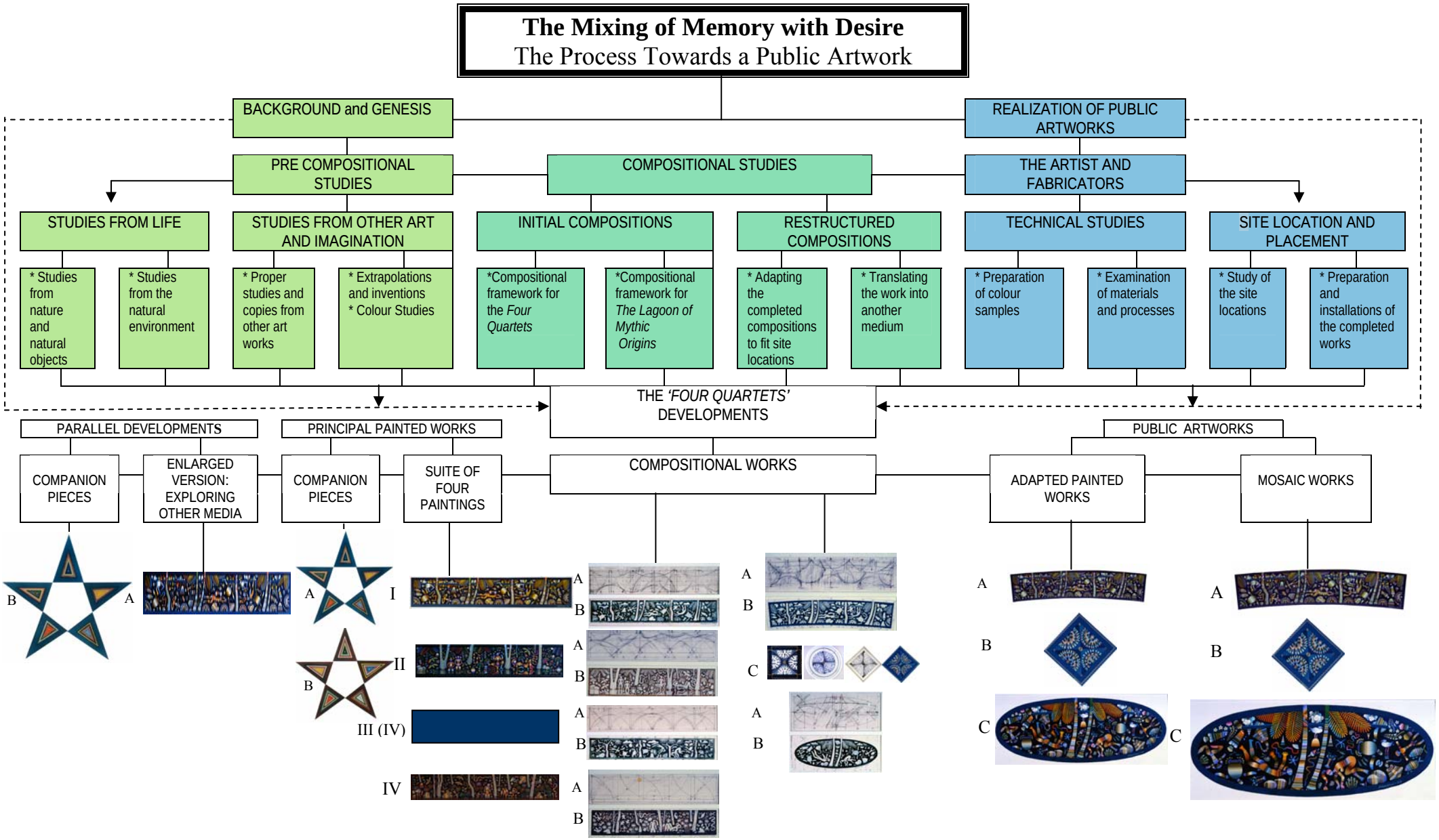


Figure 4.1.1
A schematic process diagram for *The Mixing of Memory with Desire*

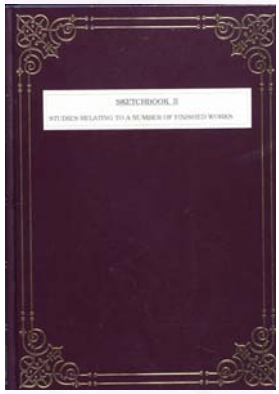
finally to those pieces whose ultimate destiny was their transformation into works of Public Art.

The *pre-compositional studies* and *compositional studies* have been deliberately separated as they address different but related pictorial issues. While it might be correctly assumed that the *pre-compositional studies* precede the *compositional studies*, overlaps occur where further trials or reworkings may have been required to progress the *compositional studies* and achieve the final outcome. The *pre-compositional studies* and *compositonal studies* will be described and their relationship to the *Sketchbooks* and *Visual Research Notebooks* – all of which have been itemized in Figures 4.1.2 and 4.1.3 respectively – will be noted in the following sections. A fundamental difference exists between the methods of managing the *pre-compositional studies* and the *compositional* material. The *pre-compositional studies* are contained in the *Sketchbooks* and are almost exclusively concerned with various aspects of visual inquiry. In contrast the *compositional studies* have been made on individual sheets and, although intimately connected to the *pre-compositional studies,* they have also been informed by the *Visual Research Notebooks.* To a large extent these contain written notes accompanied by illustrations, and address the more conceptual aspects of the work.

It is understood that, "… whilst providing a sense of the wider context." (Brown,1991: 7), the *Sketchbooks* and *Visual Research Notebooks* also contribute, as the specialist curator and historian Robert Upstone (1991) has noted, "… vitally important tools, in which ideas are developed and worked out and impressions …

Sketchbooks I-IV

Sketchbook No. 1- (1992-93), Contents include pre-compositional material used to inform the suite of four paintings *The Mixing of Memory with Desire,Nos. I and II,* also includes studies from life and other works of art.
Size A4: No. of pages 108.



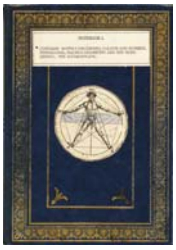
Sketchbook No. II- (1992-95), Contents include pre-compositional material employed in mosaic designs for *The Mixing of Memory with Desire, Nos. III and IV, also* includes studies from life and other artworks.
Size A4: No. of pages 148.

Sketchbook No. III- (1994-2003), Contents include inventions and extrapolations, pre-compositional and other material collected for *Communion to the Trees,* e.g. lettering, decorations and images.
Size A4: No. of pages 108.

Sketchbook No. IV- (1998), Contains work from three workshops with Gyuto Tibetian monks, from the Tantric University of Aranul Pradesh, India: includes studies in calligraphy, lettering and painting.
Size 28 x 34cm: No. of pages 36.

Figure 4.1.2
Listing of Sketchbooks with brief description of contents.

Visual Research Notebooks 1-6



Notebook I - (1992-98), Colour and number, Tantric and Classical pentagonal sacred geometry, the five elements, human proportion and astronomical notations. Size A5: No. of pages 108.

Notebook IA- (1992-2003), Tools, materials, methods, techniques and technical information. Size A5: No. of pages 150.

Notebook II - (1993-200), Pictorial geometry, numerical ratios, compositional structures, musical consonance; extended horizontal compositional formats. Size A5: No. of pages 175.

Notebook III - (2000-03), Elements of being, macro/micro levels of existence, associations of colour with *Auric* zones and the *Tantric Chakras.* Size A5: No. of pages 163.

Notebook IV- (1992-2003), Notes about and extracts from the works of writers and artists e.g., T.S. Elliot, Carlos Castenada, Dr. H. Wesselman, Klee, Matisse, S. Spencer,T.Phillips,M. Klarwein and others. Size A5: No. of pages 150.

Notebook V- (1997-2003), Compilation of notes associated with *Communion to the Trees* – background of the text, the translator, and historical material concerning the forms, styles and terms related to lettering, decoration, Bookworks, etc. Size 17.5 x 22.5cm: No. of pages 211.

Notebook VI- (1992-2003), Colour studies based on observations from life, chromatic schemes, exercises and the palettes used by other artists: *Colour Theories and Musical Consonance,* colour schemes for Public Works, Commissions and Bookworks. Size: A4: No. of pages 104.

Figure 4.1.3
Inventory of Notebooks with a concise description of contents.

captured for future reference." (Upstone, 1991: 36). In his description of their manner of use, he points out that

> Sketchbooks also serve as the artist's library a record of everything felt or seen, and the books [are] used as an invaluable source of subject-matter when … selecting a subject or composition for a finished work.
>
> (Upstone, 1991: 37).

The *pre-compositional studies* (shaded in green, Figure 4.1.1) and *compositional studies* (shaded in blue-green, Figure 4.1.1), both of which are entirely dependent upon the material gathered and generated in the *Sketchbooks* and *Visual Research Notebooks* (Figures 4.1.2 and 4.1.3), consititute the methodological underpinning for creating all the completed *compositional* pieces, including those leading to a Public Artworks outcome.

The *pre-compositional studies* fall under the broader heading of *Background and Genesis* which categorize those aspects of the work, including half the *compositional studies*, which were created independently of any Public Artworks outcome. The actual compositions and associated preparatory designs have been noted in diagramatic form in the lower half of Figure 4.1.1 and placed under the heading of *The Four Quartets: Developments and Variations.* The progressive development of these works extend to the left from the dotted centre line under the heading of *compositional works* through to the *principal painted works* and conclude with *parallel developments*. Those silhouettes extending to the right of the dotted centre line under the heading of *compositional works* represent the principal transformative

stages in the advancement of pre-existing designs towards a *Public Artwork* outcome. The colours allotted to the schematized silhouetted formats described above (and charted in the lower part of Figure 4.1.1) represent generalizations of the principal background colours assigned to individual works, regardless of the medium in which they were executed. It should be reiterated that the *pre-compositional studies* and the *compositional studies* constitute an essential part of the methodological underpinning of the Public Artwork. Attention is also drawn to the fact that, although Figure 4.1.1 charts a logical and even progression in terms of the artistic process, on the one hand a certain degree of simultaneity occurred whilst, on the other, irregular lapses of time eventuated.

4.2 - Background and Genesis: Pre-compositional Studies

The term *pre-composition,* although a borrowing from the terminology of musical composition as suggested by Cowie (1994), has been used in the present context as a convenient cross-disciplinary device to encompass all the preparatory visual material collected, produced and assembled prior to the creation of, and leading up to, the finished pictorial compositional arrangements. As has been previously outlined (see 4.1) the *pre-compositional* and *compositional studies* form two distinct categories. The first category, that is the *pre-compositional studies,* may be described as independent studies with no intentionally planned compositional arrangement. These studies were culled from a variety of disparate sources and include subjects and objects rendered from life, studies from other works of art, and fictive images in the form of extrapolations and inventions drawn from imagination. As a body of work, the role they played as contributing elements in the final pictorial compositions was

crucial. The most significant aesthetic and technical problem, however, was the attempt made to create a coherent compositional and stylistic synthesis of the many apparently disparate structural and visual elements. The second category which has been placed under the heading of *compositional studies* is specifically concerned with the foundational material underpinning the *concept designs* both for the independent painted pieces and the Public Artworks. This category includes a discussion of the compositional frameworks, pictorial arrangements, and the relationship of format adaptations to their original compositional sources, in relation to all the painted works. In the interests of clarity it should be mentioned that these painted works, although included under the overarching title of *The Mixing of Memory with Desire,* were originally planned as a suite of four pieces entitled the *Four Quartets.* What might appear to be a further aberration is the presence of an additional work with the title *In the Lagoon of Mythic Origins.* However, the *raison d'ętre* for this apparently abberant titling forms an essential part of the formative background of the work over the course of seven years and will be explained in the sections which follow. It should be reiterated that both categories of work, the *pre-compositional* and *compositional studies*, coalesce in the final *compositional works* and Public Artwork.

4.2.1 – Studies from Life

The title *Studies from Life* should not be interpreted, at least in the present context, as an activity confined to "Drawing [or painting] from the nude…" (Ashwin, 1983:139). Regardless of its traditional associations with working from the human

figure, *Studies from Life*, may be understood to include all those works whose principal sources can, at some level, be related either to *natural forms* in their broadest sense (both animate, including representations of the human figure and inanimate) and with visual experiences derived from the *natural environment*. Also included under the generic heading of *Studies from Life* are those works derived from other works of art (or artefacts) where the same general approach has been adopted as that of working from *natural objects* and from nature.

4.2.1.1 – Studies from Nature and Natural Objects

Studies in this category are those which may be classified as *observational* and, to a large extent, are concerned with various forms of visual inquiry. In terms of visual experience they also constitute the most direct connection between the *phenomenal world* and the finished work. The primary intention underlying these studies was to gain a more profound insight into and experience of particular subjects or objects from a visual standpoint; some aspects of these might inform either compositional or individual pictorial elements in the painted works. However, the degree to which these studies have been refashioned in terms of the original sources shows considerable variation, and not all the studies are faithful representations from life! In some instances the original forms have been minutely rendered (e.g.,Plate 4.2.1) whilst, in others, the extent of their modification has been appreciable (e.g. Plate 4.2.2). Although Plate 4.2.2, a page from Sketchbook No. I (Figure 4.1.2) is not intended to be representative, it does illustrate the wide variety of reference material and the diversity of treatments cited above.

Plate 4.2.1 *Study of a Volute Shell,* watercolour and pencil on paper, 12.7 x 14.5cm.

Plate 4.2.2 *Sheet of Studies,* gouache, watercolour and pencil on paper 21 x 14.5cm: Sketchbook No. 1.

At this point it is felt that some comment should be made with respect to the artist's position concerning the use of photography (particularly in relation to the *studies from nature*), and the decisions made regarding its appropriateness as a method of collecting and recording source material. The broader, much scrutinized theoretical issues associated with the technologies of reproduction, production and consumption, debates concerning what the eminent critical theorist Fredric Jameson (1992) refers to as "… 'photographic realism' or representation;" (Jameson, 1992:213), and the spatio-temporal "*phenomena"* (Kant, 1755:36) described by Ron Bowen (1992) as mechanically arrested "…states of transience…" (Bowen, 1992:100) extend beyond the limits of the present study. What does matter, however, are those issues identified by Mel Thompson (2000) in his writings on ethics and philosophy as "…appearance and reality…" (Thompson, 2000:23) and *orders of experience,* together with their apparent effect on the relationship of the artist to the object of vision conjoined with the act of recreating the object as a *visual sign.* The art historian Michael Carter (1994), in his discussion of this matter, submits that "There appears to be a strong tendency to read visual signs in a mimetic fashion, that is to relate visual signs to 'real' objects". (Carter, 1994:155).

The artist, of course, has also been concerned with this reading of *visual signs* but in reverse order, creating them *from* "… 'real' objects." (Carter, 1994:155). In fact it has been this inverted positon which provided the *raison d'être* for the artist's *Studies from life* and the deliberate decision not to use photography as a primary source in this particular situation. The artist's resolve to participate in *first order* rather than *second order experiences* as discussed by Thompson (2000), and the need for what Bowen identifies as "…establishing existences…" (Bowen, 1992:100) have

been *à priori.* In his deliberations on the relationship between drawing and photography he submits that

> …they [the photographers] may attempt to create enduring images, [but] they can only record the ephemera of situations, whilst the most fleeting drawings are essentially about establishing existences and are not about ephemera in the same way.
>
> (Bowen, 1992:100).

Bowen (1992) proposes that "…we photograph ourselves in states of transcience…" (Bowen, 1992:100) and further suggests that

> We have come to identify the uncertainty implicit in such images with our idea of experience, but though the idea of making images about uncertainty might appeal, uncertain images are still largely unreadable.
>
> (Bowen, 1992:100).

Both the issues of uncertainty and legibility in relation to determining the most appropriate ways of making *studies from nature* have also contributed to the processes of decision making regarding the use of photography. This point of view, however, is not intended as a denial of the purposes and usefulness of photography and, indeed, in other situations the camera proved to be an indispensible tool. Despite the colloquy that exists between the camera and the making of studies in general and its great value, particularly when making copies from other works of art, the artist has made every effort to work from original art objects employing the same

strategies as those used when fashioning *studies from nature* and *natural objects.* These issues are perennial and will be explored further in relation to *Studies from Nature* in Chapter Five.

4.2.1.2 – Studies from the Natural Environment

Devising an appropriate descriptive title for this category of work could be likened, perhaps to steering a course between *Scylla and Charybdis* inasmuch as it (at least in some ways) could equally well have been called *Landscape Studies* as opposed to *Studies from the Natural Environment.* However, in terms of dictionary definitions, *landscape* has a tendency to imply "… an extensive area of scenery as viewed [predominantly] from a single aspect." (Collins English Dictionary, 1993:826). In most cases, however, the studies do not accord with this definition, that is, of the recording of "… extensive areas of scenery…" (Collins English Dictionary, 1993:826) and, in fact, the opposite tends to be the case. Indeed the majority of studies represent carefully selected, vignetted motifs whose main focus is on specific natural forms which examine elements of colour, shape, pattern, rhythmic structure and the like. The studies, however, rarely stand alone, but are almost always contextualized by their immediate surroundings (see Plate 4.2.3); the choice of the word *environment* was therefore considered to be a more appropriate appellation. *Environment* then, in the present context may be understood as "… external surroundings…" (Collins English Dictionary, 1983:489), and the word *natural* which precedes it, as "… all natural phenomena and plant and animal life, as distinct from man and his creations…" (Collins English Dictionary, 1983:981). Indeed the breadth

Plate 4.2.3 *Studies of Beach Almonds*, watercolour and pencil on paper, 11.5 x 17.5 cm.

of the subject matter included under this heading is more than adequately encompassed by the above definition.

The notional approach to working in, and from, the *natural environment* was, in essence, the same in terms of strategies as those discussed in 4.2.1.1, particularly with regard to the use of photography, quicker and more convenient though that might have been. Having touched upon those points identified by Bowen (1992), in relation to the dialogue between the camera and the act of making images directly from observation, the possibility presented itself within the present context of broaching two further issues of significance. The first is situational, conditional and qualitative, concerned as it is with the concept of presence, situation and the modification of states of consciousness. The second which, in the artist's opinion, is strongly associated with the first, is quantitative and concerned with method or, perhaps more accurately, working strategies: in other words, the technical business of making direct observational studies from nature.

Presence should be understood within the current frame of reference as "… the state or fact of [something] being present, the immediate proximity of a … thing [and] invisible spirit…" (Collins English Dictionary, 1982:1157). Reference is here being made to, the relationship of the artist to the subject/object of his/her *gaze* and the subtly changing manner in which the object of the *gaze* appears to *reveal itself* to what Carlos Castaneda (1977) referred to as the *gazer* (Castaneda, 1977:25) over a sustained period of time. In other words that complex, reciprocal activity of the transaction which takes place between the *seen* and the *see-er* which is, as Carter (1993) affirms, the domain of psycho-analysis. Indeed he submits that

> It is in psycho-analysis that we will find sustained consideration of where sight, and in particular the relationship between the see-er and the seen, rests in the development of the mature adult.
>
> (Carter, 1993:152).

Important though the "… recent developments in [this field of] psycho-analysis…" (Carter, 1993:152) may be, of greater personal significance to the artist, as Bowen (1992) has pointed out, is that "Even artists who have worked from observation for years still speak of the surprise or unexpectedness of the seen …" (Bowen, 1992:64).

Although a principal reason for making studies from observation is to develop and increase both visual memory and experience, several other important issues arise; one of these is concerned with the process of visual agreement and the other with the raising of individual levels of awareness or insight with regard to the object (or phenomenon) of the *study* over a period of time. What is inferred through visual agreement are those procedures and practices involved in matching the various elements of the *study* (or drawing) with the information gathered from what is *seen* e.g., the object or phenomenon of the *study*; this will be considered in greater depth further on. Being in the *presence* of what is *seen* may, therefore, be thought of as *situational*, inasmuch as the *see-er* and the *seen* are (in this context) located in the same place at the same time.

On the other hand, the *conditional* element alludes to those factors on which the artist (and what he/she may accomplish in terms of a practical outcome) is largely dependent, and, in turn, this influences the circumstances and duration of the contact

(or interchange) with the object or phenomenon of the *study*. That is, the vagaries of physical, climatic and other external conditions which may impact on the length of available time during which the work is undertaken.

The *qualitative* element (given that a sustained period of time has been available during which the artist has been able to carry out the work), concerns the activities associated with what has previously been identified as the *gaze*. The artist's interest in this aspect of making the *studies* (particularly over a sustained period of time) has been derived from two apparently unrelated sources and is of such significance (in terms of the artist's practice) that a reasonably comprehensive description has been provided. The first is an ancient Indian *Yogic* practice variously known as *Trātaka* (Gheranda, c.1675-95), *Trotana*, (Feuerstein, 1997: 309), or *Trātakam* (Svātmārāma, c.1340-60: 2:32), which is translated as "…to look, or to gaze.." (Saraswati, 1973:310). Kevin Kingsland (1976) writing on the subject, affirms that

> Trātakam is the Sanskrit name given to the practice of training and directing the gaze. It is a high-level concentration technique [which] may also be used as a kriya to clean the eyes, but the practice of Trātakam is far more than this.
>
> (Kingsland, 1976:159).

He goes on to propose that, through a mastery of *Trātakam* techniques, one "…can learn to control [one's] mental energies…" (Kingsland, 1976:159) and further maintains that "…[one] can learn… to check the restlessness of the mind, and awaken the brain in order to manifest greater consciousness." (Kingsland, 1976:159). From this point on, the form *Trātakam* (Svātmārāma, c.1340-60:2:32)

will be used as it is that which is most frequently encountered in contemporary writing on the subject. *Trātakam* has two forms, one of which is interior (*antaranga*) with the eyes closed and the other exterior, (*bahiranga*), with the eyes open, (Saraswati, 1973: 311). The *Trātakam* practices described below are concerned exclusively with the exterior form *bahiranga*.

Though a variety of methods can be used to introduce the aspirant to simple *Trātakam* techniques (Kingsland [1976] for example, suggests the use of coloured disks), the traditional procedures are those advocated by the Tantric Swami Jyotirmayananda Saraswati (1973), and involve the use of a "…candle flame, or a black dot…" (Saraswati, 1973:47) as objects at which to direct the *gaze.* Saraswati (1973), in fact, provides a list (increasing in difficulty), of some eighteen objects and phenomena for concentrating the *gaze*. These include "… (7) Sky, Water; (8) Rising Sun; (9) Setting Sun; (11) Shadows; (12) Darkness; [and] (15) One of the Four [or Five] Elements…" (Saraswati, 1973:47). Kingsland (1976) provides a similar but more comprehensive inventory and instructs the aspirant to "Remain highly alert and aware, [and] not [to] go… into a sleepy state…" (Kingsland, 1976: 160) and continues "Practise *Trātakam* on all kinds of objects: trees in daylight; the moon at night… You will discover new worlds of light and colour." (Kingsland, 1976;160). Kingsland (1976), a neurophysiologist, Sanskrit scholar and practitioner of *Hatha Yoga* draws our attention to the fact that "In physics we know that gazing directs plasma-ionized gas which is so different from ordinary gas that is considered a fourth state of matter." (Kingsland, 1976:159).

With respect to the above phenomena, he describes two further special forms of *Trātakam* e.g., *Nasagara Drishti* and *Bhrumadhya Drishti*, about which he explains that

> [they] will … improve memory and … through this practice the central autonomic nervous systems are awakened. This is achieved through stimulation of various cranial nerves which innervate the eyes.
>
> (Kingsland, 1976:161).

Indeed an ongoing preoccupation of a great many artists is to enhance the capacity of their visual memories. The technical aspects of the practice are described, albeit rather briefly, in two of the most widely consulted classical texts, the *Gheranda-Samhitā* (Gheranda, c.1675-95) and the earlier *Hatha-Yoga-Pradīpikā*, (Svātmārāma, c.1340-60) upon which *Gheranda's* "… Vaishnava work is modelled…" (Feuerstein, 1997:105). Translations of the relevant verses treating *Trātakam* in the above works are contained in Appendices B.3 and B.4.

Reference was previously made by the artist to the attempted use of a second set of *gazing* practices, in this case derived from those described in the controversial works of the Latin American anthropologist and author Carlos Castaneda (1925-1998). It should be noted *en passant* that, despite the criticisms of his work and writings (notably by Richard de Mille (1978), some academics, and others), which chronicle "…the beliefs [and shamanic practices] of borderland Indians in norther Mexico," (Cohen, 1998: 41), the artist has continued to find them profoundly compelling, visually stimulating, and mysteriously evocative. Much like the practices of

Trātakam, however, Castaneda (1979) describes a similar set of (exterior) *gazing* practices, the use of which are intended to engage what he refers to as "… the second attention …" (Castaneda, 1979:257). In his explication of Castaneda's (1979) writings, the noted Mexican psychologist and author Victor Sanchez (1995) makes the illuminating observation that

> The way in which we use our attention in everyday life is known … as the first attention. This is what we use to perceive and impart order to our everyday world… Castaneda also indicates the existence of another form, called the second attention which represents an unknown and very specialized use of the attention. It permits us to perceive another, practically limitless, part of reality that could well be called another world since it is so foreign to our world of everyday affairs.
>
> (Sanchez, 1995:162).

Sanchez (1995) argues that "The two attentions operate in coexisting parallel areas of reality that normally never come into contact." (Sanchez, 1995:162). In his exposition and interpretation of Castaneda's (1979) writings, he further explains that

> Performing activities that obligate the first attention to focus itself in unusual ways on the known world, or to focus on aspects that go unnoticed, produces the effect of an increase and/or saturation of attention.
>
> (Sanchez, 1995:163).

He continues by discussing the practice, about which he writes that "…there are some exercises that could properly be classified as exercises of attention…" (Sanchez, 1995:163); these involve the act of *gazing* about which Castaneda (1979) himself records a detailed description in his book *The Second Ring of Power* (1979). Castaneda (1979) notes that, whilst he was in conversation with a fellow female *Seer,* la Gorda, concerning the teachings of their shared mentor and guide don Juan Matus, she informed him that

> The first thing that the Nagual [don Juan Matus] did was to put a dry leaf on the ground and make me look at it for hours. Everyday he brought a leaf and put it in front of me. At first I thought that it was the same leaf that he saved from day to day, but then I noticed the leaves were different. The Nagual said that when we realized that, we were not looking any more but gazing.
>
> (Castaneda, 1979:257).

La Gorda goes on to recount that, from one leaf, she graduated to piles of leaves and then continued by providing Castaneda (1979) with the details of more complex matters which focus on the interaction between *dreaming* and *gazing*. She also mentions the experience of the apparent suspension of time, or "… stopping the world…" (Castaneda, 1979:257), which is what she had been given to believe occurred when the *second attention* was fully engaged and which bears an uncanny resemblance to the apparent cessation of time experienced whilst performing *Trātakam* and Eliot's (1935) "Still point of the turning world." (Eliot, 1989: 15) (see 3.2.2). In answer to his question "Was the pile of dry leaves the only thing the Nagual made you gaze at?" (Castaneda, 1979:258), la Gorda replied that

> If you gaze at a pile of leaves for hours as he used to make me do, your thoughts get quiet. Without thoughts the tonal wanes and suddenly your second attention hooks onto the leaves and [they] become something else.
>
> (Castaneda, 1979:257).

According to Sanchez (1995) the tonal "…is the space in which the average person exists during the duration of life…"; he goes on to explain that

> [it] is the organizer that gives meaning and significance to everything having to do with awareness… [it] includes all that a human is, thinks, and does, all that we can think and talk about… the entire spectrum of the known.
>
> (Sanchez, 1995:15).

She continues by providing him with an ordered inventory of objects and phenomena upon which to gaze. La Gorda also relates that "First we gazed at small plants… Next we gazed at trees." (Castaneda, 1979:258), the list continues with living creatures, insects and rocks. "A second series in the order of gazing was … cyclic phenomena: rain and fog." (Castaneda, 1979:258) and "…yet another was distance and cloud gazing." (Castaneda, 1979:257). La Gorda completes the inventory with a final series, recounting that "…The last series was fire, smoke and shadow gazing [together with] two more things, star and water gazing." (Castaneda, 1979:262)

She maintained that the last two were the most difficult and concludes her discourse on *gazing* by providing instructions recounting the manner in which it should be

carried out. "The body…" she explains "…had to be thoroughly relaxed." (Castaneda, 1979:263) and goes on to say that "The gaze consisted in scanning very slowly the object gazed at, going counter clockwise but without moving the head." (Castaneda, 1979:263). The subject of *scanning* mentioned above will be discussed subsequently in relation to the practices of making visual agreements and matching whilst making *studies.*

Both *Trātakam* and the *gazing* practices described by Castaneda (1979) have two further elements in common, detailed discussion of which, though of great interest, extend far beyond the concerns of the present study. To make mention of them, however, is *à priori* as the practices of *Trātakam* or *gazing* are intimately connected with both. The first is concerned with breathing techniques which are employed in *Trātakam*, and known to those familiar with *Yoga* as *prānāyāma:* they are also discussed as a part of the practice of *gazing* (though without a specialized name) by Castaneda during his interview with la Gorda (Castaneda, 1979:265). *Prānāyāma* (breath control), is an essential part of *Hatha-Yoga*, eight kinds being listed in the *Hatha-Yoga-Pradīpikā* (Svātmārāma, c.1340-60: 2:32-33) and the *Gheranda-Samhitā* (Gheranda, c.1675-95: 1:5:53). "The ultimate purpose of *pranāyāmā*, is also "…to control the movement of the mind." (Feuerstein, 1997:226). In the case of Castaneda's (1979) description, Sanchez (1995) asserts that "The majority of special breathing techniques are useful in silencing the mind, since they direct our attention to breathing rather than thoughts." (Sanchez, 1995:155).

The second aspect common to both *Trātakam* and *gazing* alluded to previously, which occurs as a direct result of the practice, combined with the use of special

breathing is what Castaneda (1979) refers to as "… stop[ping] the internal dialogue." (Castaneda, 1979:267). He recounts that

> From la Gorda's statements about gazing it was obvious to me that the effect don Juan had been after in making them gaze was to teach them to stop the internal dialogue. La Gorda had expressed it as 'quieting the thoughts'.
>
> (Castaneda, 1979:267).

With respect to an association between the *senses* and *internal dialogue,* Sanchez (1995) maintains that

> Since the internal dialogue functions hand in hand with the ordinary way in which we use our five senses, then a modification in the way we use [them] can help us to achieve silence.
>
> (Sanchez, 1995:152).

In his discussion of appropriate techinques he continues by making a direct connection between art and the achievement of silence as a result of the cessation of *internal dialogue.* Indeed Sanchez (1995) is of the opinion that

> Depending on the degree to which its practice is connected with feelings rather than thoughts, any sincere artistic activity can bring us near to silence – especially any that do not require language.
>
> (Sanchez, 1995:157).

However, in returning to the business of making *studies*, (both from *natural objects* and from the *natural environment*), an attempt to include a sense of stillness and arrested time has almost always represented a supremely important factor in those works developed over sustained temporal periods. While the *studies* are obviously static images, those which attempt to include a sense of timelessness, as Bowen (1992) succinctly explains, "…do so by articulating this stasis or stillness for the viewer." (Bowen, 1992:131). He suggests that works of this type have a tendency to stimulate us to look at objects, and/or phenomena, with far greater care, not in the way we normally do and that, in so doing, "They encourage us to step out of time…" (Bowen, 1992:131). In this regard he maintains that

> This pause in our ordinary speed of looking stands for far more than its own brief duration. Such images are sometimes quite slowly made, and arrived at by compiling the image from minute observations in time.
>
> (Bowen, 1992:131).

The artist suggests that it is the *scanning* process (which occurs during the act of gazing), a record of which becomes apparent through the process of building an "…image from minute observations…" (Bowen, 1992:131) that would appear to provide the lynchpin connecting the *method,* e.g., the manner in which the image is constructed, through a cessation of the *internal dialogue.* This cessation of *internal dialogue* apparently generates the inner silence and stillness which, in the artist's experience, arguably gives rise to that sense of timelessness to which Bowen (1992) refers and which manifests in both the creator and the work.

The slow (not necessarily methodical) compilation of an image comprising *minute observations* made from an object, in itself focuses the artist's attention, while at the same time heightening his or her levels of awareness through concentrating the *gaze*. A successful outcome as a result of the *gazing* and *scanning* of objects (or phenomena) is, of necessity, reliant upon locating and accurately recording particular selected points of reference. It is in documenting these points that the business of making visual agreements (or matching), takes place so that, whatever the points of reference selected, an accurate record will be made. In the making of careful sustained *studies,* the artist has always used a method of measurement. The use of a system of measurement, "… across the field of vision…" (Bowen, 1992:149), based on the concept of a picture plane placed between the viewer and the object, assists greatly in gauging accurately the relative positions, dimensions and proportions of the object(s) (or phenomena) of the *study*. As a method, and by its very nature, it significantly decelerates the *speed of looking*, at the same time not only supporting the artist's quest for accuracy but also perceptual objectivity. In his exposition of this system of measurement Saxton (2003) is of the opinion that "It recognizes the difference between just looking and seeing – perception in this sense is intentional and not passive". (Saxton, 2003:40)

It should be mentioned in passing, however, that the above remarks are not intended as support for what Carter (1993) has defined as "… a mythology of *visual exclusivity*…" (Carter, 1993:48), or those artists who "… have sought to base their aesthetic on the notion of … the disembodied eye [in relation to] the object of pure visuality." (Carter, 1993:148). The actual method involved in this system of measurement, although others have been developed, derives from that established by

William Coldstream (1908-87) and Claude Rogers (1907-79) and was first taught at the *Euston Road School* (a privately run art school in London, founded in 1937 and closed at the end of 1939 due to the outbreak of hostilities at the beginning of World War II). A detailed account of the method has been given by Christopher Pinsent (1982) in which he observes that

> Appraisal of relative distances is fundamental to the art of doing pictures. Coldstream has said that he began measuring from a concern to get things to look really like. But evidently he became fascinated with the business of finding exactly comparable or divisible distances.
>
> (Pinsent, 1982:157).

In fact Lawrence Gowing (1990) in his essay *Remembering Coldstream* (1990) observes that

> These marks, the marks of measurement, were also something else…. Coldstream explained that he was *interested* in measurement 'because it' gives me units of comparison. That is what I take to be the musical side of painting!
>
> (Gowing, 1990: 21).

What follows is a detailed description of the system of measurement employed by the artist. A flat wooden rule three centimetres wide and thirty centimetres long is held out at arms length at right angles to the eye and parallel to the plane of vision. Measurements are taken by lining up the extremity of the object with the end of the

ruling stick and reading off the vertical and horizontral dimensions by registering them with the thumb. The sightings are monocular, being made with one eye closed, and working from an absolutely fixed position. The readings are then transferred to the *support* by making small marks or points of registration with pencil or brush. In this fashion the accuracy of a work may be continually checked, revised and adjusted. Each mark made on the *support*, as a result of recording every reading taken from the object, represents the registration of a *visual fact.* As the marks accrue over time and as a result of the continuous *scanning* of the object(s), an increasing quantity of information is compiled regarding the particular nature of its placement, its (their) shape, form, dimensions, incidents of surface, possible movement and so forth.

It is perhaps worthy of note that the mapping and recording of movement with respect to "… the relationship of constants and variables in subjects that change over a period of time." (Laughton, 1986: 315) has been of particular interest to two of Coldstream's most loyal progeny, Euan Uglow (one of the artist's teachers, in fact) and Patrick George. Uglow's work has been primarily concerned with the human figure, in which he registered movements and bodily change whilst the model adopted the same pose over many months (in some cases, years) and similarly with the changing appearance of fruit over time, as it progressively decayed. George's interests, on the other hand, have focused upon recording the visual histories and changing appearances of exactly the same pieces of landscape also over lengthy periods of time, perhaps several months or even years. In some situations therefore, the registration marks may be hesitant and record a considerable history of change in terms of visual incident whilst, in others, they may be *forceful* and definitive. It is possible for the registration points or marks to indicate a number of things at the

same time. Apart from providing a record of measurement, as noted by Bowen (1993), they also serve as a description of the object(s) and as aids to memory. Indeed Laughton (1986), in describing minute measurements registered across a form, observes that

> … the dots and dashes, vertical and horizontal,… take their place as elements in the design and maintain an abstract relationship not unlike Mondrian's so-called 'plus and minus' drawings.
>
> (Laughton, 1986: 235).

The marks and points of registration therefore, not only provide a documentary record of the evolution and description of a form or object(s) in three-dimensional space but, in addition, achieve an independent *abstract* life of their own. Bowen (1993) summarizes the process remarking that "The record left is that of the search for form as well as of the form itself." (Bowen, 1993: 83). Although a great deal more information is available with respect to *gazing* practices (as previously described), together with the system of measurement outlined above, the intention has been to provide explanations, indeed characterizations for two methods of developing and enhancing the *gaze*. The purpose underlying a practical application of the two methods of *gazing* has been designed primarily to bring the beneficient experiences gained from them, to the artist's practice thereby integrating elements of them with it. A simple and obvious illustration of this has been to use the object(s) selected for a *study* (whatever it or they might be) and to use them as the object(s) of *gaze*, employing either the method described by Castaneda (1979) or *Trātakam*, prior to the commencement of work. The transition from *gazing* (as outlined), to the

activity of making the *study* becomes, at least in the artist's experience, almost seamless. The resulting integration of *gazing* techinques with the art practice has greatly enhanced the experience of making *studies*.

4.2.2 – Studies from other Art and Imagination

As the title of this section implies, two categories of work will be discussed; the first is concerned with those studies which can be classed as *copies* of parts, or details from extant works. These studies have, in the main, been executed either in part, or entirely, *before* the original art-objects, or in certain cases artefacts. In some instances, however, photographic records were made and reproductions utilized in order to complete the work; this practice was adopted to when the continuation of work *in situ* was not possible. The reasons for adopting photography and the utilization of the reproductions as *second strings*, as opposed to the practice of observational drawing, for making studies has been discussed in 4.2.1.1.

The second catergory of studies, those from imagination, represent sheets of images derived or extrapolated from extant works. Selected elements from these have been integrated, in one form or another, into the broader context of pictorial arrangements developed from imagination.

4.2.2.1 – *Proper Studies* and Copies from other works

Before providing an explantation for what is meant by *Proper Studies,* it is felt that some prior general discussion should be enjoined concerning the making of *copies* from other works of art generally. Making *studies* of and *copies* from the work of

others has played an essential role in artistic practice since ancient times and although traditionally thought of, (at least until comparatively recently), as a time honoured activity in the development and progress of concept and style, it has progressively been eclipsed as a legitimate form of study by what Jameson (1992) has described as "… pastiche… and the more readily received idea of parody". (Jameson, 1992:16). This observation is not, however, intended as a slight on those notable contemporary artists who have transcended the *isms* and *wasms* that have, at one time or another, borne them along on the tidal currents or stranded them on the reefs of fashion. Although the subject of much contention, (Hockney, 1981:7) studying other works of art, particularly those of the *masters* both past and present, has been and arguably remains for many contemporary practitioners a legitimate and essential part of their art practice.

The Portuguese painter Paula Rego (b.1935-) and English artist Peter Blake (b.1932), to name but two, have for example, both produced striking bodies of work and visual transcriptions as a result of their various tenures as Associate Artists at the National Gallery in London. Regardless of their final projects, which are what Colin Wiggins (1996) describes as "… tackl[ing] the problem of making a serious response to the past." (Wiggins, 1996:20), both artists have made large numbers of highly accomplished studies from original works in the collection, supplemented by the use of photography and reproductions, to inform their finished compositions. In his essay in the catalogue, *Now we are 64* (1996-97), Wiggins writes that he, "…[Blake] engages the past with intelligence and good humour." (Wiggins, 1996: 20) and observes that his "…techinque has always been painstaking and meticulous." (Wiggins, 1996:31).

Both Rego and Blake are not only consumate painters but have also held the great works of the past in high esteem. Michael Wilson (1991), in fact, writes in his essay describing Rego's project, that

> In 1990 she became the first National Gallery Associate Artist, a new appointment intended to give an established artist the opportunity of working in the Gallery and of producing work directly related to paintings in the Collection.
>
> (Wilson, 1991:23).

The purpose in citing the above examples is not intended to be one of exclusivity, but simply affirm that the artist has had both an intimate and longstanding association with the Gallery's collection as viewer, copyist, student and artist (see 1.2). Indeed Plates 4.2.4 (Sketchbook No. 1 – Figure 4.1.2) and Plate 4.2.5 (Sketchbook No. III – Figure 4.1.2) represent two of a number of studies made there whilst the artist was undertaking the project presently under discussion. In his Preface to the catalogue *The Proper Study* (Andrews, 1984:5) (an important exhibition of contemporary British figurative painting shown in India (1984-85), Julian Andrews, in his discussion of the traditions of humanism in relation to art practice (and all that those traditions imply in a contemporary context, including that of making transcriptions from other works of art), states that "… 'The Proper Study' examine[s] how a tradition once thought exhausted is not only still around, but stronger, more varied and more capable than ever…" (Andrews, 1984:5).

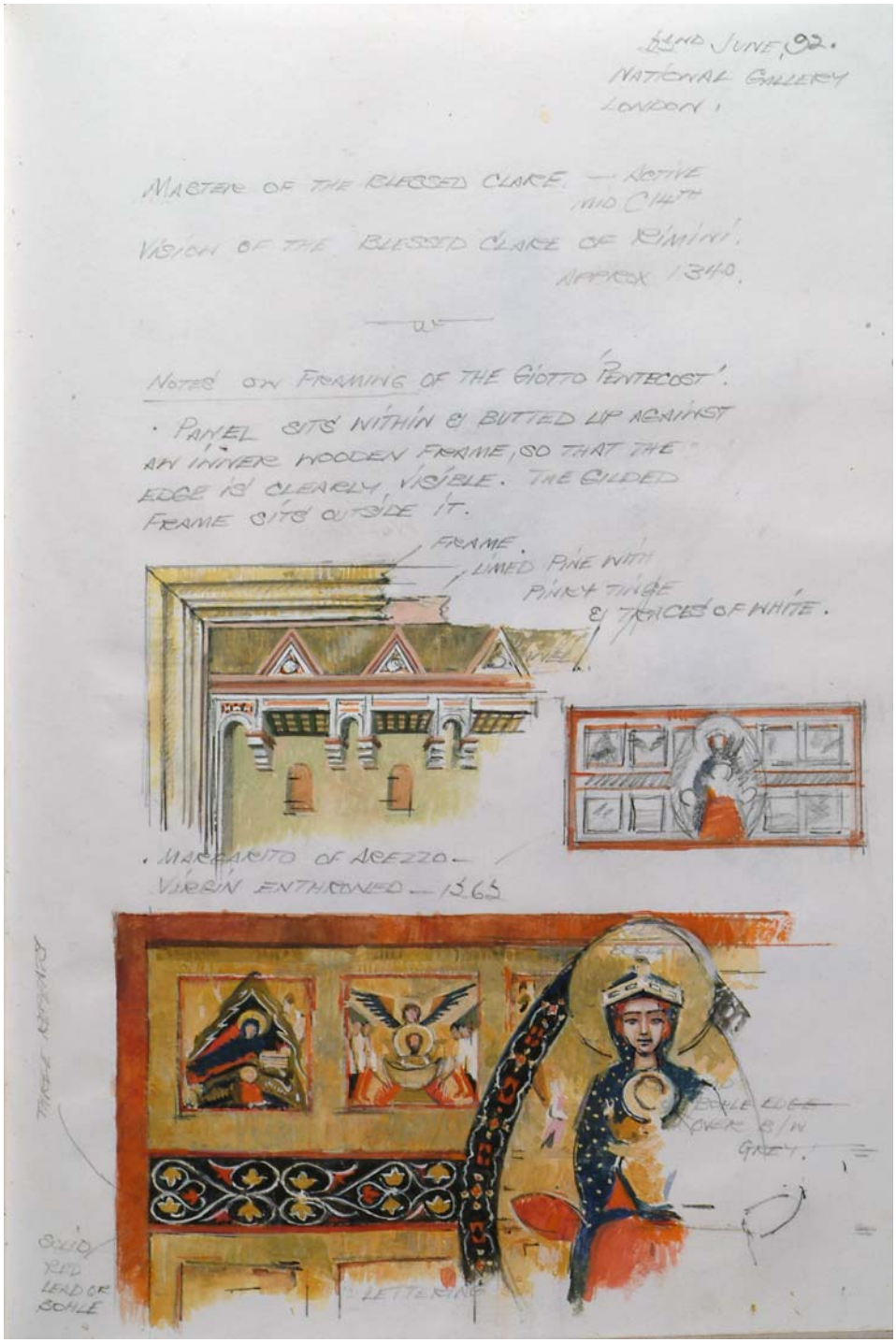


Plate 4.2.4 *Sheet of Studies,* above: after Giotto's *The Pentecost* (early 1300s). below: after Margarito de Arezzo, *Virgin Enthroned* (c.1262), pencil and gouache on paper, 29.5 x 20.5cm, National Gallery: London. Sketchbook No. I.

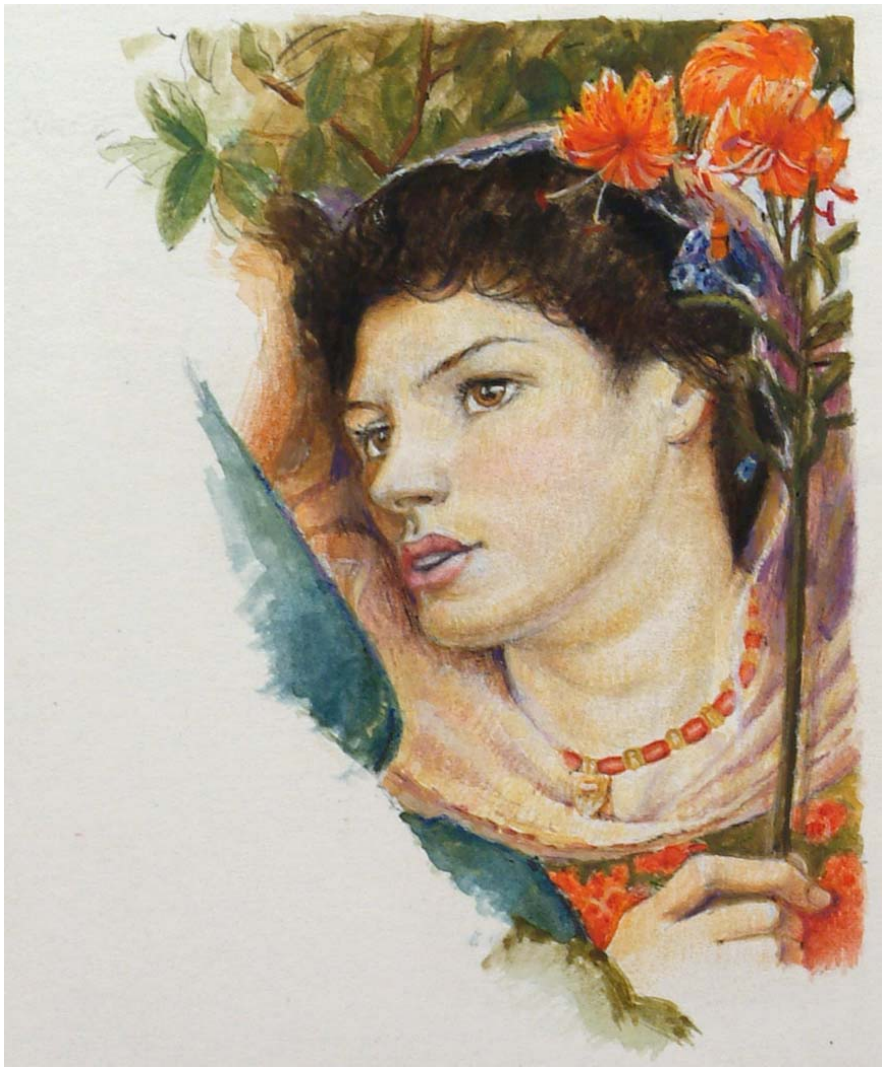


Plate 4.2.5 *Study of a Woman's Head,* after Dante Gabriel Rossetti's *The Beloved* (1865-66), pencil and gouache on paper, 13 x 12.5cm: Sketchbook No.III.

The exhibition, *The Proper Study* (1984-85), could not have been more aptly titled, culled as it has been, from the lines of *An Essay on Man* (1733-34) by the poet and satirist Alexander Pope (1688 – 1744) in which he wrote "… know then thyself, presume not God to scan, the proper study of mankind is man." (Pope, 1733-34: 189)

It is noteworthy that, of the seventeen painters represented in this exhibition, all have either made (or still make) copies of, or have reworked compositions from either *other art* or the art of the past. Jeffrey Camp (1981) an exhibitor in *The Proper Study* (1984 – 85), in fact, was the author of a manual, *The Drawing Book* (Camp: 1981), a unique publication devoted to the teaching of drawing through copying. In his Foreword to Camp's (1981) book David Hockney (1981) contends that

> The old academic method of teaching people to look very carefully at the human figure is a good way to teach looking, but copying is a very excellent way. I've become more and more convinced of this over the last few years.
>
> (Hockney, 1981:7).

In relating his thoughts concerning the challenges presented by the great works of the past in this regard, Francis Hoyland (1987), poses the following questions:

> 'How can we possibly learn if we do not study? And how can our work be anything but empty and pretentious if we stop studying? The only chance we have of producing anything worthwhile is to keep ourselves in close contact

> with the rock faces of nature and art. We must be prepared to quarry if we wish to build'
>
> (Hoyland, 1987:71).

Studies made from other arts – including artefacts and images from ancient pottery, painting and engraving on rock surfaces, carved and sculpted objects from ancient, hunter gatherer and early agrarian cultures – have all served as highly significant sources of visual inquiry and contributed greatly thereby to the artist's practice. (see Plate 4.2.6 – Sketchbook II: Figure 4.1.2)

In many respects the artist works from other works of art in a manner similar to that in which he works from nature, albeit for a variety of different reasons. Certainly one of the most compelling is that it presents a strategy for engaging with the work of other artists and artisans (even though in some cases unknown) whose geographical location, history and cultural backgrounds may not only be far removed from each other but also from his own. Hockney (1981) writes that

> Copying is a first- rate way to learn to look because it is looking through somebody else's eyes, at the way that person saw something and ordered it around on the paper.
>
> (Hockney, 1981:7).

It also represents an attempt - at least as far as it is possible - to share creative

Plate 4.2.6 *Study Detail of an Ancient Burial Site,* Bushman rock painting Epsworth Mission, South Africa, watercolour and pencil on paper, 29.3 x 19.7cm: Sketchbook No. II.

experiences and insights with, and learn from the work of others. This is particularly so in the case of those which affect the artist's sensibilities in a manner that extends beyond the point of simply looking (or taking photographs). Regarding the debate *vis à vis* photography and drawing, Hockney (1981) suggests that "Photography just can't compete with drawing as a method of expression, as a method of feeling, as a method of telling people about things." (Hockney, 1981:6).

In the case where original works are the source, copying also evokes a need to explore and retrace the author or creator's steps, through a process of deliberate and active examination e.g., by making a copy from the original either in its entirety or in part. In support of this aspect of copying Hockney (1981) makes the following observation:

> In copying, you are copying the way people made their marks, the way they felt, and it has been confirmed as a very good way to learn by the amount of copying that wonderful artists have done.
>
> (Hockney, 1981:7).

As previously stated, although the sources for making these studies are extremely diverse, in nearly every case and however long the time spent, whatever the technique or media used, there has always been a clear intention or an underlying *theme*. By way of further explanation, the *theme* has generally been associated with either some aspect of the planning stages of a piece, or with recording *visual opportunities* which may provide material with which to finish future compositional

works. (see Plates 4.2.7, and 4.2.8 from Sketchbook II: Figure 4.1.2).

Before leaving this category of studies, it should be mentioned that the transcripiton of complete works has rarely been a primary concern, and then only inasmuch as it has provided sufficient detailed visual material from which to inform or develop more finished work. It has been said that Nature is culture, before it is art and "… Art…" Jeffrey Camp writes "…is inspired by nature, yet art also grows out of art". (Camp, 1981:8).

4.2.2.2 – Extrapolations and Inventions

Both natural forms and the work of other artists and artisans may provide starting points for the development of imaginative images. Anything at all, in fact, may serve as suitable subject matter "… around which we can weave our imagination…. [and] since what goes on in the imagination is ultimately based on experience…, such images are really extensions or inversions of our ordinary world." (Bowen, 1993: 69). The section which follows addresses those images which have been derived from other works, images, and art objects, or which have been extrapolated from and whose origins may be found in extant works, however diverse or tenuous the conections.

An illustration of the transitionary process whereby a copy can be the source of a new work is provided by Jeffrey Camp (1981) who invites us to consider, for example, the notion that

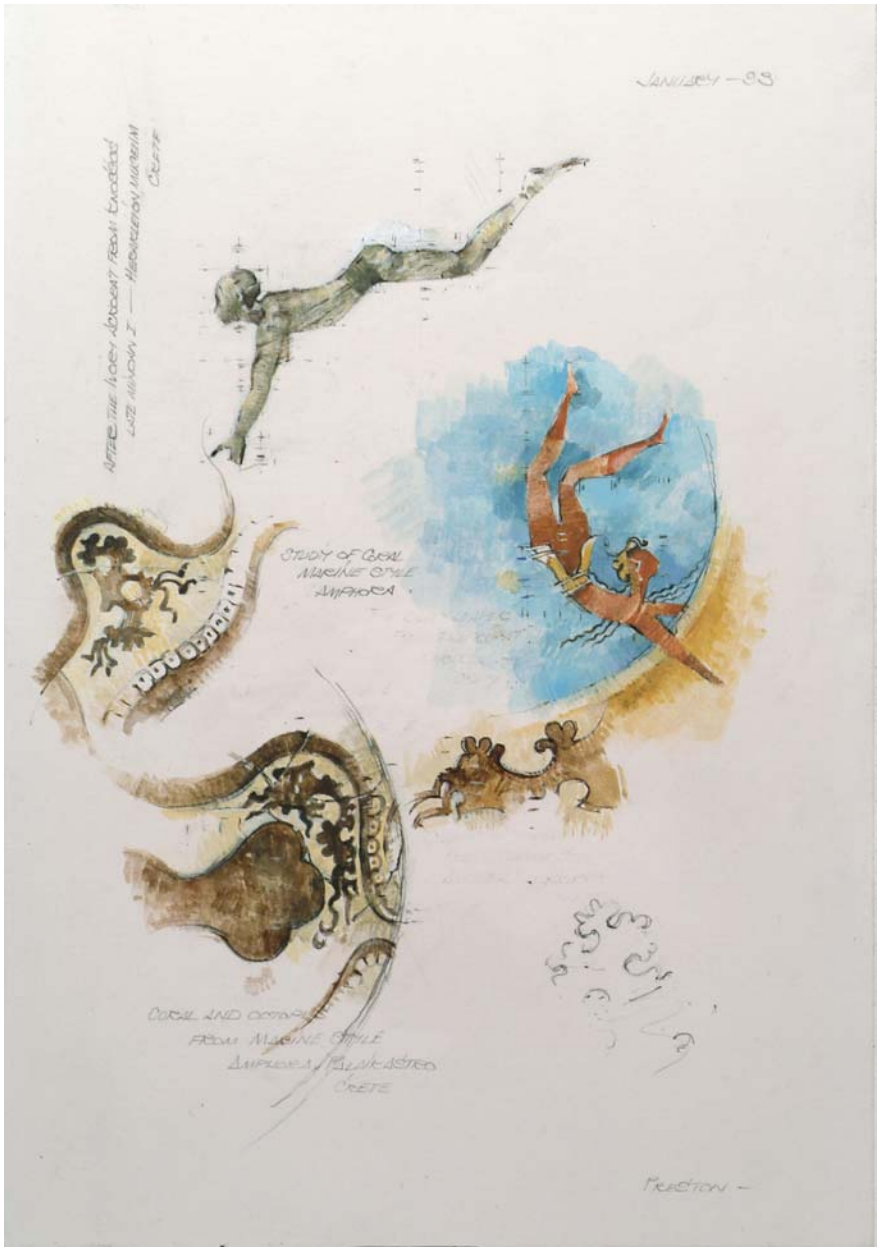


Plate 4.2.7 *Sheet of Studies of Figures and Coral Designs from Crete, watercolour and* pencil on paper, 29.5 x 19.7cm: Sketchbook No.II.

Plate 4.2.8 *Studies of Swimming Figures and Beach Almond,* pencil and watercolour on paper, 28.7 x 19.5cm: Sketchbook No. II.

> Drawing a nude from Poussin and then drawing [or painting] the body of a girl sunbathing in the same pose will bring us close to creation. The extent of transformation is always surprising. Once the material is under one's hand, copying is both physical and thoughtful.
>
> (Camp, 1981: 8).

An image made in the manner suggested by Camp (1981) (i.e., where there has been a direct line of descent, or a primary source) is understood to be a *derivation*. In the case of *The Mixing of Memory with Desire,* an example of this is provided in Plates 4.2.7 and 4.2.8.

It is generally understood that two events take place during the process of fashioning images which have been *derived* from another source. The first usually involves an analysis of the form, or form(al) organization of the source in order to uncover the essential underlying structure and distinctive surface features. The second is concerned with what Graham Collier (1992), in his description of this translitoratory process, identifies as the artist's modification of the "… basic characteristics of structure and shape in whatever way is necessary to convey the flavour of his/her imaginative involvement." (Collier, 1972: 5)

In his discussion of these two events he continues by observing that "The… artist seems to accomplish both of these things knowingly and unknowingly as he/she works." (Collier, 1972: 5). Collier (1972), also defines two species of imaginative consciousness, the *rational*, which he maintains " …tends to follow the way of

deductive reasoning, or moving from objective fact or *à priori* hypothesis…" (Collier, 1972:22) and the *non rational imagination* which he observes

> … is just sheer imagination; it comes spontaneously in strong feelings, mental images, and ideas that seem to spring forth fully formed into consciousness; …. it tends to use the model as only an initial 'given' shape from which to create new forms. The rational imagination, however, tends to stay closer to the perceptual reality of the model, or to the canons of reason that govern and define the aesthetic principles of formal harmony…
>
> (Collier, 1972: 22).

4.3 – Compositional Studies

This category (located at the centre of Figure 4.1.1) embraces those sections and sub-sections which address the work associated with the production of all the preparatory *compositional studies*: these anticipate the making of all the fully realized painted pieces. The difference between *pre-compositional studies* and *compositional studies* has already been discussed in 4.2. The category of *compositional studies*, however, encompasses two major sections the first of which, *initial compositions,* incorporates the studies produced for a proposed suite of four paintings (*Four Quartets)*, which have been ascribed the generic title of *The Mixing of Memory with Desire* and a single work *In the Lagoon of Mythic Origins* (see 4.2). The second category, titled *restructured compositions,* examines the way in which fully realized painted pieces were compositionally reworked in order to be translated into Public Artworks.

This translation required both, the *adaption of completed compositions* and the *translation of the work into another medium.* (see 4.1.1).

4.3.1 – Initial Compositions.

Within the present context, *composition* may be understood as the arranging and orchestrating process through which the visual elements of a work are organized into "…a comprehensive structure." (Arnheim, 1988:2). Dondis (1989), in her comparative discussion of the syntax of language in relation to "…the organization and orchestration of visual means…" (Dondis, 1989:20), proposes that "…the process of composition is the most crucial step in visual problem solving" (Dondis, 1989:20). She also asserts that, unlike that of language, "…the visual mode offers no prescribed structural systems that are absolute." (Dondis, 1989:20). If, as Dondis (1989) submits, that there are no absolute structural systems, what (in essence) motivates the arrangement and orchestration of forms is conditioned, it would appear, not only by the artist's current creative preoccupations, accompanying emotional and mental states, but also by much of what may be described as the accumulated detritous of past influences and experiences.

The practice of *composition* as either "… conscious or unconscious [activity]." (Cleaver and Eddins, 1977: 34), however it may be viewed, is very much a part of the individual artist's fabric of being. The *warp* and *weft* of this being could, on the one hand, be understood as a complex of those visual elements, or means by which the *composition* is created and, on the other, the constellation of influences and experiences which coalesce to form the artist's background. (see Tables 1.7.1 to 1.7.4 and section 1.7).

In view of this and, as may be seen from the tables and description of later influences in 1.7, the artist's endeavours have been impelled by the collective *universes* of multifarious literatures, disciplines, other art-forms, cultural sites and collections from both galleries and museums. This, of course, includes the making of visual notations and transcriptions from the *phenomenal* world and recognition of those influences emanating from the works, ideas and attitudes (and, in some cases, the presences) of particular notable individuals (see 1.7 and Tables 1.7.1, 1.7.2 and 1.7.3).

Diagrammatically these *universes* might be arranged as in Figure 4.3.1. In this figure an overview of the spheres of influence has been organized employing circles placed on a number of concentric orbital trajectories with the artist occupying the central position. The colour coding follows a sinistral arrangement of an artist's colour circle (Zelanski and Fisher, 1989:89), with yellow on the left-hand side and green at the base. The colour has been designated (as far as possible) to the most appropriate circles e.g., yellow corresponding to the illumination derived from the knowledge and insights gained from various Literatures and Writings, red to the manifestations of creativity and those aspects associated with the Traditions of Art and Material Culture, violet to Spiritual Beliefs and Practices and green to the World of Nature. All the above hues are to be found within the circle corresponding to The Artist, thereby representing the wide spectrum of interests and influences effecting the genesis and fabrication of the work. An expanded version of Figure 4.3.1 appears in Figure 4.3.2 in which the labels are designed to anchor the spheres of influence (rather than to be all encompassing) and, whilst some are but narrowly separated,

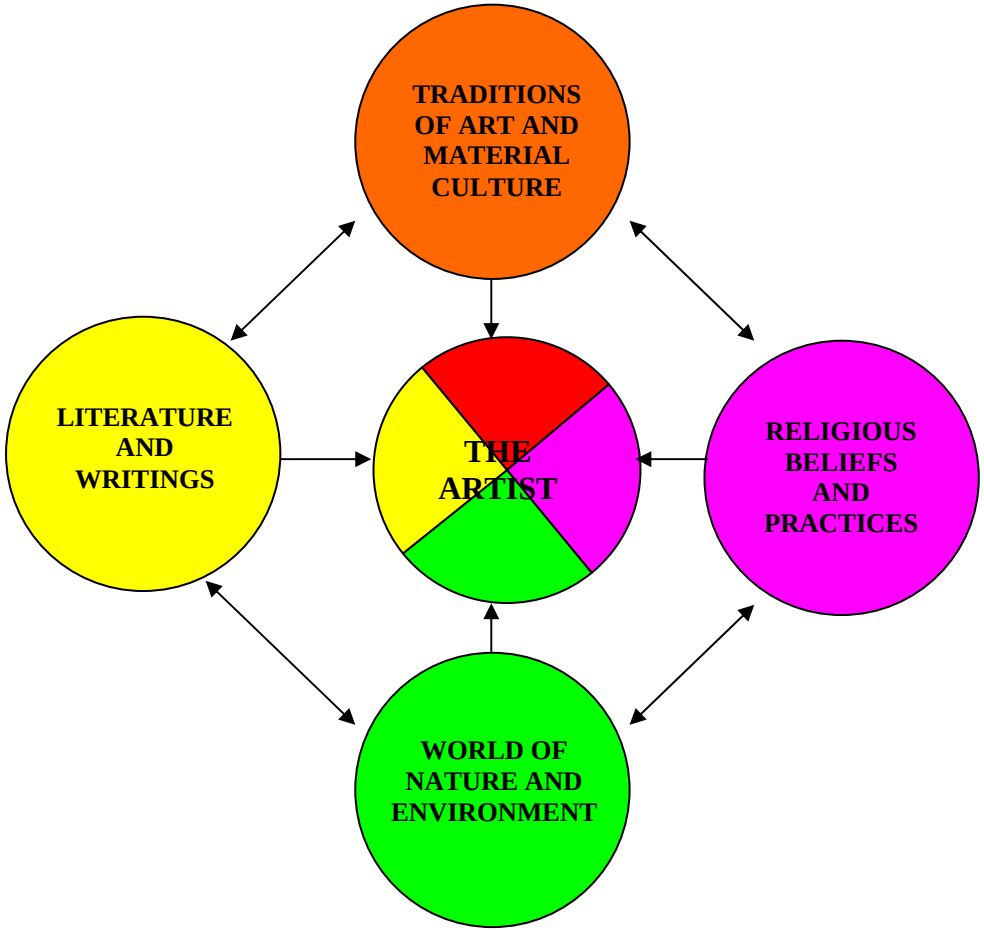


Figure 4.3.1
An Overview of Significant Universes of Influences

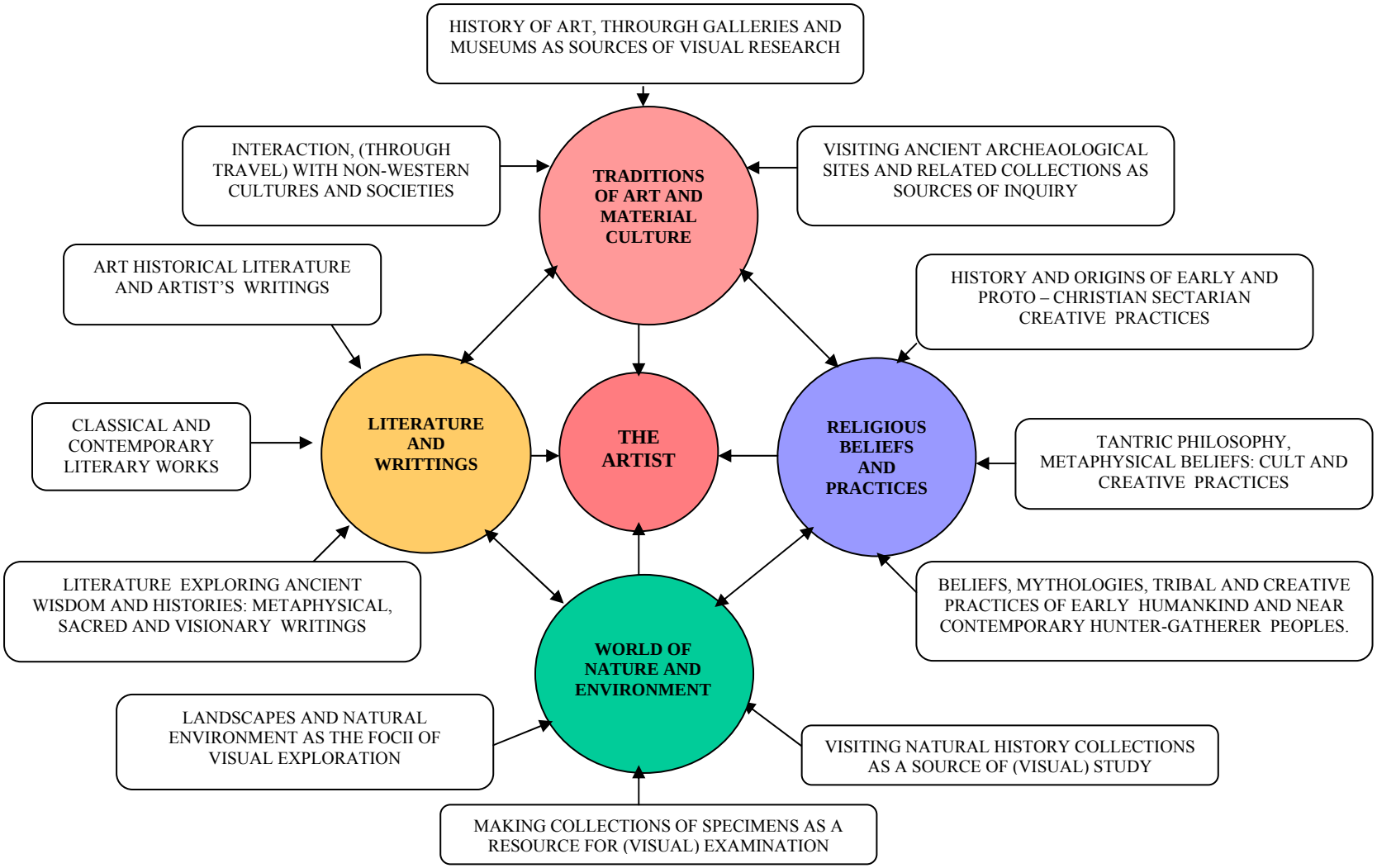


Figure 4.3.2
A skeletal working model of how circles of influence operate in the creation of the artwork. These included devivational specifics, relationships development and creational elements.

the purposes of the illustration, they may in fact meld or overlay. Figure 4.3.3 offers a further elaboration encompassing additional more expansive circles which meld together, thereby integrating all the others and constituting an organon by which the artistic process (at least within the present context) may be better understood.

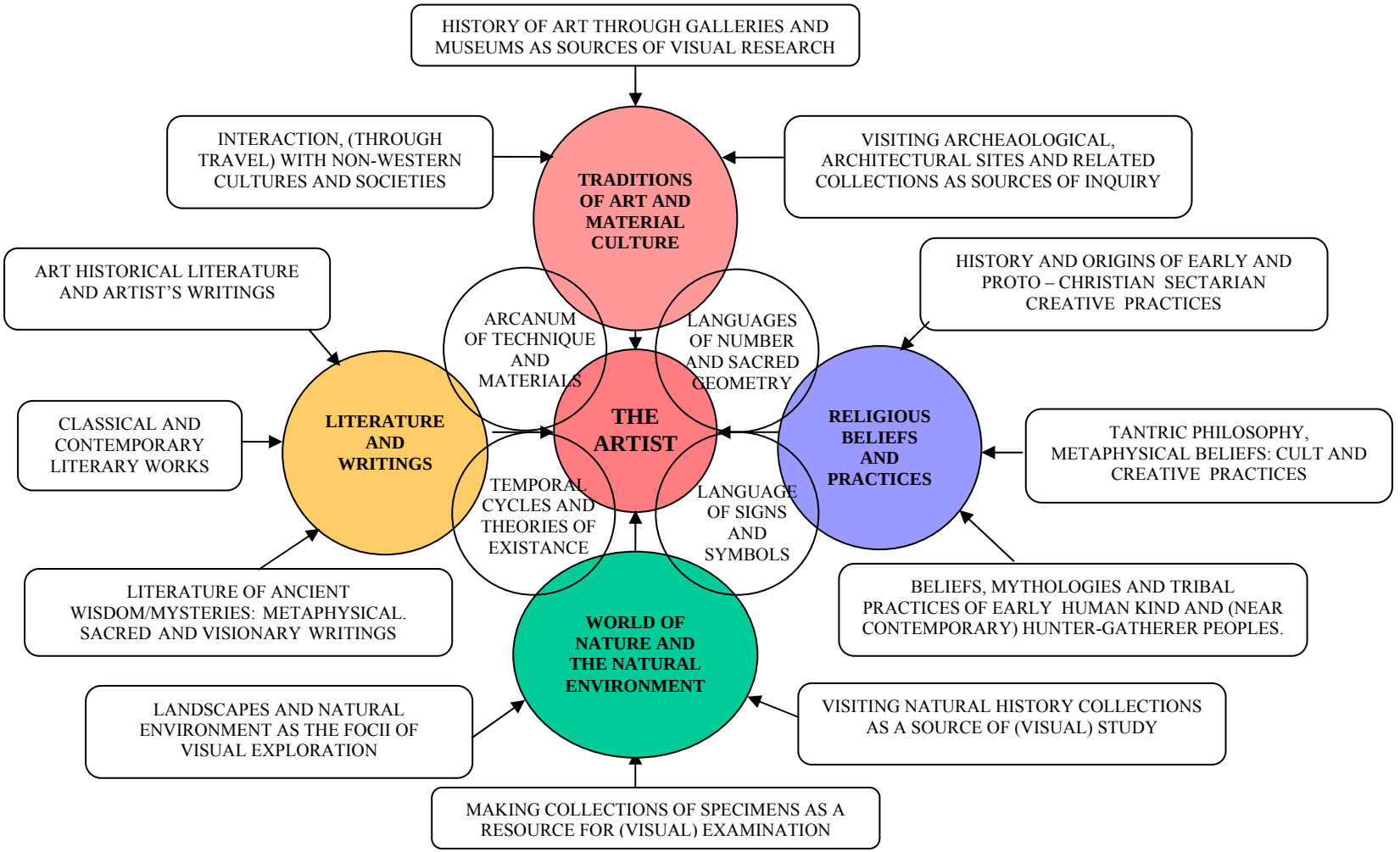


Figure 4.3.3
Representation of additional overarching circles of infulence.

4.3.1.1 – Compositional Framework for *Four Quartets*

Having discussed what can be understood (within the present frame of reference), to be a description of the general concerns associated with the creation of *compositions*, i.e., "The … arrangement of the parts of a work of art in relation to each other and to the whole." (Collins English Dictionary, 1983:310), the development of the *compostitional framework* of *The Mixing of Memory with Desire (Four Quartets)*, is now considered. This material falls into two distinct categories and, since these are not necessarily compatible, a different approach has been taken to each. In the first instance, the material is somewhat speculative and discursive in nature and addresses the conceptual underpinning of the *compositional structures*. The second requires a descriptive enumeration of the individual preparatory *compositional studies*, the antecedents of all the painted pieces created prior to and specifically for the Public Artwork projects.

This material is organized in a tabular format and follows the discussion addressing the conceptual aspects associated with the development of the *compositional structures.* The artist's interest regarding particular aspects of temporality in relation to working from nature and the strategies employed in order to facilitate a sucessful outcome have already been discussed in 4.2.1.2. In terms of the development and creation of the *compositional studies*, as well as making connections and synthesizing the (occasionally) disparate descriptive material in the Sketchbooks and Notebooks (see Figures 4.1.2 and 4.1.3), a further aspect of temporality was considered. As the experiences of working from life and all that that implies (see 4.2.1.2) could not be replicated in the *compositional studies*, as they are essentially

concerned with what Bowen (1993) defines as, a vehicle "… for encouraging the internal imagining process." (Bowen, 1993: 68), other strategies were required to enable the integration of temporal elements into the structural and organizational arrangements at a variety of levels. Collier (1972) contends that

> In the operation of our consciousness, the perception of space and light is the first step to achieving the concept of time. Space, light, and time act as a trinity in our awareness of the world – they seem hardly to exist as independent entities …. A sense of time depends upon being able to differentiate one position in space from another, and upon recognizing the time – distance that separates them.
>
> (Collier, 1972: 120-121).

He further observes that, perceptually,

> … we depend upon the presence of physical surfaces of things or objects in space – in order to identify differing positions in space …. It is not difficult to appreciate the interdependence of space and light for our perceptual experience of the world. For space is the arena in which light manifests, and this manifestation permits us to discern the layout of objects. Only by perceiving the layout of objects do we become aware of the multidimensional shape of *space* between them and, ultimately, of the distances involved. Thus we are able to conceive of time… of how long it takes to get from here to there.
>
> (Collier, 1972:121).

Collier's (1972) observations are, by implication, significant in a number of ways and germane to the discussion that follows. Although the practice of *measured* work has already been discussed (see 4.2.1.2), he provides a greatly enlarged setting against which it can be viewed and a context in which it may be seen to raise other issues. It is generally understood, for example, that the nature of visual images is that they

> … are normally deployed in *space* [and] that we normally see all the elements of a visual image simultaneously. (Unlike the linguistic signs of speech or music, which are deployed through time). [stet]
>
> (Carter, 1993: 155).

Although arising from a very different source, remarkably similar ideas are to be found in early Indian *Śilpa* – texts (though no distinction is made in India between the Fine Arts and Practical Crafts; all are classified as *Śilpa,* other than *Vāstu* "… which is as a rule particularly applied to architecture." (Boner, 1982: 2) and associated sculptural works. These early texts not only recognized, but also articulated an understanding of the existence of a relationship between the static image and time. In her expository intoduction to the text of the *Vāstusūtra Upanishad* (c.1700-50), a compilation of writings regarding the language of form in sculpture and architecture (dating back to the first millenium), by the early eighteenth century *Śilpa* author Pippalāda (c.1700-50) the renowned Indologist Alice Boner (1982) explains that the author understood that

> If *Śilpa* or *Vāstu*, the visual arts, are inextricably bound to material contingencies in space they are on the other hand, free and unconditioned by Time. This is to say: they are not, like the vocal arts, bound to a time-sequence or to intellectual operations for transmitting their message. Visual representation gives a synthetic all-embracing total view which transcends time. By the simultaneous presentation of all its parts, a painted or sculpted object aquires the power of directly penetrating the vital centres of the beholder. It is apprehended at one and the same time by all his organic and intellectual faculties without having to be mentally connected through a sequence of impressions.
>
> (Boner, 1982: 7).

Given Boner's (1982) interpretation and Carter's (1993) assertion that "… all the elements of a visual package of information are encountered at [once]…" (Carter,1993:155), orders of *composition* were sought that had a tendency to stay the vision, or at least conspire to make the task of perceiving "… all the elements of [a] visual image simultaneously." (Carter, 1993:155) a little less immediate.

In the context of most static art (see 4.3), as is the case with easel-painting, Owen (1973) also confirms the fact that "… the viewer is able to see the total design at a glance and is not forced by any imposed physical limitations to take in the painting piece by piece." (Owen, 1973: 272). He prefaces this observation, however, by pointing out that

> Only by walking the length of a long processional mural is it possible to experience [the] kinetic or cinematic sensation of successive images which in reality pass across the field of vision in an ordered sequence from a predetermined start to an inevitable finish…
>
> (Owen, 1973: 271).

It would appear then, that static images, together with their constituent parts, unless fabricated on a monumental scale extending through space (and unlike the literary and musical arts-including, of course, that of performance-not subject to immediate temporal decay) are normally *encountered*, or perceived *simultaneously*. Several notable exceptions should, however, be mentioned, one of which is identified by the noted scholar of Tantric Indian and Oriental Art, Philip Rawson (1969) who, in his discussion of pottery as a support for drawing and painting, proposes that

> … the pot surface gives an actual third dimension to the design, and any 'notional' third dimension, as in Greek pottery painting, must accommodate itself to this. The vertical co-ordinate of space is given,… by the vertical axis of the pot and the horizontal co-ordinate naturally follows, though it is highly ambigious in that it is curved around the axis and blends into the third dimension. Second and third dimensions are thus aspects of each other.
>
> (Rawson, 1969: 44).

He continues by observing that "Cretan vase-design accommodates itself … to these conditions by assimilating its undulant forms to the pot's surface …" (Rawson, 1969: 44). Rawson (1969) goes on to point out, as with Mesopotamian pottery designs, that

> Early Greek pottery, by adopting the notional space-compression of the relief-frieze, was able to avoid conflict …[of] the notional third dimension with the actual. The figures were adapted to differently shaped fields by means of stretching or contracting the base-line on which they stand …[and] on later Hellenic and Italiote pottery the surface of the pot often becomes, a dream-like, indeterminate arena in which the figures float …
>
> (Rawson, 1969: 44).

The significance of this"…stretching or contracting…[of] the base-line …" (Rawson, 1969: 44) in relation to shaped fields is directly related to the works under discussion and will be considered again further on. Of immediate importance in the present context, however, is the direct relation of the continuous bands of frieze-like designs which circumscribe a pottery vessel and the fact that neither the entire static design nor all its elements can be be perceived simultaneously. Of additional interest are the revelations resulting from the graphic *unrolling* of the designs from the pot's surface, a much loved practice of nineteenth and early twentieth century archaeololgical and museological illustrators (particularly in the case of Greek Vases), the subject of which will also be addressed subsequently.

A further exception is noted by Owen (1973) who, in an allusion to Chinese roll or scroll-paintings, describes a process of pictorial unfolding in the course of which he perceives that

> … an irrevocable sequence of continuous pattern… in such carefully designed series of contrast and repetition that a sequential design close to the forms of music and of … film is realized.
>
> (Owen, 1973: 271).

When a scroll is unrolled (as described by Owen (1973)), it takes on a *ribbon* or *frieze-like* format automatically. Bouleau (1980) in fact, suggests that

> The frieze engenders a movement which takes place in duration as well as in extension, and this notion of duration brings us closer to the arts of time, to music and poetry. Like music, it will present a succession of different values, slow or quick …. Like poetry it would be scanned in longs and shorts, in unequal accents, in a regular recurrence of rhyming syllables.
>
> (Bouleau, 1980: 31-32).

Bouleau (1980) cites three primary examples from a variety of historical periods which indeed are, as he points out, associated with architectural edifices. In the first instance he identifies the classical melodic rhythms of figures on the *Parthenon's Panatheniac Frieze* from the workshops of Pheidias (c. 440 BCE) in the second, the registers of processional female Saints, counterpointed with date-palms which are so

reminiscent of the progress of a litany, from *Sancta Appolinare Nuovo, Ravenna* (c. 530), and finally, the great Norman French commemorative epic "… painted in coloured wools…" (Bouleau, 1980: 34), the *Bayeaux Tapestry* (c.1080). Indeed, in his discussion of the *Tapestry,* he observes that

> The scenes are separated from one another by small trees with interlaced branches… they are independent strophes, composed for their own sakes … centering on a principal character to whom our attention is unmistakably drawn.
>
> (Bouleau, 1980: 35).

However, despite the ideas previously articulated with respect to an integration of a sense of temporality into the *compositional* organization of static artworks, the difficulty of irreconcilability persists. Such a dichotomy is clarified by Bowen (1993) who points out that

> … 'life is essentially a flux of change and motion', [and] in our minds we have a sense of there being a constant reality beneath. Still images have a natural association with this 'arrested' reality. They exist in a continuous unchanging present, confirming our inner belief in the constant images we carry with us through time, and providing us with unchanging images to consider and reconsider as we never can in experience. Nevertheless, they are made over a period of time, and in a specific historical time, and consequently bind our complex ideas of time and timelessness together.
>
> (Bowen, 1993: 130).

It is of some interest to note that the underlying sentiments expressed by Bowen (1993) bear a striking resemblance to certain of Eliot's key temporal concerns, particularly those associated with notions of stillness, in relation to *time and timelessness* (see 3.2). Stillness – which can be equated in the visual arts with the intervals of silence in music and poetry – and temporal duration are obviously intrinsic qualities of the static image which, as Swarbrick (1988) confirms, are unlike the

> … sounds in a piece of music, [or] the words in a poem which only make sense successively … Like everything else subject to the flow of time, words 'die' and are succeeded by silence.
>
> (Swarbrick, 1988: 65).

However, the *kinetic* sensation resulting from succession e.g., the illustration of "… episodes in a continuous pictorial narrative … divided into seqential sections." (Owen, 1973: 256) can, as already discussed, provide a distinctive foundation for the *compositional* structure of a static image, binding our notions of *time and timelessness* together (Bowen, 1993), untrammelled by the *phenomenon* of decay mentioned by Swarbrick (1988).

Though the aforementioned material contributed enormously to the development of the *compositional studies*, and determined a means by which the basic format and pictorial structure could (to some degree), be more closely allied to the temporal arts of music and poetry, two related matters remain. The first is the employment of the *quartet* form and the second is its structural integration, as it is used by Eliot (1943)

in *Four Quartets*, a form he translated from the musical arts to the poetic (see 3.2). As already discussed (see 3.2) the *quartet* form which Eliot (1943) deliberately pressed into the service of poetry immediately "… invites us to think of musical analogies." (Swarbrick, 1988: 61) and that

> A classical quartet – a musical composition for four voices or instruments – is constructed on principles of formal organization whereby a number of themes recur, transposed into varying keys, given to different instruments or altered by inversions and variations.
>
> (Swarbrick, 1988: 61).

Eliot's (1943) *Four Quartets* are organized in a very similar manner, each poem being divided into *five sections,* with every section dwelling on a recurring *theme,* the first of which (in all four poems) is concerned with time (see 3.2).

Further enlarging on the musical aspects of the *pentadic structure* of each poem, Kaplan (1993) submits that "… the poem contains musical bridges between the instrumental passages…" (Kaplan, 1993: 59), and provides an explanation of Eliot's (1943) technique. (see 3.2). Given the *four voices* and the *five section* structure it was proposed that each of the four *compositional pieces* would be inhabited by *four human figures* representing the *four voices* and that a *compostitional* structure, would be developed, in the manner of a freize, for the reasons previously outlined, comprising *five strophe-like* sections. In terms of seeking a visually practical solution, in particular a planar equivalent for the *pentadic structural* framework of

Eliot's (1943) four poems, several ideas suggested themselves. Both of these originated in the classical world and were re-established (particularly in Italy) over a period spanning the late fourteenth to the early sixteenth centuries.

The first (and earliest) derives indirectly from "… that symbol of the platonic quintessence…" (Bouleau, 1980: 63): the pentagon, a geometric figure (the earliest construction of which is accredited to the Samian philosopher and mathematician Pythagoras (c.580-500 BCE)), highly regarded as a *compositional* device both by artists and architects working in the later mediaeval period and about which there was a re-emergence of interest during the early part of the sixteenth century. Though Renaissance scholars were at pains to dissociate it from its earlier affiliations with masonic mediaeval traditions which it "… seems [were] known to the Ancient Egyptians." (Lincoln, 1992: 62). This interest came as a result of the publication in Venice of Luca Pacioli's (c.1450-1510) *Divina Proportione* in (1509). The second stems (indirectly) from the widely influential architectural treatise by Leon Battista Alberti (1407-72), *De re Aedificatoria: Book IX, Chapter VI* (1485) which treats " geometric and or arithmetic subdivisions of the rectangle." (Lincoln, 1992: 62), and in which he provides an exposition of "… the relationship between number ratios and sound frequencies." (Lawlor, 1982:7).

As is well known, these relationships were based on the division of the length of a *string,* knowledge of which was also accredited to Pythagoras (c.580-500 BCE), by Plato (c.427-347 BCE) in his late work the *Timaeus* (358-48 BCE) and, subsequent to Alberti's (1407-72) extrapolations, generally referred to as *Albertism.* In the

Timaeus (358-48 BCE) "… Plato explains that the multiplication of 2 and of 3 gives us all the numbers for the Pythagorean tuning system by successive multiplication by fifths (3:2) …" (Lawlor, 1982: 83). Alberti's (1407-72) universally known work proceeds to demonstrate how it is possible, with the use of the mathematical progressions from two and from three, to "… construct an harmonic system which could be used as a model for architecture, painting and other arts." (Lawlor, 1982:83). Generally known as *musical consonance,* it provided a method for painters to organize pictorial compositions employing the proportional ratios directly associated with music and embed them in their work at the most profound structural level. The original (Greek) names accorded these proportionally modulated (rectilinear gridded) surfaces were, in fact, directly related to the numerical relationship between the number of vertical divisions to the horizontal (Figure 4.3.4). The Italian architect and scholar Gaspare de Fiore (b.1926-), in his discussion of the application of Alberti's (1405-73) theory of measurements (in drawing and painting), explains that "These relationships refer to the lengths of the sides or to the values of length and height specified by various elements in the work"… (De Fiori; 1984: 169). He continues by explaining that the

> … *Diapason* or double; [is] an interval of eight notes, an octave; produced when the ratio between the lengths of the sides is 1:2, that is, when one side is twice as long as the other. The *Diapente* or sesquialtera (one and one-half); an interval of five notes or a fifth; produced when the ratio between the two lengths is 2:3, that is, one side is one and one-half times as as long as the other. The *Diatessaron* or sesquitertia (one and one-third); an interval of four notes or a fourth; produced when the ratio between the lengths is 3:4, that is,

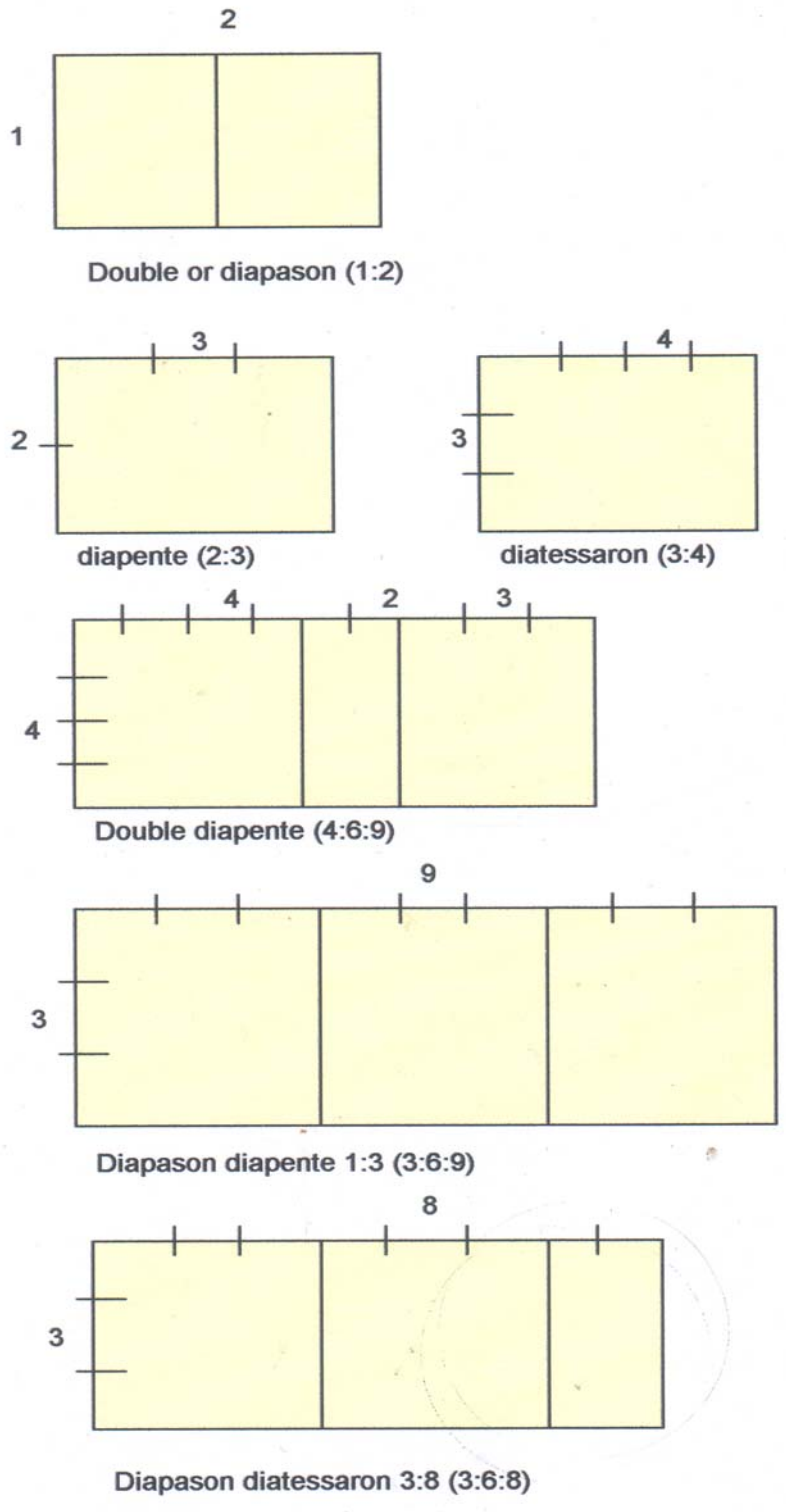


Figure 4.3.4
The division of rectangular surfaces demonstrating the use of *musical consonance* in the most frequently employed groups of proportional relationships, (after De Fiori, 1984: 169).

> one side is one and one-third times as long as the other. The *diapason diapente* or triple (a whole against its third), an interval of twelve notes or a twelfth; produced when the ratio between the lengths is 1:3, that is when one side is three times the length of the other. Aside from these relationships, there are more complex ones, such as the *double diapente* (double sesquialtera, 4:6:9): the *double diatessaron* (double sesquitertia, 9:12:16): or the union of the *diapason* and the *diatessaron* with a ratio of 3:8 (3:6:8).
>
> (De Fiori, 1984: 169).

However, the creation of a long, narrow frieze-like format through an extension of the *diapente, diapason,* or *diatessaron* (or their combinations or double forms) by adjoining the shorter sides of these rectangles (end to end), has a propensity to destroy the integrity of the prescribed ratios and, as a result, the *raison d'être* of the original shapes. The proportional division of a rectangle, derived from musical ratios, employing the *mean* areas proposed by Alberti (1405-73), at first looked promising from the perspective of musical consonance. However, as the original forms are (through extreme extension in this way) largely divested of their essential proportional attributes, it emerged that they were unable to satisfy completely the demands either of number in terms of a *pentadic* internal structure, or a narrow frieze-like format. The pentagon, on the other hand, although intimately related, due to its shared ability to generate *golden mean* or *phi* proportions, (Ghyka, 1977), presented a far greater range of possibilites, both numerically and in terms of the properties of its shape and its angles. This combination facilitated the realization of its physical geometrical construction. These aspects are discussed further in the

accompanying commentary to the pages from *Visual Research Notebook* No. II (see Plates 4.3.1 - 4.3.10) which follow.

However, before proceeding further, it should be noted that, although the artist was aware of the works of Pacioli (1450 - 1510) and Alberti (1407-72), their methods were, in this case, encountered indirectly through several unrelated sources. The first of these derived from an understanding of the existence of certain parallels between contemporary western twentieth century abstraction and the traditional non-representational compositions of Tantric origin, gained from the Tantric writings of Adjit Mookerjee and Madhu Khanna (1989). One of the two major categories distinguished in Tantric image making is purely abstract (as opposed to representational) and relies for its structure upon various grid formations (some based on mathematics) and, in particular, the basic progression of geometric figures emerging from a " … defined collective sign-system". (Mookerjee, Khanna, 1989:89). In their discussion of these parallels Mookerjee and Khanna (1989) suggest that

> There is a similarity between the spiritual aspects of Tantric art and the works of [some] twentieth century abstract artists… Klee, Mondrian, Brancusi. For these artists, art was not merely an optional manifestation but a revelation of certain metaphysical concepts…. Throughout his life he [Mondrian] was interesed in Hindu philosophy …. The vertical and horizontal theme [in his work] reflects the interplay of contrasting forces … the 'static balance' and ' dynamic equilibrium' which constitutes reality.
>
> (Mookerjee, Khanna,1989:90).

They continue by observing that

> Paul Klee explored the spatial concept of energy through the concept of polarity: 'A concept is not thinkable without its opposite – every concept has its opposite more or less' …. To express the eternal dialectic of the static and dynamic in its essence, he aligned the notion of polarity to geometry…
>
> (Mookerjee, Khanna,1989:90).

In describing trends a little closer to the present, they identify the fact that

> More recently … Rothko, Reinhardt, Newmann, in the West, and particularly Biren De in India, have demonstrated a striking visual relationship between Tantric art and their own.
>
> (Mookerjee, Khanna,1989:90).

The progression of geometric figures is also of some significance in relation to the work under discussion. Lawlor (1991) notes that every geometric figure has "… an invisible centre." (Lawlor, 1991: 32), that point at which all their co-ordinates intersect. He further explains that each of these "… invisible centre[s] has the potential within the [figure] for the appearance of the next form…" (Lawlor, 1991: 32), i.e., the inner centre of the triangle (the archetypal pattern of threefoldness) has the potential to manifest the square (fourfoldness), the invisible centre of the square has the inner potential to manifest the pentagon (fivefoldness) *et seq* (see Plate 4.3.1)

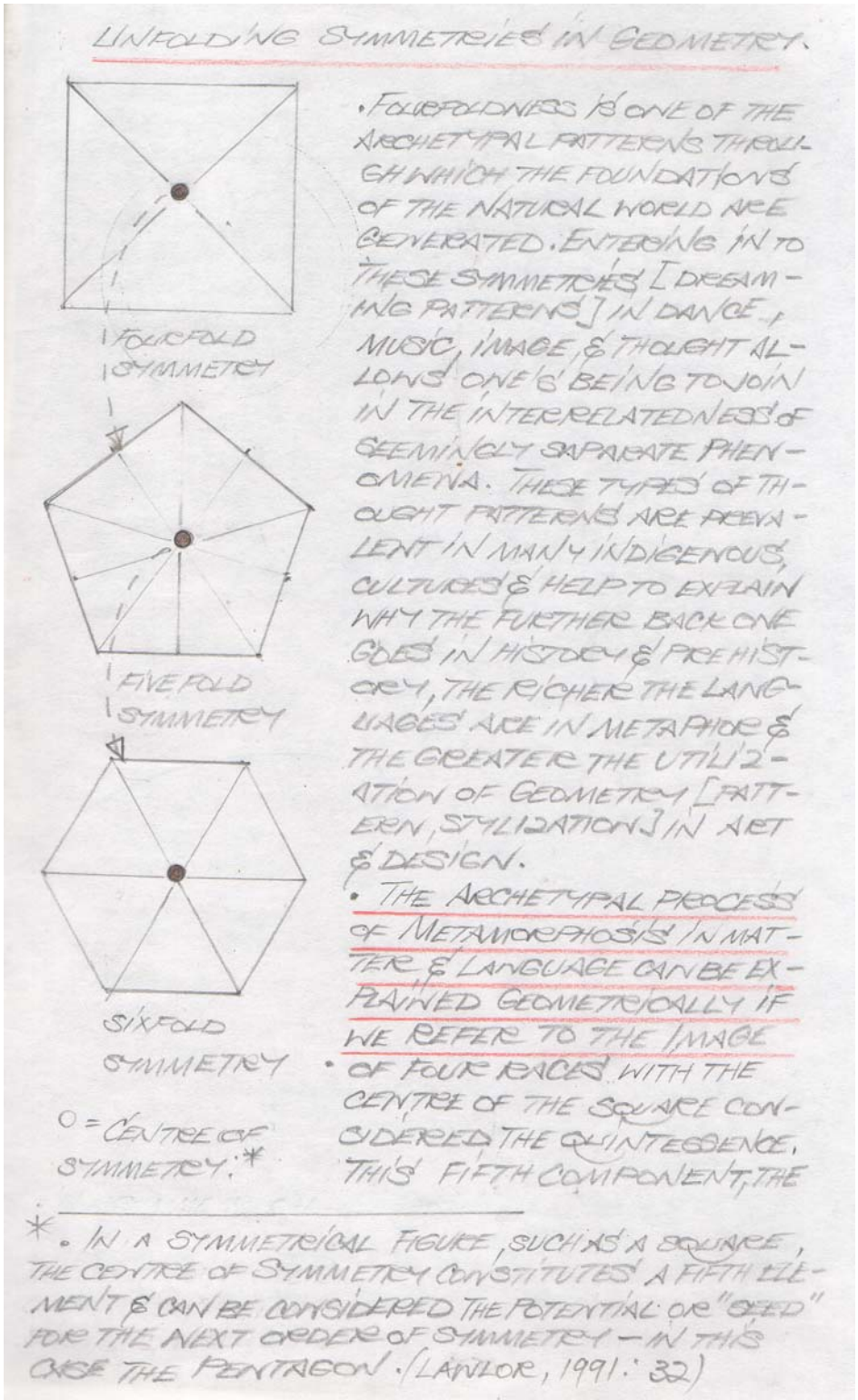


Plate 4.3.1 Unfolding Symmetries in Geometry, pencil 14.5 x 21cm: Notebook No.1.

Lawlor defines this evolutionary process as the "… unfolding symmetries in geometry." (Lawlor, 1991: 32). He further submits that

> The square, pentagon and hexagon may be seen as a sequence or related to each other in any number of less obvious ways, but they are all held within each other in a relationship of potential to actualization, of seed to fruit.
>
> (Lawlor, 1991: 32).

The implication here is that, like a fruit, each geometric figure has, at its centre, a seed (Sanskrit=*Bindu*) with the potential to give birth to a new form. The progeny thus formed increase in complexity until their final evolutionary stage - the circle - is reached; this represents an amplification as it were, of the original (seed) point of intersection and the ultimate figure which, with the aid of compasses, contains within itself the potential to generate and reconstruct each of its antecedents. A very similar, albeit more complex, combination of percept and concept is encountered as an essential component of the metaphysical underpinning which forms an integral part of the construction of Tantric power-diagrams *(yantra).* However the renowned Indian philosopher and Tantric scholar Madhu Khanna (1979), in her explication of these diagrams, explains that

> In certain instances, form-value and symbol-value are closely congruent;…. for instance, in geometry the point is the primary principle of all figures. In the *yantra*, the geometry of the point is amplified into a metaphysical 'truth'

in the symbolism of the *bindu* [point, dot or seed]: the *bindu* … is a natural symbol of the Supreme Principle just as the point is a fundamental principal of all shapes. Similarly, just as the point in geometry represents indivisible unity and the beginning of all dimension and concrete shape, the Supreme Principle represented by the *bindu* cannot be qualified in dimension because it is conceived of as unmanifest.

(Khanna, 1979: 132).

Khanna (1979) continues to explain the evolutionary process from the point or seed and explains that

> From the source, the bindu … derives the expanding line, seen as the continuum [nāda]; from nāda originate magnitude and dimension (parimeya); from parimeya arise the symbolic opposites (plus-minus, male-female), centrifugal and centripetal polarities and the order of numbers (Samkhyā). Number provides harmony and magnitude integration and unity. Thus the number 3 gives specific location to magnitude and becomes a triangle, 4 a square, 5 a pentagon etc …. These numbers are not simply sums of integers, but have specific symbolic relationships with philosophical ideas.
>
> (Khanna, 1979: 134).

The second source derives from the writings of artist, composer and film-maker Tom Phillips (b.1937-) who, in his discussion of pictorial geometry and the *golden mean* (with which the pentagon has a profound and integral structural association) in relation to his own work, particularly the images for the Artists' Book, *Dantes's Inferno* (1985), affirms that

> Euclid, who called this the extreme and mean ratio, thought it was possessed of the highest geometrical economy. Platonists and Neo-Platonists have seen in it a mystical harmony that pervades all nature. It has been used (not without success) as a key to unlock the mysteries of the growth of things from the galaxies down to the spirallings of the shell of the smallest snail.
>
> (Phillips, 1992: 214).

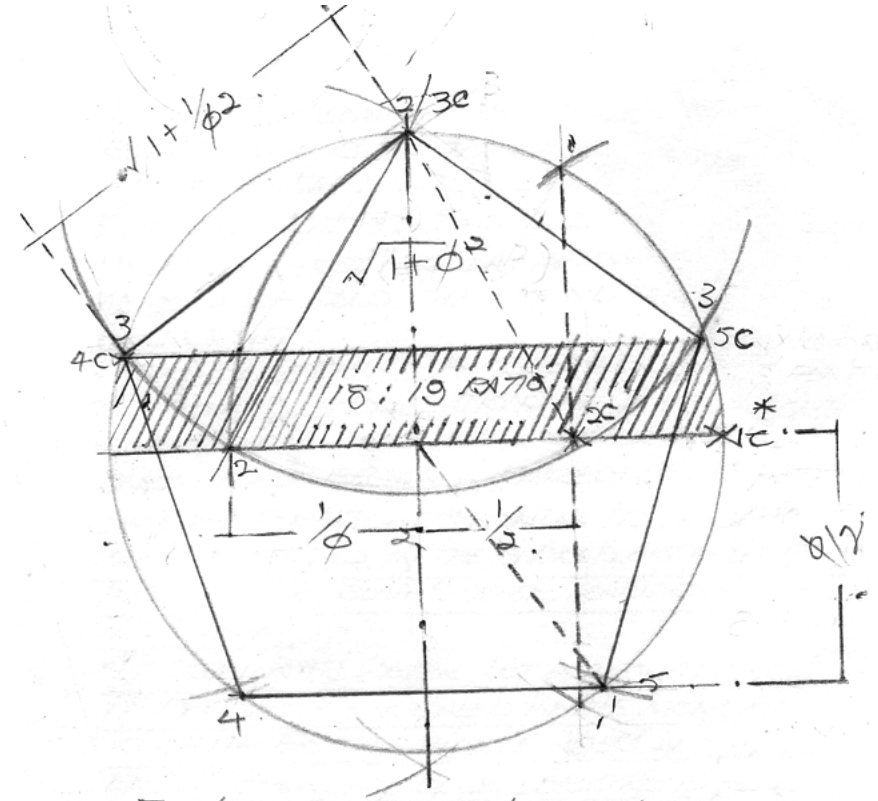
He then makes the point, particularly relevant in the present context, that

> Its history in art is just as long. Even the most ill proportioned visitor to Greece will have it in his bones before he leaves: temple and statue, pillar and pavement, speak the same harmony. Its rediscovery as one of the lost truths of antiquity lay at the heart of the Renaissance.
>
> (Phillips, 1992: 215).

Further, he makes the provocative observation that "As in the paradox of the poet freed by rhyme, the artist can be liberated by a system of great rigidity." (Phillips, 1992: 215).

However the artist's interest, as outlined above, has not been in following the equational logic of mathematics but rather in pursuing a course of " … analogical proportional thought…" (Lawlor, 1982: 43). The following nine pages are extracted from the *Visual Research Notebook* No. I (see Figure 4.1.3 and Plates 4.3.2 – 4.3.9), as these notes encapsulate the processes underpinning the structure of the *compositional studies*. As the notebooks reflect the record of a working process, the entries do not always follow logically. Hence, in order to make navigating the notes easier for the reader, a system of sequential symbols (upper-case Roman numerals) in the left-hand margin, relating to a particular segment of the notes has been introduced. In the elucidations which follow, reference will be made to these symbols to create a logical order for the reader.

A wide ranging examination of the artistic responses *vis à vis* the significance of the geometry of the pentagon, its structural potential and its ontological and teleological associations extend beyond the focus of the present study. What follows, however, is confined to an explanation of those aspects (including the steps taken) leading up to the development and realization of the final *compositional* structures.The fact that much interest has been taken in the pentagon by artists, architects and craftsmen, due to its association with the *golden mean* (see IV, Plate 4.3.4) has already been mentioned.



· THE INTERVAL BETWEEN THE AXIS OF THE CIRCLE & THE AXIS OF THE PENTAGON DESCRIBED WITHIN IT – FORMS A RATIO OF 18:19.

i – · THE RATIO 18:19 IS USED TO DEFINE THE SEMITONE IN MUSIC

ii – · THE LUNAR & SOLAR YEAR IN THE ECLIPSE CYCLE ARE ALSO DEFINED BY THE 18:19 RATIO.

iii – · ANCIENT EGYPTIANS BASED THEIR CANON FOR THE HEIGHT OF A MAN ON THIS RATIO. 18 UNITS TO THE BROW & 19 UNITS TO THE CROWN OF THE HEAD.

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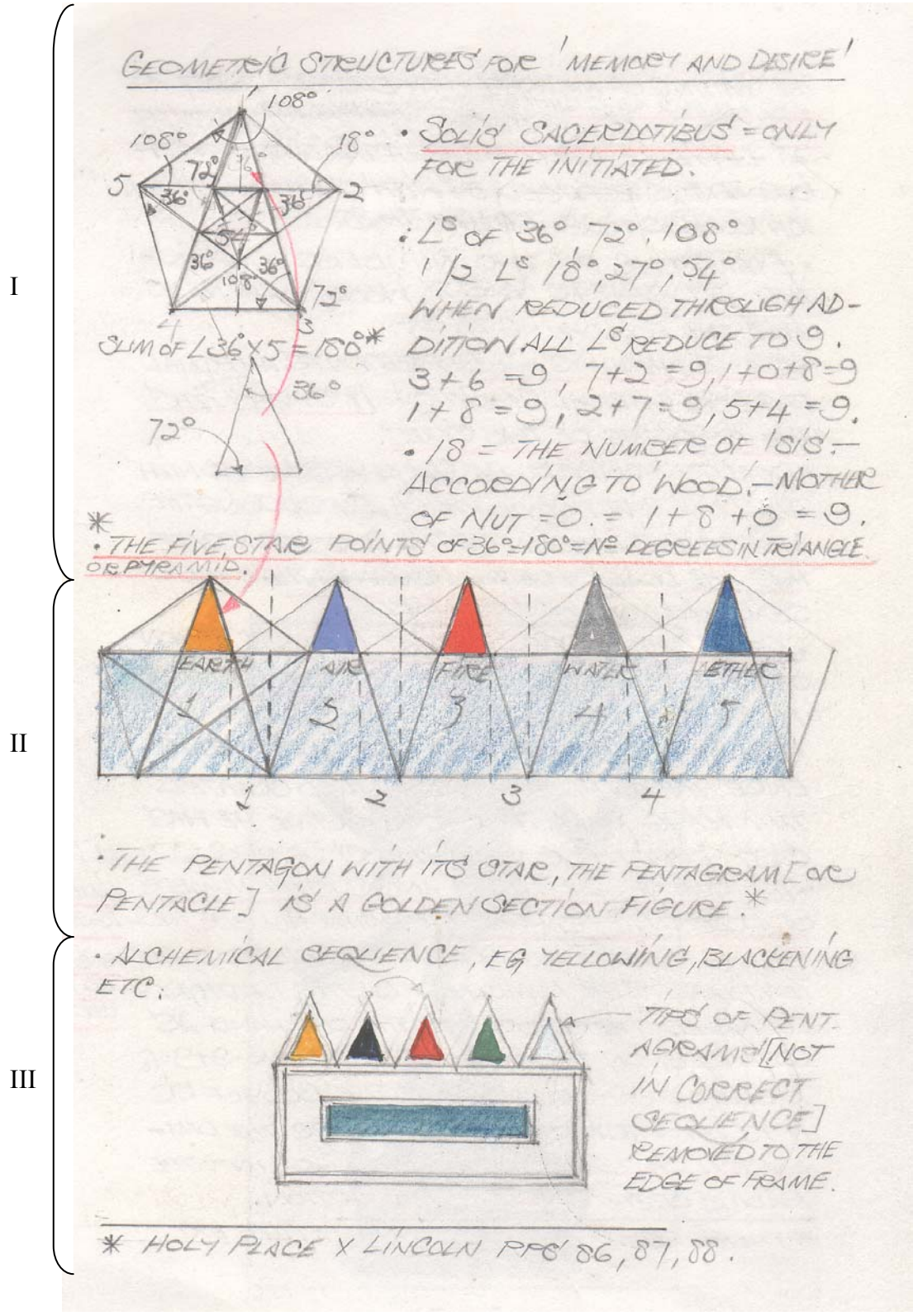
* CENTRES MARKED – 'C'.

DRAWING BASED ON LAWLOR (1982) SACRED GEOMETRY – P.51

[43]

Plate 4.3.2 Construction of a pentagon after Lawlor (1982), pencil, 14.5 x 21cm: Notebook No.1.



I

II

III

Plate 4.3.3 Geometric structures for *The Mixing of Memory with Desire,* pencil and watercolour, 14.5 x 21cm: Notebook No.1.

IV

V

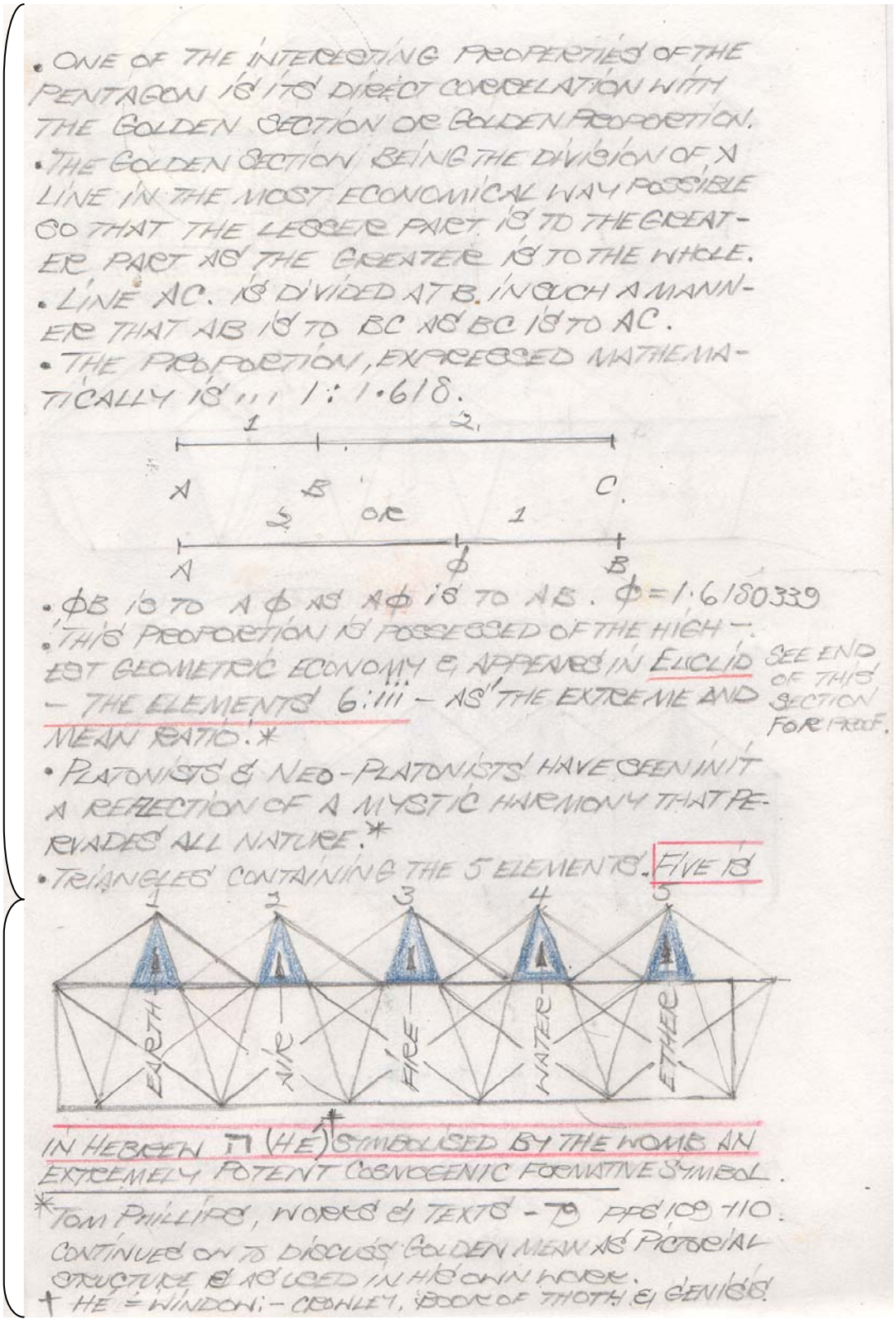


Plate 4.3.4 Rectangle with triangles derived from overlapping pentagons, pencil and crayon, 14.5 x 21cm: Notebook No.1.

VI

VII

VIII

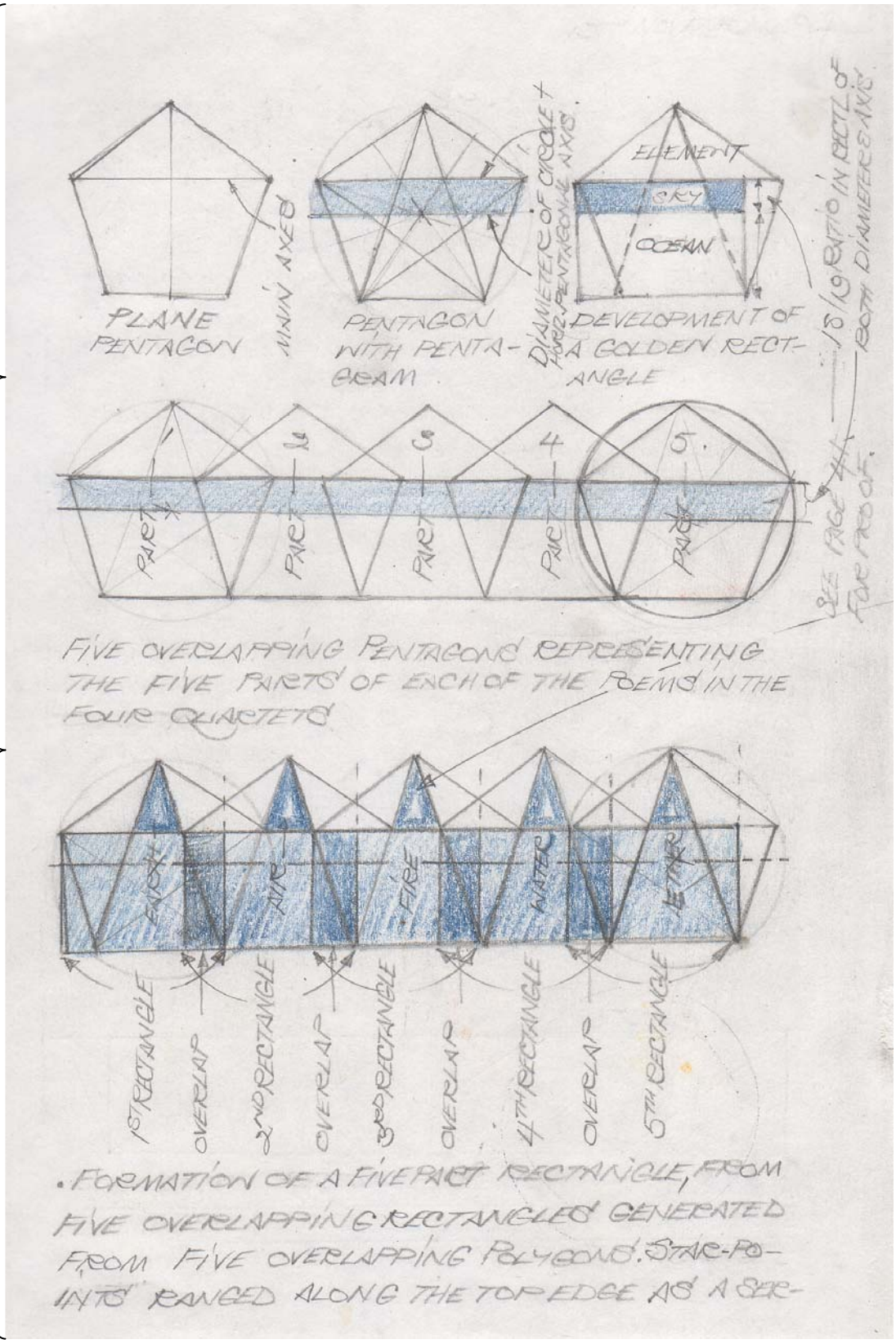


Plate 4.3.5 The development of 18/19 ratio of sky-band to ocean and five overlapping pentagons forming a long rectangle, pencil and crayon, 14.5 x 21cm: Notebook No.1.

IX

X

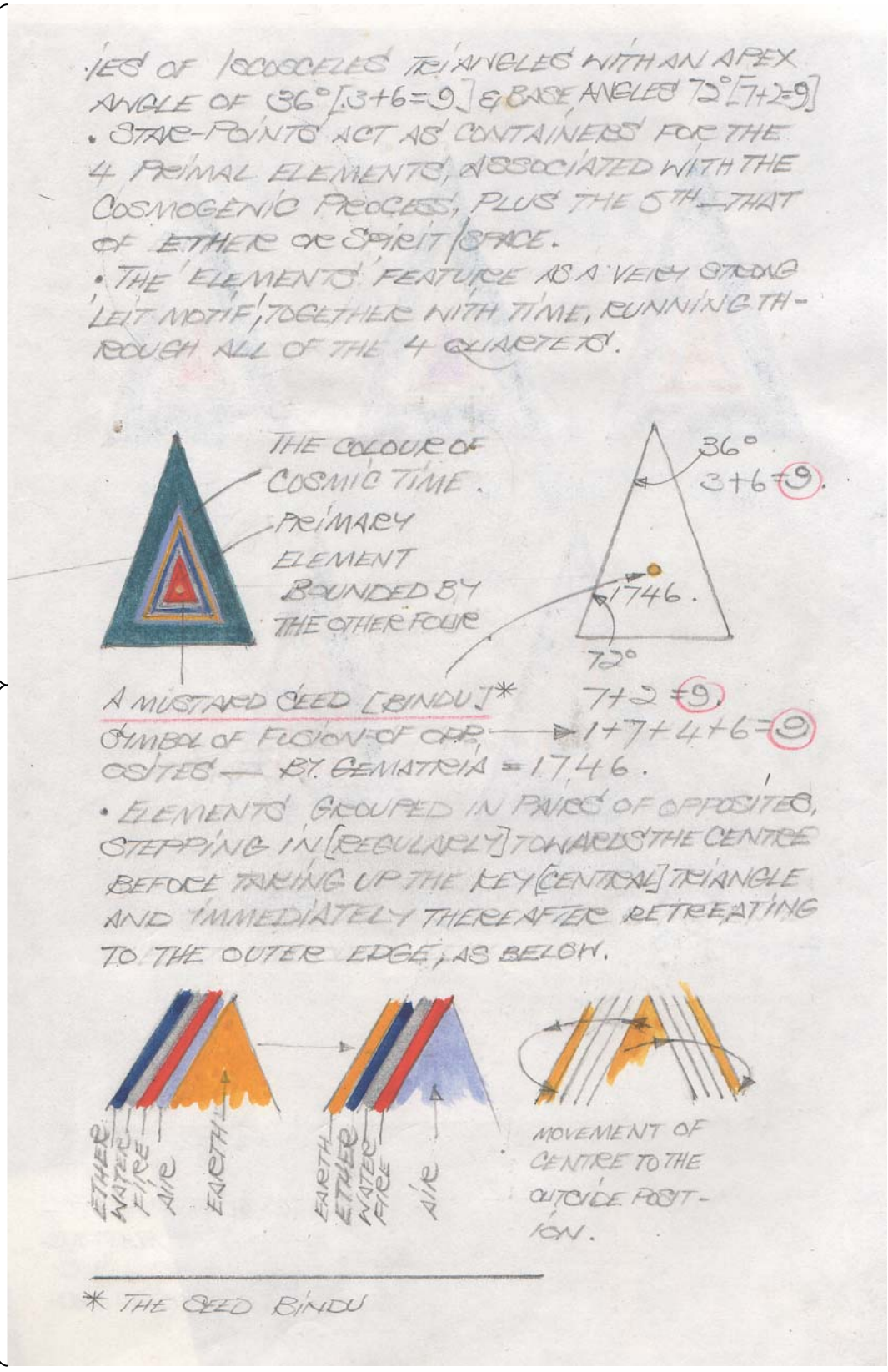


Plate 4.3.6 Development of the triangular compositions depicting the five basic elements, pencil and gouache, 14.5 x 21cm: Notebook No.1.

XI

XII

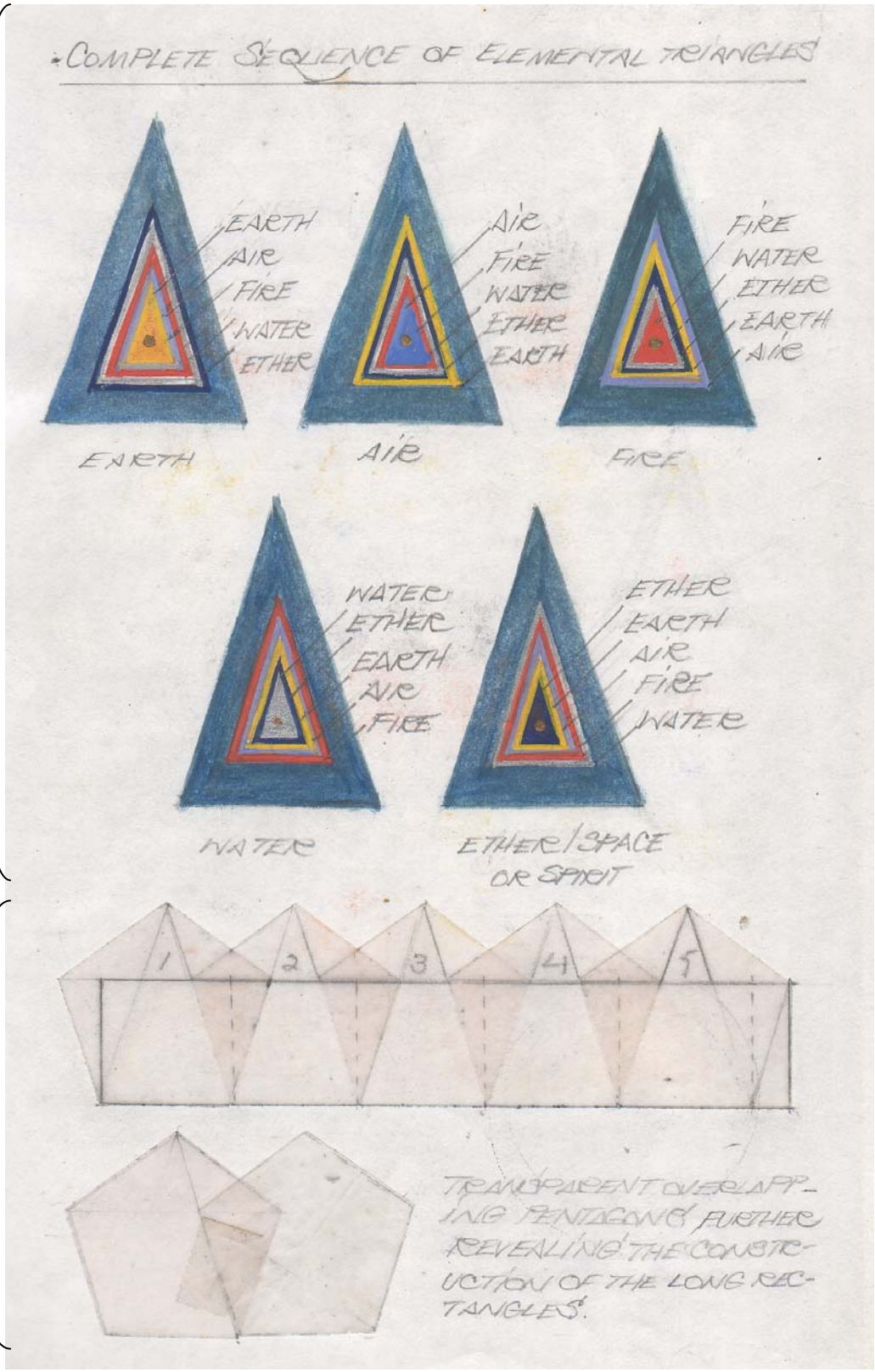


Plate 4.3.7 Complete sequence of elemental triangles, pencil and gouache, 14.5 x 21cm: Notebook No.1.

XIII

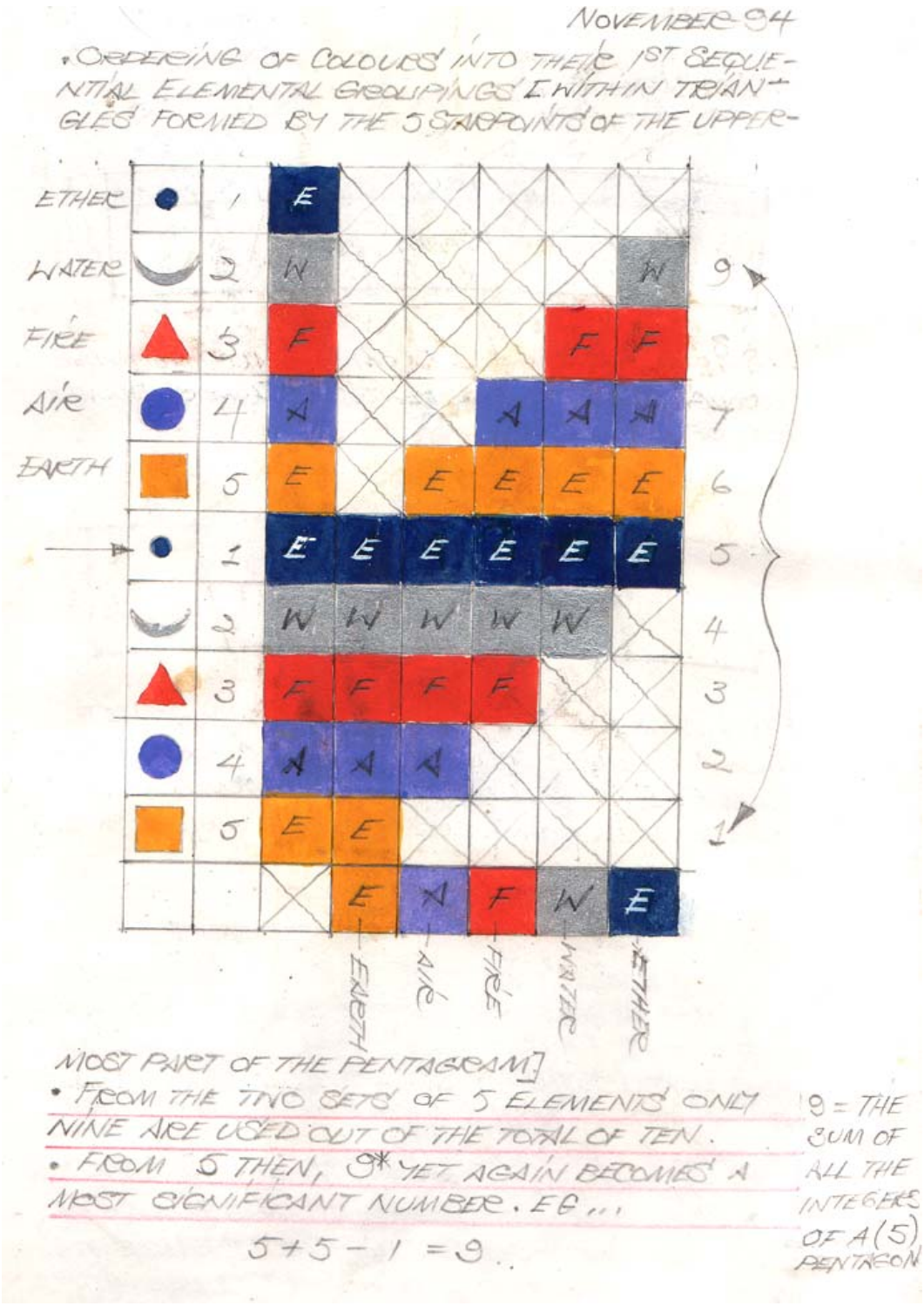


Plate 4.3.8 Order of groups of colours to appear in elemental triangles, pencil and gouache, 14.5 x 21cm: Notebook No.1.

XIV

XV

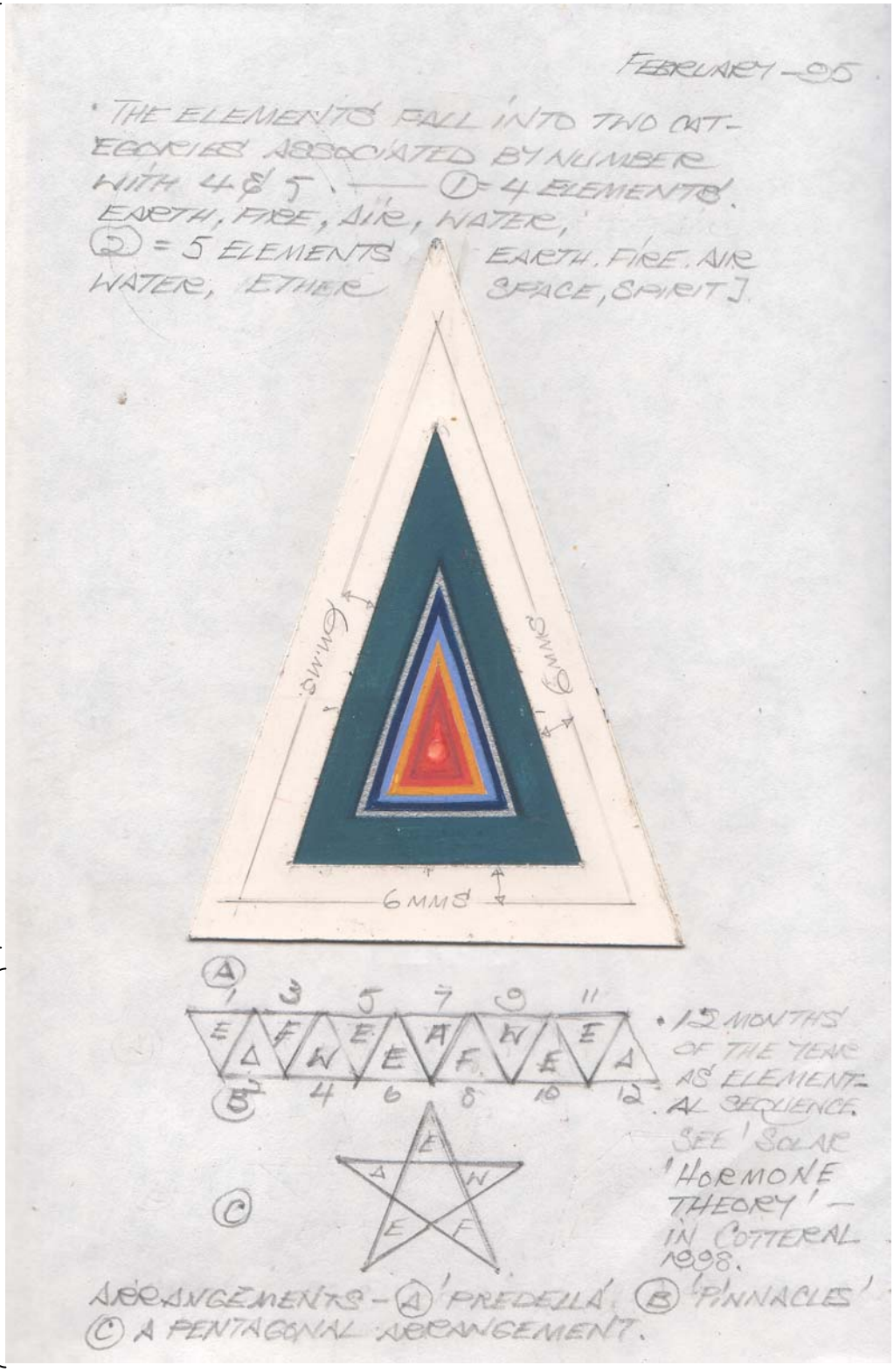


Plate 4.3.9 Completed triangle for the element of fire and possible arrangements of finished pieces, pencil and gouache, 14.5 x 21cm: Notebook No.1.

This " … although known by cultures much older than the Greek." (Lawlor, 1982: 45), is designated by the Greek letter *phi.* From a pentagon it is thus possible to construct a rectangle whose dimensions subscribe to *golden* (or *divine*) *proportions.* The pentagon (with its star-pentagram) has also been held in high esteem by many Gnostic groups, metaphysicians, esotericists both east and west space into the numerical order of five … [and] Śiva in his fivefold aspect " (Khanna, 1979: 32), and occultists

> … partly by virtue of its Golden Section generating capabilities, and partly because the fifth and final Platonic regular solid, the dodecahedron… [which] has twelve pentagonal faces and stood for the universe in Pythagorean cosmogony.
>
> (Lincoln, 1991: 88).

A pentagon may be constructed from a number of starting points e.g., a circle, the fusion of two circles, forming a *vesica piscis* a triangle, a square and a double-square rectangle etc. (in combination with a pair of compasses). In the first instance a pentagon constructed upon a circle (see Plate 4.3.2) generates a ratio that is both effective and intriguing as a horizontal design element. The horizontal shaded band in Plate 4.3.2 has been created as a result of the interval between the diameter of the circle at RS and axis of the pentagon, across its *shoulders* at EB. Of particular interest is the resulting ratio 18:19, since among other things, it is one of the ratios used to define the semitone in music and the relationship between the lunar and solar year in the eclipse cycle, both of which are concerned with aspects of periodic

duration and therefore the measurement of time. (Lawlor, 1982). What began to emerge through a progressive investigation of the pentagon, was a more clearly defined link between Eliot's (1943) *pentadic* structural compositional reference to music in *Four Quartets* (1943) and those arising from the construction of a *five-sided* plane geometrical figure. The pentagon in fact, represented a figure with the potential to generate both an interval corresponding to a ratio consonant with the structure of music, as has been established (see Plate 4.3.5) and a rectangle whose dimensions and surface modulations are consistent with the *golden mean* or *phi* ratio. (see VI, Plate 4.3.5).

The need to generate a frieze-like format from a pentagon was already suggested by the *five-part* structure constituting each of Eliot's (1943) four poems. If five pentagons (one representing each of the *five-parts* comprising one of Eliot's (1943) poems) are joined at the points of their bases, together with the continuation of their axes at the *shoulders*, a long narrow rectangle (the sum of those individual *golden* rectangles generated from each pentagon) emerges (see XII: Plate 4.3.7). The overlapping *shoulders* also produce a number of naturally occurring vertical divisions (see VIII: Plate 4.3.5), thereby allowing the format to be divided into *five strophe-like* sections, together with the further possibility of creating, at least to some extent, variable widths within them. It is then also possible to extend the band (with a ratio 18:19) horizontally across the top of the narrow rectangle from one side to the other, thereby dividing it in a manner intimately allied to both time and the structure of music. (see VI: Plate 4.3.5). In addition to the fundamental themes of temporality, *genius loci* and associated musical analogies, Eliot (1944), in the *Four Quartets*, also invites us to contemplate several other related primal correspondences (already

mentioned in 3.2) allied to each poem. Kaplan (1993) informs us that individually each poem "… corresponds to a season of the year and to one of the basic elements, earth, water, air, and fire." (Kaplan, 1993: 59).

However, returning to the pentagon it is (as is well known) a figure inside which, through the intersection of its *chords*, a pentagram or pentangle can be constructed which, in turn, produces at its centre an inverted smaller-sized pentagon and so on (see I, Plate 4.3.3); the subsequent figures also diminish in a ratio consistent with that of a *golden mean* progression. The plane figures, nevertheless have their volumetric counterparts, of which there are five identified by Plato (c.427-347 BCE), and these are "… thought to be the most essential because they are the only volumes to have all edges and interior angles equal." (Lawlor, 1982: 97). They are the tetrahedron, octahedron, cube, icosadedron and the dodecahedron and representative of the volumetric expressions of the triangle, the square and the pentagon; three, four, and five (Lawlor, 1982). In the *Timeaus* (358-48 BCE), Plato (c.427-347 BCE) recounts the notion of "… a cosmology through the metaphor of planar and solid geometry." (Lawlor; 1982: 96) and, in the same dialogue, Lawlor (1982) explains that

> … he [Plato] establishes that the four basic elements of the world are earth, air, fire and water, and that these elements are each related to one of the solid figures. Tradition associates the cube with earth, the tetrahedron with fire, the octahedron with air and the icosahedron with water. Plato mentions a certain 'fifth composition' used by the creator in the making of the universe. Thus the dodecahedron came to be associated with the fifth element, aether

> *(prana).* Plato's fabricator of the universe created order from the primordial chaos of these elements by means of the essential forms and numbers. The ordering according to number and form on a higher plane resulted in the intended disposition of the five elements in the physical universe.
>
> (Lawlor, 1982: 96).

In his study of the evolution of sacred architecture A.T. Mann (1993), explained, in relation to Plato (427-347 BCE), that "Every object including of course the human body, contained a unique proportion of all five shapes …" (Mann, 1993: 21) and Isreal Regardie (1932), scholar of the occult, asserts that "The symbol is … one which denotes the whole constitution of man." (Regardie, 1932: 117). Related ideas are also to be found in the Hindu tradition, in which the dodecahedron, "… regarded as the most perfect of the five Platonic solids…" (Becker, 1994: 84) with its twelve pentagonal faces, was envisioned as *Prakriti* (Sanskrit = material nature) "… the quintessence of the natural universe…" (Lawlor, 1982: 103). *Prakriti* is identified with the female principal representative of the power of creative energy and manifestation, her male counterpart being *Purusha* (Sanskrit = unmanifest creation), who is envisioned in the form of the icosahedron and is understood as "… unmanifest and untouched by creation." (Khanna, 1979: 171). *Prakriti* (as the dodecahedron which is formed within the void of *Purusha* the icosahedron) "… touches all the forms of creation within her silent observing partner." (Lawlor, 1982: 103).

Consequently *Purusha* and *Prakrati* are understood to represent the eternal creative dichotomy in Hindu mythology and Tantric metaphysics (Lawlor, 1982). The pentagram or pentangle may also be generated within the pentagonal planes of a skeletal construction of the dodecahedron, forming a penta-dodecahedron a volumetric equivalent of the pentagram within the plane figure of the pentagon. In Hindu Tantric tradition Khanna (1979) informs us that "…*Shyām Kālī Yantra* with magic pentagram [also] symbolizes the five elements – earth, water, fire, air, ether…" (Khanna, 1979: 167).

Only the most relevant aspects regarding the relationship which exist between the pentagon and the pentagram (or pentangle) are referenced here, i.e., their more complex interrelationships in defining the structure of the (penta) dodecahedron and the association of the five Platonic solids with the five basic elements. Also noteworthy is the generative interpretation (in which striking parallels may be found in Hindu Tantric tradition) ascribed to the dodecahedron and, by a direct structural association, the pentagon and star-pentagram (Pythagorean symbol of the perfect human form with outstretched arms), through "… the Society of Numbers…" (Ghyka, 1977: 103).

By way of an explanation in terms of numbers, it may be observed that the sum of the integers of every angle generated within the pentagon and the pentagram always add up to a total of nine (see I: Plate 4.3.3) a number that in terms of Pythagorean and Platonic esoteric tradition was associated with "… the beginning and end; the Earthly Paradise … the limit of numbers, all others exisiting and revolving within it."

(Cooper, 1982: 118); "… the number of gestation of the human foetus, of birth and of death …" (Wood, 1985: 212) and therefore in terms of human mortality, time. By analogy the pentagram is a figure that "… being endless takes on the significance, power and perfection of the circle." (Cooper, 1982: 128) and its five trianglular star-points, as *quint essentia*, not only "… define a solid moving through the fourth dimension of time or flow of psychic energy." (Mann, 1993: 20), but also the five basic elements .. spirit [or ether], air, fire, water and earth." (Cooper, 1982: 128).

Although Eliot (1943) makes reference to only four elements (one represented in each poem), the fifth element representing *spirit* (or ether*)* and his "… search for timeless perfection…" (Swarbrick 1988: 61) is ubiquitous. Therefore, it was considered that in as much as a freize-like rectangular format could provide a field in which to compose the representational pictorial components of the work (created from five overlapping pentagons), the four basic elements (plus the fifth: spirit or ether) could be abstract and independently represented by each of the triangular star-points of the pentagram (see VIII: Plate 4.3.5). In order to include all the *basic elements* coupled with the general background colour (field), it was proposed that each triangle would be composed of a set of five concentric triangles bounded by the appropriate field colour and that the centre of each would be marked by a seed point or *bindu*, (see IX, X: Plates 4.3.6, XI: 4.3.7, XIII: 4.3.8 and XIV: 4.3.9). The five points projecting above the long rectangle could be detached and re-formed into either a *predella,* or *gable-top pinnacles,* as in, the painted offering boards, *Kuntu Zangpo* of Tibet and Nepal, in the manner of early Italian School altarpieces, or they could be re-assembled into a pentagram as a completely independent work. (see V: Plate 4.3.4).

Although credible associations could be established which related the derivation of the pictorial field from an arrangement of five pentagons and the *basic elements* with the star-pentagrams, Eliot's (1943) other references to the four seasons (given the artist's geographic location and the subject matter related to it) posed, at least in this context, an apparently insoluble problem. There is not only a clear absence of congruence between the northern and southern hemisphere in terms of the ordering of months and seasons, but also an extreme dissimilarity in climatic conditions between the geographic locations of Eliot's (1943) poems e.g., the temperate regions of central and southern England and the coast of Massachusetts and the hot dry-tropical climate of the north eastern coast of Queensland. The tropical year is not uniformly subdivided climatically (apart from the somewhat mercurial [summer] *wet* and the unremitting [winter] *dry* seasons), into a sequence of four fairly obviously distinctive seasons, as in more temperate zones, which is not to say that progressive transitions over the course of the tropical year are unobseravable, or go unmarked by a sequence of successive changes, albeit more subtle. However, as the inclusion of an identifiable four-part seasonal scheme (given the artist's geographic location) in keeping with Eliot's (1943) poetic themes, appeared to be problematic, a compromise in terms of design strategy needed to be devised.

Of significance certainly in the present context is the fact that the Aboriginal peoples native to Northeastern Australia have, for millenia, been able to identify from six to eight major seasons, though known by a variety of names in different regions. In this regard the anthropologist Stephen Davis (1989), in the *Preface* to his detailed account of the yearly round of the *Yolngu* confirms the fact that the "… Aboriginal

groups throughout the tropical north of Australia have the same seasonal cycle as the *Yolngu* Aboriginal group of Northeastern Arnhem Land." (Davis, 1989: x).

It is understood, however, that traditionally these six seasons are intimately affiliated with the socio-ecomonic subsistence of the people and that "… each season is heralded by distinct changes in faunal, floral and climatic conditions …" (Davis, 1989: 2). Though not generally known (other than by *cognoscenti*), or recognized by *outsiders*, these changes signal "… the conduct of daily hunting activities, ritual life and annual cycle of movement across the land and seascape." (Davis, 1989: 2). In his *Introduction* to the same work Davis (1989), describing contemporary issues, does however pinpoint the two most readily identifiable times of the year in the region (already stated), as being the *wet* and *dry* seasons about which he explains, in relation to the indigenous people, that "The seasonal movement pattern varies from a sedentary wet season existence to highly mobile hunting groups in the dry season …" (Davis, 1989: 2). In the *Introduction* to her doctoral thesis focussing on Western stereotypical attitudes towards seasonal changes, particularly in the tropics, Anneke Silver (1997) while acknowledging *the wet* and *the dry* as identifiable complementary seasonal poles, contends that these terms are too broad (Silver, 1997). However she does ask the questions "… why four seasons? Why not three or five? [maintaining that] There is a long Western tradition behind the idea of quaternal division…" (Silver, 1997: xii) which certainly defines Eliot's geographical orientation, if not entirely his position from a metaphysical point of view.

Although the difference in terms of his mode of living and experience could not be more extreme, it is nevertheless apparent that Eliot's work (cited above) in some way

seems to share, albeit in a profoundly different manner, those fundamental universal and primal human concerns cited above which inlcude, "… the contrast between the real and ideal … [the] human and spiritual …" (Kaplan, 1993: 56), viewed against a background of time and change, of the seasons of the year and the *basic elements* upon which, at least in a metaphysical sense, it is understood that all life is ostensibly founded. Kaplan (1993) reminds us that

> These [phenomena] maintain the cycle of change in time against which Eliot places the idea of a stable, still eternity. The poem [*Four Quartets*] also recalls the birth-death-rebirth cycle…
>
> (Kaplan, 1993: 59).

What was postulated then, as an acceptable alternative to the idea of the four temperate-zone seasons of Eliot's (1943) *Four Quartets* were the two most clearly defined seasons of the dry tropics which, it was proposed, would be made up of two complementary pairs of designs; one pair connoting the *wet* season and the other representing the *dry*. It was further proposed that, in order to foreground the difference, the chromatic fields in each pair of designs would be assigned a colour analogous to its season e.g., dark blue-grey associated (among other things) with the storm clouds and rain of the *wet* season (see VIII:Plates 4.3.5 and 7.1.13) red-browns evoking the vegetal desiccation of the *dry* (see Plate 7.1.16) These colour assignations would also, it was proposed, be included in the chromatic scheme of the triangles representing the *basic elements* (see XI: Plate 4.3.7 and XV: Plate 4.3.9).

A description of the *compositional studies* and *compositional works* is provided in Tables 4.3.1 - 4.3.6. The *compositional works* were, as indicated in these Tables,

both small in scale and finally wrought. These follow the order of the works, together with their titles, size, media, function, format and background (field) colour, and list the pictorial elements and symbolic referents. Table 4.3.1 provides a tabular overview of the *compositional studies* proposed for the suite of four works *(Four Quartets)* designed to expedite the original scheme for *The Mixing of Memory with Desire* whilst foregrounding those designs leading to Public Works projects.

Table 4.3.2 focuses attention on a *second version* of *The Mixing of Memory with Desire, No. I,* (see Table 4.3.1), adapted to fulfil the demands of a Public Artwork project. Accompanying it are four revised *compositional studies*, designed to meet the needs of the same Public Artwork, one of which it was anticipated would be employed as a substitute for the original *predella* works cited in Table 4.3.1. The proposed structural revision of the format for *The Mixing of Memory with Desire, No. 1,* (second version) is illustrated in Plate 4.3.10 and may be compared with that of the original design (see Plate 4.3.7) *vis à vis* similarities and differences resulting from the modifications.

Table 4.3.1
Overview of Compositional Studies for *Mixing of Memory with Desire*

Title of Work	Size	Media	Function	Format and Background Colour	Pictorial Elements	Pictorial Symbolic Referents
The Mixing of Memory with Desire No I.	Upper: 6.2 x 30.5 cm Lower: 6.2 x 30.5 cm	Pencil on tracing paper. Pencil and gouache on *layout* paper.	Compositional study first in a proposed suite of four paintings entitled *Four Quartets.*	• Narrow horizontal rectangle. • Dark blue – grey background field.	Ocean with cloud band as a context for swimming primal couple. Swimming child-like formlings. Palms and Sea Almond trees bisect work into panels inhabited by stylized marine life forms.	For references to the following elements – see Appendix A: Concordance – Coral forms, Fish, Ibis, Islands, Palms, Shells, Starfish, Marine Turtles
The Mixing of Memory with Desire No. II.	Upper: 6.4 x 27 cm Lower: 6.4 x 27 cm	Pencil on tracing paper. Pencil and gouache on *layout* paper.	Compositional study for second proposed painting in *Four Quartets* suite.	• Narrow horizontal rectangle. • Dark red-brown background field.	Inhabited riverine setting bisected vertically by Paperbarks as a context for stylized pictorial forms from Nature.	References to the following have been provided in Appendix A: Concordance Butterflies, Paperbark trees, Rainbow Birds, Rushes, Serpents, Termite mounds, Freshwater Turtles
The Mixing of Memory with Desire No. III.	Upper: 6.5 x 37 cm Lower: 6.5 x 37 cm	Pencil on tracing paper. Pencil and gouache on *layout* paper.	Compositional study for third proposed painting in *Four Quartets* suite.	• Narrow horizontal rectangle. • Dark blue grey background field.	Marine environment with cloud band and islands as a background for primal couple swimming. Swimming child-like formlings. Pandanus and Palms bisect image into panels occupied by marine life-forms.	References to the following elements have been provided in Appendix A: Concordance. Pandanus Palms, Sea Wrack, Swiftlets.
The Mixing of Memory with Desire No. IV.	Upper: 6.4 x 27.4 cm Lower 6.4 x 27.4 cm	Pencil on tracing paper. Pencil and gouache on *layout* paper.	Compositional study for fourth proposed painting in *Four Quartets* suite.	• Narrow horizontal rectangle. • Dark red-brown background field.	Riparian zone divided vertically by Paperbarks and Cycads as a setting for stylized pictorial forms derived from Nature. Male and female juvenile pair wading. Absorbed seated adult male encompassed by numerous moths. Reclining adult female withdrawing finger from water.	For references to the following elements – see Appendix A: Concordance Fan Palms (Licualas), Moths, Marine Turtles, Cycads.

Table 4.3.2
Revised Compositional Studies for *Mixing of Memory with Desire*

Title of Work	Size	Media	Function	Format and Background Colour	Additional Pictorial Elements	Additional Pictorial Symbolic Referents
The Mixing of Memory with Desire No I: Second Version.	Upper: 7.7 x 28.7 cm	Pencil on tracing paper.	Revised compositional study for a *public artwork.*	• Long narrow curved rectangle. • Blue-grey background field.	As in Table 4.3.1	As in Table 4.3.1
	Lower: 7.7 x 28.7 cm	Pencil and Gouache on *layout* paper.				
The Mixing of Memory with Desire No. I: Second Version four designs for central floor motif.	13.2 x 13.2 cm	Gouache and coloured pencil on paper.	Compositional study for a *public artwork*.	• Quadrangular format. • Dark blue-green background field.	Four facing *Coraline* forms.	See Appendix A: Concordance.
	13.2 x 13.2 cm	Gouache and coloured pencil on paper.	As above.	• Square format. • Dark blue-green background field.	As above.	
	13.2 x 13.2 cm	Pencil and Gouache on paper.	As above.	• Quadrangular format. • Dark green-blue background field.	As above.	
	13.2 x 13.5 cm	Pencil and gold Gouache on paper.	As above.	• Circular format • No colour indicated.	As above.	

XVI

XVII

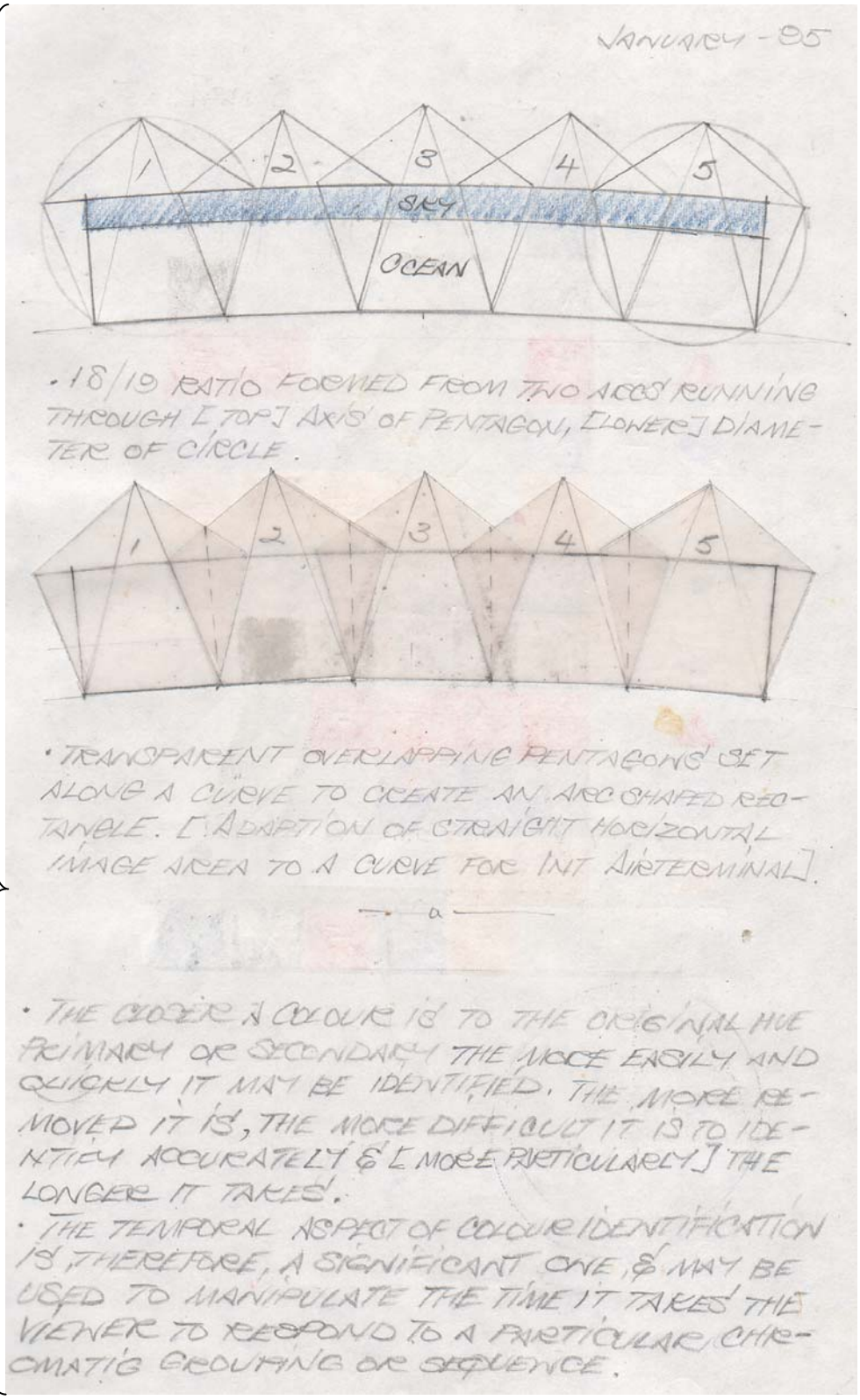


Plate 4.3.10 Re-modeling the compositional format into an arc for the *Brisbane International Airport Terminal Complex,* pencil and tracing paper 14.5 x 21cm. Notebook No.1.

4.3.1.2 – Compositional Framework for *In the Lagoon of Mythic Origins*

While Tables 4.3.1 and 4.3.2 present an overview of the four *compositional studies,* including a *second version* in the case of *Study No.1* (revised to serve as a Public Artwork), for *The Mixing Memory with Desire* (Table 4.3.3 identifies their status and position as fully realized works), Table 4.3.5 provides a parallel compositional framework for *In the Lagoon of Mythic Origins.*

The following provides an explanation for the fact that the *compostitional study* for *The Mixing of Memory with Desire, No III* (see Table 4.3.1) underwent a change both of title and numbering e.g., *The Mixing of Memory with Desire, No IV,* (see Table 4.3.4). Although originally planned as the third of the suite of four painted *compositional works (in Four Quartets)*, it remained unrealized in its original format. This change of position from *No. III to No.IV* was occasioned by the fact that (at this early stage) the *compositional study* for *No.III* had also become a focus of consideration for the design of a second Public Artwork and, as such, its realization as a painted *compositional work* in the original suite was subject both to delay and uncertainty. The final form of the *compositional study* for *The Mixing of Memory with Desire, No.III* required a dramatic alteration of the original format (see Table 4.3.5 and 4.3.6) to the extent that it demanded a complete reorganization of the composition and, while the theme remained the same, also considerable rearrangement of the existing pictorial elements. Although *The Mixing of Memory with Desire, No .III,* despite its change to *No.IV* (already mentioned) did not

Table 4.3.3
Overview of realized Compositional Works for *Mixing of Memory with Desire*

Title of Work	Size	Media	Function	Format and Background Colour	Additional Pictorial Elements	Additional Pictorial Symbolic Referents
The Mixing of Memory with Desire No I.	10.2 x 74.6 cm	Egg Tempera, gouache and dry ground pigments with raised gilding on paper - *Saunders Waterford* 300 gsm HP.	Completed *Compositional* work towards a suite of four paintings – *Four Quartets* Also provided a *compositiona*l foundation for a Public Artwork.	• Long narrow rectangular format. • Dark green-blue-grey background field.	Marine crayfish, Stingray were added. Remaining elements as in Table 4.3.1	For references to the following elements – see Appendix A: Concordance. Marine Crayfish, Stingray.
The Mixing of Memory with Desire No. I: (Predella), The Five Elements.	5 x 7.1 x7.1 cm	Egg Tempera, gouache, dry ground pigments, raised gilding and palladium leaf on paper – *Saunders Waterford* 300 gsm HP.	Five independent supplementary *compositional* works designed as a *predella* for work above.	• *Isoscelean* triangular formats. • Dark blue-grey framing band.	Abstract arrangements of *the Five Elements.*	For references to the following elements – see Appendix A: Concordance. Earth, Air, Fire, Water, Space/Ether.
The Mixing of Memory with Desire No. II.	11.5 x 74.6 cm	Egg Tempera, gouache and dry ground pigments with *shell gold* on paper – *Saunders Waterford* 300 gsm HP.	Completed *compositional* work towards a suite of four paintings *Four Quartets*	• Long narrow rectangular format. • Dark red-brown background field.	Foraging Bush Turkeys Suspended Bat's Wing, Coral Tree Leaves. Mirror image reflections in narrow band of water.	For references to the following elements – see Appendix A: Concordance. Bat's Wing Coral Tree, Terrestial Shells.
The Mixing of Memory with Desire No. II (Predella), The Five Elements.	5 x 7.5 x 7.5 cm	Egg Tempera, gouache dry ground pigments with raised gilding and palladium leaf on paper – *Saunders Waterford* 300 gsm HP.	Five independent supplementary *compositional* works designed as a *predella* for work above.	• *Isoscelean* triangular format. • Dark red-brown framing band.	Abstract arrangements of *the Five Elements.*	For references to the following elements – see Appendix A: Concordance. Earth, Air, Fire, Water, Space/Ether.
The Mixing of Memory with Desire No. III (was No. IV).	12 x 54.4 cm	Egg Tempera, gouache, dry ground pigments, and *shell gold* with raised gilding on paper – *Saunders Waterford* 300 gsm HP.	Completed *compositional* work towards a suite of four paintings *Four Quartets.*	• Long narrow rectangular format. • Dark red-brown background field.	Passage of month indicated by phases of the moon.	For reference to the following elements – see Appendix A: Concordance. Lunar phases, Paperbark blossoms.
The Mixing of Memory with Desire No. IV (was No. III).	-	-	Work unrealized as a painting. Provided a *compositional* foundation for a *public artwork* (see Table 4.3.3).	• Work not realized in original format (see Table 4.3.1). Restructured in an ovoid format retitled In the Lagoon of Mythic Origins (see Table 4.3.3).	-	-

Table 4.3.4
Revised Compositional Studies for *Mixing of Memory with Desire*

Title of Work	Size	Media	Function	Format and Background Colour	Additional Pictorial Elements	Additional Pictorial Symbolic Referents
The Mixing of Memory with Desire No I: Second Version	16 x 63.5 cm	Gouache, tempera and dryground pigments on paper.	Revised compositional painted design for a *public artwork.*	• Long narrow (convex) curved rectangle	As in Table 4.3.1	As in Table 4.3.1
The Mixing of Memory with Desire No. I: Second Version - Designs for central floor motif No.3.	13.1 x 13.1 cm	Gouache, tempera and dryground pigments on paper.	Realization of final Motif No.3 for a *public artwork.*	• Quadrangular (diamond shaped) format • Dark green-blue background field	Four facing *Coraline* forms.	See Appendix A: Concordance.

Table 4.3.5
Compositional Studies for *In the Lagoon of Mythic Origins.*

Title of Work	Size	Media	Function	Format and Background Colour	Additional Pictorial Elements	Additional Pictorial Symbolic Referents
In the Lagoon of Mythic Origins I: First Version.	Upper: 3.3 x 21.8 cm Lower: 3.3 x 21.8 cm	Pencil on tracing paper. Pencil and gouache on *layout* paper.	Compositional study for a proposed painting. Derived from *The Mixing of Memory with Desire No II* (Refer Table 4.3.1).	• Long narrow rectangular frieze-like format. • Dark green-blue background field.	Ocean with cloud-band and distant islands as a context for stylized pictorial forms. Absorbed female figure searching sea-bed in a Lagoon	For references to the following elements – see Appendix A: Concordance. Lagoon.
In the Lagoon of Mythic Origins I: Second Version.	14.5 x 36 cm	Pencil and gouache on *layout* paper.	Refined *compositional study* for painted design for a *public artwork*.	• Horizontal narrow ovoid format. • Dark green-blue background field.	Pictorial elements as above Arrangement of individual elements refined and placement adjusted. Addition of more clearly defined marine forms, spikes of Sea Almond leaves and blossoms, Sea-weeds.	For references to the following elements – see Appendix A: Concordance Sea-weed.

works (*Four Quartets*); nevertheless it did serve as a source for the compositional development of *In the Lagoon of Mythic Origins*, a completely independent though related work (Table 4.3.6).

4.3.2 – Restructured Compositions

The following section and sub-sections outline those developmental aspects of *The Mixing of Memory with Desire, No.I and No.III* which prepared the way for their restructuring and eventual translation into two Public Artwork projects, (already cited in 4.3.1.1 and 4.3.1.2).

The extent to which both works have been revised and *restructured* is markedly different and, as both *compositional studies* (and the realized work in the case of *The Mixing of Memory with Desire No.I*), precede their being *pressed* into service as Public Artworks (though in variant forms), it is this aspect which is central to the first topic of discussion e.g, *adapting the completed compositions to fit the site locations*. However, the business of translating a fully (or even partially) realized work into a different material can also present a range of challenges, matters which will also be considered, though within an independent sub-section, e.g., *translating the work into another media.* There are indeed many facets associated with public art commissioning and administrative processes to which Desmond Macaulay (1988) draws attention. In fact he remarks that "There is a list of constantly recurring matters needing attention in every commissioning." (Macaulay, 1988; 15). Although the broad debate regarding the bringing together of architecture, public

Table 4.3.6
Realized Painted Composition of *In the Lagoon of Mythic Origins.*

Title of work	***In the Lagoon of Mythic Origins. (No. I)***
Size	14.5 x 36 cm.
Media	Gouache, egg tempera and watercolour with raised gilding and *shell gold* on paper – *Saunders Waterford: 300 gsm, HP.*
Function	Completed compositional work.
Format and Background	• Acute angled horizontal ovoid based on an extended elliptical format. • Dark muted blue-green background field.
Additional Pictorial Elements	Undefined forms (at edges of *compositional study*) resolved as *Sea-weeds.* Other undefined forms resolved in the form of marine creatures.
Additional Pictorial Symbolic Referents	*Sea-weeds* – immersed in the deeps, symbolic of the spirit of the waters, Appendix A: Concordance.

spaces and Public Artworks extends well beyond the confines of the present study, it is felt that (in the case of Public Artworks) some general provision should be made for defining the term. Macaulay (1988) contends that

> One of the more useful ways of defining public art is to define 'artwork', not by the type of object or its materials, but as something conceived and designed by a person whose principal occupation is 'artist'. The regulated and voluntary public art schemes which presently exist in Australia seem well disposed to this view in their concern for artistic excellence and diversity of media.
>
> (Macaulay, 1988: 14).

4.3.2.1 – Adapting the Completed Compositions to fit Multiple Site Locations.

The discussion which follows is treated in two parts, the first addressing revisions made to *The Mixing of Memory with Desire No.I* and the second to those modifications made to *The Mixing of Memory with Desire No.III (No.IV)* which led to the development of an independent work retitled *In the Lagoon of Mythic Origins.*

In the case of *The Mixing of Memory with Desire No.I*, the format of the work was revised from the original (long narrow rectangular) composition in order to serve as the principal element in a decorative floor design for the concourse of Level Three

(*outward immigration*) in Brisbane's International Airport (see Appendices C.1 and C.2). As the scheme was to be founded upon the employment of a pre-existing work, the point at issue was defining a *raison d'être* for its modification. As the concourse itself already possessed a strongly defined shape e.g., that of a gently curved truncated oval, it was decided therefore, to *echo* the line of the interior inner edge in the reshaping of the work. (see Appendix C.2)

It is perhaps appropriate at this point to reiterate the references made to Rawson's (1969) observations (see 4.3.1.1) who, in his consideration of the designs on ancient pottery, draws attention to the possible conflict which may arise in bending a two dimensional composition round a three dimensional surface. He is of the opinion that "Early Greek pottery, by adopting the notional space-compression of the relief-frieze, was able to avoid [this] conflict …" (Rawson, 1969: 44) and of greater significance within the present context, that "The figures were adapted to differently shaped fields by means of stretching and contracting the base-line on which they stand…" (Rawson, 1969: 44). He continues by remarking that "… the surface of the pot often becomes a dream-like, intermediate arena in which the figures float." (Rawson, 1969: 44).

In his discussion of *the logic of areas*, Rawson (1969) also identifies the curved frieze-like format, e.g., subsequent to its conscious (graphic) *unrolling* or *unpeeling* (of the design) from the pot's surface, as no longer simply being a narrow horizontal rectangle but taking on a " …fan-like format which equals …[an element] of the circular plus an [element] of the rectangular …" (Rawson, 1969: 148), a combination, in fact, of both shapes. An awareness of these issues together with

what Rawson (1969) identifies as *the 'floor' as an index of space*, that is "… the floor is the base-line upon which [objects or] figures stand … [and] may also be the bottom edge of the format." (Rawson, 1969: 204), emerged as influential considerations in both revising and developing the design.

The adaption of *The Mixing of Memory and Desire No. III, (No. IV)* proved, however, to be more problematic in terms of revision. The plan of the selected site on the *Strand*, in which the *artwork* would be located was, in this case, an oval paved amphitheatre; a part of the *Strand Redevelopment* project in Townsville. (see Appendices D.1 and D.2).

As previously mentioned (see 4.3.1.2), the final form of the composition required a dramatic revision of the original format and as well reorganization of the pictorial elements. In order to preserve something of the integrity of the original composition, whilst at the same time harmonizing with the architectural space, an eliptical format was envisioned. The prospect of an eliptical (or oval) composition was strengthened and directed in a number of ways. Arnheim (1988) remarks that the "… elipse … plays on the ambivalence of roundness vs. extension … [but] has a stabilizing symmetry of its own." (Arnheim, 1988: 89). In relation to the work of the *painter or architect*, he further maintains that "As the elipse becomes longer and flatter, it aquires the qualities of a rectangle." (Arnheim, 1988: 89) and in this regard, is possessed of an increasing potential for powerful directional orientation. These observations indicated the species of eliptical (or oval) format that might be employed.

Elipses of varying angles may be constructed in a number of ways, the most straightforward (and approximate) being that formed from two overlapping circles "… the so-called *ovato tondo."* (Arnheim, 1988: 91) which endows the shape with two horizontal focal points (the central points of the overlapping circles). Of significance also, given the subject matter (e.g., that of a male and female figure swimming towards each other) was the fact that

> Compositionally the ellipse is the format of choice for the presentation of a duet or dialogue, two antagonists or partners – or, more abstractly two centres of energy coping with each other.
>
> (Arnheim, 1988: 91).

A final associative factor in determining the use of an elliptical (or oval), *pond-shaped* format was based on the fact that "Near this site a lagoon existed [*hambaluna*], much frequented by the indigenous peoples of the area and described as an idyllic, cool and shady place." (Hoffman, 1999: Appendix D.5)

4.3.2.2 – Translating the work into another Medium.

This section and the sub-sections which follow address those issues which were influential in terms of translating *The Mixing of Memory with Desire No.I,* (second version) and *The Mixing of Memory with Desire No.III (No.IV): (In the Lagoon of Mythic Origins)* from painted designs to another medium that of mosaic. It should be mentioned at this point however that, as the artist was not engaged either to fabricate the Public Artworks or install them within their respective sites, nor to

attend directly to the raft of post-fabrication and post-installation issues (to which such projects are subject), the ensuing remarks are limited to those parts of the process of translation for and about which direct consultation with the author of the works was *a priori*.

As the two Public Artworks were to be fabricated in the same medium and both may be defined as *in-ground*, (given that they were to be permanently infixed into paved concourses as a part of the two independent built environments), they have been discussed in parallel, thereby assisting in the identification of generic similarities and differences where they occur. In the first instance, in this regard, the *commission briefs* are considered and in the second the *choice of materials* employed to execute both works are examined.

4.3.2.3 – Parameters for the Artwork Commission Briefs.

Both *artwork commission briefs* for the fabrication of two Public Artworks are discussed in the order in which they were undertaken e.g., in the first instance the *Brisbane International Airport: Terminal Complex,* and the second the *Strand Redevelopment* project in Townsville.

The notion of fabricating a large scale mosaic floor design for the *Brisbane International Airport: Terminal Complex* formed a part of the *Art Advisory Service's (Jean Battersby and Associates)* initial proposals for the commissioning of eleven Public Artwork projects by the *Federal Airports Corporation* (FAC) in Brisbane. In her preliminary suggestions Dr Battersby (1993), acting on behalf of the *Federal*

Airports Corporation, submits that from the outset, it was her intention to include "… imagery to do with rainforests, and also coral growth and other elements relating to [coastal] Queensland…" (Battersby, 1993) and expresses a desire to incorporate "… a mosaic floor image or a mural based on one or other of these themes…" (Battersby, 1993: Appendix C.3). As the composition of *The Mixing of Memory with Desire No.1* included both the *coral growths* (initially suggested), in addition to a wide spectrum of *other elements* (representing a tropical marine theme), it was proposed that the composition would be used in its entirety, albeit in a format revised to harmonize with the architectural setting in which it would be situated (see 4.3.1.1 and Plate 4.3.10). As the artists selected to work on the project had been decided upon as the result of *direct commissioning* and the categories of artwork predetermined by the *Art Advisory Service*, no overarching detailed *brief* was provided. All matters concerning the site location, architectural vision, constraints, concept development, maintainance and related issues were administered through the medium of group information sessions, individual meetings and correspondence. (see Appendix C.3).

In the case of the *Strand Redevelopment* project, seven artists were originally commissioned. Although a detailed brief was initially provided by *Queensland Artworkers Alliance* (QAA), who had been engaged "… to manage the procurement of artworks for the … project." (Armistead, 1999: Appendix D.3) through the *Artworks Advisory Team* (AAT) for *Townsville City Council* (see Appendix D.3), both the medium and theme had to a great extent also been predetermined.

4.3.2.4 – Choice of Material.

As already indicated (see 4.3.2.2), the material from which both Public Artworks were to be fabricated was pre-empted by the choice of medium i.e., mosaic and was designed as parts of the individual client's more extensive integrated artwork programs. In the case of the *Brisbane International Airport: Terminal Complex,* the medium was selected by their *Art Advisory Service, (Jean Battersby and Associates)* in conjunction with the planning and materials guidelines set out by the *Federal Airports Federation* (see Appendix C.2).

A similar prescription was also applied to the *Strand Redevelopment* project but, in this case, the medium was dictated by the client, the *Townsville City Council* and their *Project Management Service*, (*Queensland Artworkers Alliance).* In both Public Artworks, the material proposed for translating the designs from the original compositions and implementing their fabrication was to be Venetian glass mosaic *(smalti)* manufactured in Italy; although for the *Strand Redevelopment* project these were supplemented with (*vitreous glass*) tesserae produced by a Central American supplier in Mexico City.

The commissioning for translating the finished artwork into the medium of mosaic and selection of materials from which to fabricate them would, in the case of the *Air Terminal Complex*, be consigned to *Artbusters* (ABC) and that of the *Strand Redevelopment* to *Urban Art Projects* (UAP), who absorbed the *Artbusters* mosaic factory between the two projects (see Appendix D.3). Though the chromatic range

of tesserae available from both mosaic manufacturers was extensive (particularly that of the Italian supplier whose samples included over a hundred hues, tints and shades, including metal-leaf, additional hues needed to be created to fulfil the colour requirements for both commissions.

4.4 – The Artist and Fabricators.

The final section and sub-sections in this chapter treat those aspects of the Public Artworks e.g., the *Air Terminal Complex* and *Strand Redevelopment* project, from the standpoints of their *technical* production, *site location* and *placement.* As already indicated (see 4.3.2.4), the dual processes of translating and installing works of this kind rely on a close collaboration between the artist and the mosaic fabricators, with the *Program* or *Art Advisory Services* acting as overarching intermediaries when and wherever necessary.

The involvement of the artist with regard to the entire process was, however, mostly limited to that of consultation (see 4.3.2.2) e.g., to monitor the progress of the work at key stages of its fabrication. Included in this was the active part played by the artist in refining and enlarging the cartoons, assisting with the decision making process *vis á vis* colour selection and interpretation, positioning expansion joints (to prevent the work from cracking) and, to a very limited degree, making suggestions with respect to the laying patterns of the tesserae. For their part the mosaicists advised the artist on the use of materials, construction techniques and those matters

regarding best practice. This being the case, the succeeding deliberations, whilst providing a broad overview of the procedures involved, *do* give precedence to those facets of the work with which the artist was directly engaged. As already intimated these facets signal those areas of responsibility consigned to both parties as, for example, with matters concerning interpretive outcomes and the consideration of a variety of aesthetic issues which will be discussed subsequently.

4.4.1 – Technical Studies

In the case of both Public Artworks, further coloured drawings and *technical studies* were required subsequent to the completion of the main *compositional works.*

As far as the *Air Terminal Complex* was concerned this involved the preparation of designs for two additional mosaic elements and a detailed coloured plan (drawing) of the concourse. The first additional element necessitating both preparatory designs and, ultimately, a fully realized painted composition, was provided for a work which would locate the centre of the concourse's *hard-surface* floor area. Though originally framed within various formats, (square, circular and quadrangular (see Table 4.3.2 and Table 4.3.4, Plates 7.1.25 – 7.1.29) it was recommended that all should include "… elements which would be drawn from or remain harmonious with the main artwork." (Battersby, Personal Communication. 1994). The format finally selected and realized as a finished *artwork* was that of the quadrangle which together with the other mosaic elements, was added to the floor plan (see Appendix C.2).

Noteworthy perhaps, is the selection of the quadrangular format by the *Art Advisory Service* and the *Federal Airports Corporation* (FAC) representatives, their combined opinion being that the concourse was an area much disposed to directed streams of human traffic and, that being the case, the quadrangular work (as it would be situated between two escaltors and point toward the departure area) had, over and above the other formats, a far greater sense of kinetic (design) potential to direct such movement.

The second mosaic element referred to above involved the design of two narrow horizontal bands which would extend from one side of the concourse to the other resembling two large ripples echoing the curved edge of the floor, whilst simultaneously harmonizing and subtly anticipating the movement of human traffic towards the *outward immigration* booths. Apart from their role as directional indicators, the bands were also designed to fulfill the dual function of both decorative design and a practical purpose. The bands were subdivided vertically into a sequence of partitions of variable widths to form two *ribbons* of multicoloured stripes.

The chromatic sequences and variable widths of the stripes were prepared only as examples of small sections (see Plate 4.4.1) as guides from which the mosaic fabricators would then be able to extemporise. In this manner it was anticipated that much of the excess mosaic material could be satisfactorily employed whilst at the same time complementing the other mosaic elements. It should be mentioned that a rule of thumb was set for determining the width of the stripes, the widest stripe being the same width as the band. This established a constant unit from which, through its division e.g. , into halves, quarters, eighths, thirty seconds etc, greater and lesser

Plate 4.4.1 *Sample of Chromatic Bands,* prepared for mosaic fabricators for the *Brisbane International Airport: Terminal Complex*, gouache on paper, 28 x 21.5cm: Notebook No. VI.

divisions and subdivisions could be generated, thereby providing the fabricators with an opportunity to distribute any unused material as the need dictated.

A third set of fully realized *technical studies*, in this instance drawn to scale directly from the architects' floor-plans (about which more will be discussed later), illustrated views of the entire concourse area in plan indicating both the overall colour scheme proposed for the floor and the disposition of the three mosaic elements in relation to each other and the major pre-existing architectural features e.g., stairways, pillars, tree planters, escalators etc. are provided in Appendix C.2 and Plates 7.1.30 and 7.1.32).

In the case of the *Strand Redevelopment* project, the only further *technical study* required was a positional drawing locating the work within its allocated site (see Appendix D.2.) and an artist's impression of the entire site drawn to scale, illustrating the mosaic artwork in its final position in relation to adjoining walkways. This plan view also included the laying pattern and colour scheme for the block-paving surround and its anticipated appearance with respect to the mosaic artwork (see Plate 7.1.38).

4.4.1.1 – Examination of Materials and Processes

The previous subsection addressed those aspects of the work which required additional studies and arose during the planning (and or early) stages of the translation of the artworks. The following discussion explores the major issues concerning the *materials* and *processes* of fabrication as a vehicle for translating the,

artist's work e.g., from small scale painting to a large scale mosaic work. For an artist, coming to terms with a new medium often engenders a mixture of excitement and anxiety. The prospect however, of having not only the execution of the work but also its interpretation (from an original piece) resting in the hands of others may upset this delicate balance and weight it heavily on the side of anxiety.

Before proceeding further with the topic of mosaic, it should be noted that, clearly compelling though it is, a detailed historical survey of the wide range of styles, subject matter, materials, fabrication and installation techniques, its relation to other forms of decoration, its architectural role, the geographical sites and museological locations of major works and information concerning their creators extends far beyond the scope of the present study. As the independent researcher Gabreilla Pascarelli (2000) acknowledges in her historical survey, "… it is a most complex subject … [a] millenary art which has in the course of centuries produced remarkable masterpieces …" (Pascarelli, 2000: 3). Mosaic can be classed, in fact, as a form of inlay and may be briefly described as

> … the art of creating patterns and figures by assembling in a bed of cement or other binding materials, variously sized fragments of coloured marble, stones, glass, mother-of-pearl, precious stones etc. Generally speaking therefore the technique falls into the category of inlay.
>
> (Pascarelli, 2000: 112).

Although the principal concern of the discussion which follows focuses upon those aspects of mosaic and its fabrication which have a specific bearing on the two Public Works, there are nevetheless, several associated historical issues which are indeed noteworthy. The first of these is a fortuitous association (etymological in origin), which concerns the title of the work *The Mixing of Memory with Desire*, its derivation from poetry and the background of the word *mosaic* itself – although such an association was unknown to the artist prior to the commissioning of the Public Artworks.

It is understood that, in Greek mythology, there were nine muses each of whom "… presided over a different branch of the arts and sciences…" (Pascarelli, 2000: 7) and that four of them were responsible for inspiring the four forms of poetry (lyric, romantic, didactic and epic). It is generally accepted that they were the daughters of *Zeus* and the direct result of his desire for *Mnemosine* the goddess of Memory and that they resided with *Apollo* (the poet-laureate and master-musician), among other places, on Mount Parnassus. Pascarelli (2000) describes these places as being

> … identified with woods, grottoes, water-springs and the like … sites where the inspiration of the poet or the artist was enhanced by their intimate communion with Nature, where the Muses could better work.
>
> (Pascarelli, 2000: 7).

It is generally understood that, in the ancient Roman world, those places sacred to the muses were known in Latin as *museo*, which, at a later date, became the same word, as pointed out by Pascarelli (2000), that was used for

> … indicating the walls and vaults decorated in mosaics, of the grottoes and fountains of the Roman garden…*Museo* was [also] the name of the poet-priest, disciple of Orpheus, recognized as the inventor of the hexameter.
>
> (Pascarelli, 2000: 7).

The Archaeologist and writer on Classical Art, Roger Ling (1998) reveals that, over time, a work in mosaic came to be known in Latin as "… *opus museum* or *musivum*…" (Ling, 1998: 7), further terms being added as the art (and craft) progressed.

As has been the case with many other art-forms, as an art and craft, mosaic, has over the five thousand years of its history, understandably undergone a number of changes in both its techniques and materials. Whilst it is true that many innovations *have* occurred, they do not appear to be as significent as perhaps might be expected given the wide variety of surfaces it has been utilized to embellish. As a medium for creating miniatures (using *smalti filati*) it has been used in the production of both portable works of art and jewellery and on a monumental scale to decorate the interior and exterior surfaces of large architectural edifices.

There are a number of reasons for its success in the past and, as a medium, its continued attraction in a contemporary context cannot be wholly consigned to the fact of its durability. It is, for example, particularly in the case of *tessera mosaic,* a medium possessed of great flexibilty - in terms of its textural, tonal and chromatic possibilities. The painter and former director of the Artists' Technical Research

Institute, Ralph Mayer (1981) remarks that "mosaic is … one of the oldest methods of decoration… [and] is looked upon as a sort of painting without paint…" (Mayer, 1981: 380). The wide variety of materials from which mosaic can be made, its *patina,* the richness, permanence and great variety of colour available (particularly in the case of glazed ceramic, glass and more recently polychrome resins), together with its intrinsic *factural* qualities, have all contributed to an enduring aesthetic appeal. In his discussion of historical developments *vis à vis* the aesthetic role played by the use of mosaic in floors, Ling (1998) maintains that

> It is an over-simplification … to claim that floor mosaics developed from a desire to make pavements more durable. Their principal function, as their rapid adoption of decorative treatment demonstrates, was to enhance the appearance of the spaces that contained them.
>
> (Ling, 1998: 10).

In his discussion of the imperishable nature of the materials employed in architectural mosaics, Mayer (1981) expresses the opinion that

> The monumental mosaics of the Byzantine, Early Christian and Renaissance eras have survived in better condition than most other works of art, perhaps not only due to the durability of the materials, but also because of the simplicity of restoration by replacement of the tesserae should any fall out.
>
> (Mayer, 1981: 381).

A wide variety of materials have been employed for the construction of mosaics in the course of their long history. These range from pebbles to irregular and regular stone and ceramic fragments, from "… shells to mother-of-pearl and precious stones … such as lapis lazuli, malachite and turquoise, cornelian, jasper etc…" (Pascarelli, 2002: 118) and various metals. However, the material favoured above all others "… was glass or *smalto* (glass obtained by a melting process), also referred to as *vitreous paste* …" (Pascarelli, 2002: 118). In discussing the significance and extensive use of glass mosaic in antiquity, Ling (1998) evidences the fact

> … that wealthier patrons aspired to have them [as] revealed by their inclusion among the luxurious fittings of private baths described by the Roman moralist Seneca, writing towards [the end of] AD 64: 'a man feels poor and mean … if his vaults are not hidden by glass.' By 'glass' Seneca clearly means glass mosaic.
>
> (Ling, 1998: 105).

Inasmuch as it was a costly form of architectural decoration at the time of Seneca's writing, glass mosaic has continued to be an expensive luxury material and, as a matter of record, remains so. Nevertheless the position of glass in a contemporary context endures as the mosaic material *par exellence* and is held in the same high regard today as it was in antiquity (Pascarelli: 2002).

As both *smalti* and *vitreous glass* tesserae were employed in the fabrication of both the *Air Terminal Complex* and the *Strand Redevelopment* works, it is primarily these mosaic materials that will be considered. Before discussing the manufacture of the

glass however, its suitability as a material for the construction of floor surfaces from a practical point of view, may well be called into question. There is no doubt, as already acknowledged, that, in terms of its luminosity, chromatic intensity and potential for the creation of an extensive chromatic range (with the exception perhaps of glazed ceramics and polychrome resins), it remains unrivalled as a material. Its increased use as an art-form exclusively employed in large scale floor decorations is a somewhat recent phenomenon having occurred principally as a result of improvements made to the contemporary production of glass, particularly that of *hard vitreous glass*, and the fact that it has become more affordable and readily available. Though a great revival in the production of mosaic (and mosaic works) took place toward the end of the nineteenth and beginning of the twentieth centuries its initial impetus was much reduced primarily as a result of the adverse effects of the First World War (1914-18) and, after a respite, the Second World War (1939-45) respectively. However, since the 1950s, there has not only been a universal reawakening of interest in the use of mosaic as a medium at a professional level (Mayer, 1981), but its aesthetic appeal as a craft also appears to have increasingly captured the public imagination.

Although the contemporary manufacture of mosaic materials is now carried out in factories the world over, including Japan, Mexico (with its longstanding Indian Tradition), North America and Europe, key centres existed in North Africa, Byzantium, the Middle East, India, Russia and Italy for millennia. In her review of this aspect of mosaic making, Pascarelli (2002) remarks that

> In the east, a well established centre for the production of mosaic glass was the city of Kiev …. [whilst] in Italy the supremacy in the production of glass was held by the city of Venice.
>
> (Pascarelli, 2002: 118-119).

Among other cities, Rome, Ravenna and Orvietto have in the past all held positions of great importance as manufacturing centres of vitreous mosaic material though, arguably, the reputation of contemporary Venice as the leading producer of exceptionally high quality *smalti* and *hard vitreous glass* remains unchallenged.

Before proceeding further it is perhaps appropriate at this point to consider the differences between *smalti* and *vitreous glass* mosaic materials. *Smalti* is an opaque material which, due to the increased quantity of lead oxide present in its manufacture, not only significantly increases its chromatic brilliance but also renders it far less brittle than ordinary glass. A further advantage is that it can be produced in almost any tint or shade. *Vitreous glass,* on the other hand, is far cheaper and more readily available; "… it is a standardized mosaic glass used industrially." (Goodwin, 2000: 35). In general its thickness is not as great as *smalti* slabs which means that the shanks of the tesserae are also shorter. *Vitreous glass* mosaic is generally smooth on one side and textured on the other and either side may be utilized for the work, depending upon the surface quality desired. Although it is available in a range of bright primary hues, the opaque tints and shades tend to be *milky* lacking the depth and luminousity of *smalti.* It is also produced in a range of multi-toned, grainy and *marbled* metallic finishes.

What, then, are the principal factors in producing a glass from which a mosaic material can be created, and one that is durable enough to withstand the wear and tear of a floor surface? According to Pascarelli (2000) there are, in fact, three determinants, these being the mixture of materials from which the glass is constituted, the temperature at which they are fused together, and the period of time over which the glass is allowed to cool. In her explanation of the process she informs us that

> The component of the batch and the temperature at which the mixture is fused (at about 1200° - 1500° centigrade) is of primary importance…. The whole process of melting the glass takes about 12 hours, after which the liquid mass is scooped into round metal plates so as to obtain … pancake shapes (known as 'pizzas') which are then cooled down. The thickness of the 'pizzas' can vary from 10 to 20mm…. The cooling process is quite lengthy, from 4 – 12 hours.
>
> (Pascarelli, 2002: 119).

Detailed information concerning precise manufacturing processes are, it would appear, equally well protected both from casual curiosity and academic inquiry. In regard to this point the mosaic artist and author Elaine Goodwin (2000) remarks that "… throughout the long history of this amazing material … many secrets or recipes are known and carefully guarded." (Goodwin, 2000: 33). The final stage in the process, after the glass has been cooled and graded, is to segment it into tessarae sized pieces. This activity is generally the task of the mosaic fabricator(s) or the artist who, employing a variety of tools "…mosaic hammers, hardies, files, glass

cutters, palette knives, tweezers and nippers …" (Pascarelli, 2002: 119) breaks the glass slabs into small rectangular pieces approximately thirteen by ten millimetres in size and from ten to fifteen or twenty millimetres in depth.

As a modest quantity of gold glass was utlitzed in the fabrication of both Public Artworks and its manufacture is somewhat different from that of ploychrome *smalti* and *vitreous glass*, a brief description of its material composition has been provided below. The introduction of metal-leaf tesserae, as Gage (1995) explains, "… first gold, then silver – can be traced fairly certainly to the early third century [AD] …" (Gage, 1995:40). Its utilization as a material reached its apogee in Byzantium (during the sixth and seventh centuries) where, other than representing a conspicuous display of wealth, it was seen to be analagous with *divine light*. It is generally accepted that its first appearance occurred simultaneously with the advent of *gilded glass vessels* (in Rome) and that both employed a similary "… specialized technique … [in which] a layer of gold foil is sandwiched between two layers of glass." (Gage, 1995: 40). Though the processes and methods of manufacture have evolved over time, essentially they remain much the same today "… the gold foil … [being] sandwiched between a film of thin and a thick layer of glass." (Pascarelli, 2000: 120). The gold foil, usually twenty four carat, may be set either at an angle to, or in the same plane as the surface of the tessera. However, as far as contemporary methods of production are concerned, Goodwin (2002) explains that

> Gold tesserae are made up of a glass support base – these days transparent and coloured yellow, green, or aquamarine, and ranging from … 3-7 mm in thickness – and an upper protective layer of thin glass, the *cartellina* – which

> is generally clear but may be coloured for producing coloured golds. Interspersed between the two layers of glass is the metal leaf, a 24-carat gold, silver, copper, or alloy of gold and other metals. Sometimes the base is granulated to give a rippled finish, though generally the finish is smooth. Colours range from deepest gold to white, or may include blue, green, or pink – the colour being made respectively by the *cartellina*, the metal, or backing glass.
>
> (Goodwin, 2002: 35).

The tesserae employed in both Public Artworks were of (deep) gold, set in a base of untextured green glass. (see Plate 4.4.4). Denied to both mosaic works however, as a consequence of the flush *setting* required for floors and pavements (employing the *indirect* or *reverse* method of *setting-out*), were the advantages of creating "… a deliberately irregular surface … giving, especially in the case of gold, a soft, [shimmering], fluid effect …" (Gage, 1995: 41).

There are a number of methods available to mosaic fabricators for *setting out* a design, the most immediate being a form of improvisation using only rough guidelines (and in some cases none at all) drawn onto the perpared surface (wall, floor or sculptural form) over which the tessarae are directly laid. However, in terms of the artist's fully realized compositions which anticipated both the *Air Terminal Complex* and the *Strand Redevelopment* projects, these were translated from small scale paintings (see Tables 4.3.4 and 4.3.6) to large drawings, by carefully enlarging them from photographic projections onto heavy paper to the correct scale.

As Pascarelli (2002) points out, although "Photographic enlargements can be used today, … in the past the operation was [indeed] more elaborate." (Pascarelli, 2002: 122) requiring the preparation of full sized *cartoons* or drawings made directly onto the surface of the wall or floor by means of overall proportional grids. Although, Bowen (1992) reminds us that grids are still in use today and remain "…valuable in transferring an image from one surface to another of another scale." (Bowen, 1992: 149). The drawings for the Public Works however were executed with large permanent (black), felt-tipped marking pens and subsequently fine-tuned (particularly the ovoid forms and long shallow curves) with the aid of cardboard templates (see Appendix C.5). These were generated from greatly enlarged reproductions of a set of commercially available *French curves* and utilized in the final drawings for both Public Artworks.

The *form-work* (or perimeter frames), within the confines of which the mosaic works would be *set-out*, employed a heavy brass frame cut to size, and were rolled out to contain their precise shapes. These were set onto thick plywood *bases*, on top of which the reversed drawing was then placed (see Appendix C.6). The coloured tesserae were provisionally arranged on the surface of the drawing in their correct positions whilst simulatenously working out the *laying* pattern (*andamento*), or directional flow of the material. When the *andamento* (of a section of the work) had been satisfactorily resolved, the tesserae were then temporarily affixed to the surface of the drawing with paste, an appropriate space being left around each piece to accommodate the grouting (see Appendix C.6). Given the nature of commissions, it should be noted that the amount of time available for the fabricators to work out the

andamento, or directional flow, with appropriate precision is often dictated by the necessity to meet deadlines imposed on them by the commissioning bodies.

There are three principal methods of *setting-out* the tesserae, all of which are still in use today. The first is the *direct* or *classical* method, the second is the *indirect*, or *reverse* method (Goodwin, 2000) and the third is the *reciprocal* or *double reverse* method, also known as *mosaico a rivoltura* (Pascarelli, 2002). Of the three methods the *indirect* or *reverse* was that employed in the fabrication of the Public Artworks, this being the prefered method of production for contemporary floor and pavement decorations where heavy human (and other) traffic is an important consideration. (Gottlieb, Personal Communication. 1993). A detailed description of the *setting-out* method employed by the mosaic fabricators (*Art Busters* for the *Air Terminal Complex* and *UAP* for the *Strand Redevelopment* projects) has been provided in Appendix C.5.

In the interests of clarity, Table 4.4.1 enumerates the three principal methods of *setting-out* mosaic tesserae, together with the basic techniques employed for their preparation, embedding on the support, their respective surface appearances and resulting aesthetic qualities. Inasmuch as the method of *setting-out* determines the directional flow, to some extent the texture and the light reflective qualities of a mosaic's surface, the *laying* techniques of the tesserae, generally referred to as an *opus* (plural *opera*), are also of primary importance. Traditionally there are seven generally accepted *laying* techniques (Pascarelli, 2002), though Goodwin (2000) identifies an eighth (*Opus paladianum*), Ling (1998) a ninth (*Opus sectile*) and King (2003) a tenth (Opus regulatum) which were originally classified "… according to

Table 4.4.1
Principal Methods of *Setting-out* and Embedding Mosaic Tessarae

Name of Method		Preparatory *Setting-out* of Tesserae	Embedding the Tesserae	Surface Appearance of Mosaic Material	Aesthetic Qualities	Preferred Types of Physical Support
1	Direct or *Classical* method.	• Form-work with thin metal *edging* frames (lead, bronze, aluminum, steel or brass), may or may not be employed.	• Tessarae embedded face-up directly into mortar on work surface one by one. • Work is grouted.	• Angular variation of tesserae. • Irregular surface.	• Light reflective. • Shimmering surface. • Shows medium to its best advantage.	• Most surfaces. • Not favoured for floors or pavements subject to heavy human (or other) traffic.
2	Indirect or *Reverse* method.	• Tesserae glued face down on paper or canvas bearing design. • Large designs can be cut into sections. • Form-work with metal *edging* frames (bronze aluminum, steel or brass) may be utilized.	• Paper or canvas bearing tesserae embedded into mortar on work surface. • Paper or canvas removed to reveal correct side of the work. • Work is grouted.	• No angular variation of tesserae. • Flat, regular surface.	• Not as light reflective as No. 1. • Results in "colder" work (Pascarelli, 2002).	• Not suited to small scale sculptural works. • Can be laid in sections over moulds. • Highly suited to floors and pavements. • Lacks life on wall surfaces.
3	Reciprocal, *Double Reverse* or *Mosaico a rivoltura* (A mixture of methods Nos. 1 and 2).	• Tesserae set face down in a bed of sand contained by form work. • Thin wooden or metal *edging* strips may be used. • Tesserae covered with water soluble glue, to which layers of gauze are adhered. • Work allowed to dry.	• Frame or form-work turned upside down. • Sand removed from face side of tesserae. • Mosaic applied to permanent support. • Work is grouted.	• Little angular variation of tesserae. • Flat, regular surface.	• Not as light reflective as No. 1. • Lacks the lively surface of No. 1. • Surface not quite as "cold" as No.2.	• Not suited to small scale sculptural surfaces. • Can be laid in sections over moulds. • Suitable for walls floors and pavements.

the nature of the tesserae … and their dimensions …" (Pascarelli, 2002: 115). A mosaic may be fabricated employing one method (*opus*) or a number (*opera*) in whatever proportions the fabricator deems to be appropriate. In her discussion of the subject of *opus/opera,* Goodwin (2000) explains that

> There is a wide degree of diversity and latitude in the laying of the [mosaic] material… By understanding the opus techinques, however, a deeper understanding of the placing of the materials is reached.
>
> (Goodwin, 2000: 54).

The *laying* techinques (*opera*), together with the nature of the tesserae themselves and their *coursing* (the lines in which the material is laid) have a most dramatic influence on the expressive and textural qualities of the work. It is, in fact, through an understanding of the various *opera* that areas of rhythm, counter-rhythm, tension and stasis are built into the work. In translating a pre-existing painted composition, or cartoon (traditionally referred to as a *sinopia* after the red coloured pigment used for the drawing), Pascarelli (2000) confirms that,

> When applying the tesserae a skilled mosaicist always keeps in mind the so-called *andamento*, that is the flow of the tessarae that should always follow the direction of the brush strokes on the cartoon.
>
> (Pascarelli, 2002: 121).

The flow of the tesserae in directional lines (the *coursing*) (see Plate 4.4.2) can also be given greater impetus by "The grouting lines [which] can emphasize the flow by being various widths and colours…" (Goodwin, 2000: 54), (see Plate 4.4.3) The catagories of traditional *opera* or *laying* methods, together with a concise description of their, use, are presented in Table 4.4.2.

In regard to the artist's two Public Work*s* (the *Air Terminal Complex* and the *Strand Redevelopment* works), the methods of *opera* employed were *Opus musivum* or *museum* and *Opus tesselatum* (see Table 4.4.2). Further information concerning the methods employed by the fabricators (*ABC* and *UAP*) for embedding and finishing the mosaic works (which include the epoxy backing, bedding, grouting, sealing and cleaning) have been supplied in their explanation of materials, methods and technical procedures (see Appendix C.5).

Plate 4.4.2 *Example of Opus arrangements*, left to right, *Opus regulatum, Opus tessellatum* and *Opus vermiculatum,* (King, 2003: 103).

Plate 4.4.3 *Grout study*, each tile is the same colour in the same place with different grouts, (King, 2003: 97).

Table 4.4.2
Categories of *Opus*: Laying Techniques

Categories of *Opus*	**Description and Manner of Use.**
Opus incertum	The tesserae are cut and *set-out* in a random manner. Much used in contemporary mosaic works.
Opus museum or *musivum*	Its use in a contemporary context applies to mosaic work fabricated in a variety of techniques, it was used in antiquity to describe the decoration of walls and vaults, employing the use of *vitreous glass pastes* (Pascarelli, 2002). Also employed "… on larger floors when the smaller refined images of the *emblemata** are freed from their central position to become a large integrated floor creating an all-over design." (Goodwin, 2000: 54).
Opus palladianum	Tesserae cut into random shapes resembling haphazard paving. (Goodwin, 2000). Much used for backgrounds where awkward shapes occur and creating representational images.
Opus regulatum	Tesserae of regular size and colour *set-out* in a *tessellated* grid. Employed for backgrounds and rectilinear patterns.
Opus scutulatum	Tesserae of different sizes and colours are introduced into a uniform ground. Also refers to rhombic shaped tiles, hence the term *sculata* (Pascarelli, 2002).
Opus sectile	Tesserae cut into shapes i.e., lozenges squares, triangles etc, are *set-out* in the manner of a patchwork decoration. Used for floors, and pavements (Ling, 1998).
Opus segmentum	Much used with *opus tesselatum* in which larger tesserae of the same colour are introduced. Commonly used for background work.
Opus signinum	Broken pieces of pottery and stones used mainly for pavements.
Opus tesselatum	Mosaic tesserae of similar size and colour employed for backgrounds and "… simple ornaments." (Pascarelli, 2002: 115). "The image is generally surrounded by one or two bands of tesserae to define its form." (Goodwin, 2000: 54).
Opus vermiculatum	Mosaic work constructed from precisely shaped tesserae of extremely small size: as with *vermicelli* or "… little worms" (Goodwin, 2003: 54). Employed for portable works, jewellery and finely rendered pictorial images.

* *Emblema*, (pl.) *Emblemata* – A portable panel of very high quality fine tesserae, inserted into a coarser mosaic ground laid *in situ*.

4.4.1.2 – Preparation of Colour Samples

The materials and processes involved in the preparation of the (glass) mosaic material, (including a brief comment regarding its great antiquity), the techniques of *setting-out* and the categories of *opera* or *laying* methods have all been discussed in the previous section (4.4.1.1). Though already touched upon (see 4.3.2.4), what has not yet been considered in depth are those matters regarding the translation and interpretation of colour, from the artist's painted works to the medium of mosaic. There are clearly differences between translating a fully realized painted work into the mosaic medium and generating a work in which mosaic materials and attendant techniques are employed from the outset. Before proceeding further, it may thus prove instructive to consider some of the major differences between the two approaches and what effect they might have on the appearance of the finished work.

In regard to the business of translation, it is understood that the artist's original (commissioned) image will almost certainly be composed, executed and resolved in an entirely different medium to that of mosaic e.g., paint, pastel collage etc. As a result, the inherent qualities of such media could prove extremely difficult to replicate unless, of course, the mosaic material is (as is the case of *smalti filati* employed in fabricating *Mosaico minuto*) of minute dimensions and available in an unlimited range of colours and tones. Nevertherless, however small the tessarae and whatever the virtuosity of the mosaicist in the *setting-out* and *laying* techinques (*opera*), the appearance of tessellation cannot be entirely concealed and it is fundamentally this tessellated surface which defines the medium, setting it apart from the original artwork.

Needless to say, however well matched the colour and tone, another significant difference is the fact that the materials from which the mosaic tesserae are made – be they glass, ceramic, shell or stone, glazed or matt, rough or smooth – have their own intrinsic qualities which differ from those of paint, pastels or collage etc. applied to canvas, paper or panel. The fact remains that both the discrete fabrication techniques and the distinctive material characteristics of mosaic, however sublimated they may be, combine to produce those unique surface qualities for which it is universally known, regardless of the style or medium of the original artwork.

With respect to the differences between the translation of a pre-existing (commissioned) work and the creation of a mosaic from available materials, two final, though related issues remain. In the first instance it may well be asked to what extent, in this situation, do the fabricators (as interpreters or translators) have to improvise whilst making the work? In the second, if the fabricator's task is to create a faithful rendering of the artist's original work (which it most often is), how might it be influenced by their modes of self expression and preferred use of the medium? Although an indepth examination of these matters extend beyond the limits of the present discussion, it would be difficult, nevertheless to treat the matter of colour interpretation, *vis à vis* the fabricator's translation, without addressing them at all. As opposed to the artist/fabricator, who is able "… to throw off the shackles of the pictorial approach…" (Ling, 2998: 57), improvise at every stage of the work and exploit the potential of the medium to its fullest extent, the fabricator/translator has, of necessity, to follow the original artwork in every particular. Notwithstanding the fact that the fabricator/tranlator's role may be limited to that of interpretation, a high

degree of skill and much experience are necessarily required in devising strategies for matching the colours of the original art-work.

To a great extent, despite the fact that at first sight, the chromatic and tonal range of *smalti* and *vitreous glass* appears to be infinite, many tints and shades can be achieved only through a process of *optical* or, to use the contemporary artist Arthur Hoener's (1989) terminology, *Synergistic colour mixing* (Hoener, 1989: 104) or having the colour(s) especially manufactured. Remarkably, as the scholar and acknowledged expert on the history of colour John Gage (1995) observes in his discussion of the use of colour in mosaic,

> The theoretical basis for optical mixture had been laid down … in the second century AD by Ptolemy who had identified two causes of optical fusion in colour: the first by distance, meant that the angle of vision formed by rays of light from very small patches of colour was too small for them to be identified separately by the eye, hence many points of different colours seemed, together, to be the same colour. The second cause was persistence of vision, whereby if a coloured object was moving, an after-image would be superimposed on the successive image and a mixture of the two would result.
>
> (Gage, 1995: 42).

It is extraordinary that, as Gage (1995) explains, Ptolemy (second century CE) illustrated the second phenomenon, stated above by "…the spinning of a parti-coloured wheel … the very tool used by the many colour - theorists of the nineteenth century." (Gage, 1995: 42). These included, James Clerk Maxwell (1831-79) and

Ogden Rood (1831-1902) who, among others, were referred to by the Neo-impressionists (Georges Seurat (1859-91) and Paul Signac (1863-1935)) who combined them with the discoveries of Michel Eugène Chevreul (1786-1889) to create "… what [later] became known as *"pointillism"* or *"divisionism"*. (Cole, 1993: 44). Exaggerated as this connection may perhaps appear to be, Gage (1995) concedes that "… we should not conclude from this that these early mosaicists were Neo-impressionists *avant lettre*…" (Gage, 1995: 44).

However, in returning to the issue of creating tints and shades through the intermixture of coloured tesserae, Goodwin (2000) confirms that "…these can be mixed only on the mosaic surface itself and by the eye of the viewer from a distance." (Goodwin, 2000: 49). It is from this point of view that the fabricator/translator will assay the work in hand, trialling various combinations of coloured material (in consultation with the artist) eventually making decisions regarding those colours which can be *optically mixed* and those which cannot. Also in collaboration with the artist, the fabricator will make decisions regarding the colour, spacing, *coursing* and conspicuousness of the grouting for bonding the tesserae, thereby determining how visible or concealed different areas of the tesselated surface will be. In both cases a considerable degree of improvisation, as well as trial and error, are necessary to achieve a successful outcome.

In terms of the translator/fabricator's ability to invest an interpreted work with their own modes of self expression and preferred use of the medium, it is clear, at least in general terms, that there would be little, if any, opportunity for either aspect of these creative facets of their practice to be enjoyed. This would certainly be the case in

terms of creating a freely wrought original composition with either a completely or partially improvised colour scheme. It is in this regard (as already noted), that the work of the artist/fabricator, who is responsible for the entire work from its conceptual development (and possible transposition from preliminary sketches) to its execution differs markedly from that of the fabricator/translator. The function of the latter is to demonstrate not only the highest level of technical accomplishment in terms of craftsmanship (following that of the artist/fabricator), but also great visual acuity in interpreting the work of others, whilst at the same time undertaking both the execution and possibly the final installation of the piece. In this regard the success of the finished work (notwithstanding the quality of the available materials) remains almost solely dependent upon the ingenuity and skills of the fabricator/translators. These, as already suggested, reside in a coalescence of their abilities to extrapolate (from the artist's original work) accurate colour assessments and interpretations, to apply their creative sensibilities in arranging (*setting-out*) the coloured tesserae to maximum advantage, and to determine the most appropriate combination of *laying techniques* or *opera.*

As far as the colour in both Public Artworks was concerned, this was created by employing the following three methods. In the first instance prefabricated coloured material was employed without the addition of tesserae of other hues; in the second, prefabricated material of different hues and tonal values (also from available stock), was combined to create *optical* or *synergistic colour mixtures* (see Appendix C.6); and the third involved the creation of a new range of colour including tints and shades which were manufactured from colour swatches (see 4.3.2.4 and Appendix

C.4). Table 4.4.3 presents in parallel the three methods employed for matching the mosaic material to the original art-work, the type of material utilized, its mode of use, matching procedures and respective physical appearances.

At the time during which both Public Artworks were executed, the Italian manufacturers (*Angelo Orsoni* of Venice), (see 4.3.2.4) had, in their available stock, over one hundred and thirty different hues including tints and shades. Of these, one hundred and six were of *smalti*, four being of variously textured and tinted (twenty-four carat) laminated gold glass (in different material compositions) and the remainder of *vitreous glass* and *glazed ceramic* materials (see Plate 4.4.4). As far as the production of new colours was concerned (see 4.3.2.4), colour swatches were provided to the manufacturer, who attempted to match the *smalti* as closely as possible with the painted samples. These affected the two projects rather differently.

In the case of the *Brisbane International Airport: Terminal Complex,* painted colour swatches were prepared for the Italian producers, which included (in addition to their available stock) thirty five hitherto previously unavailable tints and shades, examples of which have been extracted from Notebook No.VI (see Figure 4.1.3 and Plates 4.4.5, 4.4.6 and 4.4.7). The colour swatches illustrated served as exemplars against which the manufacturers *(Angelo Orsoni* of Venice) could match the new samples of coloured *smalti* and *vitreous glass* accurately.

Table 4.4.3
Methods Used for Matching Mosaic Material to Original Artwork.

FOCUS	**Method No. 1**	**Method No. 2**	**Method No. 3**
Type of material employed.	• Prefabricated material • From manufacturer's available stock.	• Prefabricated material. • From manufacturers available stock.	• Manufacturer created (custom made) material. • Not available from manufacturer's stock.
Mode of use.	• Used alone. • Unmixed with other colours, tints or shades.	• Used in combination with other tesserae. • Intermixed with other colours, tints and shades.	• Used alone. • Combined with other colours to form intermixtures.
Matching the material to original art-work.	• Colour matched with art-work from manufacturer's sample boards.	• Creation of adjusted hues tints and shades by (attempting) to mix colour *optically.*	• Mosaic material matched to colour swatches derived from original art-work. • Creation of adjusted hues, tints and shades through *optical colour mixtures.*
Resulting physical appearance.	• Monochrome areas. • Differences in colour and tone occurring from natural variation in batches of glass.	• Areas of *broken colour.* • Colour created from varying proportions of differently coloured material mixed together.	• Monochrome areas. • Areas of *broken colour.* • Colour created from varying proportions of differently coloured material intermixed.

Plate 4.4.4 Sample board of *vitreous glass* (lower five far left); *smalti* (top left to top right) and cubes of gold glass (group of four, bottom far right) from *Angelo Orsoni,* of Venice. Supplied by *Urban Art Projects,* Brisbane, 29.5 x 21cm.

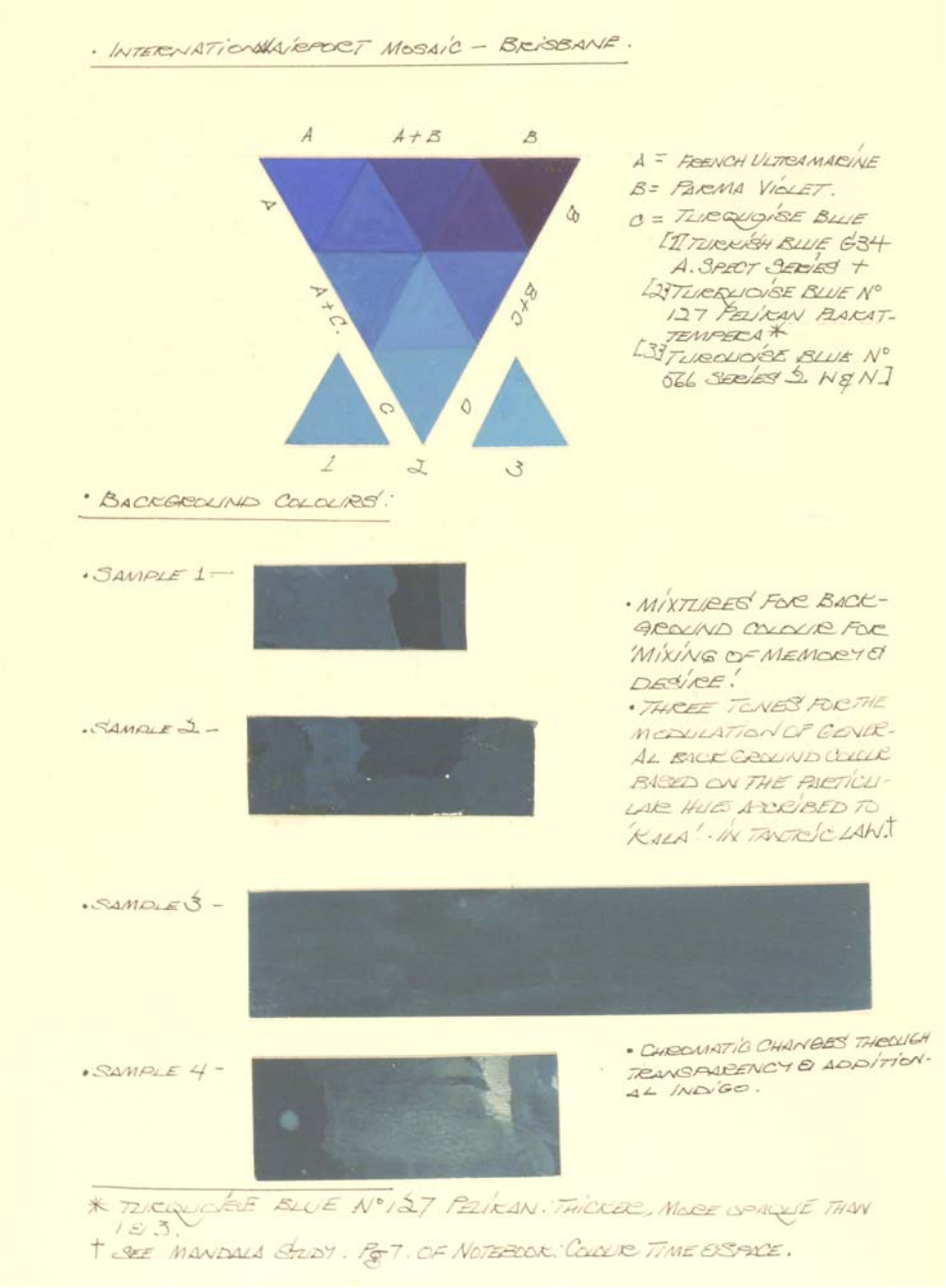


Plate 4.4.5 *Preliminary Colour Samples,* prepared for mosaic manufacturers for *Brisbane International Airport: Terminal Complex,* 28 x 21.5cm: Notebook No.VI.

Plate 4.4.6 *Colour Swatch,* prepared for mosaic manufacturers for the *Brisbane International Airport: Terminal Complex,* 28 x 12.5cm: Notebook No. VI.

Plate 4.4.7 *Preliminary Colour Swatch,* prepared for mosaic manufacturers for *The Mixing of Memory with Desire,* 28 x 21.5cm: Notebook No. VI.

As far as the *Strand Redevelopment* work was concerned, the colour swatches prepared for the *Air Terminal Complex* (together with the supplier's available material) proved to be sufficiently inclusive to encompass this project as well. It was possible therefore for the *Strand Redevelopment* work to be completed without the need for further preparatory colour swatches. Even though a preliminary swatch was initiated, anticipating those tints and shades designated for the background (see Plate 4.4.8 from Notebook VI, Figure 4.1.3), no additional chromatic augmentation or material supplies were required.

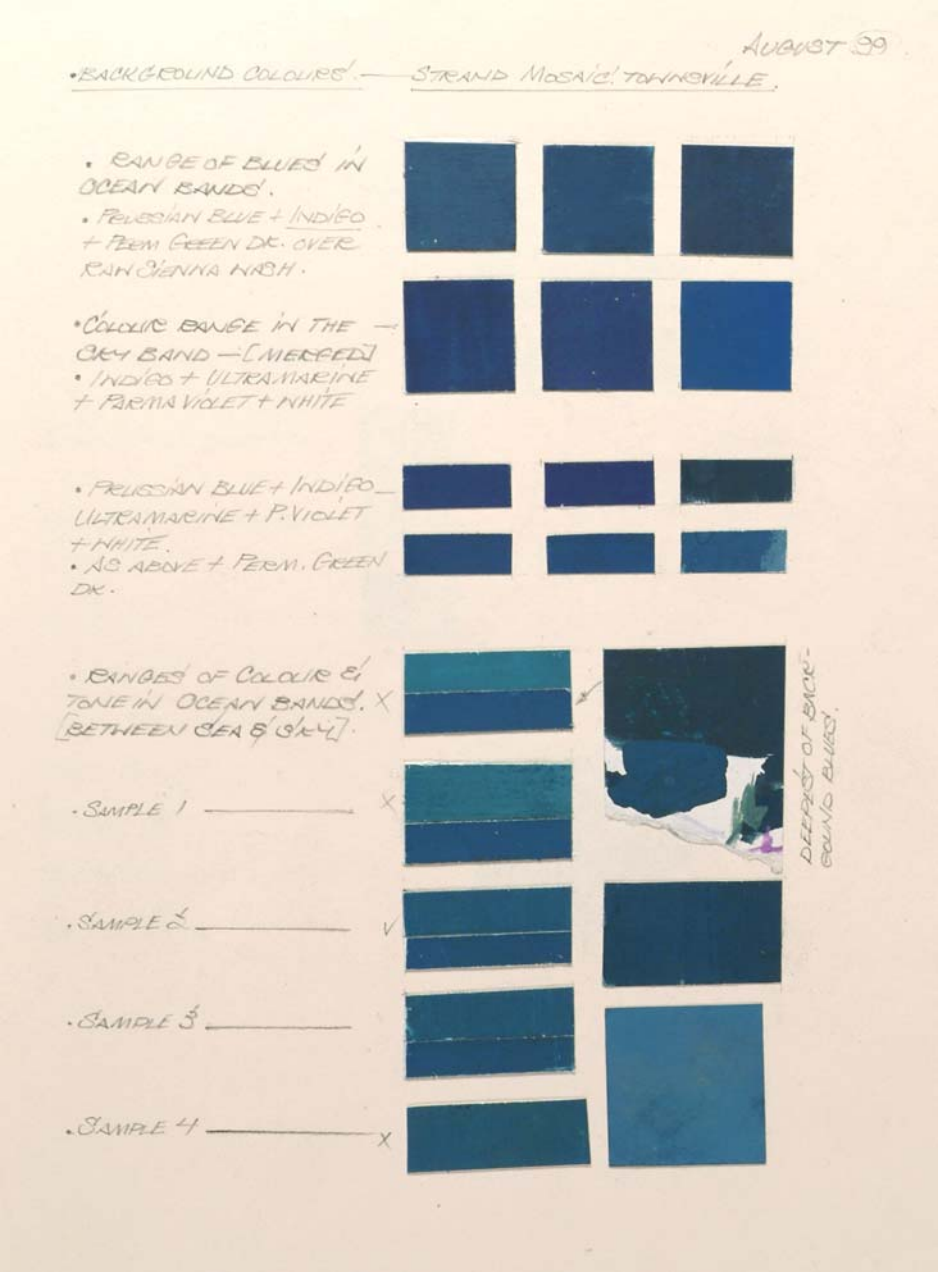


Plate 4.4.8 *Preliminary Colour Swatch,* prepared for mosaic manufacturers for the *Strand Redevelopment Project,* 28 x 21.5cm: Notebook VI, (not used).

4.4.2 – Site Location and Placement

The following subsections address those issues associated with the *site locations* and the *preparation and installation* of the completed Public Artworks. Though the siting of *public art* is almost without exception predetermined by the agenda of the commissioning body or client, in the case of both interior and exterior architectural projects, sites (or a selection of potential sites) are also to a large degree pre-planned and provided with a physical shape (if not tangible form) into which art-works will be *built-in.* However the degree to which architects and engineers are prepared to accommodate the inclusion of art-works and factor them into their overall design concepts sympathetically is often variable. Although in this regard positive incentives have been provided with the Federal and State Government's capital works building programs policy, design concepts are generally blanketed by "… the overiding concerns for efficiency and economy…" (Macaulay, 1988: 34). Both Public Artworks with which the artist has been involved came under the umbrella of the Queensland State Government's *Art Buit-in Policy*, (July, 1999) whose mandate stipulates that "… a capital works building project [should] allocate 2% of the budget to commission, create and manage public art." (Chadwick, Personal Communication: 1999). However this is not a policy that is either uniformly or necessarily embraced by all (Chadwick, Personal Communication. 1999).

The differences which exist between private and public artworks are obviously very great particularly, as noted by Macaulay (1988), from the standpoints of

> … the potential interactions of artistic ego and audience, the nature of artistic challenges arising from restraints, and the relations of artworks to locations and settings.
>
> (Macaulay, 1988: 51).

Considerations in relation to the site are many and varied. These were raised in the design brief itself and cover a broad spectrum of issues from the materials, colour palette and finishes used, considerations of scale, lighting, and climatic conditions, to public accessibility, functional use, building regulations, local government planning requirements and structural concerns with regard to mounting and fixing the artwork etc. (see Appendix D.3). A raft of other considerations also emerge regarding the matter of location; these range from historical associations and environmental issues to heritage considerations, and from thematic requirements to the business of corporate identity (see Appendix D.3). Though many of the topics cited above have already been discussed, others, however, have not and are addressed in the following subsections.

4.4.2.1 – Study of the Site Locations

The following discussion addresses those aspects of the two *public artworks* concerned with the *sites* and their *locations*. Although the work carried out for the *Air Terminal Complex* and the *Strand Redevelopment* project shared a common pictorial theme, the nature of their *site locations* was, to a great extent, manifestly dissimilar. There are however, two major points of correspondence (in terms of the *site*) which are worthy of note. The first is, that both Public Artworks can be viewed

against the background of an unfolding progression of events (regarding their execution), during which the *site locations* remained not only positionally constant, but also had a significant impact on their shaping. (see Tables 4.3.4 – 4.3.6 and 4.3.2.1) The second instance of congruity was simply that both *public artworks* were located *in-ground* (see 4.3.3.2).

The *Brisbane International Airport: Terminal Complex* is located approximately thirteen kilometres from the *Brisbane Central Business District* and is separated from the *Brisbane Domestic Terminal* by one and a half kilometres. The interior architecture is open and spacious, designed to accommodate "… the abundant use of subtropical landscaping and natural light in the central zone…" (*New Brisbane International*, *FAC*: 1995). With regard to this aspect of the *site,* four *in-ground* planters containing fairly mature palms were set across the horizontal axis of the floor on either side of the main panel of the artist's mosaic works. The planters were an extant architectural feature and had therefore to be considered in the artist's overall design, as did the position of two escalators which terminated (at some distance), opposite each other at the floor's centre. (see Appendix C.2 and Plates 7.1.30 – 7.1.32.

The three mosaic elements, that is the principal arc-shaped panel, the quadrangular centrepiece and two *ribbon* bands, were placed with the following factors in mind. First and foremost was the conscious need to situate the various elements of the work in a manner which empathized with the general *tenor* of that part of the building in which they would be placed, while at the same time taking advantage of the uniqueness of the *site*. This involved a careful consideration of the directional flow

of traffic across the floor, entrances and exits, sight lines and angles (including those from above) and the intrusion of architectural features e.g., pillars, planters, escalators and the like. The work was illuminated by two different light sources - one mobile in the form of daylight from the glass roof above and the other static in the form of *art-lighting* installed immediately over the work. However, due to the fact that the *indirect* (or *reverse*) method of *setting-out* the *mosaic* material was employed, full advantage could not be taken of the light reflective qualities of the tesserae from either source. (see Table 4.4.1).

On the other hand, the site location for the *Strand Redevelopment* project represented a small part of the complete redevelopment and *amenitization* program for a two kilometre stretch of exposed beach front (see Appendix D.1 and D.3). This extended from *Tobruk Pool*, marking its eastern extremity (and approximately half a kilometre from the *Townsville Central Business District*), to *Kissing Point* at its western end where the beachfront gives way to a steep rocky incline. The Public Artwork was to be *sited* in a small paved amphitheatre, designed to accommodate musical and theatrical events (*al fresco*) and located opposite *Gregory Street* approximately half a kilometre to the west of *Tobruk Pool*. (see Appendix D.1 and D.2).

Although only one (large ovoid) mosaic element was created for the *Strand Redevelopment* artwork, those issues cited in relation to the works for the *Air Terminal Complex* also obtained. These involved a need to situate the work in a manner that accorded with the *tenor* of the *site* from both an architectural and environmental standpoint. In this regard it was important to consider not only the

way in which the site would be used, but also the nature of the traffic (mainly pedestrian) to which it would be subjected. This included the path of its flow in relation to both the adjoining walkways and the axial direction of the work itself. As already mentioned, the mosaic was not only shaped to empathize with the overall form and purpose of the amphitheatre in which it was set, but also to endow it with a sense of the *site's* historical and environmental associations e.g., the erstwhile presence of small lagoons (particularly *humbuluna*) and their use by the local indigenous population (the *Wulguru-kaba*) during the period of *early contact* (see 4.3.2.1 and Appendix D.5). The pictorial elements of the composition were designed, as noted by Ingrid Hoffmann (1999) in her draft for the signage, "… within a pool-like shape, …[which] reveals the interwoven presence of human, marine and bird life ….[and] interconnections between human and vegetal forms…" (Hoffmann, 1999: Appendix D.4).

Prior to its execution, the design for the artwork was examined in terms of its propriety, by a group comprising the traditional land owners (tribal elders) from the *Wulguru-kaba* and *Bindal* peoples. They reviewed the work from a number of viewpoints which included, among others, the visual context, characterisation of the pictorial elements in terms of modes of representation, and the utilization of symbolic referents. Though they commented on the depiction of *Coconut Palms* (see Concordance, Appendix A) as not being native to the region, the portrayal was nevertheless approved as it was generally recognized that the plants had long been used in the Islands further north, off the coast of Cape York (and in the Torres Straits) and had been utilized to some extent by indigenous peoples subsequent to the plant's migration further south.

The source of lighting for the work is predominantly natural e.g., direct sunlight, with low level *standard bollard* lighting illuminating the amphitheatre at night. As the *site location* of the mosaic work is in the *open* and unprotected, it also remains at the mercy of the elements and the vagaries of severe climatic change. Normally this would not pose a serious threat, but the close proximity of the work to the ocean (see Appendix D.1) together with its extremely high level of exposure to the weather(in a region subject to seasonal cyclonic conditions, unlike the *Air Terminal Complex*) puts the work at high risk of damage, with the possibility of its total immersion in seawater, (causing possible undermining) and complete coverage with sand. (Gottlieb, 1999: see Appendix D.3). Although sand coverage in itself was not considered to present such a serious problem, its careless removal certainly could.

4.4.2.2 – Preparation and Installation of compeleted *Public Artworks*

The previous subsection (4.4.2.1) treated those facets of the work which highlight a range of issues concerned with the *site locations* of both Public Artworks. Yet to be touched upon however, are those aspects of both Public Artworks which address the issues of their *preparation* for and methods of *installation.* It should be reiterated that the technical methods and procedures for creating the pre-fabricated mosaic pieces and installing them was the business of the fabricators in both cases, i.e., the *Air Terminal Complex, ABC* and the *Strand Redevelopment* project *UAP.* (see 4.4). During the formative stages of the creation of both Public Artworks, the artist's role as that of consultant was substantial and the association with the fabricators close. However such a close co-operative relationship was not considered to be as necessary (as the works neared completion) with either the *preparation* or *installation* by either of the art advisory services or the mosaic fabricators.

Nevertheless, in the interests of completeness, the following description draws attention to the concluding stages of the development of both Pubic Artworks, whilst at the same time addressing those features of the work in which the artist was directly involved.

Preparations for installing the work may be considered at two significant stages, forming as it were, a bracket inside which the entire fabrication process is set. The first occurred at the planning and concept-design stage, and the second arose prior to the transportation of the completed works to their respective *locations* and their on-site *installation.*

A significant element at the concept-design stage of both Public Artworks was the preparation of independent coloured drawings. These not only illustrated and located the position of the work to scale (in relation to the architectural plans), but also took into consideration the colour and material of the surrounding floor and pavement surfaces. As a part of the overall concept, coloured floor plans were prepared for the *Air Terminal Complex* e.g., a polished blue-grey *granite* surface (see Plates 7.1.30 - 7.1.32, 7.1.34 and Appendix C.6) and for the paved amphitheatre in the *Strand Redevelopment* project, small square sand-coloured pavers (see Plate 7.1.38 and Appendix D.4).

Consultation at this stage of the development was requested for both Public Artworks (though no drawings were required) regarding the most appropriate placement of *expansion joints* in order to reduce the possibility of compromising the integrity of the mosaic surfaces. Though the *expansion joints* represented an essential structural

component (designed to prevent cracks from appearing in the work, either as the result of floor or ground movements), their ill considered placement could severely disfigure the appearance of the completed mosaic.

Due to the large scale of both mosaic works they were, following their completion (and backing with epoxy resin), rendered into *precast sections* and subsequently transported to their respective *site locations* for installation (see Appendices C.6 and D.4). No consultation was called for during these stages of the work as both mosaic works could be prefabricated in sections without impinging significantly on any part of the major pictorial elements. The *installation* of the prefabricated sections for both Public Artworks required that "… wooden templates … be laid into the floor [or pavement] level slabs. These …[were] removed at the time of installation and the mosaic panels fixed into the existing space." (Gottlieb, 1994: see Appendix C.5). The grout and bedding materials employed in the *laying* of the mosaic panels are also of an epoxy amalgam. In terms of their equal suitability for utilization in both interior and exterior *site locations*, it is claimed that, though they are relatively new adhesive materials, when put to the test they have demonstrated their

> … superior adhesion over mortar bedded and grouted mosaics, plus a superior ability to withstand vibration and load. The system [also] withstands vehicle traffic and is successfully used in shopping malls, pedestrian plazas and vehicle access areas.
>
> (Gottlieb, 1994. Appendix C.5).

4.5 – The *Four Quartets* and Developments

The following section and sub-sections are related to Figure 4.1.1 which, in its lower half, illustrates, identifies and documents in diagramatic form all the most significant artworks (and the stages of their progressive development) which comprise the *Mixing of Memory with Desire*: *Four Quartets.* The diagramatic shapes in Figure 4.1.1 denote the shape and proportion of the original works and the colour represents a chromatic approximation of their respective background fields. Each stage of the work has been grouped vertically under a common heading. However the progression of their individual developments can be navigated horizontally, proceeding from the two columns at the centre of the page and identified as *compositional works.* The coloured rectangular and pentangular shapes to the left of the *compositional works* denote the *principal painted works* and their *parallel developments.* The coloured shapes to the right of the centre of the page chart the progress of the two Public Artworks, including the *adapted painted works* from which they were translated.

4.5.1 – Compositional Works

As already mentioned (see 4.5) the *compositional works* are displayed in two columns at the centre (lower half) of Figure 4.1.1. The left hand column represents four pairs of works, each pair ascribed the letters marked A and B (a total of eight pieces) which precede the *principal painted works* immediately to their left and the *adapted painted works* to their right. Each pair of works in this column represents a line drawing A with a monochrome painting B below it. The drawing A, represent

those aspects of the compositional process in which rhythmic structure, strophic intervals and the position of registers have been worked out e.g., the proportion of sky to the ocean, the river to its banks and their horizontal placement. The coloured rectangles B immediately below the representations of the drawings indicate those works in which the colours of the background fields and the position and nature of all the major pictorial elements was worked out (see Plates 7.1.9, 7.1.10, 7.1.11 and 7.1.12).

The right hand column, however, indicates the relationship and position of additional *compositional works* which led to the development of the Public Artworks. The two arc-shaped rectangles represent adaptations of the first pair of works adjacent to them in the left hand column. The arc-shaped rectangles A and B also represent a compositional line drawing A revising the rhythmic structure and, below it, a monochrome painting B denoting the general background colour and pictorial elements. The square, circle, and two quadrangles immediately below ascribed the letter C are directly related to A and B (above) and represent a sequence of new *compositional works* designed for the first Public Artwork – the *The Brisbane International Airport: Terminal Complex.* The two oval shapes A and B at the bottom of the right hand column also represent a compositional line drawing A, and below it a monochrome painting B indicating the colour of the background field. The oval pieces also represent *compositional works* which led to the second Public Artwork – the *Strand Redevelopment* project.

4.6 – Principal Painted Works

The *principal painted works*, positioned to the left of the *compositional works* represent the *suite of four paintings* and *companion pieces* constituting the *Four Quartets.*

4.6.1 – Suite of Four Paintings

The shapes representing the paintings have been numbered from I to IV and denote the completed paintings (both in their original and altered orders) as developed from the *compositional works*. The third painting in the series (III) was, in fact, not completed, the main pictorial elements were however, re-arranged and became the foundation for the oval composition.employed for In the Lagoon of Mythic Origins (see Plate 7.1.37). It was this that led subsequently to the second Public Artwork – the *Strand Redevelopment* project. Therefore only three of the *suite of four paintings* were completed, though four were originally planned as *compositional works* (see Plates 7.1.13, 7.1.16 and 7.1.19).

4.6.2 – Companion Pieces

Two accompanying sets of five individual triangular works - *companion pieces* A and B - were generated as a development of the *pentadic geometry* from which the original rectangular *compositonal structures* were created. The triangular pieces (representing the five elements) may be understood perhaps as being *footnotes* to, or

corollaries of, the *principal painted works* (see Plates 4.3.3 – 4.3.9 and Plates 7.1.14 and 7.1.17).

4.7 – Parallel Developments

It was envisaged during the early stages of developing the *suite of four paintings* that, if successful, they would be re-worked on a larger scale (see figure 4.1.1, A and B far left) and perhaps in media and on supports, other than those employed for the original paintings e.g., a mixture of gouache, egg tempera and dry ground pigments on stretched paper.

4.7.1 – Enlarged Version: Exploring other Media

It was felt that, as the original works constituting the *suite of four paintings* were small in size (see Table 4.3.3), all aspects of the work from the original compositions to the quality and deployment of colour could be evaluated more critically if re-worked on a larger scale. In addition to the increase in scale, the artist felt that perhaps modified supports or media might also be employed (see 4.7). The support or carrier represented the principal concern, as unsupported paper on a large scale does not provide a firm enough surface for multi-layers of opaque egg tempera to be employed (due to its inherently brittle nature). Essentially the following criteria needed to be met:

- Maintainance of rigidity over an area of at least 17 x 112.5 cm;
- Resistance to warping or buckling after liquid applications of painting ground;

- Ground compatability with a range of water-based paint, including egg tempera and raised gilding media (and one that could accept burnishing);
- Minimal weight

Without making any changes to the painting media, a number of possibilities presented themselves from the standard stock of traditional supports, yet few could fulfill the above criteria. From the outset, the criteria strongly suggested the use of a thick board or panel and, though a variety of commercially prepared boards was available (the surface of which is specifically prepared for use with water colour and gouache), without cradling and at the scale proposed they lacked the necessary rigidity to accept a gesso ground suitable for egg tempera painting. The alternatives were those rigid timber supports traditionally used for tempera and oil painting and, more recently, compositions of wood, such as plywood, or boards manufactured from reconstituted compressed wood fibre or wood chips. Whilst these boards, when properly prepared with coats of size or gesso or both, provide ideal surfaces for oil (based) paint and egg tempera, they tend not to accept gouache quite as readily. Consequently it was necessary to create a support with both the firmness of a wooden panel and a surface with the qualities of (*hot pressed*) hand made paper.

In itself the glueing of a piece of dampened paper to the surface of a sized timber or plywood panel presents no serious difficulties. What *can* be problematic however, even when the panel is heavily sized, is that (over time) stains will almost certainly work through the paper and discolour the painted surface. To prevent the paper from staining, it is desirable to apply several intermediate layers of gesso to the surface of the panel on top of the size. It was felt that this would not only provide a surface

impervious to staining, and interference from beneath, but also one that was smooth and firm enough to accept the adhesion of a sheet strong paper without warping.

It might well be asked whether any precedents exist for using supports of this kind and, if so, to what extent have they been successful? The answer to the first part of this question is that there are indeed a number of examples of the use of supports of this kind and references to their construction both in Europe and the East. The second half of the question is answered by the relative age of some of the surviving examples. The senior conservator Jill Dunkerton (1991) notes that

> A pattern book known as the 'Vienna Vademecum' … probably compiled by a Bohemian or Austian painter in the late fourteenth or early fifteenth century, includes heads of different types … carefully drawn … on prepared paper pasted to wooden panels.
>
> (Dunkerton et al., 1991: 141).

Its utilization as a support for *model* and *pattern books* produced for and by European painters during the fourteenth and fifteenth centuries does not appear to have been uncommon and it is of some interest that a number of them also represent a "… celebration of innovative and individual design." (Binski, 1991: 56).

A similar method was also utilized in Indian-Asia to prepare painting grounds for the interior surfaces of the wooden covers of paper (palm-leaf shaped) manuscript books and independent *iconic* miniatures. A description of the methods of support preparations employed for this kind of work are given by the scholar and conservator

of hand made Indian-Asian palm-leaf and paper books, Om Prakash Agrawal (1982), explains that

> For independent paintings a thicker paper-board, known as *wasli*, was used. For its preparation, a sheet of paper was placed on a smooth wooden board, made wet and then spread evenly with a soft brush. Another wet paper was pasted over it using thin starch paste…. When the board was completely dry it was used for painting.
>
> (Agrawal, 1982: 87).

Both the paper and the board were often given a coat of primer or gesso of "… gypsum or chalk, [which was] polished and given a layer of colourless laquer before the artist painted the design in water-colours." (Haldane, 1976: 4). Agrawal (1982) also remarks that "Burnishing … the paper before painting, as well as … the paint, during the painting process was a necessary and important step…" (Agrawal, 1982: 87), a step carried out in most cases with an agate (stone) burnisher.

Book covers of primed board and wood with pasted paper as a ground for (laquered) gouache paintings also make their appearance in the middle-east, particularly in Iran from the sixteenth to the eighteenth centuries. Specialist in Islamic art Norah Titley (1974) observes that "… the inside covers (*doublers*) would be decorated with …. designs cut out of paper and leather and pasted over a blue or gold primed background …" (Titley, 1979: 36).

During the nineteenth century both George Richmond (1809-96) and particularly Samuel Palmer (1805-81) utilized paper grounds on sized, primed panels as, for example, is the case with Richmond's *Eve of Seperation* (1830) and Palmer's, *A Hilly Scene* (1826), *Harvest Moon* (1833) (see Plate 4.7.1) and a painted version of *The Lonely Tower* (1886). More recently in this context are a number of works by the Viennese artists, Friederich Hundertwasser (b.1928-), notably *Antipode Island* (1975) (see Plate 4.7.2) and *Blind Venus Inside Babel* (1975), and a number of paintings by Rudolf Hausner (b.1914), particularly *It's Me,* (1948), *Adam and his Judges* (1965), *Adam's Rational Scenery* (1969) and *At Sunrise* (1974).

4.7.2 – Companion pieces

The five *companion pieces*, representing the *five elements*, and a *corollary* of the first work in the *suite of four* paintings were also proportionally enlarged. As with the original (smaller scale) works, they were designed to accompany the paintings. The media (tempera, gouache and dry-ground pigments) and the supports were identical to the *enlarged version* of the painting e.g., burnished paper mounted on a gesso ground on plywood. (see 4.7.1).

4.8 – The Public Artworks

The section and subsections which follow chart the course of those painted works prepared for and translated into Public Artworks: these are represented in the lower left half of Figure 4.1.1. The horizontal organization of the diagramatic shapes representing the individual pieces indicate their origins as *compositional works*, and their development through *adapted painted works* to their final realization as *mosaic works.*

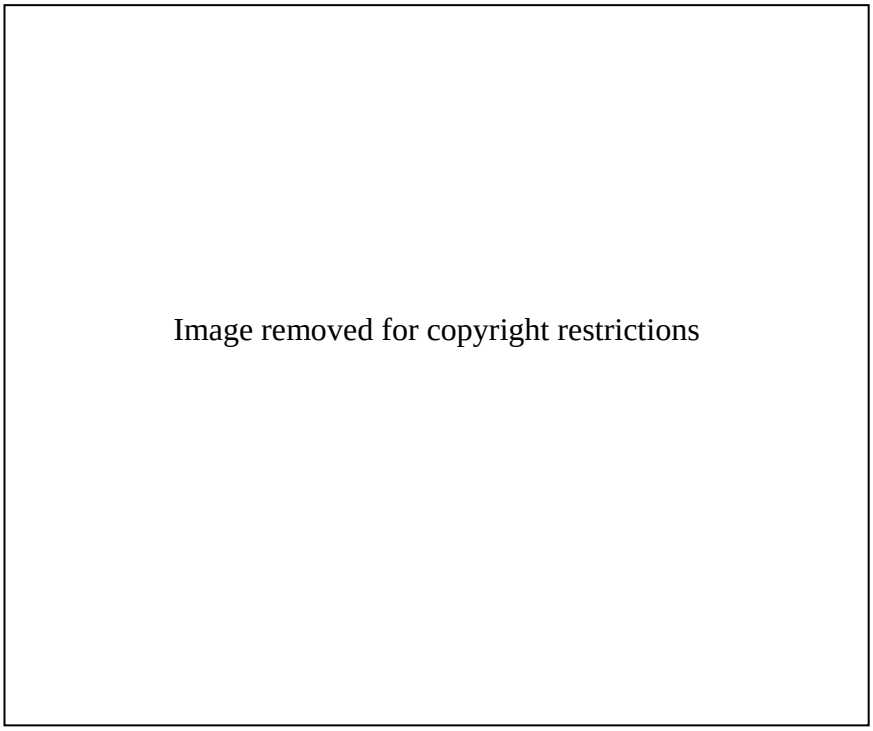


Plate 4.7.1 Samuel Palmer, *The Harvest Moon* (1833 or before), oil on paper laid on panel, 22.2 x 27.6cm,Yale Center for British Art, New Haven, Connecticut (Paul Mellon Collection).

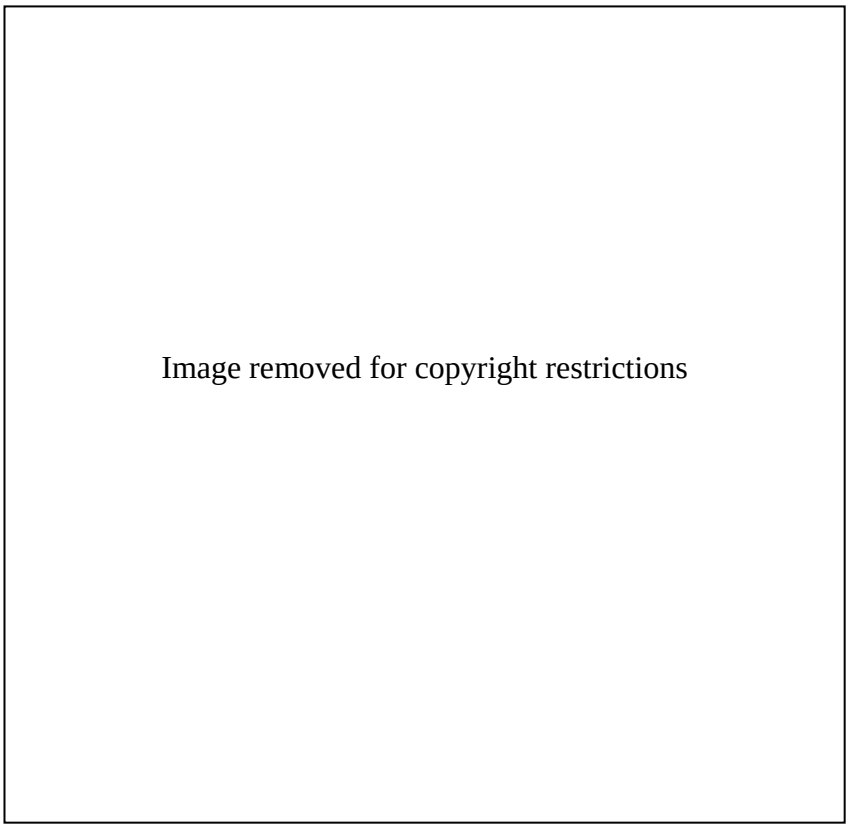


Plate 4.7.2 Hundertwasser, *Antipode Island* (1975), mixed media watercolour, egg tempera, polyvinyl, oil, lacquer, tinfoil, UHU on white primed paper, glued to hardboard with polyvinyl, 48 x 50cm.

4.8.1 – Adapted Painted Works

These are arranged vertically in chronological order. At the top of the column diagrams A and B represent those painted works which provided the designs for the first Public Artwork - the *Air Terminal Complex*. A represents the main pictorial image (see Plate 7.1.24) and B represents the composition for the central floor motif. The *adapted painting* A has its origins in a revised version of the first *compositional work* and the first in the *suite of four paintings* (*No. I*), (see Plates 7.1.9 and 7.1.23). The problems of adapting the horizontal (straight) elongated rectangle to an arc-shaped format has been discussed in 4.3.1.1. Apart from some vertical radial compositional adjustments the *adapted work* A was in every respect identical to its progenitor. Nevertheless this resulted in the loss of two elements at the horizon line and one pictorial element at the left bottom corner of the central image panel, (a *stingray*). However the extra space created in the upper half of the work also allowed for the addition of two flower spikes (*Beach* or *Indian Almonds*) at the right hand edge of the second image-panel at the horizon line, on the left handside of the work (compare Plates 7.1.13 with 7.1.24).

Though not an adaption, the quadrangular shape B denotes the final development of the series of *compositional works* which precede it and represents the composition for the central floor motif for the first Public Artwork. (see Plate 7.1.29 and Appendix C.2). The oval shape C however, represents the most extreme of the *adapted painted works* and that which was created for the second Public Artwork – the *Strand Redevelopment* project. (see Plate 7.1.37 and Appendix D.2).

4.8.2 – Mosaic Works

The final column of shapes on the extreme right of Figure 4.1.1 represents the *mosaic works*, all of which were translated from greatly enlarged colour photocopies and line drawings executed at the same scale as the on-site *voids* prepared for the finished *mosaics*. The representations of the *mosaic works* have been provided with the letters A B and C. The arc-shape denotes the main pictorial mosaic element (see 7.1.33 and Appendix C.2) and the quadrangular shape B denotes the mosaic element utilized in the central floor motif, which were both created for the first Public Artwork – the *Brisbane International Airport: Terminal Complex* (see Plate 7.1.34 and Appendix C.2). The oval shape C, denotes the second of the Public Artworks and the sole *mosaic* element created for the *Strand Redevelopment* project (see Plate 7.1.39 and Appendix D.2).