

The Desert and the Inland Sea

An Exhibition of Prints

by Christine Gates

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Artist's Statement

Each new artwork provides me with the opportunity to learn more about myself, to embark on a journey of discovery about my world and my place in it. In our contemporary world, science provides us with vast possibilities for expansion in our understanding. The scientist is the modern day explorer, going into deserts and oceans to bring new knowledge to light. In delving into this store of information from the past we move towards new ways of existing in the present and into the future.

This series of images is an examination of that which compels us to explore and to expand our boundaries. Australia is one of many countries that have suffered the devastating effects of European imperialism, the culture of the indigenous people negated in order to ease the conquest of 'Terra Nullius' for the British.

However, there is also to be examined the aspect of heroism amongst the individuals who set out on explorations of this new world that frequently ended with their deaths. Their motives may, like the governments they served, have been power driven, but the desire for an expansion of knowledge is one human reaction to a little understood cosmos and the need to

find a relationship with it.

As a member of the group of Australians who are newcomers to a land of ancient traditions, of which we have little understanding, my urgent need is to find a place within this society that incorporates my European heritage, but that is unique and enriched by the existing culture. The necessity to achieve an understanding of the spirit of place, so well understood and felt by the original inhabitants of this country, is the subject of this examination.

So strong was Charles Sturt's belief in the Inland Sea, that he took a whaleboat into the desert, prepared to finish his journey to the geographical centre of Australia on water. It was a journey of terrible deprivation: 'The stillness of death reigned around us. No living creature was to be heard.' Sturt failed to reach the heart of the continent, although he came within 240 kilometres of it. The whaleboat was eventually abandoned, after its launching on Depot Creek.

Sturt's journey was ostensibly about economic gain for the motherland and new land for the settlers. It also continued traditions of the eighteenth century Romantic

Movement, where men journeyed over vast oceans in search of the sublime, their goal forever elusive.

The image of Captain Sturt with his whaleboat is surreal, but around one hundred million years ago, when the continent of Australia was still attached to Antarctica, the ocean did extend far inland. Fossils of ocean-dwelling creatures have been found deep in Australia's central deserts. The search for water in the deserts of one of the world's driest countries echoes the search for the spirit in the aridity of modern life. Our western tendency to use the earth as a source of plunder has brought us, in the twenty-first century, to the contemplation of an earth that is uninhabitable by humans. It gives new urgency to scientific research to find answers in the remnants of our past that will enable our future.

The South Australian Museum has one of the best collections in the world of marine fossils from Australia's Inland Sea. My collaboration with the scientists, from the Departments of Palaeontology, Entomology, Marine Invertebrates and Indigenous Collections, has enriched my series of artworks, increased my understanding of science and its methodology and provided a valuable insight into the workings of the Museum.

Christine Gates, Melbourne, April 2010
www.christinegates.com

A walk around an image: **Toa**

The Artist Christine Gates

This Toa has become a totem, representative of far more than its original small scale implies. It stands against a background of the plans of Captain Charles Sturt's whaleboat, taken on his 1844-46 expedition to reach the centre of Australia and discover the mythical Inland Sea. Desert textures derive from sacred land at Lake Mungo, site of ancient ritual burials. Formerly a lake, now it consists of constantly reforming desert dunes. *Toa* encapsulates the major themes of the exhibition. The plans represent the reliance in western culture on the intellect. The boat stands as a symbol for hope and expansion and, in Sturt's case, impractical idealism and profound lack of understanding of the Australian landscape. His view of the desert as a heartless terrain, the dead centre, contrasts with the indigenous Australian vision of a world rich in metaphor.

The Scientists Philip Jones and Peter Sutton

The early 1900s label reads: *The Toa represents a hill composed of white and red earth. The two Muramuras, Teriwulaha, seeing this hill from afar, thought it was a hill of stones but when they came near they found it composed of earth, and so they said 'mita kanti', this is real soil.*

"... there is an important relationship between toas as symbolic objects, their makers and users, and the land. This relationship goes far beyond merely reflecting a generalised emotional attachment to a homeland. The ceremonial totems of toa symbolism are the key 'title deeds' of particular social groups to specific sites and areas of land... Demonstrating such relationships in the moulding and painting of designs was an important aspect of religion, but also of political and economic organisation, in a traditional Aboriginal society."

Jones, P. and Sutton, P., 1986, p.15, 'Art and Land', The South Australian Museum



Toa Photogravure handprint on rag paper

A walk around an image: ***Landscape with Boat and Toas***

The Artist Christine Gates

The textures of Country provide an abstracted background for the bark boat floating over it on a surreal journey. An aerial perspective of the landscape is typical for indigenous artists who display an uncanny knowledge of topography from this viewpoint, given that, in former days, plane travel was not available to them. The Toas are lined up like specimens in a glass case. Waiting for interpretation, they offer direction to anyone with the knowledge to understand their message.

The Scientist Keryn Walshe

This large, open, flat bottomed canoe with a 'fireplace' in the centre, came from Avoca Station, Darling River. These are splendid crafts, that could accommodate fireplaces, dogs, children and who knows what else - kindergartens and supermarkets! Certainly there was plenty of space for women or men to haul in fish and scale and cook them, or shellfish to heat and eat. The canoe is similar to the Murray River style of boat, not ocean-going, but perfect for parting the reeds and navigating up and down, or across the river and around its billabongs, lagoons and islands. The flat, wide bottom would also have allowed extra baggage on board. I am thinking of warm rugs to stay out overnight if necessary. It is like a station wagon! Perfect for the larger group, out for the day, with the dogs.



Landscape with Boat and Toas Photogravure handprint on rag paper

A walk around an image: **Turtle**

The Artist Christine Gates

When I first opened the Palaeontology Collection's drawers, containing the skulls and bones of various one hundred million year-old sea turtles, I was transported to the still life paintings of the sixteenth and seventeenth centuries. There, a skull, usually human, reminded the viewer that life was short, death certain and all was vanity or emptiness. These 'Vanitas' paintings also offered the opportunity to offset the pleasure gained from viewing an object of beauty, by contemplating death and the disintegration of human life. Renowned nineteenth century British cartographer, John Arrowsmith, used Charles Sturt's original documentation to draw the wonderful map I've placed on the ocean floor. A faint tracing of marine invertebrates overlays it.

The Scientists Natalie Schroeder Thierry Laperousaz

The dry, dusty plains around Boulia, in Queensland, might seem a strange place to find sea-turtles, but about one hundred million years ago, the area was at the bottom of a shallow sea, and some of the world's first sea-turtles swam in its waters. Fossils do not look like this skull when they are found – they are encased in rock, and are usually squashed flat. These fossils are preserved in three dimensions, in limestone nodules. Palaeontologists can use a trick of chemistry to extract them. Limestone dissolves more easily in weak acid than fossil bone, so we put the nodules in baths of dilute acetic acid so that the limestone is gradually etched away. After many acid baths, the end result is a well-preserved, undistorted specimen, like this beautiful sea-turtle skull.

Below you can see two sea animals: a sponge, *Holopasamma laminaefavosa*, and an octocoral, *Mopsella zimmeri*. Sponges are the most primitive multi-celled organisms on the planet. The earliest sponge fossils have been reported in Nevada, from rock dated at around seven hundred and fifty million years ago. Fossils have been found in Australia from the Ediacaran period around five hundred and forty million years ago. Octocoral, gorgonians or sea fans are colonial animals made of tiny individuals called polyps. The fossil record goes back into the Precambrian period, about seven hundred million years ago. Sponges and corals both existed in Australia's Inland Sea.



Turtle Archival digital print on rag paper

A walk around an image: **Nature Morte**

The Artist Christine Gates

Floating above the veins of dry riverbeds in the Central Australian Desert is a still life arrangement of fossilised sea creatures. Water, the lifeblood of the land has gone, and with it our sense of connection with our ancient country. Objects for contemplation, the subjects of still life paintings typically offered the opportunity to enjoy beautiful objects whilst dwelling on the brevity of life.

The Scientist Natalie Schroeder

There are three kinds of extinct animals in this image, all belonging to the group of marine molluscs called cephalopods. Squid, cuttlefish, octopus, and the nautilus are living members of this group. All were predators, catching fish and other animals with their numerous tentacles, which were often armed with hooks. They were themselves the prey of bigger creatures, like the extinct marine reptiles, ichthyosaurs, plesiosaurs and mosasaurs. The cigar-shaped fossils come from squid-like extinct marine molluscs called belemnites. These structures were the terminal part of the animal's internal support system. Unique to cephalopods, the dense, calcite rostrum probably improved the animal's stability when swimming, by counterbalancing the weight of its body. The shell on the left is from a nautiloid, closely related to the modern nautilus. The other two are ammonites, which look superficially similar to nautiloids, but are more closely related to octopus and squid. Both had shells that were divided into chambers, separated by a wall or septum. In nautiloids, the septum is always simple, but in ammonites, it could be fantastically complex. The animal lived in the end chamber, and as it grew, a new, larger chamber was secreted, forming the coiled shells seen here.



A walk around an image: **Collection**

The Artist Christine Gates

When I first encountered the South Australian Museum Collections I thought of them as a series of still life images; wonderful objects arranged in drawer after drawer, awaiting my touch. I was transported to that childhood world where treasures awaited discovery in the back of my mother's cupboards and where, out of breakfast cereal packets, emerged new plastic marvels. Collections, whether marbles or national treasures, offer the gifts of both education and wonder.

The Scientist Natalie Schroeder

Only a tiny percentage of the holdings in museum collections ever makes it into museum galleries for public display. Behind the scenes, much space is devoted to storing many specimens of the same kind of animal. Having multiple specimens of a species allows scientists to determine which features all the individuals in it have in common. This information can be used to define the species, and to understand variations that can be found among individuals within a species.



Collection Archival digital print on rag paper

A walk around an image: **The Navigators**

The Artist Christine Gates

Opalised fossil from the Inland Sea has become the water that contributed to its creation, and underlays the boat hull and the mariner's astrolabe. A delicate tracery of opal etches the hull. The circle, symbol for wholeness and completion, has been created by an astrolabe, once used by mariners to measure the latitude of a ship at sea. This one may have been used on one of the Portuguese ships that are rumoured to have visited southern Australia well before French and English discoveries here. The hull belongs to a catamaran called 'Pelican 1', an Australian vessel dedicated to marine research and social welfare projects. In the Middle Ages the pelican became the symbol for Christian self-sacrifice because it was thought to offer its own blood to its young when food was unavailable. The text in the image comes from archived, early, museum expedition notes, examining sources of water used by Aboriginal people in the South Australian deserts, and found in the roots and stems of certain species of trees, including '*Hakea leucoptera*, several species of Mallee and other Eucalypts, a Currajong and the Desert Oak.'

The Scientist Natalie Schroeder

The floor of the Cretaceous inland sea would have appeared much as a shallow sea-floor does today, with a diversity of bottom-dwelling animals, including sponges, like this one, going about their daily business. In a few places in Australia, after the retreat of the Eromanga Sea, geological processes allowed a unique form of fossilisation. Animals died and were buried on the sea floor, but after the sea had retreated, groundwater dissolved the hard parts of these fossils. Where particular, rare conditions were met - at Coober Pedy, Andamooka and Mintabie in South Australia - the cavities this left in the rock were infilled with a silica solution that slowly solidified to form opal. Most of this sponge was preserved as common opal or 'potch', but here and there through the walls of its body, we see blue and green flashes of precious opal.



The Navigators Archival digital print on rag paper

A walk around an image: ***The View Below***

The Artist Christine Gates

The view from the floor of the ocean or river is one humans rarely see. So if I am down there looking upwards, I might be dreaming, or I might be dead. With death comes the possibility of rebirth and new life. The microscopic Collembola in the image have become huge and create the whole of the underwater world. Or perhaps the boat shrank like Alice in Wonderland? I am thinking both of voyages of exploration across oceans, and voyages to explore inner worlds. Jungian psychologists describe our shadow side as that which goes unrecognised and unacknowledged by our conscious minds. This is the place where things that are too threatening to look at in daylight are kept. They can destroy, but also, once acknowledged, transform.

The Scientist Mark Stevens

Collembola, or springtails, exist in more habitats worldwide than most other animals, from under bark, in soil, to streams and even in underground calcrete aquifers in arid Australia. They appear today just as they did in the Cretaceous period when freshwater rivers ran into the Inland Sea. Although these amazing creatures look relatively unchanged over vast time periods of more than 400 million years, science explores how they have evolved and adapted to the tremendous changes that have occurred in the Australian landscape. These specimens were photographed with a Nikon D80 at 100 to 400x magnification, mounted on a Nikon Eclipse i50 microscope with phase contrast.



The View Below Photogravure handprint on rag paper

A walk around an image: **Icon**

The Artist Christine Gates

Here I am looking for signposts in the desert that enable me to see it as a place rich in life, the way the first Australians see it. For the new settlers, the desert was a barren, lifeless place, the dead heart. For the Diyari people, the landscape is rich with allusions to the Muramura, the Ancestors, who created the topography of the land with their mythological interactions. I have chosen Toas that indicate the significance, both cultural and practical, of water. For the unnamed Aboriginal artist, the dots on one Toa represent coloured stones in the creek. I like the way they echo the texture on the fossilised sea urchin that you can see in the background. The ochre-painted stripes remind me of striations in the bryozoan that lived on the seabed when the desert was under water. These fossils are relics of a time, the Cretaceous period, when the oceans stretched far inland and the continent of Australia was still attached to Antarctica. In this image we can see the major themes of the exhibition: water and its symbolism of life, the desert and its role in First Australian culture, journeys of exploration, voices from the past with messages for contemporary life.

The Scientists Philip Jones and Peter Sutton

"Toas are small sculptures, mostly 15 to 45 centimetres long, and the majority are based on a length of wood sharpened at the lower end... According to (the original collector) Reuther: To the Aborigine, toas are way-markers and location-finders. Each toa indicates a particular locality according to its topographical character, and by its shape bears reference to the place in question.

...In virtually every instance the design of a toa symbolises a place in the eastern Lake Eyre region. It does this by referring, in most cases, to a to a certain group of natural features and to a mythological event believed to have taken place there."

Jones, P. and Sutton, P., 1986, p.14, 'Art and Land', The South Australian Museum



Icon Photogravure handprint on rag paper

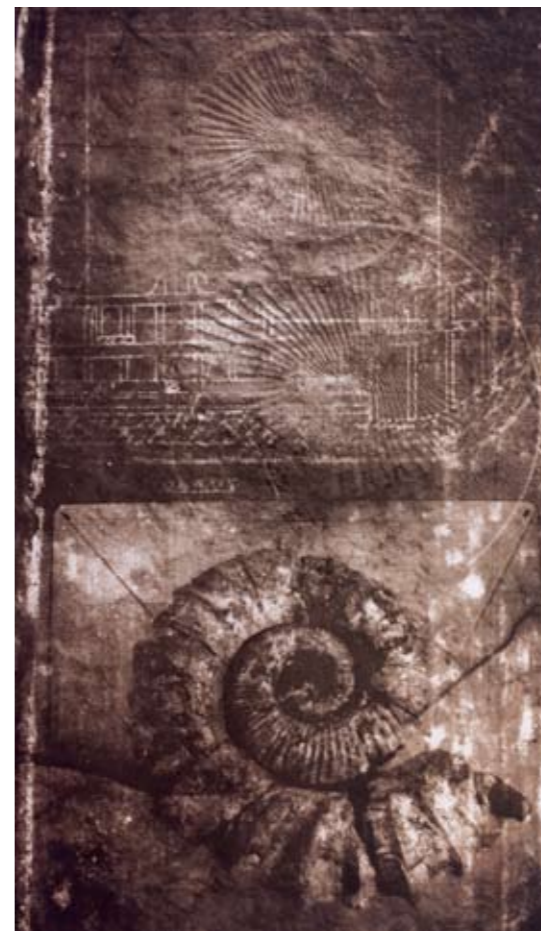
A walk around an image: ***Continuum***

The Artist Christine Gates

This ammonite, spectacularly big, the largest found in Australia, is constrained now, in its glass museum case. Here it is combined with one of the oldest known multi-celled life forms, found at Ediacara, South Australia. The image demonstrates the continuation, through scientific research, of the exploration of Australia's central deserts, begun by explorers like Charles Sturt. Overlaid with the patina of age created by the texture of a plank from Sturt's whaleboat, the image has the quality of a relic. Deeply disappointed at his failure, Sturt abandoned the boat, after launching it on Depot Creek, when he at last acknowledged that he would never sail to the centre of the continent.

The Scientist Natalie Schroeder

In the ancient hills of the Flinders Ranges, a keen-eyed observer might notice rare, strange impressions in the rocks. These impressions, dated at about five hundred and fifty million years old, are evidence the oldest multicellular life forms on Earth. These *Dickinsonia costata*, inhabited a world vastly different from ours. There was no life on dry land, predation had not been 'invented', and few animals looked like any we know. How most of these enigmatic creatures appeared in life, and what they did for a living, is the subject of much scientific speculation, and less scientific agreement. Fast forward four hundred and fifty million years, and head a bit north, and you might find an ammonite like this one in the lower image. *Tropaeum imperator* is just over a metre across. Though scientific names often look intimidating, they do have real meanings. *Tropaeum imperator* means 'Trophy of the Emperor', and finding one of these would be a trophy for anyone! The name 'ammonite' comes from the description by Pliny the Elder, who likened them to the ram's horns of the Egyptian god Ammun.



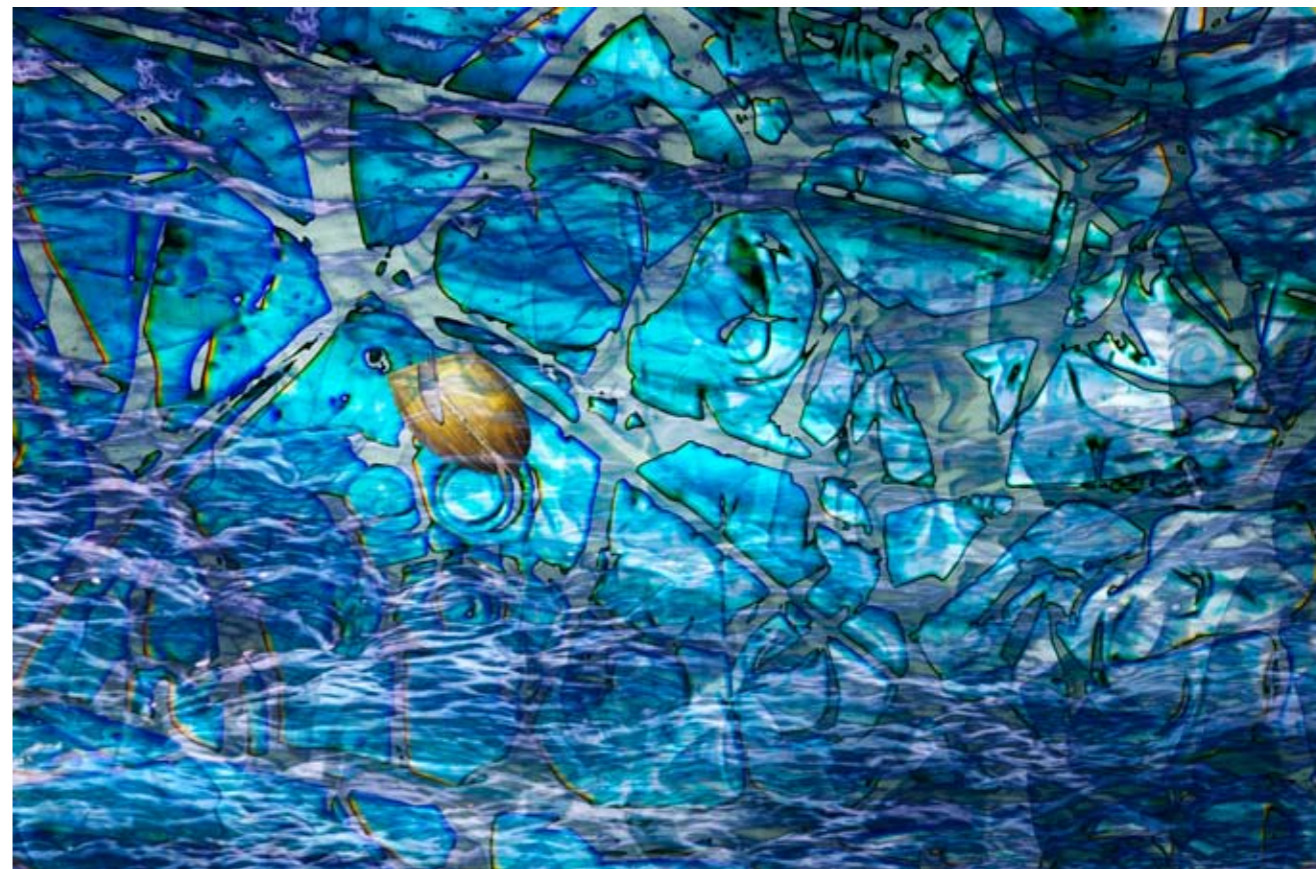
Continuum Photogravure handprint on rag paper

A walk around an image: *Into Heartland*

The Artist Christine Gates

The sea has provided a potent myth for Australian culture, both Aboriginal and Post-Colonial. The end of the Ice Age was a period of dramatic change in Australia, with inland lakes being dried up by rising temperatures, and coastal areas being swamped by rising seas. These occurrences may have led to the emergence of the myth of the Rainbow Serpent, which makes its first appearance in the rock art of the Yam style. This myth is associated with floods and rising seas, possibly reflecting the rising post-glacial sea that encroached on several hundred metres of land each decade.

The title of this image describes the heartland of the country and of the self. Crystals formed as a 15 micron layer under glass, and photographed through a microscope, have become my seascapes. 'To see a world in a grain of sand', wrote William Blake. Scientific research acknowledges that a study of the microscopic structure of materials provides an understanding of their macroscopic properties and often leads to the development of new applications. Meditation on the inner world achieves the same outcome.



Into Heartland Archival digital print on rag paper

A walk around an image: *Inland Sea III*

The Artist Christine Gates

The goal of the journey is the process of change. The journey of transformation becomes an end in itself. The attempt to create wholeness within oneself leads to an understanding of the interdependence of all beings. The West, with its emphasis on economic rationalism, is in need of a new way to interact with its environment. Indigenous Australian culture offers an all-embracing view of the universe. Cultural and spiritual concerns are interwoven with the land and all share in responsibility for its maintenance.

I look into water as a means of contemplation, a way to transform myself. My perspective is altered. Should I trust the surface image or look further into the depths? Poet Gaston Bachelard has described the real world being reflected more softly and our impressions of it being doubled. Reveries of water may be related to dreams of escape, just as water provides escape from the forces of gravity.

A belief in the distinction between spirit and body and in the need for the spirit to undergo purification after the death of the body is common to many cultures. In this process of atonement a journey is implied and a number of ceremonies aim to succour the traveller in this experience. In many cases, an essential part of the journey is the crossing of water.



Inland Sea III Archival digital print on rag paper

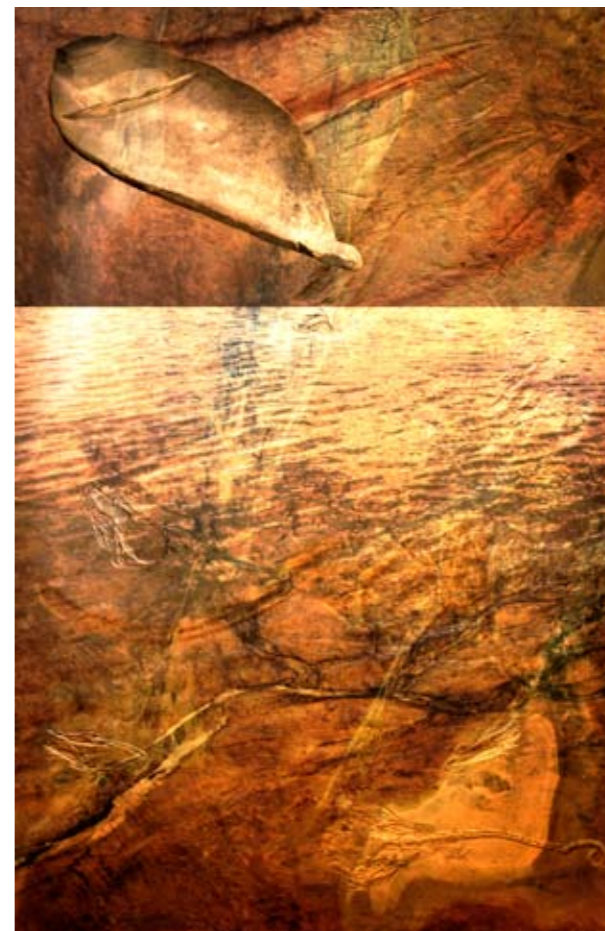
A walk around an image: **Perspectives**

The Artist Christine Gates

Art allows me a multi-dimensional view that I cannot achieve with my human body. I can be high above the desert and, at the same time, floating under water, like the segments of *Prionocyphon*, shown here. These freshwater insects make my Inland Sea real. Living in the rivers that flowed into it, they exist, little changed, today. There is a sense of the same continuity in the landscape that Aboriginal culture demonstrates. These insects have been segmented for research purposes. Like the skulls and rotting fruit in still life 'Vanitas' paintings of earlier centuries, they remind us of the impermanence of life and the disintegration of the body. The boat, a symbol for the journey, floats above an ocean that I am looking into as if it has been sliced through. The image shows a reflection on the surface of water, but it might be the distortion of a dream. Water has both depth and surface and so represents the human psyche. Perspective, and therefore reality, is altered and confused.

The Scientist Christopher Watts

I discovered this particular species near Kuranda in north Queensland and so named it *Prionocyphon kurandaensis*. It lives in small pools of water found in tree hollows in the rainforest. The ancestors of these insects lived in the rainforest that once covered the Inland Sea of the Miocene period. Remnant pockets of this rainforest can be found today in northeast Queensland. Photographs were taken with the aid of a microscope at a magnification of 50x.



Perspectives Archival digital print on rag paper

A walk around an image: ***The Explorer's Plan s.2***

The Artist Christine Gates

The conquest of the desert, whether in search of an inland sea, or simply to traverse it in search of new pasture land, assumed for nineteenth century colonialists the mystical status of the search for the Holy Grail. Inland Australia provided phenomena unknown to Europeans: lakes that vanished leaving only salt behind, rivers that flowed and then ceased to exist, sand storms that obliterated all evidence of human or animal intervention from the landscape. It is a place of continual metamorphosis.

The colonialists, having declared the new land void of habitation, thus eliminating possible objections to an effortless settlement, had also invalidated the existence and culture of the indigenous people. They had then to find a sense of spirit, a culture that reflected a life vastly alien to European sensibilities. Exploration and conquest of the unknown interior provided this opportunity.

The whaleboat in this image was used by early whalers in the southern oceans around Portland. Their interactions with the local people were largely disastrous, culminating in a massacre on the beach at a site now known as *The Convincing Ground*. The name on the boat plan is *Marco Polo*, the famous explorer who first introduced Central Asia and China to Europe.



The Explorer's Plan s.2 Archival digital print on rag paper



Inland Sea I Photogravure handprint on rag paper



Inland Sea II Photogravure handprint on rag paper

A walk around an image: **Vessel**

The Artist Christine Gates

'Container', 'watercraft', 'conveyer of blood', are some of the meanings for the word 'vessel'. It expresses something of the sensibilities of the Romantic Movement of the eighteenth and nineteenth centuries, where journeys over water in search of the sublime often ended in death or continued endlessly, never achieving fulfilment. The nautilus has existed for around four hundred million years. Its function here is both symbolic and aesthetic. Shells like this have been popular in the past as subjects for still life painting and photography, their pure lines providing objects of contemplation. Sliced through, the nautilus reveals its perfect spirals, its geometry conforming to the Fibonacci sequence, its chambers creating the perfect whole.

The Scientist Keryn Walshe

Port Stewart is on mouth of the Stewart River, on the northern shores of Princess Charlotte Bay , one of the northernmost localities in Queensland. This shell was collected there in 1927 by Museum scientists Herbert Hale and Norman Tindale. They refer to a number of Aboriginal tribal groups in the area, including Baruguan, whose land ran from Running Creek to Cape Direction. Today Lama Lama people manage this land. The Baruguan people had access to fresh water along the Stewart River, but at the mouth the water could be quite brackish. The scientists observed people digging into the sand to let the water seep up, where it could be tasted for 'sweetness'. If sweet enough, it was collected by digging a deeper hole into the sand. Hale and Tindale do not mention this nautilus shell, despite describing so many other objects that are now part of the South Australian Museum Collection. But we can assume that it played a vital function in scooping the fresh water out of the sand to be drunk immediately or carried to camp for others to share. The shell is undecorated by Baruguan people and as such displays its natural design. The simple but bold lines that radiate along the curve of the shell may have inspired the designs given to turtle skulls from the same area and used in increase ceremonies.



Vessel Archival digital print on rag paper