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Chapter 1 Introduction

1.1 The Nature and Impact of Silence

What is silence? Just how do we sense it and what does the concept of silence mean to most of us? The Macquarie Dictionary defines silence firstly as “absence of any sound or noise; stillness” and, secondly, as “The state or fact of being silent; muteness.” The Concise English Dictionary refers first to it as “the state or quality of being silent” and, secondly, as “the absence of sound or noise; stillness”. The English Oxford Dictionary devotes nearly a full page to the word silence so numerous are its interpretations. Its primary definition of silence refers to “The fact of abstaining or forbearing from speech or utterance [sometimes with reference to a particular matter]; the state or condition resulting from this; muteness, reticence, taciturnity”. The second definition references “the state or condition when nothing is audible; absence of all sound or noise; complete quietness or stillness; noiselessness. Sometimes personified”.

In usage, however, the word silence is rarely used in isolation. It is usually preceded by a descriptive phrase, or adjective, which describes the essence of a particular place in time. The type of silence, and the way in which we interpret it, is dependent upon the type of energy or essence which pervades a particular place at a given moment. Thus, we have a series of descriptions of the different silences that we can recognise and with which we empathise. These include the sense of a resounding silence, a deathly silence, a respectful silence, an eerie silence, a complete silence, an awkward silence, a hushed silence, a profound silence, a contemplative silence etc. When people are asked what silence means to them, the response is usually to do with the absence of intrusive noise, typically man made, whether it be the human voice or the everyday sounds of
civilisation that is, tools, machinery, music, dogs barking, cats fighting etc. Complete silence, unless one is in a sound proof room, is somewhat elusive, more a concept than an experienced reality.

Playwrights, poets and novelists are aware of the different qualities and moods associated with silence. They understand that audiences will have no difficulty in understanding and empathising with a particular description of silence when setting a certain scene, for example in Harold Pinter’s play *Silence*, the character Ellen says, “Around me sits the night. Such a silence”. (Pinter, 1969:49) Pinter is relying on his audience to interpret the type of silence being experienced by Ellen. Even though our responses are on a subjective level we have enough experiences in common to enable Pinter’s reliance on our interpretive skills to work theatrically.

### 1.2 Parameters of Silence

That the word *silence* is used in so many ways is indicative of people’s acceptance and recognition of the different qualities of silence and also acknowledgment of an individual’s ability to interpret the different types of energy that permeate the variety of silences we encounter in our daily lives.

Silence experienced on a daily basis in an urban environment is usually related to people and their needs. Frequently it is the cessation of sound, in which, “silence like a poultice comes to heal the blows of sound” (Holmes, 1860:122). The other type of silence is the silence that reaches out and engulfs us with its energy. This is the silence that is integral to the landscape and is the energy of the earth. It is this earth energy that
speaks of the power and the frailty of our natural environment. Our ability to listen to
the silence of the land and recognise the different qualities and energies associated with
certain places has, until recently, been largely ignored by Western civilisation.
However, for cultures more attuned to the land, this knowledge of the earth’s energy has
been of major significance, this has been the case throughout history.

Primitive cultures were aware of their environment, their lives dependent upon their
ability to interpret nature. They acknowledged and respected the energy emanating
from the earth. The places acknowledged by these peoples as sacred, used for
ceremonial purposes or burial grounds would be likely to have yielded abundant energy.
Many places, although now civilised, are powerful enough to retain a strong sense of
this energy. For example, in the Rocky Mountains of Canada, the Banff Centre for Art
has been built on the slopes of what is currently called Tunnel Mountain. Creative
people from all parts of the world come to live and work at the Centre. Many have great
trouble sleeping and, when they finally do sleep, they have weird and frightening
dreams. The local Indians attribute this to the fact that Tunnel Mountain was once a
sacred Indian site known as Sleeping Buffalo and was, according to Cree poet Louise
Halfe, a dreaming place, (personal conversation 2001).

The landscape, the earth, is a large repository for this energy, an energy recognised by
many cultures of the world. The Chinese call it Earth Chi [energy] and it is the basic
philosophy behind the ancient Feng Shui practice, which is becoming increasingly
popular in the Western world. It is a practice that recognises different energies
associated with elements such as earth, water, heat and the need for balance in all things to attain harmony.

The Chinese believe that, when the natural flow of Chi has been disturbed, it becomes unbalanced and out of harmony. Life then begins to go awry. In certain places within the landscape the Chi has been so disturbed that it is possible to sense this disruption. This sort of atmosphere can be sensed and is often described as an eerie silence analogous to that frequently experienced at deserted townships and mine sites, hundreds of which are scattered over the north and north west of Queensland. These are places where huge disruptions of some sort have occurred and the Chi is unbalanced.

One good example of a site that has been both recognised for its spiritual qualities and later desecrated is the camp of the Jordan gold field located in the Innisfail region. Originally a sacred Bora ground used by local aboriginals for ceremonial purposes, it became the site for the goldfield settlement as it was the only flat land in the area. (Hooper, 1998: 436) The original inhabitants recognised the power of this site and consequently treated it as sacred. It is easy to imagine the later casual abuse by the miners causing serious disharmony.

Places where extreme violence has occurred also retain a sense of disruption that can be sensed. For example, near Winton, in the midst of the salt pans located in Bladensburg National Park is a beautiful and unexpected deep gorge. The only trees to be seen for miles grow around the waterhole. It should be a happy place, witness to generations of aboriginal campfires. Instead, the site generates feelings of unease to the extent that one
day, instead of picnicking there as intended, we felt compelled to move elsewhere.

Later, I read that the name of the waterhole was Skull Hole and was the site of a large Aboriginal massacre in the late 1800s.

In the urban environment in which most of us live, we have distanced ourselves from the land and our perception of the earth has changed over time through lack of contact. Yet people are still able to connect/recognise different atmospheres that exist within the urban landscape. For example, buildings said to be haunted contain an energy that is recognised by some people. Children frequently dare one another to venture into the cemetery at night and become totally spooked by the atmosphere once in there. Other environments within the urban landscape contain a quieter, more reflective energy. This type of energy is usually found in places such as shrines, churches and remembrance gardens.

1.3 Silence and the Individual

We frequently wish for silence, but do we really mean the silence as defined by the Macquarie Dictionary? For the individual, silence has many dimensions. To any particular place and time we bring knowledge from a multitude of sources — our past experiences, ethnic origins, expectations of the future, visual associations and empathetic interpretations of our surroundings — all of which help us to interpret the silence unique to a particular place.

We respond to silence in different ways. For some people, silence is a thing to be feared. They do their utmost to avoid it, having the television or radio blaring in the
background of their lives and never ever allowing themselves respite from noise. Such individuals will conduct conversations with loud noise as an accompaniment, talk in loud voices to be heard, yell even louder at their children, dogs or neighbours and then fall asleep at night with the radio or television still on. Perhaps these people are the victims of our high tech society; never having had much time for reflection, their psyches seem quite unable to absorb anything that is not accompanied by a cacophony of noise.

Others crave quietitude and embrace silence, unable truly to relax and rest while there is the distraction of sound. For some, this takes the form of living in quiet places and blocking any external noises that prove distracting. Some will have air-conditioners or fans on while they sleep, preferring the background hum of one specific sound to a plethora of distracting noises. Others are able to sit amid a barrage of intrusions and meditate their way to a place of silence and remain there, oblivious to all around them. This need for and importance of periods of reflection in our increasingly busy lives is well encapsulated by Kostelanetz (1955) who wrote:

We listen too much to the telephone and we listen too little to nature. The wind is one of my sounds. A lonely sound, perhaps, but soothing. Everybody should have his personal sounds to listen for – sounds that will make him exhilarated and alive or quiet and calm……As a matter of fact, one of the greatest sounds of them all – and to me it is a sound – is utter, complete silence. (Kostelanetz, 1955: 300)

And yet, even though the need for silence in our lives may differ, we are still able to sense the different energies that contribute to a particular silence. For example, a child coming from a noisy environment will be able to discern the different types of energies that make up a specific silence in much the same way as can a profoundly deaf person.
For most of us then silence means a quiet time, away from distraction, a moment of peace in over-full lives. It is a time for reflection, for absorbing the atmosphere and surroundings of where we are at that particular moment of time. If we are receptive, we become aware of other energies that fill the stillness; energies or forces that are unique to that particular place and time and influence how we feel while in that space.

We all have favourite outdoor places to which we like to escape when we need some quiet, places where we can relax and become attuned to the sounds of nature and the peculiar energy that surrounds us. This energy that fills the silence can be felt in many places but, to me, seems strongest in the dry bush as seen in Plate 1.3.1 or desert country and in landscapes that were once inhabited by mankind and then abandoned.
1.4 Exploration of Silence

The continent of Australia is an ancient land rich in fossil and mineral deposits. Its first
human inhabitants recognised and adapted to the flow of the land in order to survive.
They sensed the energy unique to certain places and these sites became important
spiritual places for the people. They decorated the rocks with paintings and carvings and
created wonderful legends to explain how these places came to be. Today, 40,000 years
later, the spiritual quality and the intrinsic energy of these sites are recognised the world
over. A good example of this is Uluru, with many people travelling great distances to sit
and meditate at this site absorbing the energy that is perceived to surround it.

There are multiple schools of thought as to the purpose of earth’s energy, although
many share the belief in what is known as the earth’s energy grid. This grid consists of
lines of energy that run through the planet earth, having key focal points that are
believed to be powerful with Uluru, being one of the focal points. The grid links up
sites such as Uluru with other powerful and sacred places, all of which are believed to
be potent healing places. Some researchers claim these grid or ley lines (sometimes
also called Dragon or Spirit Lines) are paths of spiritual power in the landscape; others
regard them as paths for shamanistic trance. Still others claim that they are landing grids
for extraterrestrial visitors.

That an ever increasing number of people are recognising the different energies
associated with the earth is evidenced by the New Age beliefs in herbalism and the life
enhancing and restorative powers of crystals and gemstones each purporting to contain
different sacred and healing properties. Earth Goddess cults of various kinds are increasing as is the following for the North American Indian Shaman vision quests.

That the land appears to be of growing emotional and spiritual significance for an increasing number of people could be due to a growing dissatisfaction with Old World religious beliefs – their inappropriateness to many in this newly discovered old, old, land. Many are no longer able to see the relevance of European gods. Craving some form of spirituality in their lives, more and more people are recognising the innate power of the Australian landscape, long known and accepted by Aboriginal people. They feel the need to forge a new identity, a more spiritual connection to the land based on Aboriginal connectedness to their whole environment.

Despite the fact that Australia appears to be one of the most secular and godless societies in the modern world, there is good reason to suppose that an authentic rediscovery of the sacred is already in preparation here. Although at an external level Australia seems committed to the heroic, rationalistic and ego-building values of Western culture, unconsciously there is a movement in the opposite direction, a tendency toward dissolving the ego and embracing the archetypal and elemental realm. (Tacey, 2001: 4)

There is a wave of recognition of the spirituality of the land and power sources associated with specific sites. The Peter Weir film, Picnic at Hanging Rock (1975) based on a novel by Joan Lindsay (1967) depicts

…the uncanny and awful earth-sacrifice of beautiful young women at the archaic and craggy monument that is Hanging Rock. This rock we are told, erupted from the earth’s interior millions of years ago. (Tacey, 2001: 68). Lindsay has performed an important cultural task in showing us how unconscious, entranced, and subservient to archetypal forces we are in Australia. (Tacey, 2001: 69)

When this film was released, I remember being surprised at the easy acceptance of the story by people I knew. Instead of disbelief, there was talk, instead, of other mysterious
disappearances and eerie, unexplained happenings. To me this demonstrates the acceptance by many of the unknown power and physic qualities of the Australian landscape. It also, perhaps, demonstrates the fear of the unknown by a population which mainly exists huddled at the edges of our continent.

Coupled with this growing interest in the intrinsic spiritual qualities of our land is the increasing awareness by many of the urgent need to protect it from the depredation and exploitation of mankind:

Politicians and media commentators sometimes pay lip-service to that special relationship to the land that is integral to aboriginal culture, but unless non-aboriginals have experienced a physic connection to landscape they will not learn to respect the mythic bond between this land and its indigenous inhabitants. Political goodwill alone will do very little to bridge the gap between cultures. The same is true of our ecological crisis: we can urge each other to care more about the environment, but until we have revised our sense of identity to include the natural world, our best intentions may be in vain. The cure for our ecologically disastrous abuse of the earth and for our culturally debilitating racism is the spiritual renewal of consciousness. (Tacey, 2001:224)

However, before we can begin to protect our land from constant and increasing exploitation, many more people will need to become attuned to the spirit of the landscape that surrounds them. They will need to listen to the silence as only then will they be able to absorb and interpret the energy that surrounds them.

While there is acknowledgment and acceptance of Aboriginal connectedness to the spirit of the land there are varying opinions as to just how far, or in which way, those of European descent can feel the same sense of spirituality and belonging. Hillman (1982) observes that

The influence of a place - or the *anima loci* - would differ according to the state of the human soul that is turned toward it. There would be a commingling or
confluence of person and land in the psychic depths, and this could be envisaged as an alchemical interconnection, leading to any number of permutations and changes.  

(Hillman, 1982: 71)

While this is an intriguing idea, Hillman may well be giving too much power to the human psyche and insufficient credence to the innate power of the Australian landscape. As mentioned (see 1.1), we all carry a variety of information with us wherever we go, based on knowledge and life experience, and it is this which helps us to recognise the different types of energy that is predominate at a particular site in the landscape. It helps us to read the silence.

Ever since the European invasion and settlement of the Australian continent, visual artists and writers have been recording their emotional responses to a landscape that was so different from their homeland environment. Initially these works were stilted and romanticised renderings, the artists approaching the depiction of the Australian landscape in the same way they had recorded idyllic days in the English countryside. The painters of the Heidelberg School certainly captured the beauty of the Australian landscape in a way it had not been depicted previously. However, the spirituality of the landscape was not explored conceptually by non-indigenous Australians until works by Ainslie Roberts (1911-1993), Arthur Boyd (1920-1999), Sidney Nolan (1917-1992) and Albert Tucker (1914-1999) started appearing in the 1940s. Many non-indigenous artists felt the inherent power in the landscape but were unable to come to terms conceptually with the spirituality of the landscape. Commenting on the writing of D H Lawrence’s novel Kangaroo, Tacey (2001) writes:

….the aboriginal spirit of place, resists the society that has been foisted upon it. Not only are non Euro-Australians unrelated to the land by their own doing, but they are spiritually shunned by the new- old land”  

(Tacey, 2001:80)
...Lawrence himself, felt and suffered from the spiritual alienation that is the subject of his Australian novels ‘And the vast, uninhabited land frightened him. It seemed so hoary and lost, so unapproachable’ (Lawrence, 1968:400) (Tacey 2001:81)

1.5 Rationale and Aims of the Study

Over the past two decades the world has changed dramatically as new technology, increased population, globalisation and the growing awareness of pollution and depletion of the earth’s natural resources have changed the way many perceive the environment. Artist’s views are no exception. Traditionally, whether using an impressionistic, realistic or romantic style, visual artists’ depictions of the landscape have tended to be centred on geographical features and the individual artist’s interpretation of those features; the majority of such work has been confined to two-dimensional disciplines.

Historically, artists tend to be at the forefront of societal change and this is true of many contemporary landscape artists who have diversified and moved away from the rather restrictive traditional landscape framework - and now actually work within the frames of the landscape (see 1.4). These environmental artists

…set out to engage and encompass their audience rather than simply confront them with a ‘commodity’...As ‘nature collaborators’ typically these artists invoke a kind of spirituality in their artmaking through the sensuality and physicality of the environment. Subtly, they alert us to other ways of seeing the world. (Norman, 2001:12)

Their artwork, designed to highlight specific issues of concern and provoke discussion by those who view or interact with the work, is frequently political. No longer solely concerned with rendering two-dimensional images, many artists are physically manipulating the objects they once drew. Sometimes they rearrange existing elements
of the landscape to create a focus on a particular item while at other times arranging
found objects in a built or foreign environment. The work can be ephemeral, dissolving
back into the landscape from whence it came, the only record of its existence
documented on film or digital media. Or it can be constructed of a more enduring
medium that has equally strong links to environmental concerns but, in many ways, can
target a larger audience than site specific ephemeral work.

My work fits the latter category and has largely been focused on landscape and
environmental concerns of north and north-western Queensland. Issues relating to the
fragility and vulnerability of the earth and its inhabitants were explored in one series of
sculptural works, which related to the Riversleigh fossil fields and the unique flora of
the Lawn Hill National Park. Other works have been created in response to issues such
as drought, prescribed burning, land clearing and the impact of feral animals on native
wildlife.

For this project my research will involve taking concerns about the
landscape/environment much further, moving beyond the visual in order to explore the
primal energy that is an imperative, inchoate part of the landscape. This unseen but
powerful energy is the arbiter of an individual’s response to a specific landscape. In the
past, silence, its parameters, implications and uses, has been the focus of research in
“sociolinguistics, discourse analysis, anthropology, literature, religion, psychology,
psychiatry” (Tannen & Saville-Troike, 1985:235). However the silence of the
landscape, that primal energy that many people feel but not all recognise, has neither
been previously explored nor visually translated. This project seeks to examine the
different types of silence and, by coalescing visual elements with the invisible, create artwork that is a purveyor of energy unique to a specific landscape.

Specifically the aims of this research are:

1. To explore qualities of silence intrinsic to the landscape; and
2. To develop a personal visual response to those identified qualities of silence.

1.6 Organisation of the study

Chapter One has established the recognised parameters of silence with emphasis on what contributes to the varied essences that make up a specifically sensed silence and how these essences can be recognised and interpreted by individuals.

Chapter Two outlines the changes that have occurred in both perception and interpretation of Australian landscape art since the European invasion and settlement. It explores how an increased understanding of the spiritual qualities innate in the Australian landscape coupled with tales of Aboriginal Dreamings have led to new ways of seeing the landscape and the consequent emergence of new approaches to the depiction of the land.

Chapter Three probes the contribution of contemporary art practice to raising awareness and influencing public opinion on environmental and related political and social issues of local, national and global importance. It also positions the research in terms of the visual interpretation of silence and how silences endemic in artwork impact on how the
work is viewed and interpreted by an audience interested in, and willing to engage with art works that require more than a casual visual response.

Chapter Four outlines the methodology of the research commencing with the conceptual and technical directions from previous practice and the literature and visual research undertaken. The establishment of criteria for the selection of sites, a data collection plan, technical experimentation plan and the selection of exhibition venue and plans for the exhibition documentation are included in this chapter.

Chapter Five discusses the historic and contemporary relevance of glass as an art medium and the importance of its inclusion in the artwork where it acts as a visual metaphor for the earth’s energy and capacity to regenerate.

Chapter Six focuses on the need for experimentation prior to the construction of the artworks and outlines the numerous testing and construction processes undertaken in order to complete artwork that is a true response to the silence endemic to the selected sites and consistent with the conceptual vision.

Chapters Seven, Eight, Nine and Ten record in depth, the visual and conceptual responses to the four sites, and detail the processes relevant to construction of the individual works.

Chapter Eleven documents all aspects of the exhibition from initial contact with the gallery, including transport issues, the installation and presentation of work, lighting
and sound issues, documentation processes used, including the catalogue and invitations.

Chapter Twelve provides an overview of the project reflecting on the extent to which the artworks and resultant exhibition fulfilled the research aims. It places the research results in the context of contemporary arts practice especially in regard to the interpretation of place by means of the exploration and visual translation of silence. This chapter also documents the overall impressions and responses to the work from art critics, the media and general public and proposes new directions arising from the research.
Chapter 2  Subjective Imaging

2.1  The Interpretation of Landscape

Since the European settlement of Australia in 1788 many artists have been fascinated by, and drawn to the Australian landscape. Euro-Australians at first coped with the overwhelming sense of power in the Australian landscape by trying to depict it in a similar way to the landscapes and climates with which they were familiar for example, George Raper’s (1769-1796), View of the East Side of Sydney Cove (1790) (Plate 2.1.1), could well be a painting of a rural English scene as there is nothing recognisable as uniquely Australian in the work.

Traditionally, landscape painting developed and became a means of depicting a person’s wealth and social status or, alternatively a means of recording scientific and natural history observations. The first non-indigenous artists in Australia

… saw Australia as a new world, and as a new world the continent provided promising subjects for documentary art. First of all, there were new plants and animals to be described; second, there was an indigenous culture which the
settlers found exotic and barbarous; and third, there existed an undescribed landscape. (Sayers, 2001: 23)

Art and science were not regarded as separate disciplines at this time nor was there the distinction between professional and amateur that now exists. Many artists were also natural scientists, engineers or surveyors. Their carefully rendered artwork was used to illustrate books depicting native flora and fauna, ethnographic and topographical descriptions, as well as recording exploratory expeditions. Their combinations of skills was fortuitous, and made them the perfect choice to accompany explorers on surveying expeditions to the continent’s interior thus providing them with an opportunity to be among the first to record visual images of the arid inland country.

One such artist/surveyor was E. C. Frome (1802-90). The image in Plate 2.1.2 “First View of the Salt Desert – called Lake Torrens” resulted from Frome’s journey into the interior of South Australia during 1843. The image, a tiny drawing, depicts “… a surveyor on horseback, telescope raised to his eye, staring into the distance at the utterly flat surface of a vast salt lake”. (Sayers, 2001: 47)
The landscape depicted was so unlike the picturesque romantic landscape genre of the time and hence “… to the nineteenth-century imagination such a desolate void was simply terrifying”. (Sayers, 2001:47)

Frome has captured a feeling of the vastness of inland Australia and, although his depiction of the salt lake is descriptive of the land traversed during his journey and has not been romanticised, it nevertheless possesses the softness that is indicative of the way eighteenth century artists worked.

Samuel Thomas Gill (1818-80) was another artist whose combined skills of draughtsman-artist made him a natural choice to accompany explorers on surveying expeditions. Gill was a press cartoonist and illustrator producing mainly water colours and lithographs. His work heralded an increasing interest in nationalism with his depictions of fights for miner’s rights on the goldfields and objections to licences. Among Gill’s best works are the series of watercolours painted as a result of his journey into the Flinders ranges with J. A. Horrocks in 1846, and his illustrations to accompany Charles Sturt's Narrative of an Expedition into Central Australia painted in 1849. Although mainly interested in recording narratives of his journeys, Gill faithfully captured the colour and intensity of light unique to the outback.

While artists such as Frome and Gill were occupied with trying to produce accurate narrative works, others continued to paint in the English Romantic tradition. One such artist was John Glover (1767-1849) whose romantic landscapes paid little heed to the actual shape of Australian trees or the unique Australian light. One fascinating aspect of
Glover’s work is the way in which he incorporated Aborigines into his landscape paintings. In reality, there were few remaining Aborigines when Glover produced his Tasmanian works due to a heavy influx of settlers and “… government sanctioned policies of destruction” (Sayers, 2001: 40). Glover seemed to sense that Aborigines were a part of the landscape and possibly depicted them “… because they represented literal immersion in the landscape”. (Sayers, 2001:41) In a letter to G. A. Robinson he described his imaginings of the “… gay, happy life the natives led before the White people came here”. (Sayers, 2001:41) This imagining of Glover’s is well illustrated in Plate 2.1.3 Aborigines Dancing at Brighton 1835 in which Aborigines are depicted dancing around a fire, appearing as a natural extension of the environment.

Glover’s sympathetic attitude and empathy for the Indigenous people and his portrayal of them as part of the landscape was unusual for the time. Many considered paintings
depicting Indigenous people as a recording of a race that was thought to be on the way to extinction.

While some landscape artists were able to travel on journeys of exploration, others concentrated on pastoral scenes of the settled areas. *Homestead* paintings were popular with pastoralists, particularly before legislation ensuring the squatter’s rights was enacted in the 1870s: “… homestead paintings were one strategy of cementing proprietary claims on the land.” (Sayers, 2001:63) This means of recording the squatter’s wealth was traditional with the artwork depicting the elements that were the sources of wealth such as pasture, woolsheds, stock and the results of that wealth, house, gardens with introduced plants, leisure. A classic painting of this genre is Eugene von Guerard’s (1811-1901) painting *Glenara* (1867) (Plate 2.1.4) commissioned by squatter Walter Clark. In this work, Guerard has used paired views – one looking toward the house and the other away from it. This method enabled the source of the squatter’s wealth and the actual wealth to be displayed simultaneously.
2.2 Desire for Change

Towards the end of the nineteenth century and into the twentieth century a number of broad approaches to landscapes could be discerned:

Having no regard for Indigenous rights to the soil, and in a context of centennial celebration, artists searched for ways to depict a relationship between the emigrant people and the natural landscape. One way to express this relationship was to place recognizable historical types in the landscape – the squatter, the swagman, and the bushranger; another was to paint rural labour – tree-fellers or farmer families buried waist deep in grass, tending sheep and beehives; … (Sayers, 2001:89)

Artists appreciated the unique beauty inherent in the Australian landscape and painted it realistically. It was, however, depicted as an extremely harsh environment with human figures often used to reinforce the loneliness, hardship, and pathos that was the lot of those who dared to try and settle on the land. Well known paintings of this genre include: Shearing the Rams by Tom Roberts (1856-1931) and The Selectors Hut by Arthur Streeton (1867-1943). The genre is epitomised in Frederick McCubbin’s (1855-1917) Lost which depicts a child engulfed in the sapling scrub (Plate 2.2.1).
In the past, many historians, including William Moore (Story of Australian Art 1934) and Bernard Smith, Australia’s most influential post-war Art historian (Place, Taste and Tradition (1945), and Australian Painting (1962) chose 1885 as the origin of the ‘Australian School’. This date saw the return of Tom Roberts to Australia and the beginning of “… the influence of contemporary European practice (specifically outdoor painting in oils) on both Roberts and a group of fellow artists”. (Sayers, 2001:79) This group became known as the Heidelberg School and included Tom Roberts, Arthur Streeton, Frederick McCubbin, Charles Condon (1868-1909) and Louis Abrahams (1852-1903).

For many years the work of these artists was considered the epitome of Australian landscape painting and was thought to embody the spirit of Australia. This feeling was strengthened during the early part of the twentieth century, which saw Australia’s involvement in World War 1. There was an upsurge in nationalistic sentiment and many artists’ work personified the sentiments expressed in Dorothea MacKeller’s (1885-1968) poem My Country written in 1904:

\[
I \text{ love a sunburnt country, a land of sweeping plains,} \\
\text{Of ragged mountain ranges, of droughts and flooding rains.} \\
I \text{ love her far horizons I love her jewel-sea,} \\
\text{Her beauty and her terror, this wide brown land for me...} \\
\text{ (MacKellar, 1904)}
\]

However, over the past three decades, this view has been challenged and the veracity of the Australianness of the Heidelberg School questioned. This might possibly be attributed to the death of Arthur Streeton in 1943. Streeton, as well as being a popular and very well known artist, held the influential position of art critic with the Melbourne
Argus until 1935. In addition, the establishment of more art schools and a subsequent increase in art scholarship has allowed the Heidelberg School to be seen in historical perspective. Recognition of the “… richness and variety of earlier nineteenth-century art was revealed” (Sayers, 2001:79), and the way in which the Heidelberg artists worked was seen as “… an international style of academicized Impressionism” (Sayers, 2001:79) with the artists’ perceptions bound up in the glorious country dogma of the time.

The masculine world view of the Heidelberg artists has also been recognised and the acknowledgement and appreciation of woman artists such as Clara Southern (1861-1940) Jane Sutherland (1855-1928) and Ina Gregory (1874-1964) has resulted in the art of this period being brought into more appropriate historical balance.

During the 1920s new approaches and ways of seeing the Australian landscape emerged, facilitated by new and improved roads that enabled artists to travel more easily to areas such as central Australia. In the 1930s access to air travel created a new perspective on the landscape and was “… probably the strongest contributing factor in the creation of the perceptions of Australia which prevail – Australia as a vast, reddish ochre desert”(Sayers, 2001:131)

### 2.3 Recognition and Influence of Indigenous Art

Throughout this period little heed was paid to Indigenous art because the Aboriginal relationship with the land was regarded as primitive, and represented too foreign a concept for many people to understand. In addition, the fact that Aboriginal art was made in response to cultural requirements, and not just for arts sake, as was much of Western art, added to this lack of understanding. The beautifully carved, painted and
woven items were regarded as artifacts, of interest in an anthropological sense only. (Morphy & Perkins 2006) Exceptions to this were Albert Namatjira and the other watercolourists of Hermannsburg who chose to paint in a non-indigenous style. Their work found ready acceptance among the Australian public.

Hermannsburg, a Lutheran Mission located 120 kilometres from Alice Springs, was established in 1877 and played an important part in the development of the Indigenous art market. During the 1930s the completion of a railway line to Alice Springs and improved roads allowed a greater number of visitors to travel to central Australia; this, in turn, led to an increased demand in the tourism market. Initially the mission was producing decorative wooden objects such as boomerangs and wooden plaques, Albert Namatjira being one of those employed in decorating these items. However, after successive visits by landscape watercolourist Rex Battarbee (1893-1973) in 1932, 1934, and again in 1936, the artists at the mission became interested in watercolour painting.

The consequent success and acceptance of Namatjira and the other Hermannsburg artists paved the way for an increased national and international interest in all things pertaining to the Australian Aborigine. However there is still debate over the degree in which the Hermannsburg art expressed a distinctly Aboriginal view. Some remain convinced that the Hermannsburg art was weak and imitative; others thought that it was innovative while some thought that “… the landscapes chosen by the artists have meaning beyond superficial landscape readings through association with a particular artist’s Dreaming”. (Sayers, 2001:145) The last is the interpretation of the present day central Australian landscapists “… who are less concerned with the form in which the
country is depicted than with the meaning of the country itself. In this context the act of painting is an act of engagement with the Dreaming”. (Sayers, 2001:145)

The changing perceptions of Aboriginal art in the 1940s were further encouraged by an exhibition mounted in the Sydney David Jones store during 1941 by anthropologist Frederick McCarthy. The motivation behind the exhibition titled ‘Australian Aboriginal Art and its Application’ was to examine the “… influence of Aboriginal art on non-Aboriginal art practice in Australia” (Sayers, 2001:145). The exhibition included Aboriginal art, paintings depicting the Aboriginal way of life, and an array of decorative objects made by Sydney artists using Aboriginal motifs.

This was an important time for landscape artists in Australia; traditional approaches to the landscape were being questioned and new approaches and ways of seeing the landscape began to emerge. As early as 1942, artists were recognising the potential for a truly Australian art to emerge from influences arising from the Aboriginal immersion in, and connectedness to the landscape. In 1942, the year Margaret Preston painted *Flying over the Shoalhaven*, she expressed the idea that “Australia … has ignored a fine simple art that exists at her own back door. It has to learn what this art could do to help clear up the minds of our people and give them a national culture…” (Studio, (London),124 (1942) 122)

Preston has proved omniscient, as nearly sixty years later in his book *Edge of the Sacred*, Tacey (2001) writes how, after a century of many Australians having the limited view that the landscape was something to be conquered and tamed, perceptions
are changing. He expresses the view that Australia is on the edge of great spiritual and social change, due in large part to a growing awareness and feeling of empathy with the landscape. This he attributes to a greater awareness of the spiritual qualities innate in the landscape made public by Aboriginal land claims and the increased media profile that Aboriginal spirituality and tales of *Dreamings* attract.

While there is currently a thriving trade in all things Aboriginal with souvenir shops to be found in most large towns, cities and airports, much of the Aboriginal culture is considered private and is not discussed with non-Indigenous people. The spiritual connectedness to the land experienced by Aborigines and the subject of many Indigenous artworks is something that cannot be appropriated by non-Indigenous artists who need to explore their own spiritual and emotional links to the landscape. As Tacey (2001) writes “We have not only stolen Aboriginal land, destroyed the tribal culture, raped the women and the environment, but now we ask for their spirituality as well”. (Tacey, 2001:132)

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Plate 2.3.1 Margaret Preston
*Flying Over Shoalhaven River 1942*  
(Sayers, /2001:146)
Margaret Preston’s *Flying Over Shoalhaven River* (1942) (Plate 2.3.1) is considered one of the most important Australian paintings of the 1940s as it illustrates not only her idea that a national art would arise from Aboriginal influences but also reveals a new structure of the Australian landscape; the landscape as seen from the air.

In this work Preston has used a palette of ochres, black and white in conscious imitation of bark paintings with the surface being broken into areas of pattern similar to Aboriginal way of working. Although Preston mimicked the palette and motif style of Aboriginal art in some of her own work (and may be considered by some to be appropriating the Aboriginal style), she also accurately predicted the increased national importance of Aboriginal art and understood from whence Aboriginal artists were coming. In a magazine article (1941) Preston expressed the view that “Aboriginal art represents not the object alone for which it is drawn, but with the essential truths which may or may not be visible to the human eye”. (Sayers, 2001:146)

### 2.4 A New Approach to Landscape

While Margaret Preston was dealing with the formal concerns of palette and design format, Melbourne artist Albert Tucker (1914-99) was experiencing life as a soldier. It was a life to which Tucker was unable to adjust and from which he was discharged after six months, most of which was spent in the Heidelberg Military Hospital suffering from psychosomatic illnesses. His experiences with, and observations of other patients exerted a profound influence on Tucker. Tucker was shocked at what he saw as the disintegration of the world. His interest in myth and delving in to the power of myth to “reveal the depths of Australian cultural values” (Sayers, 2001:161) led to a series of paintings entitled *Antipodean Head*. In these works Tucker “…incorporated references
to landscape and to the struggle to survive which he found in the sagas of exploration and pioneering activity of the previous century”. (Sayers, 2001:161) Tucker was, like Margaret Preston and his close contemporary Arthur Boyd (1920-99), attempting to discover a deeper, gutsier significance in Australian painting. Although not fundamentally a landscape artist, his way of incorporating the landscape as an integral part of the work rather than as a backdrop, displays a new and different attitude and approach to the landscape than that displayed by traditional landscape artists.

This desire to create a uniquely Australian form of art in which landscape was depicted in an iconographic way was shared by Arthur Boyd. Boyd, along with similarly inclined Melbourne artists, including his brother David (b.1924) and contemporaries John Brack (1920-1999), Charles Blackman (b.1928), Robert Dickerson (b.1924), Clifton Pugh (1924-1990), Bernard Smith (b.1916) and John Perceval (1923-2000) together formed a group known as the Antipodeans. Their one joint/group exhibition was accompanied by a polemical essay written by Bernard Smith entitled *The Antipodean Manifesto* (1959) which, in part, noted that

…Art is, for the artist, his speech, his way of communication. And the image, the recognisable shape, the meaningful symbol, is the basic unit of his language… Lines, shapes and colours, though they may be beautiful and expressive, are by no means images. For us the image is the figured shape or symbol, fashioned by the artist from his perceptions and imaginative experience. (McCaughey, 1987:121)

The Manifesto was a rejection of what were considered European movements such as abstract expressionism, geometric abstraction and action painting. For the Antipodeans, landscape and myth were inextricably linked in works that were passionately and spontaneously painted with the figure acting “… out the dramas of the soul”
(McCaughey, 1987:121). The Manifesto caused division among the participants and most later sought to distance themselves from the strictures it imposed. Arthur Boyd, however, continued to paint in a passionate expressionist style with many of his works epitomising the Antipodean philosophy.

Boyd, like Tucker, also served in the army and the work he completed between 1940 and 1944 featured scenes of a “…brutalised humanity” (Sayers, 2001:163) reminiscent of the work of Bruegel and Rembrandt. Often allegorical, his works are full of erotic images and images of death and decay. Like Tucker he was concerned with man’s relationship with the landscape and enthralled by the stories and myths that grew out of the Australian landscape. During 1951 Boyd made a trip to central Australia. This trip was of great significance to Boyd as the way of life of the Aborigines and the conditions under which they lived was a revelation. Hoff (1986) refers to Boyd as seeing the Aborigines as “…tragically suspended between two worlds.” (Hoff, 1986:49) His concern for the deprivations he witnessed led him to “…imagine what a half-caste Aborigine might feel, what dreams and fantasies might result from his inability to bridge the gulf between himself and black as well as white society.” (Hoff, 1986:49)

The Bride and Bridegroom series of drawings and paintings he produced from this time tells a narrative of the life of a half-caste man. The narrative depicts imaginary scenes about a half-caste man’s courtship and marriage. Set in the wilderness, with bride and groom becoming outcasts from both black and white societies, the series reaches its conclusion with the murder of the groom by a “citified black in European clothing”.

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(Hoff, 1986:50) As the groom lies dead on her veil, the bride turns toward the only other human face present, the reflection of her own (Plate 2.4.1).

In the same years that Boyd was working on this series, Patrick White was busy writing *Voss*, a novel which features as one of its characters the Aboriginal boy Jackie. Like the half-caste in Boyd’s painting, Jackie is torn between black and white societies. A guide and helpful companion to Voss and his party, he eventually betrays Voss, killing him – before himself going mad. In both book and painting the landscape plays a significant part. In *Voss*, the landscape is portrayed as mythologised, feminine and utterly powerful. When Voss is attempting to recruit the young Le Mesurier to his journey of exploration he notes that,

… in this disturbing country, so far as I have become acquainted with it already, it is possible more easily to discard the inessential and to attempt the infinite. You will be burnt up most likely, you will have the flesh torn from your bones, you will be tortured probably in many horrible and primitive ways, but you will realise that genius of which you sometimes suspect you are possessed… (White, 1957:38-39)
Voss and his party’s journey takes on a dreamlike quality as their lives and fates inevitably succumb to their “… buried desires for self-annihilation” (Tacey, 2001:94)

The similarities between the literary and visual interpretations of the landscape are intriguing. If Patrick White was a visual artist rather than a writer, it is easy to imagine his characters being portrayed as submerged in and therefore inseparable from the landscape, in just such a way as that portrayed by Arthur Boyd. For example, in Boyd’s paintings, especially the Nebuchadnezzarr series, the landscape and figure are enmeshed in an exploration of spiritual connectedness. In Nebuchadnezzarr’s Head in a Wave (1996-9) (Plate 2.4.2), the body is completely submerged in the landscape with only part of the face being discernable.

Plate 2.4.2  Arthur Boyd  Nebuchadnezzarr’s Head in a Wave (1966-9)  (Hoff, /1986: Plate 87)
This merging of the individual with the landscape was a different approach and is indicative of the increasing level of artists’ concern for and interest in the exploration of the spiritual qualities unique to the Australian landscape. In his later Shoalhaven works (1980s), Boyd was concerned not only with

The element of destruction in nature itself, the struggle of each live organism against chaos… he was also concerned with the … threat posed to nature by man’s activities…

(Hoff, 1986:86)

Where form followed feeling for the Antipodeans, the reverse was true for their contemporary Fred Williams (1927-1982). Williams, although well known to all of the artists involved in the Antipodeans, was not invited to join the group until after they had held their one and only exhibition. Stung by their initial rejection and the inference that his art was on a different plane, he refused the invitation to join the group. While in Europe, Williams had had the opportunity to see first hand, the fashionable, emerging, abstract styles that had been rejected so vehemently by the Antipodeans. His work at this time “… reflected uncertainties within his art” (McCaughey, 1987:121) and may well have been the reason he was not initially invited to join the Antipodeans. As it happened, his art developed into the antithesis of the Antipodean credo. Where they painted passion, Williams painted form, and where they painted with a sense of immediacy, Williams laboured over his work. His concern with the formal elements of painting led often to his painting the same image over and over in different sizes so he could play with different scales and colours. When discussing his work with artist and writer James Gleeson in 1978, Williams said that

… he expected his pictures to work on an aesthetic level and that some of the worst pictures he ever painted were attempts to recapture the kind of experience he had had when he originally looked at the landscape. …he stayed with landscape as a subject matter because it allowed him to move with great freedom – freedom to invent.

(Mollison, 1989:53)
This is a different and quite analytical approach to the landscape than that of Arthur Boyd and Albert Tucker. Williams has approached the landscape as something apart or separate from him, a problem to be worked out on canvas, whereas Boyd and Tucker were striving for a spiritual connectedness to the environment and the Australian landscape.

Williams was, however, concerned about the environment and often expressed his alarm at the number of trees being felled around Upwey writing in his diary on the 31st July 1967 that “there is more and more activity in the gully – there is a continual swing of axe and chainsaw – I guess its prettiness cannot last much longer – and this makes me very sad – it is the reason we came to live here.” (Mollison, 1989:97) His *Chopped Trees* series of etchings and paintings completed in latter half of the 1960s is his recording of a landscape being destroyed, (Plate 2.4.3) the destruction making him more conscious of the beauty and fragility of the landscape rather than angry at what was being destroyed.
Although Williams appeared not to feel the need for a spiritual connection with the land, he felt the power of the landscape saying “I often try to paint people in landscapes but I don’t really have any success at all …I feel that the country dominates everything. …I always eliminate them” (Mollison, 1989:100)

Williams was interested in aboriginal art and in his painting *Flood Bound Cattle* (1975) (Plate2.4.4) elements such as the vertical format and the ochre colours are reminiscent of Aboriginal bark painting.

In the series *Bushfire in the Northern Territory* and in later paintings of a riverbed on the Cape York Peninsular, Williams made reference to Aboriginal art. From time to time he mentioned the need to “absorb Aboriginal art” but also that he “put it in the too hard basket” (Mollison, 1989:210).

Throughout his career, Williams often expressed the view that Australia was just one vast, flat space and that “the regional differences in the Australian landscape were less important to master than the basic similarity of their forms…” (McCaughey, 1984:216). In his later works, aerial perspectives and mapper’s views of the landscape, coupled with simplicity of form, create a unique and powerful vision of the vastness and beauty of the Australian landscape.
Plate 2.4.4 Fred Williams *Flood-bound cattle 1975* (Mollison, / 1989:211)
Chapter 3  Political and Social Windows on to Specific Sites

3.1  The Contemporary Approach to Landscape

Since images were first drawn in the sand by our ancestors, art has been used to educate and inform (Gombrich, 1967). Contemporary society, although seemingly swamped by a barrage of images and subliminal messages from a range of media, remains susceptible to art that confronts the senses. Today, while many artists continue with a traditional approach to landscape with realistic, idealistic or impressionistic depictions of specific scenes, an increasing number of artists from all disciplines are exploring the more liminal aspects of landscape. Concerns about the environment, pollution, mining, the fragmentation of families and communities, the need to reconnect in a spiritual way with the earth are among the concerns of contemporary landscape artists. Many are also producing ephemeral works which have been dictated by the desire to have no further harmful impact on the environment as well as by the individual artist’s conceptual concerns.

Artists are also utilising direct and subliminal approaches through mainstream media outlets such as daily newspapers, which can have a critical impact on public perceptions of specific issues. The growth and development of new technology has encouraged an inter-disciplinary, multi-media approach by many artists as demonstrated by Joan Brassil’s *Quay Vive: Reflections and echoes* 9 (Plate 3.1.1.), in which Brassil has incorporated sound in the form of echoes as an integral component of her installation commenting “Sound goes into the body, the vibration.” (Sanders, 2006:86)
3.2 Political and Social Impact

Since the 1970s, a growing awareness of the power of art to inform the public and influence political decisions has seen an increasing number of artists mobilised to act individually or combine forces to raise both funds and public consciousness on issues that affect the landscape and its inhabitants in radical ways. Artworks dealing with ecological, social and political issues in contemporary society generate public interest and debate, encouraging the challenging of ideas and the raising of questions that might not otherwise be asked.

In 1972 Nic Út’s image (Plate 3.2.1) of nine year old Kim Phúc running naked and screaming down the road, her back on fire after napalm had been dropped on her village by United States forces, did much to raise awareness of Vietnam war victims. The now famous image won Út a Pulitzer Prize, and has since been used in anti-war campaigns, especially those highlighting the plight of innocent victims of war (Hariman & Lucaites, 2003).
More recently, graphic images released in 2004 depicting the torture and abuse of Iraqi prisoners of war held by American troops at Abu Ghraib caused international outrage and reaction (Hersh, 2004). On the environmental front, Al Gore’s (2007) documentary on climate change *An Inconvenient Truth*, shocked many viewers and has contributed to general awareness of an issue of vital global importance (Murray & Heumann, 2007).

The role artists play in their communities to educate, inform and encourage debate on environmental, political and social issues is widespread, international in reach, and impacts on all socio-economic demographics. An example of this global concern was apparent in the recent Asia-Pacific Triennial of Contemporary Art held in the Queensland Art Gallery/Gallery of Modern Art (GoMA), Brisbane (2nd December 2006-May 2007). As part of an international arts dialogue, the Asia Pacific Triennial is one of a series of recurring exhibitions that take place throughout the world every two to five
years. These exhibitions provide selected artists with the means to showcase contemporary art which, although regionally specific, explores ideas and issues within an international context, encouraging critical debate and facilitating the sharing of ideas between artists, enabling them to explore themes and make connections of international interest, concern and importance. The exhibitions attract audiences from afar while also impacting on the local cultural landscape and providing significant economic, political, social and cultural benefits for the host community (GoMA & QAG, 2006).

The artists who participated in this most recent Asia Pacific Triennial addressed such issues as the impact of global consumerism on natural resources, for example, the depletion of natural resources through unnecessary packaging of consumer items; the impact of Agent Orange on generations of Vietnamese children; the collecting of animal specimens for research purposes, and the artificial values of a consumer driven society. (Seear & Raffel: 2006)

In Damaged Gene (Plate 3.2.2) Lê explores the ongoing effects of chemical defoliants which were used by the United States of America during its involvement in the war with Vietnam, and also, as mentioned in the following extract the reluctance of the Vietnamese government to acknowledge the contamination due to its reliance on agricultural exports.

The title of Damaged Gene refers not only to the immediate consequences of chemical exposure but also its long-term genetic effects and the large number of conjoined twins born as a result. In Vietnam, congenital malformation has been a taboo subject, with the government’s silence about contamination of soil partly due to its economic dependency on agricultural export. Damaged Gene reacts against this silence as well as the unwillingness of the United States government to compensate Vietnamese victims of Agent Orange.

(Seear & Raffel, 2006:102)
Lê doesn’t shy away from pointing the finger at the American companies who produced the dioxins, integrating into the works the names of the companies involved, such as Monsanto and Uniroyal Chemicals, in the form of labels which have been sewn on to the garments in places it would be usual to find a designer name or symbol. Thus, he makes a direct and unambiguous statement in relation to their involvement and blame for mutations due to the ongoing contamination of the soil.

(Seear & Raffel: 2006)

In another work entitled *Lotus Land* (Plate 3.2.3), Lê has placed a series of conjoined twins on and around lotus blossoms and leaves in an installation “connecting them to the Buddhist symbols of purity and enlightenment”. (Seear & Raffel, 2006:102) This series, constructed of fibreglass, polymer and wood resulted from observations Lê made on his travels through rural towns in Vietnam “…where communities often worship
conjoined twins as “special spirits” believed to possess the power to protect and bestow luck”. (Seear & Raffel, 2006:102)

The artificial values of our consumer-driven society are explored in Ai Weiwei’s work with one disturbing photographic triptych (Plate 3.2.4) in which the artist deliberately drops and shatters a rare Han Dynasty urn. Weiwei believes that “For modern connoisseurs the urn is a potent symbol of refined taste, cultural achievement and purchasing power…”
Ai Weiwei suggests the act of smashing it as he does is “powerful only because someone thinks it powerful and invests value in the object” (Seear & Raffel, 2006:52)

Other works, such as the vessels dating back to the Neolithic period (Plate 3.2.5) have been coated in brightly coloured synthetic polymer paint which effectively changes how we view these works.

Although not destroyed as completely as the Han urn, their appearance has changed from “burnished and russet-hued” vessels “… imbued with cultural worth and meaning…” to decorator items of no great emotional value as

The aura of enigmatic antiquity that permeates these objects has been disrupted by Ai’s intervention so that our affinity with them now goes no deeper than the gaudy gaiety of their new vividly coloured exteriors (Seear & Raffel, 2006:52)

Ai’s works challenge the viewer’s perceptions of specific objects and question the artificial monetary values of contemporary society.

That a growing number of artists internationally are using their artworks to make commentary on issues to do with social, political and environmental concerns is apparent from works exhibited during 2007 at Documenta 12 in Kassel Germany, Sculpture projects Munster and the Venice Biennale. Works such as Sheela Gowda’s
Collateral 2007 (Plate 3.2.6) was not only installed but also constructed in the Neue Galerie at Documenta 12.

The installation consisted of shapes moulded from agarbathi (incense) which, when placed in position, were set alight and burnt until only the ash remained. The delicate tracery and fragility of the residual ash suggest “...the severity of material life reduced to its fundamental shapes and substances”. (Watson, 2007:254) The title Collateral references the euphemism collateral damage which is used for civilians killed in war and the destruction of nature for, as Minato writes,

Ours is an age caught in a paradox about time. On the one hand, advances in science and technology have enabled us to know history in greater detail, replicate it more accurately, and restore and preserve it better than ever before. On the other, that same history is under unprecedented threat of annihilation from pollution, regional conflicts, and the increasingly high-paced urbanised society that rapid globalisation and population growth are engendering. (Minato, 2007: 56)
Gowda’s (2007) installation captures the essence of fragility inherent in all life forms while referencing our ability to control the outcomes and impacts of our existence on each other and the environment.

### 3.3 The Role of Advocacy in Australian Art

In Australia the power of art to influence public opinion on a variety of environmental issues became apparent when, in 1983, in the lead up to the Federal election, Peter Dombrovskis’ photograph of *Rock Island Bend on the Franklin River* (Plate 3.3.1) was published in full-colour, full page newspaper advertisements with the caption *Would you vote for a party that would destroy this?*

Both image and subsequent campaign “… helped oust the Fraser government, and halt the damming of the Franklin River” (Grant, 2001).

Plate 3.3.1 *Rock Island Bend, Franklin River* P. Dombrovskis 1979 (Dombrovski, /1979)
This win for conservationists demonstrated that an image could be used to inform, influence and effectively change/shape public reaction and this exerted a profound influence on the growing number of artists who wished their art works to have more tangible outcomes than merely being viewed (Grant, 2001).

This growing awareness of the power of art to inform and alter public perceptions, coupled with the growth and development of new technology, has seen many contemporary artists, nationally and internationally; use artwork to address issues of concern in political, social and environmental arenas. Many contemporary landscape artists have diverged from the rather restrictive traditional landscape framework. No longer solely focused on two-dimensional, visually-uplifting images (for example, that of John Olsen and Fred Williams), contemporary artists now create work to engage the audience’s thought processes rather than focusing solely on the beauty of the viewed object. Sayers (2001) comments that,

> Increasingly throughout recent decades there has been a recognition of the highly culturated ways in which the natural world is seen and presented; there has also been a realisation, brought about by an increased understanding of indigenous art, that the certainties of earlier generations of Australian landscape artists were strongly ideological. Perhaps the strongest motivation for continued investigation of the landscape in Australia has been ecological concern. (Sayers, 2001; 216)

Innovative projects like the Mildura Palimpsest, first held in 1998, have provided artists with the opportunity to create works highlighting contemporary ecological issues.
For example, Adelaide artist Lee Salomones’s installation *Branch Rationalisation* (Plate 3.3.2) helped focus public attention on the salinity problems associated with the Murray/Darling Basin river system (Hamilton, 2000).

Opportunities for artists to respond publicly to their individual political and environmental concerns are increasing throughout Australia with many regional areas hosting annual or bi-annual art festivals focusing on the local environment. For example in North Queensland, the *River-way Festival* (sponsored by the then local City Council and oriented towards the Ross River) has become an annual event since its inception in 1998 (Aubrey, 2007).

In addition to creating works designed to inform, artists also contribute work to auctions or similar fund raising events to assist in the raising of funds for conservation causes. An example of this is the Postcard Auction, an initiative of the North Queensland Conservation Council. Held bi-annually, donated postcard sized art works are auctioned to help raise funds to support the organisation. The increase in the number of works
donated for each auction well illustrates the concern many artists feel regarding conservation issues (Wildeheart, 2005).

Today, many contemporary Australian artists are concerned not only about the environment but our spiritual separation, and “…modes of dwelling upon the earth” (Best, 1997:60-76). As our population increases and continues to become ever more urban, the divide between the natural Australian landscape (the bush) and urban landscapes is likely to escalate. These changing demographics will lead to an ever expanding number of people who feel no spiritual or physical connection to the wider Australian landscape and therefore have little understanding of environmental issues and how they may impact on regional and remote areas. In the following extract from *Teaching a Stone to Talk*, Dillard (1984) captures both spiritual and environmental concerns that are an issue in contemporary Australian society:

> It is difficult to undo our own damage, and to recall to our presence that which we have asked to leave. It is hard to desecrate a sacred grove and change your mind…We doused the burning bush and cannot rekindle it; we are lighting matches in vain under every green tree. Did the wind once cry, and the hills shout forth praise? Now speech has perished from among the lifeless things of earth, and living things say very little to very few. (Dillard, 1984: 70)

Indeed as Dillard suggests, “it is very hard to undo our own damage”. However, the interest in, and observation of growing ecological concerns felt by many, coupled with a desire for a more nature-based spirituality (see 1.4), has led to an increased awareness of the depredations and threats facing our environment as well as the threat posed to nature by man’s activities. In his book the *Edge of the Sacred*, Tacey (2001) acknowledges that

> Artists are almost by definition ahead of their time; they are prophets of a psychological condition still to be realised in the wider community, which
naturally strives valiantly to protect itself from change, to dull the impact of the new. (Tacey, 2001:120)

This desire for a more nature-based spirituality, coupled with an awareness of the need to protect and conserve our environment, is well illustrated in Brassil’s work *Where yesterday may be tomorrow*, (Plate 3.3.3) shown in the 1997 *Australian Perspecta*. This work illustrates the “... immense power of the aesthetic domain to address new ways of seeing, new ways of thinking, new ways of making the world.” (Best 1987: 73)

In this installation Brassil transformed the formal white cube of the galley space in such a way that “It was as though the space, by dint of being so cleverly filled and carved up, became a bigger volume, indeed an immense volume sufficient to hold many different times and spaces.” (Best 1987: 72) The installation consisted of a series of works that, as the viewer moved through them, unfolded in a narrative way and depicted …elements or residues of the earth’s story: the greening of the earth was represented by brilliant emerald moss growing on rocks partly submerged in
shallow water tanks; the death and fossilisation of plant life was embodied by lustrous black coal and the aftermath of bushfires was depicted by ash and highly evocative relics of recent fires… (Best 1987:72)

A major component of the work was the incorporation of sound which contributed to the feeling of the viewer being but a small insignificant part of an immense universe. The sounds, satellite recordings of the

…movement of electrical energy from pole to pole produced by lightning strikes near either pole [and] ‘pulsar registrations’ which were …the pulses of energy emitted by the rotating core of a collapsed star or pulsar, from the Parkes Radio Telescope in New South Wales. (Best 1987:72), coupled with the way the viewer was enveloped by the energy of the spatial arrangement of the works … folded the viewer into the space and yet also suggested a world beyond our ken: an infinite universe in which we are but tiny particles.(Best 1987: 73)

Best (1987) argues cogently that

The installation space is thus at once responsive to human bodies and movement, and yet elicits feelings of strangeness and unearthliness. This in turn produces a highly contradictory experience: a sense of being both grounded in a very material world and yet oddly displaced. (Best 1987: 73)

By stripping us of our usual feelings of human supremacy Brassil’s work “… uses the experience of infinity, ‘the absolute difference’ of the unearthly, to question human sovereignty.” (Best 1987:73)

3.4 Sensing the Silence

In common with Brassil and other Australian artists whose work focuses on the land, the present author also has an interest in the environment and associated ecological and social concerns. That these concerns are being recognised by a growing number of people who, as well as being aware of issues relevant to their immediate surroundings, are open to new information and ways of viewing issues relating to ecological concerns
gives artwork that can act as a purveyor of specific issues an ever increasing immediacy and importance.
Chapter 4 Methodology

4.1 Directions from Previous Practice

In the years prior to commencing this research I had developed an enduring interest in atmospheres/essences unique to different locations. Many memories of my childhood remain especially vivid because of specific essences or energies associated with them. An example of this is my memory of a family picnic. Living at the time with extended family on a cattle property on the Darling Downs, it was a family tradition to go for a picnic to celebrate birthdays and other special occasions, the younger members riding their horses and the old and infants travelling in the old work ute along with the food. The spot invariably chosen for the picnic was at first glance a trifle odd, with little other than a slight incline and a rise of rock to distinguish it from the surrounding bush. However, hidden within that incline were a number of shallow caves providing protection, not only for a colony of insectivorous bats camped in the crevices on walls, but also a wonderful array of Indigenous rock art. Initially discovered by my uncle while out mustering, it became a place of wonder to visit, not just to admire the bats and the art but to soak up the primal energy and feeling of ancient earth that pervaded the site to the extent it could be felt and recognised by a child.

Since that time I have visited diverse places where this primal energy or unique aura can be felt and absorbed; some of these sites, such as the cave paintings in the Lawn Hill National Park and the cave dwellings of the Anasazi in the Utah and Arizona deserts are recognised as sacred and, as such, are visited by people from all over the world. Other locations are left for those of us, who are aware individuals, to discover.
During the year 2000, I was employed as a touring *Artist in Residence* for the Priority Country Area Program instigated by the Education Department of Queensland to ensure that students in remote areas of the state had access to, and experience of contemporary art and artists. The program provided me with an opportunity to visit numerous isolated locations and communities throughout north-western Queensland. Given my interest in the dry north-western landscape it was an opportunity to rediscover favourite locations around Cloncurry and Mt Isa and explore the newly visited including Lark Quarry, the site of a Dinosaur stampede, and Bladensburg National Park near Winton and its infamous Skull Hole (see 1.2). Deserted towns such as Melban and the defunct uranium mine and township of Mary Kathleen were of especial interest to me. Many of the buildings from the Mary Kathleen site had been relocated to properties in and around Cloncurry. I had visited the Mary Kathleen site briefly on a previous trip and had an urge to revisit and spend more time there. My interest was constantly piqued by glimpses of buildings from the once busy little town now spread out over the west.

My previous trip had been in 1998, when I was researching geographical features and inspiration from the north-west landscape for a major body of work focusing on the fragility and vulnerability of the earth. The resultant work which formed the *Beneath Our Feet* exhibition was influenced by the textures, colours and surfaces found in Torrens Creek, Porcupine Gorge and the Lawn Hill National Park. The installation of the mostly large-scale sculptural work in the Perc Tucker Regional Gallery was arranged in such a way that each setting or series of work created a particular geological landscape and attempted to imbue the viewer with feelings similar to that which they might experience when encountering similar formations, such as ant hills, or soaring,
overpowering limestone cliffs in the natural landscape (see 4.2). An example of this is the work *Gorge Sentinels* (Plate 4.1.1) which was inspired by towering limestone cliffs which surround the Lawn Hill Creek rising up to 60 metres in height. The finely compacted striations on the works are reminiscent of the rippled surfaces of Cambrian rock found in the Lawn Hill area.

Given my fascination for Mary Kathleen, I stayed in the area for several days documenting the defunct mine and surrounding landscape through photographs, sketches and notes while absorbing the energies that seemed endemic to specific locations within the site. As intimated in 4.2, the logical progression of my work after creating the work for the *Beneath Our Feet* exhibition was to go beyond the visual and explore the primal energy that is an inchoate part of the landscape. To attempt to create work that, as well as conveying visual imagery, could embody and communicate a
palpable sense of energy unique to that specific site was the goal. My personal response to Mary Kathleen is most likely attributable to the different energies I could determine at different locations within the immediate area, its history and the environmental impacts of the uranium mining which was carried out there.

4.2 Conceptual Directions

As mentioned in 1.5 (page13) my sculptural work has largely focused on landscape and environmental concerns of north and north-western Queensland. Concerns about the fragility of the earth, the consequence of large scale mining on our landscape, the affect of drought, prescribed burning and the impact of feral animals have been the focus and conceptual drivers behind each new body of artwork.

With each of these series of new works, additional technical skills have been either learnt or developed in an effort to visually articulate specific concepts. For example, in the Beneath our Feet exhibition, I experimented with different mixtures of ceramic fibre, porcelain and paper until I developed a strong, yet translucent clay body which I then used to evoke a feeling of the earth’s fragility in the Tread Softly Dominic series. In Plate 4.2.1 the impressed images of fossils from Riversleigh and a young child’s footprint on the clay are so fine that they can only be seen when the work is lit from behind, thus creating the effect of fragility that I was seeking.

While creating the work for the Beneath our Feet exhibition I was concerned primarily, with focusing attention on the earth’s fragility and the immediate and irreversible
impact of mining on fragile environments. However, as the work progressed I became more and more intrigued with the placement and grouping of objects, the importance of light and how together these elements can articulate a mood or create a type of aura that can be sensed by the viewer. The progression from this was the idea of going beyond the visual and exploring the primal energy that is an inchoate part of the landscape. How much stronger, how much more powerful would an artwork be if, as well as conveying visual imagery, it could give off a palpable sense of a unique energy that is an arbiter of an individual’s response to a specific landscape?

4.3 Directions from the Literature Visual/Research

As discussed in Chapters Two and Three, many non-Indigenous visual artists’ interpretation of and response to the Australian landscape has changed dramatically during the latter part of the last century. An awareness of the fragility of the landscape coupled with a growing recognition and feeling of spiritual connectedness to the land, has resulted in an increased general awareness of the threats posed to the environment by irresponsible government policies and lack of management.
By researching silences of disparate yet historically and geographically linked sites it is intended that the essence of silence endemic to aspects of the Mary Kathleen landscape will result in a body of artwork that will assist the viewer to empathise with the silence and spiritual qualities unique to each place and time thus evoking a more all encompassing response to the work and ultimately to the landscape it has had as its focus.

The challenge of visual translation of the silences endemic to specific parts of the landscape is the driver of this research project, Sensing the Silence: Mary Kathleen. In addition the research explores the interdisciplinary combinations of ceramics, glass and found objects. The glass acts as a visual metaphor for the earth’s primal energy and its usage is pivotal in translating the different identified energies. The specific glass research for this project is discussed in Chapter Five.

Initially three distinct areas within the Mary Kathleen site have been identified for this project, each containing a discernibly different essence; these are the defunct uranium mine and remains of operating plant, the deserted town site, and the surrounding natural landscape. The different qualities or essences of silence that permeate the sites, as well as physical characteristics will influence the choice of mediums and medium usage in the artwork. It is not until both tangible and intangible aspects of each site are identified that the most appropriate mediums for the artworks can be determined. For example, the mediums used, along with the colour and texture suitable to convey the aura of aggression that pervades the mine site will differ markedly from those used to articulate the aura of tranquillity sensed in the surrounding landscape
4.4 Mary Kathleen Mine Site

The Mary Kathleen mine is located in the north-west of Queensland almost midway between Mt Isa and Cloncurry (see Figure 4.4.1). Established in 1963, the Mary Kathleen mine operated as an open cut uranium mine until its closure in 1984.

Uranium mining first began in Australia at Radium Hill, South Australia during the 1930s where small amounts of radium were mined principally for medical purposes. Small quantities of uranium ore were produced as a by product and this bright yellow
pigment was used to colour glass and ceramic glazes for commercial purposes. During 1954-1962 the mine was commissioned to supply uranium oxide to the United Kingdom-United States Combined Development Agency. On its closure the mine had milled 970,000 tonnes of ore.

The second Australian uranium mine, Rum Jungle, located in the Northern Territory was established in the early 1950s to supply uranium oxide to the United Kingdom-United States Combined Development Agency between 1953 and 1962. The contract specified for defence purposes only. Once this contract was fulfilled, the mine continued to operate until 1973 producing another 2053 tonnes of yellowcake (uranium oxide) which, stockpiled by the Commonwealth Government, was stored at Lucas Heights in Sydney until it was sold in 1993-4 and 1994-5 to nuclear power stations in North America.

The Mary Kathleen uranium deposit, located about halfway between Mt Isa and Cloncurry in far north west Queensland was discovered in 1954 by Mt Isa prospectors Norman McConachy and Clem Walton. The mine was named after McConachy’s wife, Mary Kathleen who had died several weeks earlier from cancer.

The company, Mary Kathleen Uranium Ltd (MKU) was formed in 1955 with the majority of shares being held by the Rio Tinto Mining Company of Australia Limited. Contracted to supply uranium to the United Kingdom Atomic Energy Authority, mining commenced in late 1956 with the treatment plant being commissioned in mid 1958. In this first phase of its operation to 1963, the mine treated 2.9 million tonnes of ore. The mine was then closed down until 1975 when it was recommissioned to supply
uranium to Japan, Germany and the USA for electrical power generation. Operational until 1982, the mine milled a further 6.3 million tonnes of ore before its eventual closure.

Other, smaller mines operational in Australia during this period (frequently referred to as Phase One) included the Moline (1959-64) which milled 128,000 tonnes of ore and the Rockhole (1959-62) which milled 13,000 tonnes of ore, both located in the South Alligator Valley area of the Northern Territory.

By the 1970s what may now be regarded as the second phase of uranium mining commenced in Australia with the discovery of significant uranium deposits at Jabiluka, Nabarlek, Ranger and Koongarra, all located in or near the Alligator River region of the Northern Territory, and at Olympic Dam in South Australia which, although predominantly a copper mine, the ore mined produces 20% of uranium which adds to financial viability of the project. According to the Parliament of Australia: Senate Committee: Report on Uranium Mining and Milling (last reviewed 8th May 2003) other mines currently being developed include the Kintyre, Lakeway, Manyingee, Mulga Rock and Yeeliree sites in Western Australia, the Beverly, and Honeymoon sites in South Australia and the Bigrlyi site in the Northern Territory.

The Mary Kathleen site, as seen on the topographical map below (Figure 4.4.2), possesses a diversity of surrounding landscape.
Small hills surround the flat grassy terrain which is dotted with creeks and waterholes. Adjacent to the site is the Corella Dam. Unseen on the map, to the left, is the Mary Kathleen creek which flows into the Corella Dam. While observation of Figure 4.4.2 offers at first glance a large area of prospective exploration, much of this area is inaccessible due to the nature of the terrain or legally restricted access.

Given the isolation of the area, the mine site had its own township located approximately 10 minutes drive from the actual mine site. The varying essences of silence endemic to the Mary Kathleen mine site, township, and immediate surrounds makes this an ideal landscape for the proposed research. The primal energy of the site was previously recognised by indigenous inhabitants as evidenced by nearby cave
paintings. It is anticipated that, on examination of the primal energy of the surrounding natural landscape, the eerie/waiting silence of the deserted township and the aggressive, dominating silence of the mine site, may well lead to a different kind of creative product which will convey to viewers a sense of the silence unique to these sites. Thus the research project, *Sensing the Silence: Mary Kathleen*, endeavours to create an awareness of the energy that is unique to a particular place in time.

### 4.5 Selecting Sites of Silence

Having determined that the project would focus on Mary Kathleen and surrounds for the reasons outlined in 4.4 it then became imperative to narrow the range of visual and subjective exploration to sites within the chosen area that it was felt best encapsulated a specific silence. Prior to choosing the sites for further investigation and research, where accessible the areas were extensively covered by foot with initial visual and sensory observations made and recorded through photographs and written and drawn entries in a visual diary. As the aim of the project was to create work that would act as an arbiter of the silences unique to specific locations, it was important that the locations chosen contained a diversity of essences that would be apparent in the resultant works. To enable comparisons of the variations in silences, it was necessary to have at least two, and preferably more sites, containing essences of similar intensity but nonetheless with an obvious difference.

In order to assess potential sites, the following criteria were developed to help identify and determine the areas best suited to the needs of this research project. A number of areas were evaluated against the following criteria:
• Accessibility;
  o locational
  o approval
• Significant variation in landscape
• Ongoing historical association /Mary Kathleen
• Distinctive types of silence
• Environmental concerns including;
  o rehabilitation of the site
  o continuing level of environmental degradation

Having determined the criteria against which the potential of sites would be rated two tables were compiled. Table 4.5.1 lists the sites considered against the specified criteria with the number five denoting the highest rating and number one the lowest. Table 4.5.2, typifies the types or essences of silence detected at the different sites.

Table 4.5.1

<table>
<thead>
<tr>
<th>Criteria for Site Selection</th>
<th>Surrounding natural landscape</th>
<th>Rehabilitated landscape</th>
<th>Site of township</th>
<th>Extraction site surrounds</th>
<th>Remains of plant &amp; open cut mine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artist's affinity for site</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Significant variation in landscape</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ongoing historical association/Mary Kathleen</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Distinctive types of silence</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Accessibility a. location b. approval</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Level of revegetation &amp; regeneration after human interve</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ongoing environmental concerns</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

| Totals | 34 | 26 | 33 | 27 | 33 |
As can be seen in Table 4.5.1 the highest to the lowest were graded as follows:

1. Surrounding natural landscape
2. Equal (Site of township and the ruins and remains of plant and mine)
3. Extraction site
4. Rehabilitated landscape

Table 4.5.2 estimates the intensities of silences (using a grading system where five is the highest),

The rankings being:

1. Equal for the site of the township and the remains of plant
2. Surrounding natural landscape

In analysing Tables 4.5.1 and 4.5.2 it became obvious that the site of the township, the ruins of the plant and the surrounding natural landscape were rated more highly on both sets of criteria making these areas obvious foci for further research. The other sites initially considered, the rehabilitated landscape and the open cut extraction site, had
scored low on the artist’s *affinity for the site* and *accessibility* making it difficult to achieve an appropriate outcome. After much deliberation over a considerable period of time and further research into social issues surrounding the actual mining of uranium a fourth potential site – emerged as the silence of the future.

### 4.6 Data Collection Plan

The data collection plan was based on three field trips taken at intervals throughout the research project in order to document, through text, visual images and recorded empathetic responses, the different sites the types of silences felt there.

In addition it was planned to explore the following sources:

- Mt Isa Library Stack Collection to peruse relevant documentation and historical archives
- Research at the local newspaper in search of images held in archives.
- Original documents and photographs held in the Mt Isa Museum and the Cloncurry Museum
- Discussions with Kalkadoon Tribal elders
- Exploration of indigenous historic sites
- Interviews with former residents of Mary Kathleen

### 4.7 Technical Experimentation Plan

A significant amount of experimentation was necessary to enable the construction of the artworks in the medium most appropriate to the identified silence of selected sites. As the media most suited to convey the essence of silence evolved with the strengthening
of the conceptual response to the sites, so too did the experimentation necessary to enable the concepts to be realised.

As a ceramicist aware of the diverse ways in which ceramics could be utilised, this was a preferred medium as was glass which was to act as a metaphor for the earth’s energy and healing powers. Initial research focused on these two mediums and the ways in which they could be adapted and used in conjunction. The following outlines the order in which the technical research plan evolved including the mastering of new skills such as welding, casting of glass and bronze and patination and polishing.

- Glaze formulation and testing to establish a range of textures and colours that would be sympathetic to the diverse sites
- Glaze firings of long duration to test for stability during prolonged firing schedules
- Development of clay bodies suitable for long firing schedules
- Paper clay and porcelain transparent sheets
- Incorporation of photographic silk-screened images on clay
- Testing of different glasses including found glass and crystal
- Exploration of forms for initial works
- Casting glass
- *Pâte de verre* incorporated into ceramic works
- Development of hollow-cast sheath method to allow integration of bronze and cast glass
- Cast glass segments incorporated into ceramic works
- Testing wax casts for bronze sections to make as light as possible
Casting of bronzes
Cutting and polishing techniques for cast glass
Patination tests for bronzes

The glass research is detailed in Chapter 5 while Chapter 6 deals specifically with the underpinning technical research.

4.8 Choosing the Exhibition Venue

The choice of a venue for presenting any art work for public viewing and interaction is critical if the work is to maintain both conceptual and visual integrity. Inappropriate spaces, bad lighting, and noise all detract from the viewing experience. Hence works that have much to communicate if viewed in maximal conditions, may easily be dismissed by viewers and critics alike if negative factors interface with the viewing experience. It is therefore advantageous for the artist to have a feel for the space in which their works will be exhibited given that hanging/installation constraints and other such issues can be resolved during the construction of the work instead of having the potential to become a major drama during the often stressful installation period.

An awareness of the gallery and of precise contexts within the exhibition space also allow the artist to gain a better understanding of how specific areas within the gallery might be used to take best advantage of available lighting and sound equipment, for example, as these may be essential components for the realisation of the concept. Nevertheless, while it is helpful for an artist to know the proposed exhibition space in order that work can be constructed, sized, etc, to suit the specific area, consideration must also be given to other possible and lesser known venues in which the work might
eventually be displayed, either if purchased for a permanent collection, public space or, as required, travel to other locations for further display.

Living in a regional area, the galleries available for major exhibitions are limited in number and space. When the works for Sensing the Silence: Mary Kathleen were still at the concept stage, there were four possible choices of venue, Umbrella Contemporary Art Studio, then located in Flinders Mall in Townsville, Thuringowa city’s Pinnacles Art Gallery in Kirwan, Flinders Gallery in Townsville west, and the Perc Tucker Regional Gallery located in Townsville’s city centre. Other venues such as empty buildings, and even the defunct mine site itself were considered possibilities. The idea of utilising empty or derelict buildings for the venue was discarded early on because of security issues and the inability of advance planning due to the speed with which unoccupied buildings around Townsville are being demolished, many disappearing almost overnight.

<table>
<thead>
<tr>
<th>Table 4.8.1</th>
<th>Criteria and Assessment of Potential Exhibition Venues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of space</td>
<td>2 3 2 4 5</td>
</tr>
<tr>
<td>Lighting suitability</td>
<td>3 3 2 4</td>
</tr>
<tr>
<td>Potential for intrusive noise</td>
<td>3 3 4 4 3</td>
</tr>
<tr>
<td>Security</td>
<td>4 4 2 5</td>
</tr>
<tr>
<td>Potential to control internal sound in a specific area</td>
<td>3 3 1 4 5</td>
</tr>
<tr>
<td>Previous experience with and knowledge of the gallery space</td>
<td>5 5 5 5</td>
</tr>
<tr>
<td>Assistance with exhibition costs</td>
<td>3 3 5</td>
</tr>
<tr>
<td>Totals</td>
<td>23 24 16 31 13</td>
</tr>
</tbody>
</table>
In order to facilitate the assessment of the most suitable venue in which to exhibit the works a summary of criteria, both implicit and explicit was compiled. Table 4.8.1 lists venues and assessments against criteria, with five denoting the highest rating and zero the lowest.

While aesthetically it would have been appropriate to have exhibited the work at the various derelict ruins and plant at the mine site, and the nature of the space was suitable for this, issues with transport costs, security and the lack of an audience other than a bovine one rendered the venue impractical thus resulting in the lowest ranking. Conversely the most desirable venue was also quickly established with the Perc Tucker Regional Gallery scoring 31 out of a possible 35 thus outranking the next most favourable, Pinnacles Gallery by seven points. Hence, after assessing the various possible venues against the specified criteria, The Perc Tucker Regional Gallery emerged as the most desirable location.

The high ranking of the Perc Tucker Gallery ground floor derived largely from the greater potential to control sound and lighting as a consequence of the high ceilings, available natural light and the space itself which consists of an area easily visually segregated by the placement of works. The greater financial assistance offered to the artist to assist with catalogue, invitation and opening night expenses also played its part in the eventual decision.
4.9 Plans for Exhibition Documentation

The plans for the exhibition documentation included the following:

- Choice of Gallery
- Invitation
- Catalogue, including Catalogue essay
- Photographs of work for catalogue
- Photographs of work *in situ*
- Published critiques of the exhibition
- Recording of exhibition music
- Recording of interviews
Chapter 5 Glass as an Art Medium

5.1 Glass: Paradox and Metaphor

It has been amply demonstrated over thousands of years that people recognise manufactured glass as a simulacrum for naturally formed glasses and crystals and similarly imbue glass with many of the associated earth powers. Because of this universal acceptance of glass as a purveyor of the earth’s energy I planned to incorporate kiln formed glass and pâte de verre into my sculptural work where it would act as a visual metaphor for the earth’s energy and capacity to regenerate. It also replicates the geological phenomenon of Volcanic Glass (Glassy Quartz), which is formed by the rapid cooling of residual pockets of molten magma after volcanic activity.

Whether manufactured or naturally formed, glass has an unparalleled “…capacity for assuming a variety of physical and symbolic guises”. (Edwards, 1998:13) Initially the province of alchemists and sorcerers, glass and its possibilities soon intrigued scientists, philosophers, artists, poets and novelists alike.

In what Edwards (1998) believes to be one of the earliest literary allusions to glass “as a medium with extremely potent properties … and also acknowledgement of the mystery underlying these powers” (Edwards, 1998:14), he cites an extract from The Clouds by Aristophanes;

…in which Socrates and Strepsiades discuss a cunning means of discharging outstanding debts by using a rudimentary lens, made of a ‘translucent stone’, to concentrate the sun’s rays on the accounts—thus igniting and destroying them underlying these powers.
(Edwards, 1998:14)
Socrates was forty five years of age when his young contemporary, Aristophanes wrote *The Clouds*, which was originally produced in Athens during the spring of 423BC. It was also set in this period when Greece and “…in particular Athens, was in an intellectual ferment.” (Edwards, 1998:107) New forms of education were coming to the fore signaling changes to society with the existence of the gods being questioned and “…atheism, scientific inquiry and speculation…” (Edwards, 1998:107) causing rifts between those that held fast to the old beliefs and those that embraced the new. What is particularly interesting is that, although it has been established that glass has been around since the 17th century BC, it was still appearing in quite a crude form approximately 1500 years after the first man-made glass was thought to have been made (see 5.3). Later literary references to glass are found in Horace’s *Odes*, (65-8 BC) xiii.1 where he wrote, “O fons Bandusiae splendidior vitro”. *O spring of Bandusia, more brilliant than glass.* (Oxford, 1964: 109).

Still later, Biblical references to glass can be found in the New Testament in St Paul’s first letters to the Corinthians (X111. X11), in which he writes “…For now we see through a glass darkly; but then face to face: now I know in part: but then shall I know even as I am known.” (*Holy Bible*, circa 1900:924). In Revelations is found a description of heaven; “…Also in front of the throne there was what looked like a sea of glass clear as crystal.” (*Good News Bible*, 1979:1525). From these references, both written in the first century AD, it is apparent that people were aware, not only of the physical appearance of glass, but its associated chameleon like qualities.
In literature, Shakespeare’s characters frequently used analogies based on the perceived characteristics of glass; for example in Act 1V, Scene VI of *King Lear*, when halting what he perceives to be an unjust punishment, King Lear says, in part,

…Take that of me, my friend, who have the power to seal the accuser’s lips. Get thee glass eyes, And, like a scurvy politician, seem to see the things thou doest not. (Shakespeare, 1995:64)

While the scene with Socrates, and even to some extent the Biblical and Shakespearean references to glass, have undertones of alchemy, sorcery and intrigue in more recent literary allusions, glass is typically seen as a metaphor for fragility and vulnerability. In more contemporary literature, references to people *being made of glass* appearing fragile, in need of tenderness, devotion, etc, abound. For example, in the fairytale *Cinderella*, glass, in the form of Cinderella’s glass slipper is seen as a symbol for the character’s purity, her chastity portrayed by the clarity and translucency of the slipper.

Another well known example of glass being used as a metaphor for fragility, transience and beauty is seen in Tennessee Williams’ play *The Glass Menagerie* (1944). In this play the central character, a crippled girl, takes solace in her collection of tiny glass animals, the precariousness and uncertainty of her life mirrored by the fragility of the animals in her menagerie.

Contemporary music, both mainstream and alternative, is another medium in which glass is frequently used as a metaphor for human emotion. For example, in the American duo, *The Indigo Girl’s* lyrics for the song *Love Will Come To You* ‘…guess I wasn’t the best one to ask myself with my face pressed up against love’s glass to see the shiny toy I’ve been hoping for the one I never can afford…’ the transparency of glass,
and one’s ability to see through it becomes an analogy for the singer’s ability to know what love is, and yearn for her inability to attain it.

The widespread use of analogies relating to glass in all its guises seems to have universal acceptance and understanding. This is particularly true of glass in the form of mirrors and hourglasses, which are used extensively as symbols in both literary and pictorial contexts. The hourglass has long been used as a universal symbol of the passage of time, underscoring the brevity and transience of life and thus, also, of death.

Images of hourglasses have been used extensively by visual artists and writers who recognise their universal symbolism. They are commonly used in interior scenes especially those depicting a scholar or philosopher in his private domain. An example
cited by Edwards, is the 16th century painted Flemish panel from the National Gallery of Victoria’s collection which depicts St Jerome in his study surrounded by book, hourglass and skull. Another example is Albrecht Dürer’s (1471-1528) Melencolia I, (1514) (Plate 5.1.1) in which a seated and pensive winged woman sits, surrounded by a weird assortment of paraphernalia including a sphere, compasses, woodworking tools, scales and in which

...The sumptuously wrought casing of the hourglass is fixed to a pillar, to the left of an enigmatic panel of ‘magic squares’ containing numbers. In this compelling evocation of intense introspection and mental focus, the figure is oblivious to all that occurs around her, including the passage of sand from the upper to the lower bulb of the hourglass behind her (Edwards, 1998:18).

In literature the symbolism of the hourglass, or allusions to it, are frequently used to underscore the passing of time. For example in William Blake’s (1757-1827) Auguries of Innocence. Blake refers to the grains of sand moving through the hour glass, “To see a World in a Grain of Sand, and a Heaven in a Wild Flower, Hold Infinity in the Palm of your hand, and Eternity in an hour.” (Oxford, 1964:38). Another example is found in Act 11 Scene 1 of Shakespeare’s comedy All’s Well That Ends Well: “… Or four and twenty times the pilot’s glass / Hath told the thievish minutes how they pass…” (Shakespeare, 1995:652). Pilot’s glass is the maritime name for the hourglass, which was used in navigation until the 17th century. While in the 21st century we no longer rely on the hourglass to measure the passage of time, its symbolism is still accessible by contemporary society and, for many years, an image of an hourglass appeared on the opening frames of the television series Days of Our Lives.

The mirror has “… long served as a metaphorical device for revealing the world as it truly is (that is it reflects empirical reality) and as it might appear in an ideal state.
(Edwards, 1998:27) Edwards (1998) cites Shakespeare and Lewis Carroll as examples. With Shakespeare interpreting “…mirrors or glasses, as variously deceptive, revealing, flattering or the cause of dismay” (Edwards, 1998:27) and Carroll crediting the looking glass in *Alice in Wonderland* with mystic powers.

### 5.2 The Formation of Natural Glass

Glass is formed naturally when the mineral silica is subjected to extreme heat. This occurs in a variety of ways; in desert sands glass spears (fulgurites) are formed when lightning strikes the sand and the intense heat melts and fuses the silica into tube or spear shapes following the pattern of the strike. These *spears* are up to five feet long with smooth glassy interiors and a rough texture on the outside due to unfused grains of sand.

Glass is also formed naturally during volcanic activity when the silica and oxygen combine to form different varieties of quartz. As the magma cools, the different rates of cooling determine the crystal structure and type of quartz. For example, slow cooling of the magma allows the growth of large crystals whereas, in areas where the magma is trapped in small pockets, it cools rapidly, resulting in what is known as volcanic glass or glassy quartz, which has no visible crystal formation (Plate 5.2.1) Other types of volcanic glass include obsidian, pitchstone and techylyte.
Pure quartz, or rock crystal as it is frequently called, is the most common type of crystal; colourless and transparent, it is used for making jewellery, cups, vases and bowls. Colour within the crystal is a result of minute impurities within the quartz. For example, rose quartz obtains its colour from needle like inclusions of rutile, and amethyst its violet colour from iron inclusions. The deeper the colour the more elements or colour makers are present. The main colour makers are copper, nickel, iron, manganese, chromium, zinc, titanium and vanadium. Throughout history these naturally formed and beautiful composites of minerals have been valued and much sought after by people of all races, their rarity making them highly prized and their possession symbols of wealth and social status.

5.3 Manufactured Glass

Although it is not known precisely when glass was first manufactured in its own right, and not as a glaze, it is generally accepted that the first glass, in the form of glass beads, was made in Western Asia around 2000BC. The impetus behind the desire to create glass was the wish to devise economical substitutes for the much prized, rare and valuable coloured stones. This is evidenced by ancient records, such as the small clay tablets bearing cuneiform text now in the British Museum which “…once belonged to
the library at Nineveh, assembled by the Assyrian king Assurbanipal (666-667BC). The tablets include a description of glass as “...lapis lazuli from the kiln”– evidence that glass was at this time being made to imitate gemstones” (Edwards, 1998: 38). The clay tablets also give detailed directions for preparing different types of glass although, unfortunately, few are complete. Descriptions of the excavations at Nineveh, describing the ancient Assyrian artwork also refer to panels “which are inlaid with narrow horizontal strips of opaque blue glass, probably in imitations of lapis lazuli, and with some few bars in green” (Layard, 1854: 10).

However the earliest information on actual glassmaking techniques is a “…recipe for a glaze found on a tablet near Tell’ Umar on the Tigres, dating to the 17th century BC....” (Vose, 1980: 26) which indicates the likelihood that glassmaking originated from glazes used by potters. In Glass, Vose (1980) cites the excavation of the “…earliest glassmaking complex...at Tel el Amana (ca 1375-1358BC) where open hearths were apparently used with shallow crucibles supported on refractory drums”. (Vose, 1980: 27)

Initially manufactured glass was coloured with the addition of metallic oxides and for over “…1000 years coloured glass vied in beauty with the precious stones it deliberately emulated” (Vose, 1980:28). It was not until around 800BC that clear, almost colourless glass was first achieved. Only a small number of vessels made with clear or slightly greenish, transparent glass, survive from antiquity. These vessels, mainly bowls, were made with a high degree of technical competence and are thought to have been among the luxury goods of the time.
Then, as now, glass continues to be made with the same basic combination of “… sand, soda and lime. The soda (or another alkali, such as potash) acts as a flux to bring the melting temperature of the silica or sand down from around 1700°C to about 1400-1500°C, and the limestone acts as a hardening agent”. (Vose, 1980:24) However modern glass technology is extremely complex with constantly expanding research into the many applications of glass as “…recent developments include toughened, laminated and float window glass, glass ceramic ware, heat-and-light-sensitive glasses, and new building materials that combine fibreglass and cement.” (Vose, 1980:24).

5.4 Kiln Formed Glass

The technique of kiln forming glass was developed as early as 1500BC by the ancient cultures of Mesopotamia and Egypt. It evolved from glass-makers copying the closed and open moulds used by potters. By pressing powdered or molten glass into the moulds, open vessels as well as solid objects like statuettes could be produced. In Egypt powdered glass was also used as a surface decoration fused on in the manner of enamel. Popular with the Pharaohs this form of decoration was used to inscribe names: indeed one of the earliest dynastic glass vessels to survive bears the name of Pharaoh Tuthmosis III.

During the first century BC the Phoenicians (Syrians) perfected the technique of glass blowing. The consequent discovery that glass could easily be blown to shape in moulds led to the realisation that glass could be mass produced. This increased capacity to manufacture glass led to its being valued for its own sake rather than as an imitation of precious stones. As this development coincided with establishment of the Roman
Empire, the technique spread quickly throughout the Roman territory. The old methods of kiln forming glass tended to fall into disuse for centuries before being revived by studio glass artists during the past two centuries.

Ioannou (1995) expresses the view that glass as an art form is currently

…experiencing its most dynamic renaissance since its early historical period: its numerous devotees are *pushing the medium* as they say, blowing, casting, or otherwise trailblazing ideas and form into being. (Ioannou, 1995; 11)

This upsurge of interest in glass work, aligned with evolving discoveries and innovations, has led to some confusion with terminology used to describe techniques, for example where *hot* glass originally referred to the “…innovative use of a small furnace for glass manipulation within a studio or artistic scale” (Ioannou, 1995; 15) Ioannou (1995) suggests it is now more appropriate to use *furnace-working* as this covers glass blowing, solid working as well as furnace and sand-casting. Moreover, the terms kiln-worked and kiln-formed glass had independent meaning, although a broader understanding and knowledge of kiln formed glass has led to the term *kiln-formed* being used to cover a diversity of techniques “…where the kiln is central to the activity” (Ioannou, 1995; 15). These include *pâte de verre*, slumping, laminating, mosaic work, draping, fusing and kiln casting. Cold-working, including cutting, polishing, grinding, etching, sand-blasting etc is finishing work carried out on pieces that have already been either formed in a furnace or kiln-formed.

### 5.4.1 Pâte de Verre

*Pâte de verre* (glass paste) is finely ground powdered glass made into a malleable paste by mixing with water and a binding agent such as gum arabic. Once mixed into paste
the glass can be pressed into a variety of moulds to form either vessels or sculptural works. Used in ancient glass production by Mesopotamians and Egyptians (see 5.4), it fell into relative obscurity before being revived and reintroduced as an art form on at least three occasions over the centuries. The first was Scottish artist James Tassie (1735-1799) who “…experimented and perfected the casting and imitation of precious gemstones and cameos from a vitreous paste.” (Ioannou, 1995; 99) The formula was lost with his death although “…subsequent analysis has showed it to be a lead potash glass.” (Ioannou, 1995; 99)

The second documented revival of pâte de verre was by the Frenchman Henri Cros (1840-1907). Cros spent many years experimenting with the technique before he developed a successful formula which enabled him to construct a series of famous reliefs between 1893 and 1903. After his death, his son Jean continued to work with glass but without the knowledge to reproduce his father’s pâte de verre as Cros had died without disclosing his formula. Subsequently from around 1900 other Frenchmen, including Emile Gallé (1846-1904), Albert Dammouse (1848-1926) Georges Despret (1862-1962) and Francois Decorchemont explored the technique, all developing their own recipes and interpretations of pâte de verre. (Vose; 1980) A further variant of pâte de verre was pâte de crystal developed by Gabriel Argy-Rousseau who used the technique to create one-off studio pieces.

After the 1930s the technique of pâte de verre and its variations, once again fell into disuse before being revived for the third time in the 1960s by glass artists “…intent on exploring the singular relationship between material, form and historical technique
which *pâte de verre* embodies.” (Ioannou, 1995; 99) Artists are intrigued by the variety, tactility and sensuous qualities inherent in *pâte de verre*:

Soapy-soft to the touch, *pâte de verre* objects may range from a dense, opaque polychrome appearance, to a paper-thin delicacy of rich, translucent colouring streaked with bubbles, veins and other light enhancing effects. (Ioannou, 1995; 99)

The delicacy and translucency that Ioannou describes is particularly well illustrated in Plate 5.4.1 which depicts the sculptural work, *Debut*, by Roger Buddle (1940).

The extraordinary delicacy of this piece of fused and moulded glass would be hard to achieve through techniques other than that of *pâte de verre*. This contemporary revival of *pâte de verre* begun in the 1960s continues today, with some glass artists pushing further the boundaries of the medium by incorporating *pâte de verre* elements into mixed media works an example of which can be seen in the contemporary wearable art of Cairns based artist, Judith Bohm-Parr.
5.5 The development of the studio glass movement in Australia

In Australia, the studio glass movement did not emerge as a distinct branch of arts practice until the 1980s. Ioannou expresses the belief that the seminal event for this occurred in 1972 when Stephen Skillitzi gave the first public glass-blowing demonstration. Since then, the founding of glass workshops at the Jam Factory in Adelaide, the Canberra School of Art, later followed by the establishment of courses at the Sydney College of the Arts, the School of Design in Adelaide (now the University of South Australia) and the Chisholm Institute of Technology (now Monash University), has given rise to an increasingly strong glass/arts practice in Australia. Initially the emphasis was flat glass and glass blowing, however there is increasing emphasis on kiln-forming processes which Ioannou (1995) believes to be due to the strong influence of the Canberra glass workshop.

5.6 Inclusion of glass as a metaphor

It was to this Glass Workshop at the Australian National University that the author looked to acquire the knowledge and skills necessary to allow the successful incorporation of glass into the mixed media works constructed as a major part of this research project. The desire that glass be used as a metaphor for the earth’s energy for the reasons outlined in Chapter 4.1 led me to research different methods of utilising glass in the artwork. These included experiments with glass slumping, fusing, pâte de verre and glass casting. Two intensive workshops at the ANU, interspersed with visits to Cairns based glass artist Judith Bohm-Parr, a graduate of the ANU’s Glass Workshop, visiting Calgary University, and attending a pâte de verre workshop while
there, and conducting intensive research at the Banff Centre for Arts in Alberta, Canada added to the impetus to push the existing boundaries of the incorporation of glass further into mixed media works.
Chapter 6 Technical Experimentation

6.1 The Need for Experimentation

Before work could begin on artwork relating to the mine site, consideration needed to be given to identifying both tangible and intangible aspects of the site. It was only once these aspects were identified and prioritised that the most appropriate sculptural mediums visually to portray specific elements, both objective and subjective, could be determined. As more detailed attention was given to the types of silence and the concepts intricately woven into the energies that permeated the chosen locations, it became apparent that a significant number of technical issues needed to be resolved if the works were to fulfil the conceptual vision and genuinely identify with the varied intuited silences.

As a practising artist of many years I have, of necessity, acquired numerous skills in many aspects of arts practice; however, with each body of new work, those skills need to expand in order to accommodate the increased level of knowledge and skills that the concepts, which become increasingly complex with each new series of work, embody progressively more demanding conceptual visions.

As acknowledged in 5.6, a knowledge of glass, and methods of working with glass (which included, fused, slumped, cast and pâte de verre methodologies), needed to be acquired to enable the successful resolution of the concepts relating to several sites. A working knowledge of bronze casting and the devising of new ways of lost wax casting to enable the bronze and glass sections to join together smoothly was also required as no
evidence of previous resolutions to similar problems could be found. I also needed to learn how to weld in order to complete the bronze series. To achieve the effects I sought with certain images, new processes had to be devised which included the developing or altering of clay bodies to enable them to withstand many days of firing, different usages of photographic images, and the development and altering of glaze formulas.

Hence a process of technical experimentation was initiated during 2001 as preparation for this post graduate research. Given the award of a Research Residency at the Banff Centre for Arts in Banff, Alberta, Canada, this was too good an opportunity to let pass as the time at Banff could be utilised to undertake an intense period of research as a precursor to post-graduate candidature. Prior to taking up the residency, and knowing that the research at JCU would explore methods of combining kiln cast glass and metal work with ceramic sculptures, I undertook a welding certificate course at the TAFE College in Townsville, and the previously-mentioned two week intensive glass casting workshop at the Australian National University. Research into glazes that I wished to test while in Canada and later use and develop further during my post-graduate research at JCU was also undertaken.

The period of intense research at Banff resulted in some highly successful work with tests based on a glaze developed by Jenny Chong during her post graduate research at Monash University and published in *Pottery in Australia* 36 (1997; 4) providing the dry textured surface intended for further exploration during the research. The first solo
attempts at casting glass and incorporating *pâte de verre* into my ceramic work also worked well, albeit on a steep learning curve.

6.2 Glaze research

Glazes are essentially a thin layer of glass which, when subjected to intense heat, become fused on to a ceramic surface. The main components of a glaze are silica (SiO₂) which is the main glass former, a flux, which is used to lower the melting temperature of the silica (which melts at 1710°C) and also impacts on the colour and appearance of the glaze that is, glossy, satin or matt. Common fluxes are whiting (calcium carbonate/ calcite), talc (magnesium), dolomite, barium carbonate, bone ash, lithium, zinc oxide and the metal oxides such as copper, cobalt, iron, nickel, manganese which also contribute to the colour of a glaze. The third essential component of a glaze is alumina (Al₂O₃) which acts as a stabiliser to stop the glaze running off the ceramic surface and also increases glaze viscosity. Alumina is rarely used in its oxide form, usually being added to a glaze formula contained within clay or feldspar which also contains silica and potassium.

The analysis of minerals mined from different regions/countries, and even from pits within close proximity of each other, can differ hugely with additional or variable trace materials altering the way a glaze may react. Many suppliers will blend materials from several pits in order to obtain a more uniform product. The extensive array of glaze materials available and the variations within batches create an almost endless array of possibilities in the creation of a glaze. Some ceramicists spend years perfecting a glaze only to find that a mine has suddenly closed down and that the identified *perfect ingredient* is no longer available. The application of a glaze can also affect the end
result; for example, dry glazes need to be applied in numerous thin coats whereas tea-dust or oil-spot glazes need to be applied thickly to enable the crystals to mature. The type of kiln, the fuel used, placement in the kiln, final temperature and soak periods all impact on the final product. Kilns, even if exactly alike in manufacture and appearance, are idiosyncratic and will consequently produce unique results. For all of these reasons I chose as the starting point for my glaze tests a number of published formulas that had the textural qualities essential to the creation of the finished art-work. These included dry glazes, an example of which can be seen in Plate 6.2.1, which could be built up layer by layer to obtain varying intensities of colour as seen in Plate 6.2.2 and which worked together chemically as well as aesthetically.

6.3 Glaze tests

Given the variation in the mineral compositions between ores mined in North America and Australia, and which comprise the ingredients for a glaze, prior to glazing the works it was necessary to re-test the glazes that had worked successfully in Canada to ensure they had similar positive results when made from Australian ores.

6.3.1 Replicating the Canada trials

The first tests made in Australia replicated those trialled in Canada (an example of which can be seen in Plate 6.3.1) but gave different results, with the colours either too
vivid or muddy with the texture non-existent and matt, lacking the dry platelet type crystal development necessary for the site specific art work (see Appendix A).

These initial results proved the harbinger of hundreds of tests to follow, in a quest not simply to replicate the original results, but to develop texture, patina and colours unique to the specific art works.

The task of refining the glaze, and researching the diverse potential variables, such as differences in the mineral composition, impure ingredients, etc, began with the entire range of tests being repeated, this time with new ingredients to eliminate the possibility of contaminated minerals or formula error.

### 6.3.2 Test Refinement One

A large (approximately 20 x 22cm) flat test tile rather than the curved surface used in the first series of tests was used (see Figure A.2.1 in Appendix A.2), in the hope that this would provide a more even surface and allow for a more consistent build up of the layers necessary for platelet-like crystal development. However, the results of this series of tests were similar to the original James Cook University tests with results as outlined in 6.3.1.
6.3.3 Test Refinement Two

An additional test series was made early in November 2001 and again yielded results (Appendix A.1.) which were similar to the original James Cook University tests (6.3.1) and as seen in Appendix A.1 with the exceptions of Test A.3.1 (Plate 6.3.2) and A.3.3 (Plate 6.3.3) which showed separation segments in areas containing heavier applications of cobalt oxide but no crystal development. However, given some positives, this series of tests was expanded later in November of that year.

Plate 6.3.2 Glaze test C.1a

Plate 6.3.3 Glaze test C.1c

6.3.4 Test Refinement Three

The further November tests showed good colour development in some of the glazes. While some of the colours, most notably in glazes A.3.35 and A.3.31 (Plates 6.3.4 and 6.3.5), showed good development, the majority of glazes appear subdued by the black copper wash as can be seen in Plate 6.3.6, Glaze Test A.3.36.

Plate 6.3.4. Glaze test A.3.35
Plate 6.3.5 Glaze test A.3.31
Plate 6.3.6 Glaze test A.3.36
6.3.5 Technical Checks

Prior to further testing, both kiln and pyrometer were checked for malfunction. The pyrometer indicated the kiln was reaching the correct temperature. It is usual, when firing, especially when the temperature of both clay body and glaze is of paramount importance, to use pyrometric cones which actually record the reaction and heat of the clay body, rather than the atmospheric heat measured by the pyrometer. However, because of the extremely long firing times of 40 hours plus, at slow increases in temperature and then long soak times (where the kiln is held at the same temperature for an extended period), it was not possible to use pyrometric cones as they are designed only to function properly when there is a steady rise in temperature and short soak times. On further observation, the glazes on the test tiles appeared more mature the higher up they had been placed in the kiln. Given the variation in temperature within the kiln, further tests were placed in the top half of the kiln only, thus maximising temperature control.

6.3.6 Test Refinement Four

Given the resultant knowledge of the kiln’s idiosyncrasies, further tests in December with freshly mixed glazes resulted once more in colours duller than anticipated, although an increased number of thinner glaze applications gave a more heavily textured surface as illustrated in glaze test A.4.4 (Plate 6.3.7) (Appendix A.4).
6.3.7 Test Refinements Five and Six

Prior to glazing major art works, two further series of tests were carried out, one in December 2001 (Appendix, A.4) and the other in February 2002 (Appendix A.5). These tests once more resulted in areas of good colour development and the platelet-like textural surface sought as seen in glaze test A.4.8 (Plate 6.3.8) and glaze test A.5.3 (Plate 6.3.9).

Plate 6.3.8 Glaze test C.5b  Plate 6.3.9 Glaze test A.5.3

6.3.8 Glazing of First Exhibition Works; Arches 1 and 2

Given these encouraging results, two major works, Arches 1 and 2, were glazed and fired on the 19th February 2002. Of the two, the work glazed with mainly copper based glazes was the more successful, the other was disappointing…a muddy and lifeless dull brown, with areas of glaze flaking off in sections where there had been heavier applications of glaze. It had all the appearance and characteristics of being under-fired, although its placement in the middle of the kiln should have ensured that it reached the required temperature. In an attempt to save the work, it was reglazed using the brightest cobalt glazes from the initial tests, applied over a thin layer of a comparatively neutral manganese glaze. The refiring was a success, with the resultant colour a vivid blue with pink undertones as seen in Plate 6.3.10.
Research undertaken thus far had not yet resulted in a replication of the results obtained in the initial glaze tests conducted at James Cook University during 2001 (Appendix A.1). As the vivid colour in the remnant glazes from the initial glaze tests had been used to such positive effect on the reglazed Arch, the possibility of having the glazes analysed to isolate the chemical differences between the first and subsequent tests was considered. However this proved impractical with the Analytical Laboratory quoting a cost of approximately $200.00 per mineral tested. As each glaze contains a minimum of six minerals, testing several glazes was found to be cost prohibitive.

6.3.9 Construction and Glazing of the Inheritance Series

Given the success finally achieved with the Arches, work proceeded on the next series, Inheritance from Mary Kathleen 2. Constructed over a four month period these slab works incorporated found objects from the mine site and were planned eventually to contain ceramic figures embedded in pâte de verre.

The long period of construction was necessitated because of the constant monitoring required by the thick ceramic/perlite body as it dried; for example, as the clay body started to dry and consequently shrink, inevitably it would crack around the found metal.
objects impressed into the clay. The ceramic/perlite body needed then to be carefully wetted down over a period of time allowing repair work to be carried out as required.

After being bisque fired, the thirteen works were carefully glazed as illustrated in Figure 6.3.1 over a period of days allowing the glaze to dry thoroughly before additional coats were added.

![Diagram of glazing process](Image)

Figure 6.3.1 J. Mulcahy Extract from journal 2002
Once glazed, the works were fired using the same firing schedule and kiln used for the firing of the *Arches* a few weeks previously. Unfortunately, all but two of the works emerged from the kiln a combination of dull brown and virulent yellow.

The glaze, instead of adding a build up of texture as it had done previously, appeared to have retreated into the clay body taking the perlite with it. A refiring was tried with an even less successful result. On analysis, the following observations were made:

- Glazes were the same as had been used with success previously;
- Firing schedule was the same;
- Ceramic body was the same;
- All works had been fired in the top two thirds of the kiln as the bottom elements were not working to standard.
- Pyrometer appeared to be functioning normally

Such observations pointed to inconsistencies within the kiln. The only other possible variant was the perlite which had been used to lighten the ceramic body. Some of the works included a mix of Chillagoe and Ausperl perlite whereas others, made earlier, contained only Chillagoe perlite. Although it would have been possible to fire these works off campus in an alternative kiln, this was not done as previous firings had indicated that a reasonably successful result could be achieved if using only the top section of the kiln. In addition, the larger works in the *Ruins* series were much too large to be moved even if another large kiln could be accessed. It became imperative to find a solution within the parameters available but this meant working with a kiln that was consistently inconsistent.
The obvious solution was to develop the glaze and glaze application further and in a way that would ensure success. It is usual, when a kiln is unable to reach or hold a specific temperature, to adjust the glaze so that it matures at a lower temperature. However in this instance, with fluctuations and inconsistencies in temperature appearing to be the problem rather than a uniform lower temperature, it was more appropriate to seek other means of rectifying the situation.

### 6.3.10 Eliminating Variants

A further series of tests were undertaken to eliminate the possibility of variants within the two brands of perlite causing the problem (See Appendix B, glaze tests B.1.1 through to B.1.50). In addition, in the hope of creating a surface with minimal mineral content (given that this may have been reacting with the glaze or kiln atmosphere), a pure ball-clay slip was applied over the ceramic test surfaces prior to bisque firing and, in some areas, extra coats were added after the bisque firing prior to glazes being applied (See tests in Appendix A.7.17-A.7.24) The rationale for this approach was that

- The slip will fracture and crack during both the drying and bisque firing, creating another type of texture, especially in areas where it was applied heavily and with this intent;
- Even if glazes do not fully mature, the neutral white surface provided by the slip will prevent the colours becoming muddied as they would do if they mingled with the ceramic/perlite body;
- Any colour that is evident will consequently be brighter.
The tests (Appendix A.7) supported the soundness of this rationale and the resultant bright colours and muted textures encouraged further interaction with the kiln. The white slip is most clearly visible in test number A.7.18 (Plate 6.3.12) yielding subtle nuances of colour, especially with glazes containing cobalt carbonate which would otherwise have merged into the pale tan colour of the perlite body. Glaze number A.7.23 (Plate 6.3.11) demonstrates the lichen-like colour and effect sought.

The numerous glaze tests (see Appendices B.1.2 to B.1.50) were undertaken to explore the reaction of the base glaze with inclusions of a variety of glaze colourants to clay bodies containing the different perlite/clay mixes that had been used previously. The glaze tests illustrated in Appendices B.1.2 to B.1.6 and B.1.15 to B.1.20 have been applied over a clay body containing both coarse Chillagoe perlite and the finer Ausperl perlite. Other tests (see Appendices B.1.9 to B.1.14 and B.1.21 to B.1.26) contain only Chillagoe perlite. All tests were fired in the same kiln and on the same kiln shelf, thus ensuring a uniformity of atmosphere and temperature.
Results seen in Glaze Tests B.1.1 (Plate 6.3.13), (5 coats base glaze with 1.5% copper carbonate over mixed perlite body) and B.1.7 (Plate 6.3.14) show no discernible difference in the resultant glaze colour; however the test, B.1.7 (Plate 6.3.14), (5 coats base glaze with 1.5% copper carbonate over body containing Chillagoe perlite only) has a slightly coarser texture.

### 6.4 Outcomes of Glaze Research

After completing over two hundred glaze tests in the Tetlow electric kiln at the JCU campus, the following outcomes have been identified:

- Use of the different brands of perlite, (Chillagoe and Ausperl) had no impact on the colour of the final glaze. However it does alter the final texture slightly due to the coarser formation of Chillagoe perlite causing larger pits, hollows or raised surfaces to which the glaze adheres. Where a combination of Ausperl and Chillagoe perlites has been used, the larger pits and hollows that occur with only the Chillagoe perlite are prevented by the smaller Ausperl particles filling the gaps thereby creating a denser clay body and external surface. Knowledge of the differing surfaces achievable will enable greater control over future works.

- Use of a white slip under any of the glazes contributed to clarity of colour and provided additional textural contrast even when the glazes were not fully mature, thus enabling larger works to be fired in a kiln where there is a notable disparity in temperature between the top and
bottom sections of the kiln. By applying slip to the lower portion of the work prior to glazing, the lack of glaze maturation on the lower portion compared to the top portion of the work would not be so obvious due to the increased textural interest created by the slip.

- Numerous thin applications (up to six) of glaze proved far more effective in producing the desired heavy lichen-like glaze surface qualities than fewer thick applications of glaze.
- Each series of tests contained at least one glaze that acted as a control to determine if there were any huge variants occurring at base level. This control glaze was usually, but not limited to the base glaze with the addition of 1.5% copper carbonate.

Given that the numerous tests undertaken had demonstrated that the variety of perlite used had no discernible effect on the glaze colour, further tests were carried out during June 2003 in a different kiln (in a private studio) on a clay body containing a mix of the two perlites and applied using remnant original glazes alongside freshly mixed formulas.

### 6.4.1 Test Refinements Seven

Following the same firing pattern as used previously, the resultant tests as seen in Plate 6.4.1 (Appendix B.1.33) produced the colours and textures achieved initially in the kiln at the Banff Centre for Arts and during the first firings undertaken at James Cook University during 2001 and early 2002.
6.4.2 Implementation of Results

Given these results, the series of works that had been destroyed in the earlier firing, the *Inheritance from Mary Kathleen Series 2*, as seen in Plate 6.4.2 was remade along with an additional triptych of works entitled *Inheritance from Mary Kathleen Series 3* and fired successfully in a kiln located at a private studio.

As the trials using slip to act as a colour enhancer/brightener in areas of the work where the glaze had not quite reached maturation point had proved relatively successful, the
larger free-standing works included in the Ruins series, and entitled Ruins 1, 2, 3, 4 & 5 respectively, were glazed successfully.

### 6.5 Technical experimentation: works relating to the Town Site

A large number of tests and experiments were carried out on a variety of media in an attempt to capture and portray the ephemeral nature not just of our physical existence but also civilisation’s trappings which, even if made of heavy duty steel, will eventually erode and break down into matter before being absorbed back into the earth from whence it originated, albeit in another form.

One of the concepts relating to the town site involved replicating the fragmented appearance and texture of the tiles that remained on some of the concrete slabs; to capture the feel of the weathered tiles as they were slowly fading, curling up and finally crumbling to dust. Once this was achieved, the idea was to colour them with light washes of under-glaze colour and then silkscreen some of the tiles with faded images from the time when the town (and the tiles) were fully functional (see Chapter 8) thereby using the fragmenting of the tiles as an analogy for a town that had ceased to exist in reality but was still vivid in the minds of those who had lived there.

Paperclay is clay to which cellulose fibre has been added to make the clay stronger in its unfired state. The fibres mesh together creating a clay body which is an ideal medium for creating very thin textured sheets of clay which are strong enough to withstand different surface finishes and the pressures of being printed on in the green state. Initial tests were made in order to determine possible strengths and surface finishes that could
be achieved with paperclay when rolled as thinly as possible. A number of different formulas were mixed and trialled as was commercially prepared paperclay body (Plate 6.5.1).

Plate 6.5.1 J. Mulcahy  
Variety of paperclays and photographic silk screen test pieces 2006

The first, a porcelain paperclay mixed with added kaolin fibre to increase the strength, was placed between sheets of transparent plastic to prevent it sticking to the rolling pin, and rolled out to an even one millimetre thickness. The top plastic sheet was then removed, and the top portion of the test piece coated with a thick coat of white terra sigillata (a super fine deflocculated slip made with Clay Ceram which is a high mesh china clay) to a depth of one millimetre, making the overall thickness two millimetres. The lower half was coated to a similar thickness but a pure sieved ball clay slip was used in place of the terra- sigillata. These coatings of slip were necessary for two reasons, the first, to create an initially smooth surface which was necessary for the
application of silk-screened images as the addition of the strengthening fibre gave the
clay a dimpled texture unsuitable for printing, and secondly, it was hoped sections of
the slips would crack slightly as it dried and during the firing, due to the different
shrinkage rates between it and the paperclay which would help achieve the fragmented
appearance sought.

While the clay sheets were still damp, yellow, turquoise and black under-glaze powders
were sprinkled over the surface and then gently rubbed in to create subtle colouration.
When the slabs had dried beyond being sticky to the touch, images in yellow were
screen-printed on to the coloured surface. This proved unsuccessful with the colour
smudging and shreds of clay slip adhering to the screen which, in itself, was acceptable
due to it added to the weathered appearance of the surface but the smudged colour was
a problem because, if the image were too much out of focus, it would not be
recognisable thus defeating the purpose.

A further attempt was made when the clay was dry; however, this time black under-
glaze was used as the print medium in the hope of clearer colour definition than had
been obtained with the yellow. This attempt was more successful but still not optimal,
possibly due to the paper-clay having curled a little as it dried thus making it a more
difficult surface on which to print. Further under-glaze colours were then sponged on
with a damp sponge, and when the colour had dried, additional images were scratched on
through the coloured surface. Of the two slips applied, the terra sigilatta (Plate 6.5.2)
seemed to have the better adhesion to the paperclay surface.
The ball clay test proved much more fragile, cracking too much and causing the paper thin sheets of porcelain to deteriorate to such an extent as to not be viable on a large scale (Plate 6.5.3).
Similar tests were applied to the commercially-produced Black Wattle Earthenware paperclay. However, as the Black Wattle body contained no ceramic fibre and was consequently smooth, applications of slip were not needed to create a level surface as required with the porcelain paste. The downside was that, although the surface was wonderfully smooth, the clay body was no way as strong as in the mix containing ceramic fibre which meant it was unable to be rolled to the thinness achieved with the porcelain mix.

The thinnest sheet achievable with the Black Wattle paperclay without cracking was two millimetres. As with the previous tests, underglaze colours were applied and rubbed on to the surface selected areas. The images were then silk-screened with a black underglaze or straight black copper oxide mixed with a brushing gel. Further underglazes and body stains were then applied. However, this second application of colour was not successful as it proved easy to smudge the black of the silk-screened images. When fired these works were similar in colour and texture to the porcelain sheets but the additional thickness required to strengthen them resulted in a substantial rather than an ephemeral feel and again defeated the purpose.

Still searching for work that spoke to the other sites as well as relating to the deserted town site, further research involving paperclay and the glazes used on works made in response to the other sites ensued. Small amounts had previously been applied to small sections of the paperclay when other tests were being trialled. The next step was to apply the glazes over a series of larger flat, surface areas to articulate visually the colours of the surrounding landscape within area confines similar to that taken up by one of the decomposing floor tiles found in the township. Thirty two panels/tiles were
prepared, 16 using the commercial Blackwattle clay body and 16 using the porcelain paperclay body each with each measuring approx 30 cm square.

Plate 6.5.4 J. Mulcahy  Commercial paperclay with slips and glazes 2006

Once bisque fired, the panels made from the commercial paperclay were laid out in two rows; layers of glazes were then applied quickly in minimalistic painterly strokes. The panels were subsequently fired and then assembled in landscape formation. As can be seen in Plate 6.5.4 the results of the individual panels were quite stunning. However, as with the glass tests, they did not contain the feeling of ephemera which was needed to respond to the essence of silence identified at the town site and, because of this, were discarded for the time being as not relevant to this research project.

As the porcelain paperclay body could be rolled to almost paper thinness hope was held for it achieving the desired results which referenced decomposition and the ephemeral nature of being. However it was still not working as I wished and nor did the media used relate as well as I had hoped to works made in response to the other sites. So this too, although a fascinating technique, was discarded for this particular research project.
Further research combining different media between sheets of transparent glass was conducted to test the hypothesis that the glass would encapsulate the fragile fired paper clay sheets while also adding a further ethereal dimension to the works.

Plate 6.5.5 J. Mulcahy  Fired paper-clay fragment fused between transparent glass sheets  2006

In the first of these tests, fragments of fired paperclay were successfully fused between transparent glass sheets as can be seen in Plate 6.5.5. The red/yellow glaze used on the Transition and Open Cut series formed, when thickly applied, a dry surface which cracked like a parched earth surface with large platelets. For the next test this glaze was applied thickly to ceramic fibre cloth in the belief that the individual sections of glaze would be able to be peeled off the ceramic fibre cloth and then placed between sheets of glass and fused together.
The idea was that the fragmented bits of glaze (as seen in Plate 6.5.6) could potentially be used in a similar way to the fragmented sections of fired porcelain paperclay. This worked well in so far as the glaze reacted well and was able to be removed from the fibre blanket and fused between the transparent glass. However, during the fuse firing, the glaze changed quite dramatically in colour, most probably due to the reduction of oxygen occurring as the glass melted and encompassed it resulting in the dull colour seen in Plate 6.5.7.

Plate 6.5.7 J. Mulcahy  Fragments of fired glaze fused between sheets of transparent glass  2006
Further tests incorporating segments of glaze and additional items such as ceramic figures and figures drawn in under-glaze colours (Plate 6.5.8) worked well apart from the loss/change of glaze colour intensity.

Plate 6.5.8 J. Mulcahy Fragments of fired glaze and figures drawn in underglaze colour fused between transparent glass sheets 2006

While all the tests involving glass worked effectively apart from colour loss in the glaze fragments, and will later (beyond, the current research) provide avenues for further investigation, it was decided not to pursue this mix of media at this time as the translucency of the glass, seemed unable to achieve the feeling of deterioration and the breaking down of matter sought.
Chapter 7  Mary Kathleen: Site One, The Mine Site

7.1 Introduction

Chapters Seven to Ten elucidate the link between the four selected sites of silence, how the different artworks document these silences, why the mediums selected were deemed the most appropriate for the individual sites, and the technological approaches used to ensure the realisation of conceptual vision. Many specialised techniques were either learnt or developed to enable the actual production of the works and, while Chapters Seven, Eight, Nine and Ten refer to these techniques, processes and ultimate results, the detailed body of technical information has been dealt with in Chapter Six and related appendices.

The Mary Kathleen mine site is located at the edge of the Selywn Ranges between Mt Isa and Cloncurry in the north-west of Queensland. Frequently referred to as the Isa Highlands, the Selwyn Ranges traverse the dry north-west draining into the Gulf of Carpentaria from the Williams and Fullarton Rivers in the north and, in the south, into the Lake Eyre Basin from the McKinlay River and its tributary, Booroma Creek.

The land on which the mine is situated was originally part of the Kalkadoon tribe’s territory (see Appendix D). However, as the mine was developed prior to legal recognition of native title in 1992, the lease arrangement was made between the mining company MKM and the Queensland State Government, indigenous rights to the land not being recognised.
7.2 Site visits

As indicated in 4.1, I first visited the now defunct open-cut mine and associated sites in 1998 and more comprehensively again in 2000 just prior to commencing this research. It was then that the prospective sites of silence were first explored in line with the criteria identified in 4.5. A further field trip to Mary Kathleen was undertaken during June/July 2005, its main purpose being to document more fully, both visually and geographically, the site of the mine, the township and surrounding natural vegetation and also to make contact with the elders of Kalkadoon tribe, the traditional owners of the area, in order to discuss any concerns they may have regarding the projected research. It was also anticipated that records held by the Mt Isa Library and the Mary Kathleen Museum at Cloncurry would provide additional documentation relating to the social structure of the isolated mining community as well as data relating to the operation of the mine and associated extraction plant.

In the event, the Mt Isa Library collection was disappointingly sparse, containing little other than the Mary Kathleen Community newsletters which had been printed on a regular basis by the mining company Mary Kathleen Uranium LTD. Primarily these documented the social events of the community as well as snippets of information about the running of the mine. Unfortunately no original photographs are held in the collection and the images in the newsletters are of poor news print quality. Given changes in ownership, with Mary Kathleen Uranium LTD being taken over by Mt Isa Mines, historical documentation was unavailable for research purposes at the time. The Mary Kathleen Museum at Cloncurry, however, had an extensive collection of historical photographs that depicted details of the mine from when it was first established,
documenting images of the processing plant and machinery that were used through to the de-commissioning stage when both mine and township were dismantled. Even though not ultimately directly utilised in the artwork, these images provided an invaluable visual aid to understanding the massive changes wrought in that particular landscape over a relatively short period transforming it from a pristine landscape to one despoiled and then regenerating – a spectrum which consequently assisted in the conceptual development of the work. These data, both written and visual, provided one window of understanding into what life had been like for the miners, and it was this understanding and empathy which, it was planned, would subconsciously and subjectively imprint into the artwork relating to the site in such a way that it could, when viewed, be recognised not only by the people who had lived and worked at the site but also by people who had no previous connection with the area.

7.3 Visual research

The approach to the mine is along a rough track surrounded by grazing country with a few gently sloping hills in the foreground giving way to more rugged peaks in the distance. Eucalypts and acacias dot the landscape, marking out the creeks and providing shade for the grazing cattle. It is a peaceful rural scene and, because of this sense of peacefulness, the discord in the landscape, seen as well as felt as one nears the abandoned mine site, is all the more apparent. Jagged lumps of concrete and mullock heaps (Plate 7.3.1) rise from the spinifex serving as a foil for the elegantly-constructed termite mounds that dot the landscape. Pieces of rusty machinery litter the ground becoming more numerous the closer one gets to the mine. The aura, initially sensed, of
aggression that pervades the mine site is embodied in the huge broken and pitted hunks of concrete that stand defiantly still.

Too massive to be removed, these fortress like remains (See Plates 7.3.2 and 7.3.3) are grim reminders of the way humankind can impact upon the landscape. A short distance from these remnants of the plant, the actual open-cut mine rises up in tiers, multi coloured from the rich mineral deposits they contain and, at their base, sits a seemingly bottomless pool of lethal looking turquoise water, its colour derived from minerals leaching out of the rock surrounds (See Plate 7.3.4).
Plate 7.3.2  J. Mulcahy  Remains of plant at the Mary Kathleen Mine 2002

Plate 7.3.3  J. Mulcahy  Remains of plant  2005

Plate 7.3.4  J. Mulcahy  Open cut mine and tailings dam  2005
One becomes aware of a sense of stillness, of busyness halted, of nuances beyond the obvious and immediate.

Upon reflection, it is apparent that the initial reactions of aggression and despoilment are indeed integral contributors to the silence that characterises this site. Somehow, however, allied to this, another more subtle silence makes itself felt and, instead of the discord one would expect to feel at such a site, there is rather a sense of the earth at last at rest and of a healing process underway.

7.4 Conceptual framework

As identified in 4.5, two main issues at this particular site contribute to the silence it embodies; these are (a) the despoilment and consequent slow acceptance and healing/regeneration of the landscape and (b) the ongoing consequences to the planet itself, especially in relation to all those who have suffered harm or potential harm through the mining of uranium, not least the miners themselves. These are the issues with which the artwork to be made in response to this site will most closely engage. A list of the critical elements relating to the remnants of plant and the tiers of the open cut mine and integral to the site are as follows:

- Massive built environment now derelict and decaying;
- The growth of grasses and a multitude of lichens and mosses slowly softening and reclaiming the derelict remains, blending them back into the natural environment;
- A sense of a landscape ravaged, its layers blasted, exposed, exploited and abandoned to its fate.......... now quiet;
• A feeling of acceptance, of slow healing;

• Objective facts concerning the uranium that was mined:
  - Contradictory uses of uranium, that is, its use for medical treatments and research versus its use in nuclear weapons, power stations, waste disposal;
  - Health of miners; and
  - Public accessibility to defunct mine site.

Having isolated these key elements to inform the artwork, the next step was to research the medium or mediums which would potentially convey the silence endemic to the linked areas within the site (for example, the ruins and the mine face).

### 7.5 Processes relevant to construction of artwork relating to this site

When considering the sculptural medium best suited both to convey visual and subjective impressions and elements identified at the site, and to portray the subtle colourations contained within the lichens and mosses that covered the plant ruins, it was decided that an altered ceramic medium (clay, leavened with perlite and sawdust) had the potential to supply the means to portray mass, the decay as well as the subtlety of the surfaces found on parts of the ruins. Appropriate glazes would be necessary to replicate the mosses and lichens which are an integral element of the ruins, acting as a foil to the harsh remains of buildings and simultaneously promoting the sense of renewal and acceptance palpable at the site. Other mediums such as ferro-cement and styrofoam were initially and briefly considered; however the potential use of these mediums was discarded due to the desire to incorporate glass, in the form of *pâte de verre* (as explained earlier, to act as a visual metaphor for the earth’s energy) into some
of the smaller works which meant that the base media had to be able to undergo prolonged periods of firing which were not possible with either ferro-cement or styrofoam. A ceramic based medium would also allow for the integration of both found objects from the site, and pre-fired ceramic pieces into the work.

7.5.1 Construction of the artwork relating to the plant ruins Site One (the mine site)

As mentioned in 7.2, the defunct mine site with its hulking relics of the crushing and storage areas and visually sinister pond was one that evoked an immediate and strong subjective response. Here it was not necessary to sit meditatively absorbing the essence of the innate silence as the visual reminders of what had been created an aura that impacted immediately on one’s senses. This initial response to the site was a sense of quietitude (see 7.3) and it was this duality of perception and the intuited aspects of the site that would need to be encapsulated in the artwork as a fundamental essence if, ultimately, the viewer was to be able to empathise in the way envisaged by the artist.

In order to include the critical elements identified in as integral to this site (See 7.4), a variety of works needed to be constructed to enable the concepts relating to the various elements to be covered adequately. This was imperative for, unless all aspects of this site could be conveyed to the viewer through the work, the viewer would not be able to form a comprehensive response to the works and therefore to the specific silence intuited which, in turn, would place at risk the aims of the research project and defeat the purpose of the proposed exhibition.
Initially two series of work relating to this site were commenced. These were *The Ruins Series* (*Numbers 1-5*) which references the massive built environment and the slow regeneration of nature, and the *Inheritance from Mary Kathleen Series* which references the consequences of the mining of uranium on the miners involved in all stages of the mining and refining of uranium ore. However, as the work evolved, additional works were constructed to define and realise the energies felt at the site more comprehensively. These extra works comprised the *Open Cut* series which referenced the actual tiers of the open-cut mine and the site specific wall-installation, *Ruins No 6*, which was made as a wall-mounted addition to the initial five free-standing works in the *Ruins Series* and comprised seven massive lengths of ceramic and steel, each piece weighing up to seventy kilos.

The construction of the initial works (*Ruins Series Nos 1-5*) began by using a clay and perlite body (developed during research undertaken in 1996/97 for the exhibition *Passages of Earth*). Initially, a series of large and dominant sculptural works inspired by the plant ruins was constructed but it was not possible to achieve even a fleeting sense of the bereft, quiet and regenerative silence felt at the mine site. The works certainly related to the site in form, colour and texture but the resolution was otherwise not satisfactory. After three months of increasing frustration and the constant altering of the forms in futile attempts to acquire that missing innate *je ne suis quoi*, I began sawing the sculptures into sections for easier disposal; as I sawed I stacked the sections on top of each other. In doing so I became aware of how particular angles and spaces could manipulate light and shadow in a way that suddenly gave the work a different feel, at
last and serendipitously actually creating the sense that I was seeking. Building on this
discovery, the first five pieces in the *Ruins Series* began to emerge (Plate 7.5.1).

As the sculptural forms took shape it became imperative to develop further the glazes
first tested during the Banff Residency in order to obtain a wider range of colour and
variation in texture (see 6.2) which would contribute to the visual linking of the artwork
to the site and, by subconsciously awakening the tactile senses of the viewer, help
engender the mood and type of silence integral to the work.

Over time, the remains of the crushing and storage facilities at the mine site have
become encrusted with a wide variety of mosses and lichens whose textures and colours
range from subtle, barely visible growth to heavy, rich textures in deep greens and
blues. Of the glazes under research and experimentation, there was one that was
particularly appropriate to represent the texture sought in that, when applied to the
selected ceramic medium, it developed a dry crystal growth which, in places, resembled
the texture of lichen (Plate 7.5.2).
The use of these colours and textures, associated as they were with those naturally occurring on the ruins, was designed to create an immediate visual link between site and work. Further testing of variations of the original glaze was undertaken in order to obtain the desired colours and textures, as well as the nuances of those colours and textures most applicable to the actual site. (Refer Chapter 6). The visual link thus created by the replication of colour and texture between the plant ruins and the artwork made in response to Site One, the mine site, provided a framework for the other three sites, thus assisting in unifying the four sites into a harmonious exhibition.

7.5.2 Additional works

In his essay ‘The Eye and the Spectator’, O’Doherty (1986) refers to the implications of space on how artwork is both perceived and interpreted by its audience. He refers to “…The flow of energy between concepts of space articulated through the artwork and the space we occupy…” (O’Doherty, 1986:38) and comments that “…Space now is not just where things happen: things make space happen…” (O’Doherty, 1986:39). Although O’Doherty is referring to the hanging or installation of paintings and the necessity for works to be hung appropriately to realise the context in which the artist
wishes them to be viewed, his acknowledgement of the importance of space and how it can be used further to articulate the meaning of the artwork on show is even more applicable to three-dimensional works which, by their very nature, occupy a highly definitive position in space compared with a painting which, it could be argued, presides over, or at the edge of a space, as opposed to having central dominance within.

O’Doherty also makes numerous references to the viewer of the artwork whom he also refers to as the Spectator and, “… the Observer, occasionally the Perceiver…” (O’Doherty, 1986:39), acknowledging that much of the contemporary audience for art has become accustomed to viewing or perhaps recognising that there is more to many works than is initially and immediately visually apparent.

While the initial series of *Ruins (Nos 1-5)* was under construction, the triptychs which comprised the *Inheritance from Mary Kathleen Series* were also being worked on (see 7.5.1). As these two initial series responding to the mine site *Ruins (Nos 1-5)* and *The Inheritance from Mary Kathleen* triptychs reached completion, I recognised that, although each individual piece worked aesthetically and could be grouped with the others harmoniously, the totality was they were not yet strong enough, given the space in which they were to be displayed, to imbue the surrounding space with the energy they were intended to convey. The gallery was large, and the area where it was envisaged these works would be installed would, because of its spaciousness, make more tenuous the existing links between the works and hence potentially fracture the overall energy.
The conclusion was that additional, physically more imposing works needed to be constructed in order to depict the silence intuited at this site more accurately (see 7.3). This was necessary to ensure that the works that reflected this site would work together aesthetically and fulfil the desire for a silence specific to this grouping of works as well as working to create a further harmonious installation with work addressing the other three sites of silence. If the artist could not feel the desired essence of silence emanating from the artwork and from the space both contained by and impacting on the placement of the individual artworks, it is likely that the audience, lacking the artist’s strong association with the site, would struggle to experience the response it was expected the work would elicit. Thus were the Open Cut Series (refer 7.5.4) and the large wall installation, Ruins No 6, (which consists of seven sections) commenced. The scale of these extra works was such that in excess of twelve months were dedicated to their construction. The large scale was essential if the final installation in the gallery were to be a place where, as O’Doherty said, “…things make space happen…” (O’Doherty, 1986:39).

Secure in the knowledge that these works would play a pivotal role in creating the dominant yet peaceful and regenerative energy desired by adding strength to the silence already inherent in the first five works, it was imperative that the same visual aesthetics in relation to form and finish that had been used in earlier works be applied. Prior knowledge of the space in which the work was to be installed proved invaluable when designing the seven wall panels that comprise Ruins No 6 as it was possible to measure
the gallery walls and actually visualise, during the design phase, how these further works would fit into the space.

The wall space to the left of the main entrance of the Perc Tucker Regional Gallery (refer Gallery Plan Figure 11.4.1) on which *Ruins No 6* was planned to be installed was measured and then a similar area of wall in a studio at the Vincent campus of the university was covered in newsprint to sketch the design, roughly adjusting proportions as required (Plates 7.5.3 & 7.5.4). Using this method, the scale of the work, how it fitted with the already constructed artworks and how they would work together in the gallery space, became easier to envisage.

Prior to the final drawings being made on the wall, a maquette was constructed of clay slabs to help determine placement of the seven individual pieces that would comprise the work. The life-size drawings enabled precise planning of structural and mounting devices as well as the planning of the placement of the found objects (mainly scrap metal) since each could then be seen both in relation to the other and the installation as a whole.
7.5.3 Technical issues associated with construction of *Ruins No 6*

The areas within the work where the structural anchor points were to be located needed to be identified and aligned to allow them to work aesthetically as well as structurally throughout the installation. This was, in fact, crucial given the sheer size and weight of the works. There were size constraints relating to the studio in which they were being constructed and thus it was realised from conception that the works would not be able to be viewed as intended until the final installation on the Gallery wall. This made it imperative that a through line of aesthetic links be incorporated in and between the individual pieces to enable them to be installed as initially visualised or, in the event of some construction, firing or installation disaster, be strong enough to work either as a smaller installation or as individual works.

Once the size and scale of the works had been determined, timber support structures for the construction stage were prepared with several coats of varnish to minimize warpage over the months they would be in contact with the damp clay body. The clay/perlite body was mixed in bins by hand with the dry clay being slaked down until it was a thick slip (the consistency of thick cream). Perlite was then added continuously to the slip until it reached the stage where the slip could not easily absorb any more perlite.

As the work was constructed without any former other than the base support, the individual works were built up layer by layer to reach the desired depth. This process took many months as each layer took several weeks to firm up sufficiently for subsequent layers to be added. As the layering grew deeper, found metal sections were
added in sections of the works in keeping with the initial design plan as seen in Plate 7.5.5.

Once the individual works had been built up to a depth of approximately 15 cm, it was judged that the pieces were not going to work as anticipated given that, in proportion to the wall space they were to occupy, they were too flat and not sufficiently physically imposing. At this stage, despite the fact that many of the works were well on the way to drying, it was decided to wet them down sufficiently to allow more layers of the clay body to be added to increase the depth of the work and, in so doing, to create a more monumental and dominating presence. These additional layers added a further five to eight centimetres of depth, but caused some of the denser metal inclusions (as seen in Plate 7.5.5) to become problematic. As the layering grew deeper, the clay completely encased some metal sections causing large cracks to appear where the natural shrinkage of the clay had been impeded by the metal inclusions. This resulted in a chisel needing to be taken to the affected sections to either remove the metal entirely or, where possible, replace it with less dense or obstructive pieces.
The works in progress had, up to this stage, been constructed on the floor of an air conditioned studio which was suitable for the initial construction and slow drying phases of the work. However it proved extremely challenging for me because I had contracted the Ross River virus and found the constant kneeling and standing difficult. When the chance came to move to a different studio with no air-conditioning, but sufficient benches on which to assemble the work to almost the final installation formation, it was accepted with alacrity.

The work was moved to the new studio space during the 2005 mid-year break and, over the next six months, any damage caused by the move was repaired with the final carving and shaping of apertures for installation being completed. Each work was also divided into two or more sections in keeping with the overall aesthetic to enable it to fit into the largest available kiln on campus. As the works became bone dry, they were bisque fired to 1000°C, a process which took eight weeks with each work fired in an upright position and supported by fire bricks. Each took a little over a week because of the slow firing and cooling cycles required to minimise the inevitable cracking and warping that would occur around the metal inclusions.

Most of the works came through the bisque firing with little or no damage. However two had major problems, one due to the steel reinforcing bar inclusion which had caused severe warping and in another, where a metal rail line section had been included in the top layer of clay, buckling caused a bad crack to appear. The first problem was cause for concern with the artist initially going to discard the work considering it too damaged to be retrieved. However, by sawing through and then removing the end of the
steel bar it became possible physically to break the work at the apex of the warp and then later, after it was glazed, fired and reassembled, a rust patinated metal section was fastened over the break which had been glazed and coloured with a black copper wash so it blended in with the rest of the work giving the appearance of an intentional break.

The second problem was fixed by completely removing the buckled section of metal and then, after the work had been glazed and refired, reinforcing the work with gap filler and appropriately glazed and fired wedges of clay which had been made in anticipation of this category of problem. Prior to glazing, the apertures that were also designed to serve as bolt holes to fasten the ceramic section to the steel backing plate were reworked to make them a little larger for the fastening bolts, as the sculptures had shrunk approximately six per cent in the bisque firing and would shrink further during the glaze firing. The works were then cleaned of any dust and washed down prior to glazing. Initial washes of various strengths of black copper oxide were applied to sections of the works where a darker colour was sought and then the glaze was applied in thin washes with up to six applications in some areas where variations of colour, colour intensity and texture were sought.

As with the bisque firing, each work required approximately six to seven days in the kiln because of the slow temperature rise and long cooling down periods. After the works were glazed and fired, they were bolted (using bolts and washers which had been soaked with hydrochloric acid to induce a rusted surface) to steel backing plates which had also been artificially rusted and shaped to fit the individual works.
7.5.4 Open Cut

The series of works entitled Open Cut No1 and No 2 was made in response to the multi coloured tiered remains of the open-cut mine and the lethal looking pool of water at their base as seen in Plate 7.3.4.

Using a plaster mould as a former, the works were initially constructed as an almost solid sphere from a mixture of clay and perlite. After eight weeks of additions, being added on to, manipulated and turned, the spherical form was left a further few weeks until dry enough to sustain its shape without the support of the plaster former. It was then sawed and chiselled in half thus creating two almost solid hemispherical sections which were left until dry before being further worked; if carving were to be attempted too early on, when the clay body still felt damp to the touch, it would be difficult to obtain the desired texture as pressure applied caused the surface to become compacted and smooth which was the antithesis of what was required.

As it dried, the clay and perlite body developed a hard, chalky texture which was relatively easy to carve and work with a chisel and hammer, thus the tiers, which echoed those of the actual mine site, were able to be carved into the work and the curved interior hollowed out. Constructed over a period of six months the two works were, when bone dry, individually bisque fired over a period of 80 hours and 50 minutes. The extra-long firing cycle allowed for the slow release of any moisture which is inevitably contained within the clay body because of the high humidity and the thickness of the work.
7.5.5 Embellishing of surfaces

Prior to glazing the works, further tests were carried out on variants of base glazes No 2, No 3 and No 4 (see Appendix D) which had been previously tested in 2001 (Plate 7.5.6).

The aim of the further tests was to see if, over the five years, the original glazes maintained their intensity of colour and whether subtle differences in the amount of oxides used as colourants could be achieved to create further nuances within the glaze colour.

The tests resulted in suitable colours being obtained from glazes 2A, 2B, 3G, 4B, and 4D which were then used singly or in multiple layers to build up the glaze coat on the two Open Cut works. The first to be glazed and fired was Open Cut 1 which, unfortunately, was not as successful as anticipated given the results of the previous test firings. This was most likely due to the glaze being applied too sparingly on some areas of the work. Subsequent additional coats of glaze were applied before the work was re-fired with much richer results. Although frustrating, the knowledge gained from the necessity of having to add further glaze coats and re-fire Open Cut 1 contributed to the
more successful glaze application and the consequent successful firing of *Open Cut 2*.

Plate 7.5.7 Crystal samples

Initially the intent was to incorporate cast glass at the epicentre of these works representing the mineral laden pool of water that is found at the mine site. *Open Cut 1* was thus fired with accurately measured shards of gold and marmalade coloured crystal (Plate 7.5.7) placed in the base of the work where it would melt, fuse and be annealed *in situ* in a firing cycle lasting two weeks, prior to being removed from the kiln with the variant colours being placed in positions that, when melted and fused, would contribute to the appearance of depth within the pool.

Although extreme care had been taken to ensure that the work was level when placed in the kiln it was found that because the lower internal tier of the work itself sat on a slight natural angle, the dead level glass, once fired looked out of place in relation to the position of this lowest tier. More glass was subsequently added, with the work being placed in a carefully angled position in the kiln prior to the re-firing to ensure that the glass, when melted, was true to the angle rather than in the previous flat position.
However, when the kiln was opened two weeks later, which was the time it took to melt, fuse, anneal and cool the glass, it was found that the darker, marmalade glass, of which only a small portion had been placed in the centre (the darker colour to recreate a feeling of depth) had dominated the larger area of gold coloured glass and that the extended firing time (this work having spent almost two months in the kiln) had also caused the burn-out of the colours resulting in a drab looking work as can be seen in Plates No 7.5.8. & 7.5.9.

Plate 7.5.8 J. Mulcahy *Open Cut 1* 2006

Plate 7.5.9 J. Mulcahy *Open Cut No1* (detail) 2006
As the second half of the sphere, *Open Cut 2*, had been successfully glaze fired and looked quite complete without the addition of glass, it was decided not to risk its loss in attempting another glass inclusion. The deep reds and yellows of the glaze surface (as seen in Plate 7.5.10) capture the implied sensation of toxicity and danger allied with beauty, drawing in and then repelling the viewer as many erroneously assumed that the glaze colour was obtained from uranium.

![Plate 7.5.10 J. Mulcahy Open Cut No2 (detail) (2006)](image)

7.5.6 Inheritance from Mary Kathleen

The *Inheritance from Mary Kathleen* works were created in a sequence of either pairs or triptychs with the first exploratory *Inheritance from Mary Kathleen* works being made during a research residency at the Banff Centre for Arts in Alberta, Canada (see 4.6). Conceptually the pieces in the series are as multifaceted as the myriad of construction processes each underwent. The initial works made in Canada (Plate 7.5.11) were, from the blending of the clay body through to the completed works, entirely experimental.

The first thirteen Australian works in this series were constructed over a four-month period. The free-formed slab works incorporated found objects from the mine site with
cavities left in some which, it was planned, would eventually contain fired ceramic figures embedded in *pâte de verre*.

The long period of construction was necessitated because of the constant monitoring required of the thick ceramic/ perlite body as it dried; for example, as the clay body started to dry and consequently shrink, inevitably it would crack around the found metal objects impressed into the clay. The ceramic/ perlite body used needed then to be carefully wetted down over a period of time allowing adjustments to be carried out as required.

After being bisque fired, the thirteen works were carefully glazed over a period of days allowing the glaze to dry thoroughly before additional coats were added. The firing of
this first group of works was unsuccessful for the reasons outlined in 6.2. Numerous tests, also reported in Chapter 6, ensued until the problem was identified and rectified.

The series was remade, albeit differently as many of the found inclusions could not be reclaimed and alternatives had to be found. After successful bisque and glaze firings, the ceramic figures and heads, already twice fired, were placed in position in the purpose made cavities of the works and pâte de verre packed tightly around them. The pieces then had their final firing to melt, fuse and anneal the pâte de verre, examples of which can be seen in Plates 7.5.12, and 7.5.13.

Plate 7.5.12 *Inheritance from Mary Kathleen Series 2* (detail) J. Mulcahy (2006)

Plate 7.5.13 *Inheritance from Mary Kathleen Series 2* (detail) J. Mulcahy (2006)

These initial series had, as their fundamental core concept, humankind acting as a modifier, altering, extracting from and changing the landscape for its own purposes, with little thought for the possible future consequences of uranium mining. The works concentrate on the isolated and encapsulated aspects of the environment shared by the miners with their families, an environment which provided work, housing, food, education and social activities without access to the wider world. The miners in return, seeing it as a well-renumerated job and a secure place in which to raise their families,
were seemingly unconcerned about health risks and unfazed by the potential harm the ore they were mining could cause. As this series of work evolved, the concepts deepened from concerns for those who came in contact with uranium during its metamorphosis from freshly dug ore to nuclear reactors and weapons, to concerns for the future and the global threats posed by uranium.

### 7.5.7 Green Arch

The *Green Arch*, although visually a partner for the *Blue Arch* (9.4.1), references different conceptual concerns. Where the *Blue Arch* relates directly to the bridge one crosses either to enter or leave the township as well as the ability of the earth to regenerate, the *Green Arch* is more a metaphor for the crossing of boundaries and the ability of humankind to alter, for better or worse, minerals extracted from the earth.

The roughly textured and striated surface of the work was planned to evoke a response similar to that experienced when one walks among, observes, and contemplates the variety of mosses and lichens that are slowly spreading over the ageing plant remains. The translucent green colour (Plate 7.5.14) of the cast glass in *Green Arch*, references the initial use of uranium ore, which was a colourant for glass, and in ceramic glazes. Initially used by the glass makers of Bohemia, the colours obtained by the use of uranium ranged from yellow to amber, to apple green (as duplicated in *Green Arch* but obtained by means other than uranium), and also to a deep red if there was also enough lead content in the glass (see Appendix F).
Plate 7.5.14 J. Mulcahy Detail of glass in Green Arch

The construction process was similar to that outlined for the Blue Arch, the main difference being that the first glaze firing of the Green Arch was successful unlike that of the Blue Arch which required additional glazing and a further glaze firing before a satisfactory result was achieved. The casting and annealing processes used to produce the glass were the same as those employed for the Blue Arch (9.4.1).