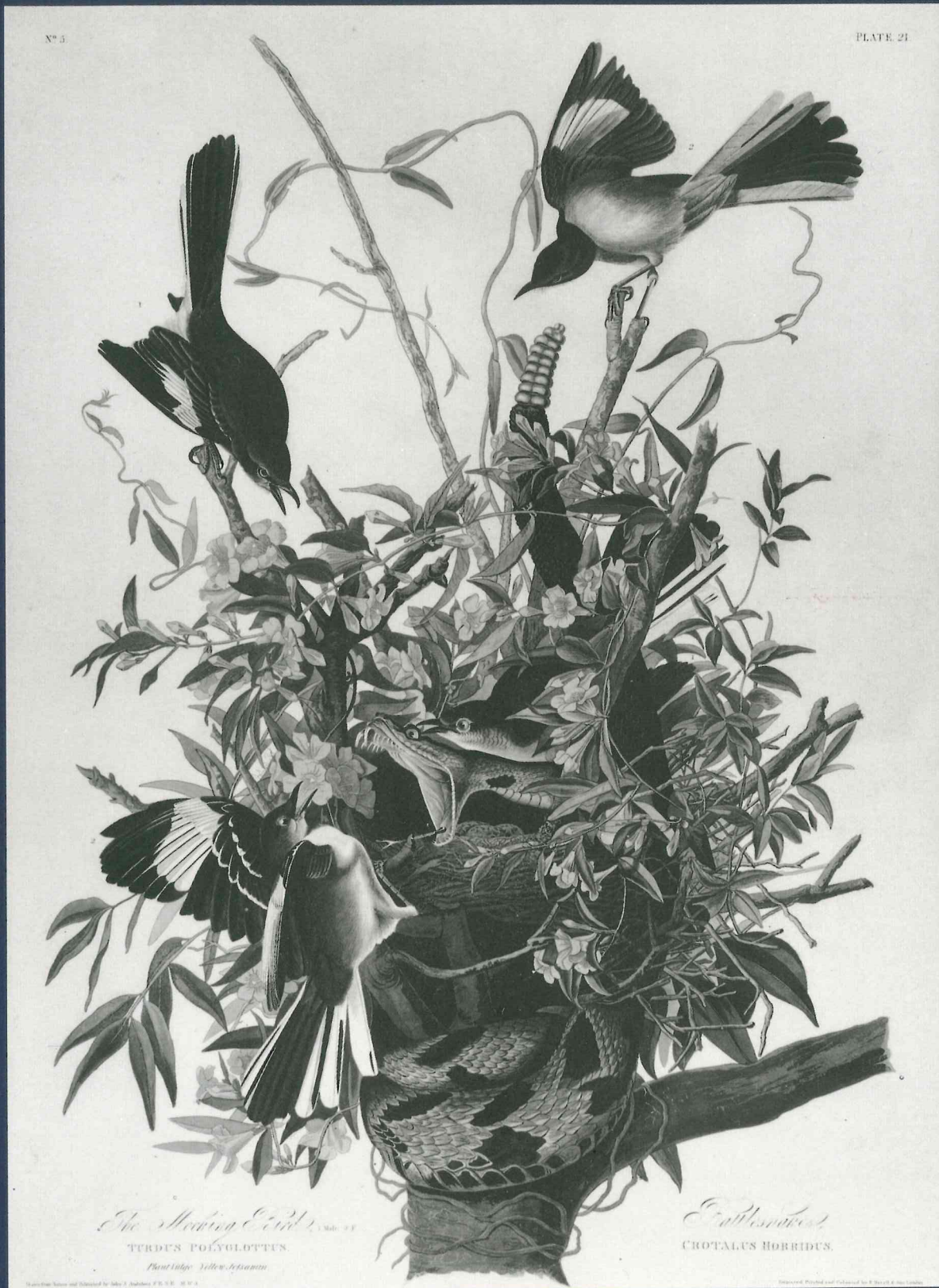


DRAWING ON NATURE



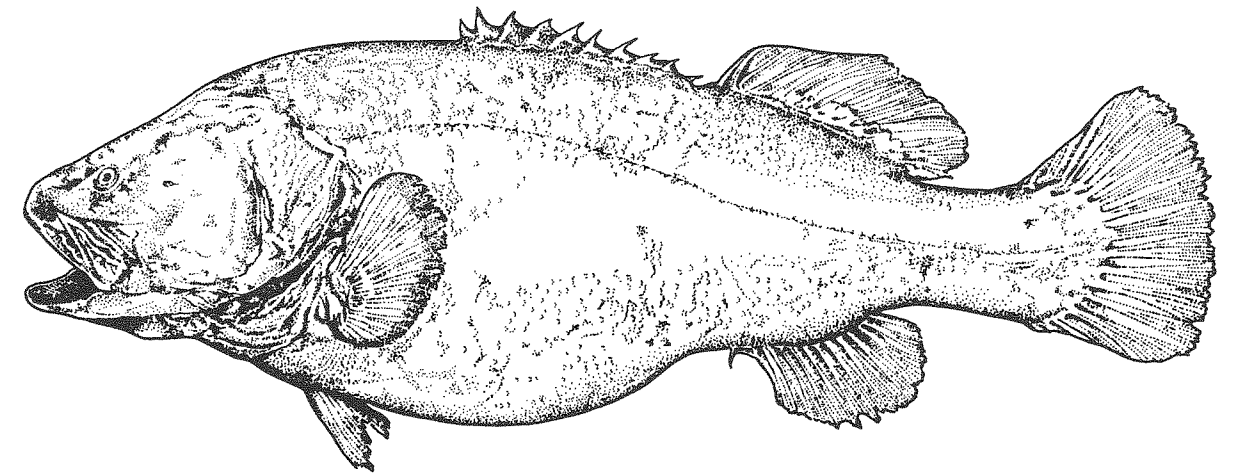
images and specimens of natural history
from the collection of the Museum of Victoria

DRAWING ON NATURE:

**images and specimens of natural history
from the collection of the Museum of Victoria**

with four essays on nature

Paul Fox



Murray cod (Maccullochella peelii)

Geelong Art Gallery 6 March-12 April, 1992
Benalla Art Gallery 17 April-15 May, 1992
Museum of Victoria 25 May- 25 July, 1992

Indemnification for this exhibition is provided by the Victorian Government through the Ministry for the Arts.

Published by Geelong Art Gallery
Little Malop Street, Geelong, Victoria, 3220

First published in 1992

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ISBN 1 875237 07 0

Typesetting and printing: List Print, Geelong

Photography: Frank Coffa and Rodney Start, Museum of Victoria Photographic Services Department

Catalogue design: Geelong Art Gallery

Cover illustration:

John James AUDUBON

The Mocking Bird, Turdis polyglottus
Plate 21, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert Havell & Son

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ACKNOWLEDGEMENTS

There are many people to whom this exhibition owes its successful completion and to whom I would like to express my thanks.

First and foremost to all the Museum of Victoria staff who have given of their knowledge, skills and time in explaining the Museum's collections: Martin Goman and Ros Poole of Ichthyology; Les Christidis and Belinda Gillies of Ornithology; Lindy Allen, Judith Wiseman and Melanie Raberts of Aboriginal Studies; Penny Morison of Outreach; Frank Job of the Museum's Library; Roger Cummins of Rural Science; Michell Berry and conservation staff; Lyn Anderson and Pauline Storer for typing; Matthew Nickson, Curator Photo-Archives; Frank Coffa, Rodney Start and Jon Augier of Photography; Andrew Scott-Young of Design and Kevin Kelly, Public Programmes. As well, I would like to thank Sue Boyd, Thomas Darragh, Betty Thompson, Joan Dixon, C.C. Lu, Judith Hill, Catriona McPhee, Ken Walker, Gaye Sculthorpe, Mary-Ann McCubbin and Liza Dale for their personal and professional support.

I wish to thank Mrs. Dorita Thomson for allowing me to work on the Donald Thomson collection and giving permission to reproduce the photographs in the exhibition and catalogue. To study Donald Thomson's collection of artefacts, photographs and fieldnotes is a considerable privilege, and doing so alters one's mind-frame for life. In this regard, I owe an enormous debt to Judith Wiseman, who introduced me to the collection, and shared with me her deep love and understanding for the collection and people of Arnhem Land. I am enormously indebted to her. I would also like to thank the curator of the collection, Lindy Allen, for answering my questions and pointing me to writings on Arnhem Land, and to Dr. Nicolas Peterson of the Department of Prehistory and Anthropology at ANU, for his kindness and words of encouragement; they were greatly appreciated.

I would like to thank the members of the Science and Humanities Committee, chaired by Caroline Searby, whose enthusiasm, support and award of the Thomas Ramsay Science and Humanities Scholarship gave me the strength and vision to see the exhibition to its successful completion. In particular, I would like to thank Alan McIvey and Norman Wettenhall for their commitment to liberal, humanist values with

regards the Sciences and Humanities. It is a rare thing in Australia for a scholarship to support and encourage lateral thinking of any kind, much less to do so with financial generosity, and in this regard Sir Thomas Ramsay's support must be acknowledged. I would also like to thank former Science and Humanities Scholar, Richard Aitken, for his help and encouragement at different stages of the project.

When I could no longer continue at the Museum, it was the generosity of spirit and commitment to knowledge of Dr. Leon van Schuick, Dean of the Faculty of Design and Construction, and Dr. Christopher Ryan, of the Key Centre for Design, RMIT, who found me a temporary position at RMIT so I could keep watch over the exhibition at close quarters. It is their contribution that has led to this exhibition's successful completion. I would also like to thank Jenny Lee, Hilary McPhee, Peter Corrigan, John Andrews, and Gael Spooner for their encouragement. I also owe a great debt to Jennifer Phipps, who generously gave of her spare time to check the catalogue, printing and label details, and whose valuable and highly professional advice has been of immeasurable assistance. I would also like to thank the Swiss Consul, Mr. Renggli and Christophe Dufour of the Musée D'Histoire Naturelle for their assistance in bringing La Trobe's specimens to Australia, and Juliana Engberg for her initial support of the catalogue.

I would also like to thank the contributors to the catalogue: to Martina Norelli, even though an ocean separated us, for her enthusiasm for the project, to Wade Chambers, again for his enthusiasm, and in particular Naomi Cass, whose enthusiasm was contagious and who has helped with much of the publicity strategy.

Finally, I would like to thank the Director of the Geelong Art Gallery, Susie Shears, her most professional staff, Veronica Filmer and Ann Carew, and the Director of the Benalla Art Gallery, Pamela Gullifer, for their vision, energy, enthusiasm, and commitment to this project. I would also like to thank Mr. Graham Morris, Director of the Museum of Victoria, Margaret Pilepitch, the Museum Project Co-ordinator, for her unstinting, unflinching and practical support for the project, and to Dr. Ron Vanderwal, Conservation, as a friend, for quietly and patiently listening and, wherever possible, acting on my concerns.

Paul Fox

INTRODUCTION

Drawing on Nature presents a gallery filled with images and specimens of nature from the unseen collections from the Museum of Victoria. Part cabinet of curiosity, part bestiary, the exhibition abounds with curious, exotic and fabulous stories about nature, where fish are likened to parrots and zebras, apples are named after a nineteenth-century European statesman, a murray cod appears caught in a glass case for ninety-nine years, and a human body is found in a canoe. Like fables of old, the exhibition's stories challenge the visitor to stop and reflect on nature. It tells how some artists, like John James Audubon in America, were uplifted by nature, celebrating, delighting and exulting in the exotic vegetation and birds of the American South, even likening the hummingbird to 'fragments of the rainbow', and, with a quirkiness of personality, placing bees in his painting for the amusement of the black cuckoos.

Today, the word 'nature' is often interchanged with 'environment'. The exhibition illustrates this point, moving from Louisiana swamplands and prairies to Australia, where nature was imagined as both arcadian prospect and improved pasture. The exhibition conveys how humans saw the environment: some exhibits such as the gigantic murray cod (weighing 46.8 kilograms), are as much sporting trophies as they are natural history specimens, recalling how every nineteenth-century museum director wished to procure the largest of all specimens. If such activities and ambitions conform to established views of nineteenth-century Europeans as plunderers of nature, some exhibits surprise. Who thinks 'green' environmental attitudes are new? In the 1870s, farmers were being encouraged to protect insect-eating birds and their eggs as an alternative to chemical sprays.

The exhibition seeks to challenge other preconceptions by comparing European images of nature with those of Australian aborigines. While Europeans protected birds' eggs to safeguard orchards and crops, the aborigines of Arnhem Land in Australia's Northern Territory in the Arafura Swamp obtained the eggs of magpie geese for food. Here then are views about nature different to Audubon's *Mockingbird* where, despite the best efforts of the mockingbird to defend its nest, its eggs are seen by the rattlesnake as food.

The exhibition also asks the visitor to understand the artistic process. It places specimens by paintings and asks you to check the accuracy of the artists' descriptions. Have you ever before in your life done *The Rainbow Lorikeet Recognition Test*? If you haven't, then the exhibition invites you to place a specimen of this bird next to Cayley's description of it and decide if the watercolour is 'true to nature'.

The display of images and specimens also provokes the visitor to ask whether the specimen or drawing can ever be the same as nature, and how different cultures see and explain nature. By comparing European depictions of nature with those of Arnhem Land aborigines, the exhibition asks the question of how different cultures see nature. It juxtaposes the anthropologist Donald Thomson's photographs of collecting magpie geese eggs and catching cat-fish in fish traps with bark paintings, illustrating how aborigines see these events. It exhibits Thomson's photographs, and then shows a bark painting of a cat-fish collected by the anthropologist, Baldwin Spencer, in Arnhem Land.

The exhibition continually challenges the visitor to see how the portrayal of nature reflects these different cultures' attitudes to nature. There are moments of quiet profoundness: looking at Thomson's 1937 simple image of an aboriginal man standing in a canoe becomes exceedingly rich when we look at the canoe in the exhibition, and understand that its parts are named after the man's body. To an aborigine the canoe literally mirrors the person in it.

Come to the exhibition, be delighted, challenged, and leave asking questions. The exhibition, divided as it is into European and Aboriginal views of nature, asks two final questions: how are we to see nature and the Australian environment in the future, and is a new vision necessary? The exhibition cannot provide answers, that is for the visitor to answer in their own way.

Paul Fox
Curator

DRAWING ON NATURE: IMAGES AND SPECIMENS OF NATURAL HISTORY FROM THE COLLECTION OF THE MUSEUM OF VICTORIA

In its selection of images and specimens of natural history and anthropology, *Drawing on Nature* attempts to understand how nature has been culturally and historically constructed, represented and legitimised. It asks simple but important questions about how nature is seen and drawn, how the creation of pictorial space is understood by its creators and viewers, and how different cultures create different representations of nature. In recognition of the crisis of representations and the binaries implicit in European colonial re-naming and ordering of the indigenous, the exhibition is divided into two halves: on one side a European vision of nature in the new world is represented, whilst on the other, European and indigenous views collide, remain different and perhaps converge, so the museum can be seen as an elaborate cabinet of specimens which, when decoded, reveals how and what the institutional eye sees, and how it often averts its gaze from the *genus loci* of place.

In exhibiting European-American and Australian views of nature, the exhibition illustrates how scientific collecting, recording and classification created a vision of the 'new' world, and how American nature, influenced by the culture of which it was to become a part, was used to symbolise the nation, as witnessed in Audubon's description of the *Belted Kingfisher* (cat.no.2):

I should call it the United States Kingfisher. My reason for this will, I hope become apparent to you when I say that it is the only bird of its genus found upon the inland streams of the Union;

and how, at the beginning of the nineteenth century, popular piety and traditional faith used nature to also sanction the divine. As Audubon observed of the *Ruby Throated Humming Bird* (cat.no.5), who 'would not turn his mind with reverence toward the Almighty Creator' upon seeing it?

Implicit in these views is the understanding that nature represented unambiguous political and moral truths. Yet in Audubon's work there is a conflict between verisimilitude and a desire to improve on nature, as evidenced in *Black Cuckoos* (cat.no.3), where the birds were deliberately not shown by the artist where they were shot, but were placed amidst the more aesthetically pleasing *Magnolia grandiflora*

which grew nearby. Audubon's careful selection of botanical specimens in his *Birds of America* suggested that the Louisiana landscape was an exotic paradise garden, filled with rampant and brightly-coloured bignonia, jasmine and magnolia.

Whilst Audubon employs the universal language of scientific taxonomy to describe and particularise place, he also employs in his written descriptions a metaphorical view of nature, so that Louisiana can be identified by the presence of scientifically determined flora, or it can be described as 'a land of a thousand flowers'. Similarly, for Audubon, the *Humming Bird* exists as both a scientific species and 'a glittering fragment of a rainbow', whilst the Rathbone Warbler's song is first likened to the music of a piano before verification of the bird's existence is sought in scientific terms. These views of nature also existed in the scientific museum, as seen in a description of a case of humming birds in the Melbourne Natural History Museum (cat.no.58) as 'the most fairy of all the birds', where 'every jewel sparkles in their plumage' although these birds are scientifically classified as belonging to the *Trochilus* species. Although Western science had attempted to exclude literary, expressive modes from its descriptions of nature, the literary portrayal of nature, especially in the diaries and travel writing of collectors, remained an important influence in representing nature. The continuing influence of the literary mode associated with travel in representing the unknown, reflects the opposition by European culture to a view of nature determined solely by science.

In the colonial situation, this crisis of representation was writ large, for often the traditional languages of metaphor, science and utility were inapplicable. Yet, confronted with this, these new societies, in their desire for certainty, created images of nature which verified European imaginings and ignored these conflicts. The panel of *Australian Grasses* (cat.nos.65-66), prepared by the former colonial photographer Charles Walter for the Melbourne Science and Technology Museum in 1906, by being framed in a she-oak frame, spoke of the utility of Australian timbers and the pastoral landscape. Yet, for all the authority vested in this artefact by this language, the object gives no hint of the ecological changes which, by the 1860s, had occurred from

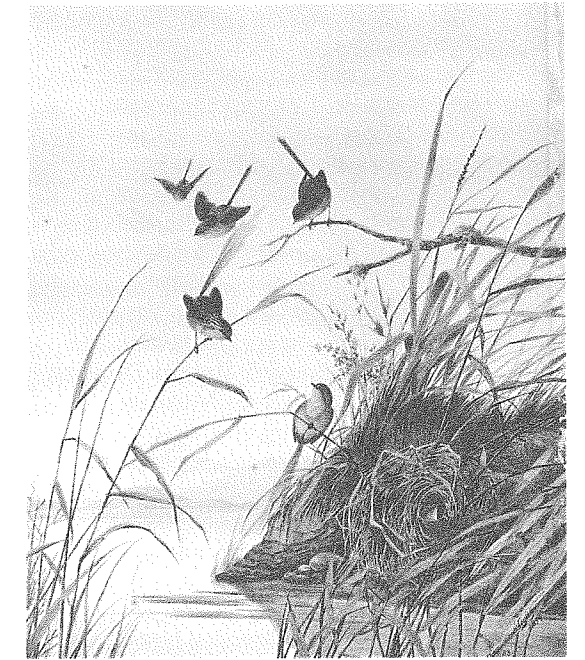
Victoria's Western plains to the Riverina: how imported cattle and sheep had eaten out grasslands, how soils had been compacted, and how the consequent ecological imbalances had resulted in increasing insect infestation of 'native' trees.

Only when Walter's panel of *Foreign Grasses* is juxtaposed against the Australian grasses can these environmental changes be decoded. These ecological disturbances were believed to be rectified by the utilisation of overseas scientific knowledge to establish the suitability of such species as American prairie grass in Australia, where large tracts of land were, by the 1860s, named prairies after their American counterparts. This seeing of place in terms of such scientific universals suggests how science in colonial conditions allowed the peculiarity of place to be ignored.

Envisaging colonial nature in these terms raises questions about how the watercolours of Australian birds, painted in the early 1890s by English-born Neville Cayley (1853-1903), should be viewed. At first glance, they might be seen as examples of pristine nature where, apart from *Magpie Lark* (cat.no.28), no sign of European settlement is evident; that is, until it is realised that such birds as the *Masked Lapwing* (*Vanellus miles*) (cat.no.22) and the *Magpie Lark* (*Grallina cyanoleuca*) appear to have extended their range as a consequence of European settlement. For all Cayley's scientific accuracy in depicting these birds, his arcadian vision of nature obscures the transformation of place; only the *Magpie Lark*, with its landscape of ringbarked trees, explicitly depicts the landscape affected by a hundred years of European settlement.

Whilst Audubon and Cayley attempt to particularise nature, the taxidermist, artist, and field naturalist Arthur Coles' parrots, being drawn from all over Australia, precluded any specific habitat being delineated. As a consequence, Coles' *Parrot case's* painted background (cat.no.67) depicts a generalised, non-specific Australian scene. In its separation of specimens from the background, the case recalls Audubon's practice of drawing his birds from mounted specimens whilst painting the background separately. Audubon, Cayley and Coles' work suggest how an artist in the studio reconstructed nature indoors to suggest what lay beyond it, and how the success of these portrayals depended on the artists' technical competency. In Cayley's *Southern Emu Wren* (cat.no.23) and *Red-backed Fairy Wren* (cat.no.24), the artist's technical skills influence

the delineation of nature: the birds being placed in the same positions of flight and repose in both works suggests that Cayley developed standard ways of seeing and drawing nature, whilst the nest in his *Magpie Lark* owes more to nineteenth-century drawing relating to volumes and solids than to a nest *in situ*.



23. Neville Cayley Southern Emu Wren

If Cayley's work speaks of how nature was transformed by the artist, Coles' eggs of *Insectivorous Birds of Victoria* (cat.no.29), in determining which eggs to include in the work, uses the language of scientific classification. This work, like Audubon's *Belted Kingfisher*, also possesses a political intent: the Victorian Field Naturalists, of which Coles was a member, used the scientific information contained in this work to lobby government to limit the shooting season and protect insect-eating birds; an intent also found in the *Descriptive Chart of Common Insectivorous Birds Found in Victoria* (cat.no.30), produced by the Departments of Agriculture and Education in 1878 for distribution amongst schools and mechanics' institutes.

This poster, presenting as it does the work of John Gould's *Birds of Australia* and the pre-gold Port Phillip ornithologist, John Cotton, represents an attempt by the state to popularise knowledge about nature beyond the museum. Its publication reflects an awakening public interest in identifying Australian nature, which saw the Director of the Melbourne Natural History Museum, Professor Frederick McCoy, exhibit Australian shells in the Museum

for the first time in 1877 (an event welcomed by local collectors who could now identify their specimens by taking them to the Museum rather than comparing them to drawings), and the publication, in 1878, by the Director of the Melbourne Botanic Gardens, William Guilfoyle, of his textbook *Australian Botany for the Use of Schools*.

The publication of scientific knowledge by government, so as to lessen damage to orchards, pasture and crops, and protect the agricultural output of the colony, culminated in the government entomologist, Charles French, publishing *A Handbook of the Destructive Insects of Victoria* (1891-1911), illustrated by C.C. Brittlebank (cat.no.19). Like the poster, French's work, by bringing together information on birds housed in the Natural History Museum, and on crops, pasture and fruit housed in the Economic Botany Division of the Science and Technology Museum, suggests how new mediums of spreading essential information were developed and used when established, institutionalised practices prevented the demands of the colonial state from being fulfilled. If in these works nature is being reshaped by the state using the forms of nineteenth-century popular culture, the popular 'sport' of hunting also influenced how the museum represented nature to the public. The specimen of the *Murray Cod* (*Maccullochella peelii*) (cat.no.64), selected for display in the Melbourne Museum of Natural History, not only illustrated scientific information about that particular genus, but in selecting a cod weighing 46.8 kilograms, the museum appears to have been influenced by the sporting representation of nature which transformed the natural history specimen into a trophy. In this schema, nature belonged firmly within the European's domain.

Yet did it? In the countries of the new world, this schema was usually at odds with non-European views of nature where, in North-East Arnhem Land during the 1930s, the act of creation involved in the making of the *Kurka gorl* (fish trap) (cat.no.59) was a metaphorical re-enactment of human procreation, and the names given the *ngärdän* (canoe) (cat.no.57), used in goose hunting in the Arafura Swamp, were those given to parts of the human body. Here the human and natural world were fused with the ancestral world where, as in the story told by Waytjung in *A Crocodile, Fish, Turtles and Dolphin* (cat.no.40), the crocodile and salmon fish belong to the Yiritja people, whilst the artist's mother owned the turtles and dolphins. The natural environment spoke of the bonds

between living relatives and ancestors, and the relationship between the human and the mythic.

Yet our knowing Waytjung's story is dependent upon an intermediary, in this case the Reverend Chaseling, the Methodist missionary at Yirkalla, Arnhem Land, who presented the work to the National Museum, Melbourne, in 1940. Here the European collector disempowers the subject. Aboriginal knowledge of the public story associated with the painting is due to a chance visit to the Museum, in 1974, by Wanjuk Marika, who identified Waytjung as the artist, and recounted the story: 'this story is good to all of us' ... 'this is a story for the children'. Yet, even in this instance, someone else speaks for the artist. A more extreme example of translation occurs with Baldwin Spencer's collection of barks made during his trip to Western Arnhem Land in 1912, which shows a preference for animal representations he found painted in caves at Oenpelli. On his return to Melbourne, Spencer, influenced by his biological background as Professor of Biology at the University of Melbourne, grouped these paintings in the National Museum according to the type of species represented. What we know and see is often a consequence of European selection, and the deliberate withholding of information by the indigenous creator. As Ann Wells recounts in *Milingimbi: Ten Years in the Crocodile Islands of Arnhem Land* (1973), that her husband, the Methodist missionary the Reverend Wells, notebook in hand, going over a painting with a group of aboriginal artists (which was much the same as he had handled in previous years), was told, for the first time, 'a much more significant part of the story'. Wells, on hearing this new information, reproached the artists: 'but you did not tell me that before', to which they replied: 'you were too new then, Bapa'. Such a story should make us aware of the limitations of the stories accompanying the paintings in the exhibition from the Wells' collection (cat.nos.32-34).

With the coming of the anthropologist to the 'new' world, European representations of indigenous people and their landscape was made by means of the fieldnote and the camera. The photograph, by translating indigenous knowledge into a European pictorial form, gives a European representation of the indigenous. Thus, photographs of goose hunting on the Arafura Swamp, taken by anthropologist Donald Thomson in 1937, during his second expedition to Arnhem Land, are in choice of subject influenced by anthropological classifications of watercraft.

They also pictorialise the information recorded by Thomson in his fieldnotes, which are a combination of 'detached' personal observation, and Thomson's recording and translation of what indigenous people told him, or wished him to know. Divested of these fieldnotes, the photographic image works to silence aboriginal knowledge but, when viewed in conjunction with the fieldnotes (extracts of which accompany the photographs in the exhibition), they recode our vision. For instance, the description of the *kurka gorl* and *ngärdän* found in the fieldnotes, allow the people in the photographs to speak in their own language and, for the non-indigenous, to see something of the aboriginal landscape; in this way, the photographs of goose hunting on the Arafura Swamp deconstructs the canoe as a popular European representation of the sophistication (or otherwise) of indigenous peoples, for we can see the canoe as they see it: in terms of the parts of their bodies.

Despite this, Thomson's camera still has a limited field of vision. It is unable to depict how aborigines see their country. In North-East Arnhem Land, Donald Thomson recorded in his fieldnotes how the bark painting was referred to as *miny'tji*, which he translated as meaning pattern. Yet the camera, unable to represent these patterns, instead imposes a European pattern over the landscape, providing, as illustrated in the photographic sequences of the *kurka gorl* (cat.nos.44-46) and hunting magpie geese (cat.nos.47-51), a European narrative about time, place and custom, which divests the country of its metaphysic patterns. It is unable to see the snake in the clouds or the lightning emanating from its mouth, found in *Dugong Hunting* by Mangarawui (cat.no.32). Indeed, as soon as the mechanical eye of the camera focuses, the European geometry of space comes into being.

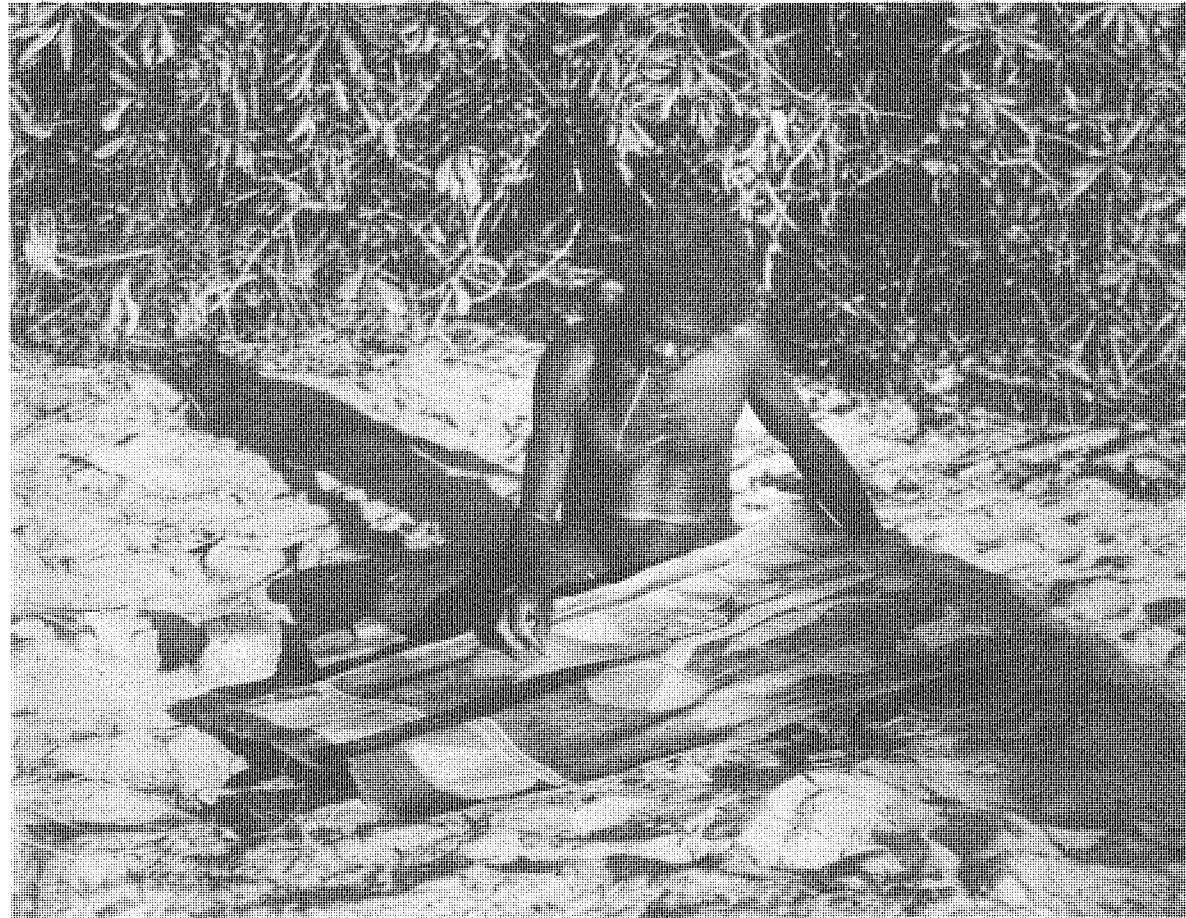


32. Mangarawui *Dugong Hunting*

To emphasise this, in the exhibition Donald Thomson's camera looks from the European portrayal of nature in the 'new' world, to a portrayal of the aborigine in Arnhem Land. Its inclusion and positioning is intended to ask how and what do European fields of vision see: taxonomy or myth? An answer is suggested in Charles Walter's framing and systematic arrangement of the grasses. Before joining the Science and Technological Museum in the mid-1870s, he had been a colonial photographer: it could be argued that the framing and systemising of nature found in his panels of grasses also informs European photography's construction of colonial space.

Whilst Thomson might be seen not to have questioned the assumptions implicit in the use of the camera, his documentation of the explanation of the untitled bark painting, painted by Wonggo (cat.no.42) in 1935, reveals an awareness of the European view of indigenous place. Many of the details of the painting which Thomson recorded, such as the existence of the rainbow snake and the dog, *Warrgan*, edge toward an understanding of the *miny'tji* or pattern. As Thomson was dependent on the translator explaining the *miny'tji*, there are still silences or gaps in the written explanation of its meaning. One wonders if Thomson's lack of notation about the rainbow serpent and the *Warrgan*, the totemic ancestor, tallies with their generally acknowledged importance, or if these terse explanations are part of an elaborate strategy on the part of the translator, whereby the meaning encoded in place remains with the painter and not the anthropologist. It is this part-explanation, part-silence about the sacred which allows Wonggo to still speak after Thomson has written his fieldnotes and photographed him painting the image (cat.no.52).

This example raises questions about the nature of the exchange which occurs between cultures viz: what is and ought to be the nature of that exchange? The exhibition attempts to explore these questions by including Eugene von Guerard's *Barter* (cat.no.1), painted in 1854, Mawalan's *Belongings of Macassan Visitors* (c.1976) (cat.no.34), and a string bag and contents collected by Thomson in Arnhem Land in 1937 (cat.no.68). In von Guerard's painting, an exchange between the aborigines and newly-arrived diggers is taking place; goods are being bartered. To the Europeans, the goods being exchanged by the aborigines are either ethnographic curios, as classifiable as the lizard in the lower left hand corner, or a better source



52. Donald Thompson Wonggo making bark painting, Trial Bay
With kind permission of Mrs. D. Thompson

of warmth than the blankets they have exchanged with the aborigines. The painting, placed as it is at the end of the exhibition, asks us to consider not only those who have power to command the framing of the European view of place, but also to consider those who see the view differently. The exhibition asks us to recode the von Guerard painting from the Koori viewpoint and asks how they see the exchange.

The aboriginal perspective is provided by Mawalan's *Belongings of Macassan Visitors*, depicting the goods traded by the Macassans from Indonesia with the people of North-East Arnhem Land. Seen in conjunction with the nails and iron of the string bag, it tells how Macassan goods became part of the ritual exchange cycle of gift giving (known as *girri*), whereby Macassan goods were distributed throughout North-East Arnhem Land. It is therefore fitting that, nearby von Guerard's painting, the contents of the string bag: the red

ochre used to provide the background for the *miny'tji*, and the cultural icon of modern Australia, Sydney Harbour Bridge (in the form of a buckle), are exhibited together. For, although these, and *Barter*, belong to different times and places in Australia, they explain something of the nature of the two cultures, and suggest that, if the European vision of nature, space and place in Australia is to be recoded, the nature of the exchange, or 'barter', between the two cultures, needs to be critically assessed and acted upon.

Paul Fox
Curator

Paul Fox is a cultural historian and theorist, lecturer, writer and exhibition designer currently writing a book on Culture and Museums, who lectures (part-time) in Urban Design History and Theory at RMIT.

JOHN JAMES AUDUBON IN LOUISIANA, 1821-1822

John James Audubon's reputation as an artist and writer on birds and quadrupeds has achieved, since his death in 1851, virtual mythic status. While many people immediately recognise Audubon's name, few are aware of the complex evolution of Audubon's art and the constant struggle that marked his life. From his early youth, Audubon's interest in the natural world and his pleasure in sketching, hunting, and fishing took precedence over responsibilities toward work or family. When Audubon left Cincinnati in 1820 for the South, he was in financial ruin. However, it was in Louisiana that the many years of struggle were set aside momentarily while, from July to October 1821, the artist gave drawing instruction to Eliza Pirrie at her family's home at Bayou Sarah, near New Orleans. This sojourn at Oakley Plantation, during which Audubon enjoyed absolute security, was critical for his artistic development.

Audubon, born in Haiti in 1785 and reared in France, first came to America in 1803 to manage his father's estate at Mill Grove, Pennsylvania. The holdings were sold in 1807, necessitated largely by Audubon's inattention to the administration of the property. That same year, Audubon moved to Kentucky and opened the first of a series of unsuccessful businesses. Without the assistance of his French friend and partner, Ferdinand Rozier, Audubon's financial collapse perhaps would have occurred earlier. His wife Lucy Bakewell also contributed heavily to the stability of the family through her work as a governess or teacher.

Although his years on the frontier were not particularly successful from a financial standpoint, they were extremely important for Audubon. He revelled in the company of men with similar tastes in hunting, fishing, and shooting, and he created many drawings of birds. At the same time, he developed his 'Great Idea' to publish his drawings after Alexander Wilson, author and artist of *American Ornithology*, stopped at Audubon's store in 1810. Until this time, Audubon was involved with ornithological studies much as were many amateur naturalists of the period. The romance of nature, and particularly of birds, revealed itself in numerous volumes of observations, species lists, and illustrations. While Audubon's initial desire to publish was closely tied to his desperate financial state, he eventually saw his project as a corrective for the artistic and

scientific flaws he felt were present in Wilson's volumes.

Although the plates published in the *Birds of America* reveal Audubon's fully-developed style, his early drawings communicate the hard work and self-instruction behind those stunning mature achievements. Most of Audubon's earliest bird portraits were drawn with chalk and pencil, and depicted birds viewed in strict profile. This was the traditional manner of presentation, and the one with which Audubon was familiar. Since the primary motivation in natural history books was the depiction of the appearance of the species, and since the artist usually worked from dead animals or the taxidermist's art, it is understandable that natural history illustrations usually lacked any semblance of vitality. As he improved his handling of his media, Audubon captured more accurately the three-dimensionality of a bird, as well as the different textures of various layers of feathers and body parts. Some early drawings, however, clearly are evidence of an artist still struggling with drawing techniques. As such, they provide clear evidence that Audubon's claim to have studied in Paris in 1802 with the painter Jacques Louis David was probably false.

Accompanied by Joseph Mason, one of his art students, Audubon worked his way toward New Orleans during the winter of 1820-1821. He planned to apply for work as an artist with the Red River Survey Expedition. They arrived in New Orleans early in January 1821, and despite some chalk portrait commissions, Audubon was again in straitened circumstances. He was rescued in July by an offer from James Pirrie to instruct his daughter, Eliza, in drawing. Audubon reacted to the relaxed atmosphere, the financial security, and his freedom to work, by producing some of his most convincing bird portraits. At the same time he developed his mature technique, in which the drawings were completed mainly in watercolour rather than in chalk, with details added in ink and pencil. The use of watercolour as the primary medium gave increased depth and richness to his work. Audubon also perfected a working method which enhanced his ability to capture convincingly the lifelike quality of his subjects.

The artist's working method had evolved over many years. His early attempts to capture a bird's active presence led Audubon to make hundreds of quick sketches of a species. He was forced, however, to return to dead specimens to

complete these outline drawings. Since he felt that these drawings were no improvement over those drawn directly from dead birds, Audubon tried to position a dead bird in a life-like manner by fastening threads to various parts of its body and arranging it much like a marionette. This procedure, and a desperate attempt to build a bird mannikin, were abandoned. Audubon finally found the solution to his dilemma when he fixed the body of a freshly-killed bird to a piece of board with sharp wires. The wires passed through the head, body, tail, wings, and feet of the bird and thus enabled the artist to pose the bird in a life-like manner. The liveliness of the birds in many of his compositions, as well as the occasional awkwardness, were a product of this approach. With this method, Audubon felt he had actually drawn birds 'from nature.'

Audubon completed more than sixty bird drawings during 1821, including a number of small, but no less impressive watercolours. Mason contributed to the botanical elements and the insects in these works. Among the finest of the group are the *Yellow Throated Vireo* (11 July 1821, plate 110), shown on a branch of 'Swamp Snow-ball' with a wasp; the *Yellow Throat Warbler* (August 1821, plate 85), perched on a 'Chink-apin' branch; *Prairie Warblers* (5 September 1821, plate 14) (cat.no.9), on 'buffalo grass;' and a *Louisiana Water Thrush* (27 September 1821, plate 19) (cat.no.8). All of these were painted at Bayou Sarah while Audubon lived at Oakley Plantation. These wonderfully balanced compositions of bird and plant evoke both the surrounding environment and the living essence of the birds. Their simplicity involves the spectator in actively expanding the few elements depicted into an enlarged vision of the swampy or forested areas in Louisiana through which Audubon roamed. The exquisite facility with which Joseph Mason added the botanical and insect specimens to the compositions is almost indistinguishable from Audubon's greatly improved facility with watercolour and ink. The importance of Mason's contribution to these works is evident when one compares them with later drawings in which Audubon, working alone, often only suggested the environment with a minimal wash or the blank page as background.

In several instances, Audubon produced several drawings of a single species, refining the composition until he achieved the version that would be published in *Birds of America*. Audubon also began watercolours at Bayou Sarah which were later completed or

incorporated into entirely new compositions. The *Mockingbird* (plate 77), on the other hand, was probably completed in 1822 at Little Bayou Sarah, but the male and female birds in the lower section of the sheet may have been drawn ten years earlier. *Rathbone's Warbler* (plate 65) (cat.no.6) was also a composite drawing. In this instance, the two clusters of flowers in the upper right were cut from an earlier pastel drawing and collaged onto the sheet. Audubon then added the warblers, which were based in part on another 1808 pastel.



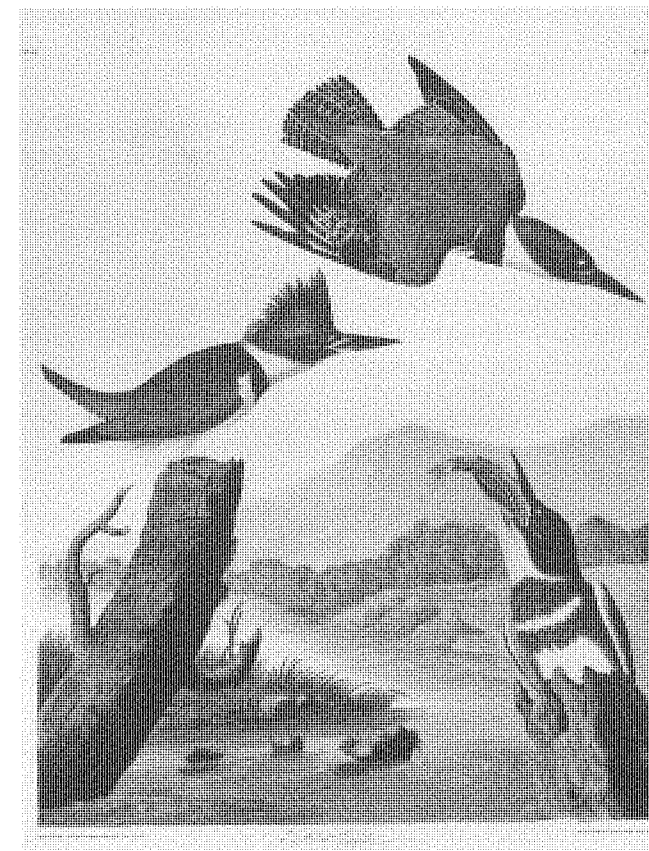
9. John James Audubon *Prairie Warbler*

The mockingbird composition reveals Audubon's predilection for depicting birds at dangerous moments. Himself a romantic, Audubon delighted in portraying birds as prey or predator. The mockingbirds both react to and against the rattlesnake that was searching their nest for food. This image provoked a strong negative reaction from his critics. Many felt that rattlesnakes would not climb trees, nor that their fangs curved outward at the tips. Some observers also maintained that rattlesnakes were assisted in capturing their prey by the ability to 'fascinate' their victims. As mentioned above, Audubon had scrutinised a rattlesnake closely and his version of the snake's behaviour and appearance was later held to be

accurate. His mockingbirds certainly were not mesmerised by the snake, nor presented themselves as willing victims, but actively defended the nest in a somewhat melodramatic scene.

The *Black Cuckoo* (plate 32) from 1822 (cat.no.3), one of the more complex compositions of this Louisiana period, is additional evidence of the superb botanical elements contributed by Joseph Mason. The branch of magnolia in bloom provides a sumptuous environment for the birds. There is no question that when Joseph Mason went on to other work in 1822, that Audubon's output, as well as his financial situation, declined.

Despite the hardships that confronted Audubon following his halcyon days at Bayou Sarah, he persevered with his plan to publish his watercolours and observations of birds. When faced with discouragement from Philadelphia and New York publishers, the artist went to England in 1826 where his 'Great Idea' was greeted with enthusiasm. The following years were consumed by work on the production and selling of *Birds of America*. The 435 double-elephant folio hand-coloured aquatint and engraving plates remain today an extraordinary achievement.



2. John James Audubon *Belted Kingfisher*

Audubon's volumes proved a record of scientific and artistic endeavour which offered a fresh and dramatic view of American birds to his contemporaries, and preserved for future generations an important part of America's natural heritage. Within his remarkable career, however, Audubon's days at Oakley Plantation were critical in facilitating the development of his mature style. The exquisite watercolours, completed by Audubon and Mason during those few months in Louisiana, established a high standard against which his later work would have to be measured.

Martina R. Norelli

Martina R. Norelli is author of *American Wildlife Painting* (1975), various catalogues on American wildlife artists, and has recently retired as Curator of Prints and Drawings, the Smithsonian Institute, Washington D.C.

SIBLING RIVALRY OR SCIENCE AND ART AS COMPETING REPRESENTATIONS OF NATURE

I am making a bridge for you between science and art. I am not a scientist nor an artist. I am a messenger between the two, an advocate. I bring a 'hearsay' version of science and art and resist what would be called true knowledge of either. I am an audience.

Art is not a copy of the real world, one of the damn things is enough. Virginia Woolf

Science and art are representations of the world that compete like siblings for our attention. Within these disciplines, representations compete for supremacy, or truth, or appeal, or a slice of the market.

You might wonder how I can speak of a similarity between art and science as representations of the world? How is a von Guerard or a bark painting like a scientific theory?

'For example' is no proof. Jewish proverb

Science is generally believed to be different from art because its methods and intentions guarantee an objective relationship with the real world as opposed to the creative world or the cultural world or the inner world of the image maker.

The design of a book is the pattern of reality controlled and shaped by the mind of the writer. This is completely understood about poetry or fiction, but is too seldom realised about books of fact. John Steinbeck, novelist, in collaboration with Edward Ricketts, Marine biologist, *The Sea of Cortez* (1941)

This view of science, although persuasive, I have come to understand as problematic. Like art, science is a product of our cultural world and is merely different, not outside other cultural representations.

Traditional views of science as objective and uniquely connected with the truth (Nature) are deeply embedded within our web of beliefs and, as such, are difficult to shift. In my family of origin, science served the rich responsibility of epitomising the highest instance of rationality which underpinned all human activities - from waiting in turn to watering the garden; from the personal and interpersonal to the social and political. What a burden.

Yesterday evening Mrs. Arundel insisted on my going to the window and looking at the glorious sky, as she called it. And so I had to look at it...And what was it? It was simply a very second-rate Turner, a Turner of a bad period, with all the painter's worst faults exaggerated and over-emphasised. Oscar Wilde

Perhaps more contentious, fellow audience, is the view that not only is science a cultural representation of nature, but that nature itself is a construct. Whether or not nature is there in truth, we can only get to it via representation. It is impossible to see nature in an unmediated fashion, outside our ways of seeing.

To have even the most simple conversation about nature requires quite complex theories concerning observation, language and evidence. To accept for instance, a spot viewed through the lens of a telescope not only as a planet as evidence for some theory - and not merely as a mark on the glass - requires much theoretical apparatus and, indeed, some faith.

The biological sciences seek to place all living things in a specific and unique position within a picture of nature. As a representation of nature, biology is extremely effective. I could think of this science as a true picture - one that can stand in for nature. We may interact with the biological picture, test it, make predictions and return to the picture. This gives the science a ring of truthfulness.

But the picture of nature created by science doesn't remain unchanging. Like a painting, science reflects and reveals the interests and desires of the period. Some aspects of this picture are more resistant to reinterpretation, other aspects appear dated or just wrong.

All swans are white

'When I was a graduate student, people talked about there being 10 million species of animals on the planet. We are now becoming aware that there are probably 50 million species'. Professor Michael Rosenzweig, University of Arizona, *The Age*, July 1991

Taxonomy is a representation of nature, of a kind. It is a two-dimensional, abstract representation that consists in lists and categories. Spatial relationships are created by placing all living things in an hierarchical order. Taxonomy asserts that there is a natural place for everything.

What kind of picture of nature does taxonomy provide? Is a classification simply a language of communication between practitioners, a method of storage and retrieval of information, or is this science a description of the truth?

Science requires that the seemingly infinite variety of nature may be reduced to definable, testable and predictable categories. A geneticist, for instance, makes the fundamental reduction to a chemical authority; for a physicist the fundamental reduction is to energy. The ecologist on the other hand, seeks to understand the behaviour of the whole.

You may wonder to what essence does the taxonomist owe the classification? It is an axiom that all things are grouped according to what they are, but what they are, changes according to the beliefs and interests of the scientific community or culture.

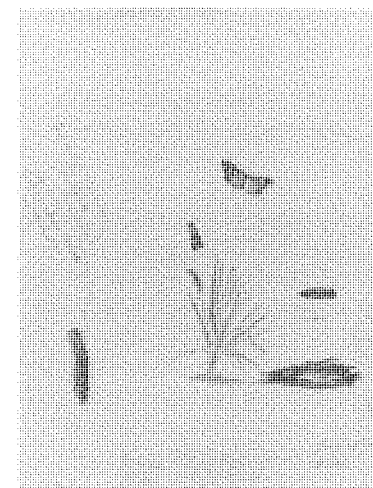
Following Charles Darwin (1809-1882), taxonomists were able to support their picture with an explanation other than Special Creation as to why classified groups were homogenous. The theory of evolution says that natural groups are related because they descend from a common ancestor. The process of gathering and analysing data did not alter with the theory of Evolution but the hierarchies and significance of the picture changed.

Phyletic or evolutionary classification points away from visual characteristics to genetic material as the linking or essential factor. For instance, some cacti look the same, yet they are essentially different according to their evolutionary position.

Within taxonomy there are competing theories. A significant debate is concerned with whether it is more correct to say that nature starts with the simple and becomes complex - or the opposite. A flower tells its place on an evolutionary scale by how sophisticated it is. According to this picture of nature the magnolia (pictured in Audubon's *Black Cuckoos* (cat.no.3)) is viewed as advanced.

However, the competing theory argues that nature progresses from complexity towards simplicity. The magnolia evidences its primitive state via its complexity and showiness because it must attract insects as agents for reproduction. Rye grass, on the other hand, is simple and therefore advanced. It is propagated by the wind. Surely, these are significantly different pictures of nature.

Do you think of the ecology of a crocodile as primitive because it is so old and un-complex, or do you think of it as advanced, for the same reasons?



15. Arthur Bartholomew *Comarchis tinevides*



3. John James Audubon Black-billed Cuckoo

Stockholm newspapers report that Tourism authorities have decided to 'move' the arctic circle so that it will be closer to a cafe and parking lot used by tourists who flock to admire the midnight sun. Odd spot, *The Age*, September 1991

Fish that have a pebble in their heads; Fish that hide in winter; Fish that feel the influence of the stars; Extraordinary prices paid for certain fish. Pliny the Elder

a certain Chinese encyclopedia in which it is written that 'animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a long way off look like flies. Jorge Luis Borges

I believe that the ecology of Australia significantly changed one hundred thousand years ago, sixty thousand years before the accepted arrival of human beings. An account is given for this natural change by postulating the presence of Aborigines at the earlier date. Without agriculture these nomadic people were able to provide for their protein needs by burning off large tracts of bush. With the rapid growth of grasslands came grazing animals. Eucalypts are fairly fire resistant and therefore dominated the new landscape.

In a symbiotic relationship with the land, Aborigines modified the world to ensure survival. In the 1990s, this human centred activity is inscribed as 'natural'.

A scientific theory is like a picture of nature because it makes claims about what is essential for the re-presentation of nature and acts as a depiction of this. Successive scientific theories follow like successive pictorial representations. Consider for instance, the representation of a fish, in a late Antique floor mosaic; in an Early Christian catacomb fresco; in a dark seventeenth-century Neapolitan still life; in a glistening Dutch genre painting; in a Picasso; in a traditional Aboriginal bark painting; in a nineteenth-century natural history exhibit. The subject of each representation is what is considered important about fish. No one picture is closer to nature than any other.

Classifications of nature are enormously revealing of what the classifier believes to be important. Two classifications much cited provide beguiling illustration: from the index to *Naturalis Historia* by Pliny the Elder (A.D. 23/24-79), and a Chinese taxonomy cited in Jorge Luis Borges and fundamental to Michael Foucault's *The Order of Things* (1970). These aberrant and seemingly promiscuous classifications give me a glimpse as to how representations (theories,

classifications, lists, pictures) of the world reveal the interests of the scientist, listmaker, picturemaker. They help me to see outside the ethnocentric, species wall that modern science has built around my head.

In creating a vision of nature, today's artists, unlike their predecessors...are confronting an environment that it may no longer be possible to describe as natural. Jeffrey Deitch, *Artificial Nature* (1990)

Breastfeeding is natural - good Koori mothers breastfeed. Bumper sticker

We won't play nature to your culture. Text from a Barbara Kruger billboard.

The cricket sings in my heart, my heart sings in the cricket. Zen Master

It is instructive to consider 'outmoded' pictures of the world, not just for how they picture an unfamiliar world but for how they can invalidate the idea of progress - in science and art. I read with surprise in Dr. Benjamin Spock that 'breastfeeding is natural', *Baby and Child Care* (1945). I understand that this authoritative, perhaps 'scientific' statement was made in the context of a period when most of us were taken from our mothers at birth and bottle fed by health professionals. In a modern world such repressions were seen as improvements upon nature.

I caution against arguments that insist upon nature as objective: 'nature' changes. It doesn't seem a huge leap from discrediting breastfeeding to sanctioning the removal of black infants from their mothers to be reared by whites.

You may object here and assert that in the long run our picture of nature will converge with the truth. As science gathers more data, looks more deeply more clearly more objectively more somethingly, the picture will merge with the truth. My reply is that each picture of nature constructs the viewer, the viewed and the view maker. A representation is successful if it most effectively achieves the desired instrumental contact with the world. I do not doubt that nature is there, it's just that I can't see nature independently of representations.

Drawing on Nature provides a rich and diverse range of competing interests in picturing the world. The museum is indeed a gallery, a zoo, an archive of rival representations of nature: a hall of mirrors that tells us as much about ourselves and our desires as the world around us. Take this story and enjoy some of the representations of nature here, for what they find in you.

Naomi Cass

Naomi Cass is a mother of two, founding member of the Centre for the Constructed World, Melbourne, and has curated exhibitions on science and art.

NATURE AND KNOWLEDGE IN AUSTRALIA

'What is this exhibition about?' one asks oneself. Nature? Yes, though at two or three removes. Picturing nature? Most certainly, as we know from its title. Seeing nature? That too, since it is quite impossible to separate completely the process of representation from that of perception. It might even be said to be 'about' Victoria's rich collections of historical objects, prints, drawings and paintings, the majority of which it is never possible for most folk to see.

Is this exhibition then about 'culture'? Without a doubt, we learn as much here about culture as we learn about nature. Multicultural understanding. Oh, yes. Consider the multiplicity of encounter: Aborigines, Europeans and Macassars, all bearers of vision and instinct, curiosity, knowledge and wisdom. And we must remember that animals too participate in this sometimes friendly, often hostile scrimmage. The original excitement and abiding tension of cultural diversity reaches us across the years through mixed and overlapped images, genres and media: bark and print, photograph and object, bark and object, science and art.

We have then in this exhibition not just some interesting images of Australian nature. Looking deeper, we find a flowing river of ideas about both nature and culture. Implicit in the curatorial selection is an intelligent current of meaning, a coherent perspective of some momentous analytical issues of the twentieth century: the varieties of the human experience of nature, the difficult concepts of perception and representation, the very notion of knowledge itself is seen in its cultural dimensions.

Perception The artist John Constable likened the art of seeing nature to the art of reading the Egyptian hieroglyphs, suggesting thereby that both were active not passive undertakings, and also that both were learned activities. But, does 'seeing nature' really amount to anything more than opening one's eyes and looking? Isn't seeing nature something we all do equally well, without requiring any special talent or skill and without being greatly influenced by time or place, culture or personality? Recent scholarship in the history and philosophy of science, in the sociology of knowledge, in art and literary theory, and in psychology, participating in what has been called 'the post-modern turn', seems to suggest that

Constable was right. Seeing nature plain or with 'innocent eyes' is not something babies can do. Even Ruskin's newly-cured blind man must learn how to see. This is to say that we see with our brains, not our eyes. If one wants a mechanical metaphor, one may say that we see like programmed computers rather than like cameras. Seeing is a far more active, more highly subjective, and more thoroughly culture-bound process than is suggested by the widely-used metaphor of the camera lens.

Stated this way it sounds as if the process of seeing itself distorts our vision of reality; but, of course, the important point is precisely the opposite: seeing gives us the only images of the real world we have or can hope to have. That this process does not give us direct, full, and objective registration of that world is no more surprising or distressing than the fact that microscopic images disclose artefacts of sectioning and staining as well as the optical properties of the lens system, all of which must be interpreted. When these interpretations change, our seeing changes.

We are slowly learning to accept and cope with the discovery, in fields as diverse as physics, ecology, and anthropology, that the act of observation itself directly modifies that part of nature under examination. This view is a kind of starting point for the multi-dimensional and reflexive process that we call the perception of nature, a process in its vast complexity richly illustrated in this exhibition.

Representation When Waytjung sees fish, turtle, dolphin and crocodile, he sees it in a context largely inaccessible to a European. When he depicts it on bark, he follows the design of another artist, providing us with ecological, historical and religious contexts and meanings.

When Yilkari, the fisherman, sees the *gorl*, he perceives a set of natural relations and meanings that enables him to catch a meal. When Thomson see Yilkari through the camera lens, he sees him (and the cod soon to come) in a context and set of meanings largely inaccessible to Yilkari and to those who live on and within the land. When you, as a visitor to this exhibition, look over Thompson's shoulder at Yilkari (and at the cod), you may be profoundly moved by the beauty and significance of his portrayal, but your meanings are probably not those of Thompson. Finally, when in my mind's



43. Donald Thompson *Yilkari with Gorl, Clyde River (detail)*
With kind permission of Mrs. D. Thompson

eye I see you in the gallery, looking over Thompson's shoulder, I bring my own interpretation to this richly laminated image, defying time, demobilising cultural boundaries and transfixing a vast array of natural meanings.

How can we account for the remarkable multiplicities and ambiguities of the human understanding of nature in art, in science, and in every day life? Seeing nature and depicting what we see are, of course, two quite distinct procedures. But, in much writing on the subject, 'seeing' is hopelessly intermingled with 'depicting', even when the theoretical distinction is well understood. For example, when discussing the way an artist *portrays* nature, writers often refer to the way the artist *sees* nature. Such a conflation is perhaps inevitable. After all, what artists portray in their pictures (and sometimes in words) is our only evidence of what they see.

In science this conflation is perhaps more pronounced than in art: scientific descriptions of nature (whether expressed graphically, mathematically, or verbally) are usually taken to be observations of nature, and indeed are often referred to as such. Furthermore, these 'observations' may themselves be taken to be 'facts', i.e. nature as it really is. The philosopher of science, N.R. Hanson, has lampooned the suggestion that we can somehow 'see' facts. Only in light of theories we hold, hypotheses we consider, and languages we speak, are we able to identify certain events or statements as 'facts'.

Facts? Why they are just the things that happen: the hard, cold, stubborn facts, the sheer, physical, plain, and unvarnished facts. The observable facts out there for all of us to see, come up against, trip over.... Of those of us who so readily speak of

observing the facts, looking at them, collecting them, etc. - and most of us do so speak - has anyone ever asked what observation of a fact would be like? What do facts look like? In what receptacle might we collect them? I can photograph objects like X-ray tubes, or events like fluorescence.... But what sort of photographs would a photograph of a fact be? Asking the question in this way is like biting the forbidden apple. Facts can never be regarded in the fat, dumb, and happy way we looked at them before.
(N.R. Hanson, *Perception and Discovery*, 1969)

Hanson has given us a stimulating and coherent defence of the proposition that 'there is more to seeing than meets the eye', i.e. that the process of seeing, even in science, is not just retinal activity but involves interpretation, based on the observer's knowledge and experience. And we must add the corollary that there is more to depicting than just seeing.

For many years orthodox opinion in the history of science pointed to a long and progressive evolution of style, technique, and content in the art and science of natural history illustration. The evolution was said to move from schematic and symbolic forms to more explicitly concrete and accurately representational depictions of the natural world. This line of argumentation explains much about the spirit of modern science and the social and intellectual forces that enabled, indeed impelled, it to come into being.

The later Roman Empire and the early Middle Ages lived not in a world of visible facts but rather in a world of symbols. The intellectual atmosphere was so saturated with Platonic modes of thought that the first Christian millennium was scarcely more conscious of them than it was of the air it breathed.... Suddenly, toward the middle of the twelfth-century, something began to stir in the air of western Europe: a fresh sense of the immediacies of concrete experience, a new attachment to physical actualities. As we look at these first symptoms of the coming naturalism, we seem to hear that ebullient remark of one of the earliest of the twelfth-century scientists, Adelard of Bath: 'I am not the sort of fellow who can be fed with the picture of a beefsteak!' This impatience of symbol, this factual and earthy quality, was the symptom and expression of the forces then remoulding European culture and laying the foundations of modern science.
(Lynn White Jr., *Natural Science and Naturalistic Art*, 1947)

As forceful as White's statement of this 'progressive discovery' thesis may be, when taken at face value it is highly misleading. Science may have given Adelard his beefsteak, but symbol and metaphor still abound in scientific texts, and decontextualised Platonist historiographies of science survive aplenty.

White's thesis in the history of science is paralleled by similar generalisations in the history of art. For example, Roger Fry, in his book on Constable, *Reflections on British Painting* (1934), characterised the entire history of art as 'the gradual discovery of appearances... gradually symbolism approximates more and more to actual appearance.... Indeed, it has taken from Neolithic times till the nineteenth century to perfect this discovery'. This 'discovery of appearance' thesis now has little credibility as a general approach to the history of art. For one thing, highly effective representational work may be found across many cultures and throughout history. Even in the prehistoric period in Europe, evolution over time is now thought to have moved from the representational to the abstract rather than in the reverse direction. For another thing, the vast significance of the abstract in the twentieth century must somehow be explained.

In the history of science, the case is somewhat different. The 'discovery of appearances' thesis, or as I called it before, the 'progressive discovery' idea, held complete sway until very recently when revolutions in the philosophy of science and the sociology of knowledge caused us to reconsider the matter. Without wishing to quarrel with White's characterisation of European natural history in the period he knows best, we may point out that concrete and highly representational depictions of nature occurred before twelfth-century Europe, and that symbolic and highly-stylised and conventionalised depictions continue to occur in all the sciences from the twelfth century to the present.

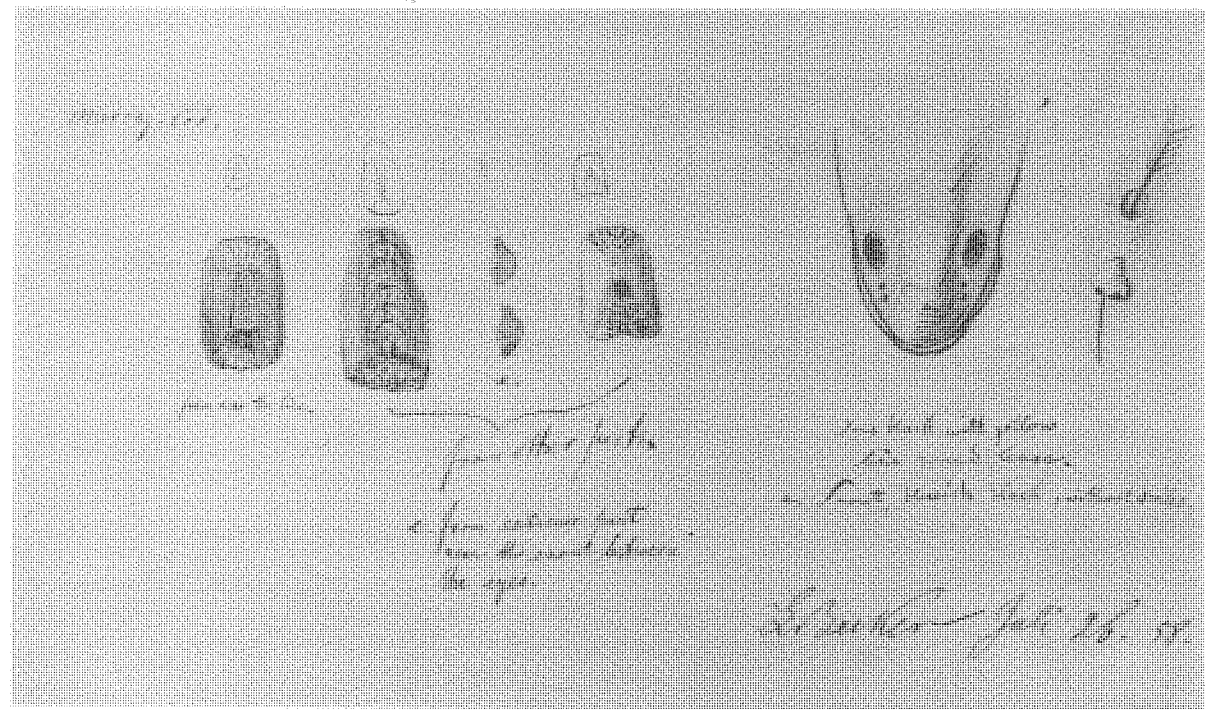
As a matter of fact, or rather as a matter of careful reading, zoological literature and art do not exhibit a simple and over-progressive transition to naturalistic representation. Indeed, a great many factors complicate the story and muddy the waters seemingly made so clear by such historical generalisations as that of White. Instead of characterising the modern period as one of the progressive discovery of appearance, we should look rather to the changing ends and purposes of the illustrators and to the changing contexts in which they worked.

Of course, in science, unlike the situation in art, an effort has been made to 'purify' the motives of practitioners, to eliminate all conscious ends other than the accurate description of nature. Not only has overt symbolism, as such, been largely eliminated from the published literature, but all evidence of contextual influence - social, economic, religious, and even ecological - is usually removed. With Becker's *Murray Cod* (cat.no.18) we see this process at work, analytical description of the parts replacing holistic concern for the animal's place in nature. Audubon too, in most of his work, focuses on points of anatomy and the common postures, along with a few floral associations.

This is not to say that a study of the symbology of natural history illustration over the last few centuries would prove barren. Even the most highly representational animal drawings, for example, may inculcate profoundly subjective cultural attitudes to the beast in question. That such symbolic messages still pervade animal iconography is indisputable. The natural sciences are still in the process of eliminating the very real effects of such attitudes, for example, in ecological studies of gorillas and wolves. In any case, it is now realised that metaphor and convention play a central, if sometimes subtle, role in scientific description in the physical as well as the natural sciences.

In other words, that which sets techno-scientific knowledge apart, and provides its undoubted authority in modern life, is not a question of naturalism or objectivity, and not even, in the end, a matter of accuracy, but rather the power over nature which science gives to humanity. Aboriginal knowledge systems also provide power over nature but mostly of a different sort and of a different order of magnitude. It is this differential of power relationships which more than any other factor accounts for the 'triumph' of Western scientific knowledge over traditional Aboriginal knowledge.

Like Western scientific knowledge, Aboriginal knowledge of the natural world constitutes a coherent and comprehensive system of classification and relationship, connecting patterns and symmetries, negotiation and authority, explanation and application. Recent scholarship has made clear that two hundred years of characterising Aboriginal knowledge as merely religion and myth or hunting and fishing was not only misinformed by tragically misleading.



18. Ludwig Becker Murray Cod

Both kinds of patterning form complex and mathematically sophisticated systems, both have powerful ideological underpinnings, both are social constructions emerging from historically identifiable contexts, both are rational in principle and practical in application. And, finally, both systems involve re-occurring patterns and cycles which can be used, and indeed are used, as an organising and explanatory framework for understanding all things.
(Helen Watson and D.W. Chambers, *Singing the Land, Signing the Land*, Geelong: Deakin University Press, 1989)

Australians of non-Aboriginal culture have much to learn from Aboriginal modes of perceiving and knowing nature. Not only because their knowledge relates specifically and concretely to this land in which we live, but also

because within their knowledge may be discovered the will and the way to stop the ongoing destruction of nature. At least part of this project must be the recognition of nature as our kin.

David Wade Chambers

David Wade Chambers received his PhD in the History of Science and Technology from Harvard University and has lectured at McGill, Melbourne, and Deakin University. He is the author of the *Imagining Nature*, *Worm in the Bud*, and (with Helen Watson) *Singing the Land, Signing the Land*, which considers Aboriginal and Non-Aboriginal knowledge of nature in systematic and comparative detail.

CATALOGUE

Measurements are in centimetres, and height precedes width. Unless otherwise stated the works cited are in the Museum of Victoria's collection. The number of exhibits on display at each venue will change according to available space.

1. Eugene von GUERARD 1811-1901
Barter 1854
oil on canvas
45.9 x 47.8 cm
Signed and dated l.r., 'Eug. Von Guerard
Melbourne 1854'
Collection: Geelong Art Gallery
Presented by N. Belcher and W. Max Bell, 1923.

WORKS ON PAPER

2. John James AUDUBON 1785-1851
Belted Kingfisher, Alcedo alcyon
Plate 77, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell Junr. 1830
comp. 65.5 x 52.4 cm
Purchase 1949.
The print was purchased from Mrs. E.W. Chenu,
Bank of Australasia, Warragul, Victoria. A
relative of Chenu's was a subscriber to Audubon's
work when *The Birds of America* was first
offered to the public in Scotland.
3. John James AUDUBON
Black-billed Cuckoo, Coccyzus erythrophthalmus
Plate 32, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell & Son 1828
comp. 47.8 x 67.0 cm
Purchase 1949.
4. John James AUDUBON
The Mocking Bird, Turdis polyglottus
Plate 21, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell & Son
comp. 85.0 x 60.0 cm
Purchase 1949.
5. John James AUDUBON
*Ruby Throated Humming Bird, Trochilus
colubris*
Plate 47, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell Snr. 1828
65.0 x 51.0 cm
Purchase 1949.
6. John James AUDUBON
Rathbone's Warbler, Sylvia rathboni
Plate 65, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell 1829
comp. 50.0 x 31.3 cm
Purchase 1949.
7. John James AUDUBON
Prothentary Warbler, Dactis protonarius
Plate III, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by
W.H. Lizares
comp. 52.0 x 31.3 cm
Purchase 1949.
8. John James AUDUBON
Louisiana Water Thrush, Turdus aquaticas
Plate 19, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell Jnr.
comp. 50.0 x 31.3 cm
Purchase 1949.
9. John James AUDUBON
Prairie Warbler, Sylvia discolor
Plate 14, Vol.1 *The Birds of America*
hand-coloured aquatint, engraved by Robert
Havell Jnr.
comp. 50.0 x 31.3 cm
Purchase 1949.
10. Arthur BARTHOLOMEW (working 1859-90s)
Hesperilla donnysa ? 28 October 1861
watercolour, tempera, pencil on paper
18.5 x 14.5 cm
Not signed. Dated l.r., 'October 28 1862 D270 In
pupa 24 November. Larva forms pupa on surface
of ground not enveloped in cocoon'.
11. Arthur BARTHOLOMEW
Pterolocera amplicornis 21 October 1861
watercolour, tempera, pencil on paper
19.0 x 14.0 cm
Not signed. Dated l.r., '21 October 1861'.
12. Arthur BARTHOLOMEW
Junonia vellida 11 February 1861
watercolour, tempera, pencil on paper
19.0 x 13.0 cm
Not signed. Dated l.r., '11 February 1862. Loc.
Near Melbourne. *Junonia vellida*. Imago from
larvae in Cabinets'; l.l., 'Appendage on head only
observed on left side. In pupa 12 February.
Imago 1st March'.
13. Arthur BARTHOLOMEW
Darala ocellata 20 January 1862
watercolour, tempera, pencil on paper
19.0 x 14.7 cm
Signed l.l., 'A. Bartholomew felicit'; l.c., 'Food
consists of baynet and other grasses. 307 In pupa
10 January 1862 Imago 12 Feb 1862'.
14. Arthur BARTHOLOMEW
Darala ocellata 20 October 1891
18.4 x 13.0 cm
watercolour, tempera, pencil on paper
Signed and dated l.r., 'A. Bartholomew Oct 20th
1891 Drawing 699'; l.l., '(Darala ocellata) In
pupa Oct 22nd 1891. Imago Dec 9th 1891. Local:
Caulfield - food grass'.

15. Arthur BARTHOLOMEW
Comarchis tinevides 29 July 1861
watercolour, tempera, pencil on paper
19.0 x 15.0 cm
Not signed. Dated l.r., '29 July 1861'; l.c., 'In
pupa 1st August 1861. Imago 28 September 1861.
Forms cocoon under stones on loosed bark on
surface of ground'; u.c., 'Loc. Near Melbourne'.
As assistant to Frederick McCoy, Professor of
Natural History of Melbourne and Director of the
Natural History Museum, Bartholomew made
drawings of nature indigenous to Victoria, some
of which were reproduced in McCoy's celebrated
Prodromus of the Zoology of Victoria.
16. Arthur BARTHOLOMEW
Aracana ornata December 1887
watercolour, pencil on paper
24.8 x 17.8 cm
Not signed. Dated u.r., 'December 1887'.
17. Arthur BARTHOLOMEW
Aracana ornata 1 December 1887
watercolour, pencil on paper
19.0 x 14.0 cm
Signed l.r., 'A. Bartholomew'. Dated u.c.,
'December 1st 1887'.
18. Ludwig BECKER c.1808-1861
Murray Cod, Maccullochella peeli 26 January
1858
ink and pencil on paper
116.0 x 190.0 cm
Signed and dated u.l., 'January 26 1858'; c.l.,
'from near line from other parts'; l., 'from
extreme part near the snout between eyes'; c.r.,
'Iris black with yellow line round the lens'; a.,
'snout, bluish black without scales'.
19. C.C. BRITTLEBANK (working 1891-1911)
Peach and Destructive Insect 7 February 1895
watercolour, pencil on paper mounted on
cardboard
21.0 x 13.5 cm
Signed and dated l.l., 'C.C. Brittlebank 7
February 1895'.
20. Francois Louis Nomp La Force, Comte de
CASTELNAU 1802?-1880
Parrot Fish, Labrichthys bleekeri Cast
watercolour, pencil, ink on paper
21.0 x 34.0 cm
Not signed. Not dated.
Bequest of the artist, Melbourne Public Library,
1880, thence to the Museum of Victoria.
21. Francois Louis Nomp La Force, Comte de
CASTELNAU
Parrot Fish, Labrichtys richardsoni var ?
watercolour, pencil on paper
21.0 x 34.0 cm
Not signed. Not dated.
Bequest of the artist, Melbourne Public Library,
1880, thence to the Museum of Victoria.
22. Neville CAYLEY 1853-1903
Masked Lapwing, Vanella miles 1892
watercolour, pencil on paper
49.5 x 77.5 cm
Signed and dated l.l., 'Neville Cayley: 92'.
A publican named Flannigan kept a hotel in
N.S.W. After his death, Mrs. Flannigan came to
Melbourne bringing the paintings with her. Her
son-in-law brought two paintings to show the
Director of the National Museum, Melbourne.
The purchase price for 18 paintings was \$150.
23. Neville CAYLEY
Southern Emu Wren, Stipiturus malachurus
1894
watercolour, pencil on paper
62.5 x 52.0 cm
Signed and dated l.r., 'N. Cayley 1894 No.83';
verso, part label, '31.10.0'.
24. Neville CAYLEY
*Red-backed Fairy Wren, Malurus
melanocephalus* 1893
watercolour, gouache, pencil on paper
61.0 x 50.0 cm
Signed and dated l.r., 'Neville Cayley 1893
No.14';
verso, part label, '31.10.0'.
25. Neville CAYLEY
Rainbow Lorikeet Trichoglossus haematodus
1894
watercolour, gouache, pencil on paper
61.8 x 52.0 cm
Signed and dated l.r., 'Neville Cayley 1894
No.84'; verso, 'Aldenhoven Art Gallery, Picture
Frame Factory, Australian Birds Office, Portrait
Enlarging Studio, 74 Hunter Street Sydney.
No.84, Blue Mountain Paroquets, Original Ptg by
N. Cayley. Price of 31.10.0'.
26. Neville CAYLEY
Crimson Rosella, Platycercus elegans
watercolour, gouache, pencil on paper
62.5 x 47.6 cm
Signed, 'N. Cayley'; verso, '176 Crimson Lorey.
Original 31.10.0'.
27. Neville CAYLEY
Kookaburra, Dacelo novaguinea 1892
watercolour, pencil on paper
58.6 x 47.0 cm
Signed and dated l.l., 'N. Cayley 92 B'; verso, '10
guineas'.
28. Neville CAYLEY
Maggie Lark, Grallina cyanoleuca 1893
watercolour, pencil on paper
63.0 x 53.0 cm
Signed and dated l.r., 'Neville Cayley 1893
No.16'; verso, part of label, 'Original ptg by N.
Cayley Price 31.10.0'.

29. Arthur COLES (working 1880-1900)
Eggs of Insectivorous Birds of Victoria
watercolour, gouache, pencil on paper
52.5 x 75.5 cm
Signed l.c., 'A. Coles'. Not dated.
30. E.W. MINCHEN active 1878
Descriptive Chart of Common Insectivorous Birds Found in Victoria 1878
lithographed at the Department of Lands and Agriculture by E.W. Minchen, Melbourne 1878
56.0 x 76.0 cm
Inscribed in print, 'Prepared by the Department of Agriculture for the Education Department of Victoria - A.R. Wallis, Secretary for Agriculture. This chart contains 36 species of the more common insectivorous birds indigenous to Victoria. The illustrations are from the original drawings of the late Mr. John Cotton and Gould's work on the Birds of Australia. Issued for use in the State Schools of Victoria W. COLLARD SMITH, Minister for Public Instruction'.
31. John WOLSELEY 1938-
Description of a Journey from Ormiston Pound to an Ochre Mine into the Heavitree Range, Northern Territory 1978
watercolour
12 separate sheets, each 23.5 x 31.5 cm
Collection: Geelong Art Gallery
Capital Permanent Award, 1979

BARK PAINTINGS

32. MANGARAWUI
Dugong Hunting
Yirrkala NE Arnhem Land
39.5 x 81.0 cm
Purchase 1976.
Collected by Reverend E.A. and Mrs. A. Wells, Methodist missionaries at Yirrkala.
33. MAWALAN
Macassan Prau
Yirrkala NE Arnhem Land
162.5 x 72.6 cm
Purchase 1976.
Collected by Reverend E.A. and Mrs. A. Wells, Methodist missionaries at Yirrkala.
34. MAWALAN
Belongings of Macassan Visitors
Yirrkala NE Arnhem Land
131.0 x 63.5 cm
Purchase 1976.
Collected by Reverend E.A. and Mrs. A. Wells, Methodist missionaries at Yirrkala.
35. George MILPURRU
Goose Hunters
Mulgurum via Ramangingin, Arnhem Land
135.0 x 62.0 cm
Purchase 1983
This bark painting was purchased at the Ramangingin Art and Crafts Exhibition, December 1983

36. UNKNOWN, Gagadju tribe
Aborigine Spearing a Crocodile from a Canoe
1912
Western Arnhem Land
178.0 x 53.3 cm
In 1912, the Director of the National Museum, Melbourne, Professor Baldwin Spencer collected about 50 bark paintings at Oenpelli, Western Arnhem Land. They arrived at the Museum in 1913. This is one of them.
37. UNKNOWN
A kulekuli or Catfish 1912
Alligator River area, Western Arnhem Land
63.5 x 35.6 cm
Gift of the Director of the National Museum, Melbourne, Professor Baldwin Spencer 1913.
Acquired by Spencer in Western Arnhem Land in 1912.
38. UNKNOWN
Dugong
Ingura Tribe, Groote Eylandt, Eastern Arnhem Land
20.0 x 56.0 cm
Donald Thomson Collection, on loan from The University of Melbourne.
Donald Thomson collected this on 7 November, 1935, during his second expedition to Arnhem Land.
39. UNKNOWN
Pied Goose
Copy of rock painting
Alligator River area, Western Arnhem Land
114.2 x 58.5 cm
In 1914, Paddy Cahill, Northern Territory buffalo hunter and cattleman, collected for the director of the National Museum, Melbourne, Professor Baldwin Spencer, a bundle of bark paintings, including this one, from Oenpelli, Western Arnhem Land.
40. WAYTJUNG
A Crocodile, Fish, Turtles and Dolphin
Yirrkala, NE Arnhem Land
34.0 x 20.0 cm
Gift of Reverend W.S. Chaseling, Methodist missionary at Yirrkala, 1940
41. WONGGO
Macassan Prau
Arrawiya Tribe, Caledon Bay Area, NE Arnhem Land
50.2 x 68.0 cm
Donald Thomson Collection, on loan from The University of Melbourne.
Donald Thomson collected this bark painting when in NE Arnhem Land. The date of acquisition is unknown.

42. WONGGO & SONS
Untitled 1935
NE Arnhem Land
142.0 x 58.0 cm
Donald Thomson Collection, on loan from The University of Melbourne.
Donald Thomson collected this painting in July 1935 at Trial Bay and photographed it being painted.

PHOTOGRAPHS

The following photographs are part of the Donald Thomson collection on loan to the Museum of Victoria from The University of Melbourne and reproduced with the kind permission of Mrs. D. Thomson.

43. Donald THOMSON 1901-1970
Yilkari with Gori, Clyde River, NE Arnhem Land
14 April 1937
gelatin silver print from original glass negative
60.0 x 50.0 cm
44. Donald THOMSON
Kurka Gori Trap, Liagallauwumit Matta, Glyde River April 1937
gelatin silver print from original glass negative
60.0 x 50.0 cm
45. Donald THOMSON
Kurka Gori Trap, Glyde River
gelatin silver print from original glass negative
50.0 x 60.0 cm
46. Donald THOMSON
Kurka Gori Trap, Glyde River April 1937
gelatin silver print from original glass negative
60.0 x 50.0 cm
47. Donald THOMSON
Goose Hunters, Arafua Swamp, NE Arnhem Land May 1937
gelatin silver print from original glass negative
50.0 x 60.0 cm
48. Donald THOMSON
Goose Hunters, NE Arnhem Land April 1937
gelatin silver print from original glass negative
50.0 x 60.0 cm
49. Donald THOMSON
Goose Hunters, NE Arnhem Land April 1937
gelatin silver print from original glass negative
60.0 x 50.0 cm
50. Donald THOMSON
Goose Hunters, Camp at edge of Swamp, Arafua Swamp, NE Arnhem Land
April/May 1937
gelatin silver print from original glass negative
60.0 x 50.0 cm
51. Donald THOMSON
Goose Hunters, Arafua Swamp, NE Arnhem Land April/May 1937
gelatin silver print from original glass negative
50.0 x 60.0 cm

52. Donald THOMSON
Wonggo making bark painting, Trial Bay, NE Arnhem Land 14 July 1937
gelatin silver print from original glass negative
50.0 x 60.0 cm

OBJECTS

53. ARTIST UNKNOWN
Album of apples: Silver Reinette Dr. Bunce New Scarlet Permain
watercolour, pencil on card pasted onto paper with accompanying notes
40.0 x 26.0 cm
Not signed. Not dated.
54. ARTIST UNKNOWN
Album of fruits modelled by Miss M.I. McMillan: Hales Early Foster Willermoz Royal George Conkling Early Silver
watercolour, pencil on card pasted on paper
36.0 x 26.0 cm
Inscribed frontispiece: 'Fruits modelled by Miss M.I. McMillan 1904, S & T Museum'.
55. *Aracana Ornata*
Provenance unknown.
56. *Camera tripod*
whole plate field camera (Watson & Sons, 313 High Holborn, London) with Thornton and Pickard shutter
Donald Thomson Collection.
57. *Canoe (Ngärdän)*
315.0 x 59.0 cm
From Arafura Swamp, Arnhem Land April/May 1937
Donald Thomson Collection.
58. *Humming bird case* (nineteenth century)
Presented by Mrs. L.J. Carter, 1936.
59. *Kurka Gori (fish trap)*
Glyde River area NE Arnhem Land 1936
Donald Thomson Collection.

LA TROBE SPECIMENS

The following four bird specimens were collected in the Port Phillip District (now Victoria) and sent by Charles Joseph La Trobe (1801-1875), in two consignments, to Société des Sciences Naturelles de Neuchâtel, Switzerland, during 1841 and 1843-4.

60. *Metops ornatus*
Collection: Musée D'Histoire Naturelle, Ville de Neuchâtel, Switzerland.
61. *Phaps elegans*
Collection: Musée D'Histoire Naturelle, Ville de Neuchâtel, Switzerland.

62. *Todiramphus sanctus*
Collection: Musée D'Histoire Naturelle, Ville de Neuchâtel, Switzerland.
63. *Turnix Varia*
Collection: Musée D'Histoire Naturelle, Ville de Neuchâtel, Switzerland.
64. *Murray cod (Maccullochella peelii)*
Fish Department, Museum of Victoria.
Caught in the Murray River in 1893.

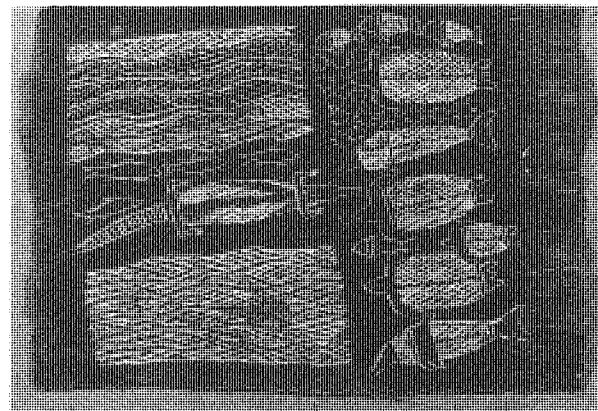
PANELS OF GRASSES

'A collection of native and introduced grasses was prepared by Mr. C. Walter (1831-1907) and labelled with their habitat and purposes for which they were adapted'. *Annual Report of the Trustees, 1906*

65. *Introduced Grasses* collected 1888-1906
Australian She-oak frame
103.0 x 67.0 cm
66. *Introduced Grasses* collected 1888-1901
Red Gum frame
103.0 x 67.0 cm
67. *Parrot case*
A. W. Coles, taxidermist
From the Donald Mackintosh Store, 432 Bourke Street, Melbourne, in 1973.

Key to case of Australian Parrots

1. Mallee Ringneck *Barnardius barnadi*
2. Blue Bonnet *Norhiella haematogaster*
3. Elegant Parrot Lorikeet *Glossopsitta pusilla*
4. Crimson Rosella *Platycercus elegans*
5. Elegant Parrot *Neophema elegans*
6. Palm Cockatoo *Probosciger aterimus*
7. Musk Lorikeet *Glossopsitta concinna*
8. Regent Parrot *Polytelis anthopeplus*
9. Australian King Parrot *Alisterus scapularis*
10. Rainbow Lorikeet *Trichoglossus haematodus*
11. Superb Parrot *Alisterus scapularis*
12. Elegant Parrot *Neophema elegans*
13. Mulga Parrot *Psephotus varius*
14. Swift Parrot *Lathamus discolor*
15. Eastern Rosella *Platycercus eximius*
16. Red-winged Parrot *Aprosmictus erythropterus*
17. Pale-headed Rosella *Platycercus adscitus*

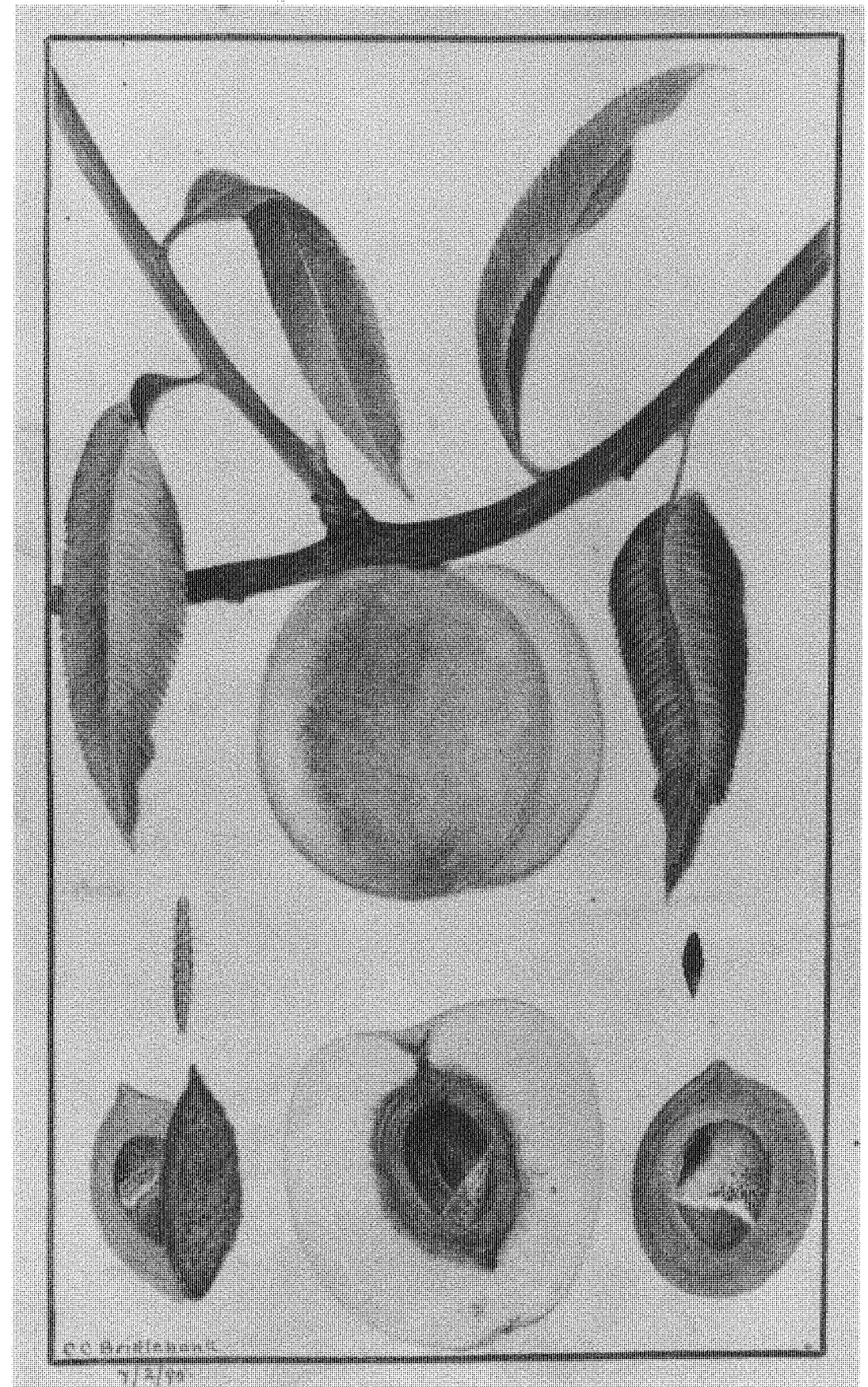


40. Waytjung A Crocodile, Fish, Turtles and Dolphin

68. *String bag*
Arnhem Land
Donald Thomson Collection
Contents as follows: Woven rush basket; small fibre string dilly-bag, containing scraps of coarse knitting wool, fibre string; small quantity of melaleuca bark; short length of braid; small piece of cloth; lump of ochre, wrapped in bark and tied with twine; leather belt with 'Sydney Harbour Bridge' buckle; piece of resin; fishing line, with hook, paper cap (party type); tennis ball; ivory tooth-brush handle, (bristles worn right down); *kut kut* in melaleuca wrapping; bolt (long) metal 'knife-blade' (large); cap of I.X.L. tomato sauce bottle; four fine pieces of metal c.30 cm long; wrapped with fibre string; round tobacco tin, full of beads; bundle of fibre string; small round mirror (cracked); lump of very light stone (pumic? scoria?); sinker for fishing line; dessert spoon; fire sticks (short); length of bark, part prepared for string; six fine bone implements (awls, etc.)

WAX FRUIT

69. Miss M.I. McMILLAN
Early Silver Peach 1904
70. Miss M.I. McMILLAN
Hale's Early Peach 1904
71. Miss M.I. McMILLAN
Foster Peach 1904
72. Miss M.I. McMILLAN
Royal George Peach 1904
73. Miss M.I. McMILLAN
Conkling Peach 1904
74. Thomas McMILLAN
Bismark Apple 1880
75. Thomas McMILLAN
New Scarlet Pearmain Apple 1875
76. Thomas McMILLAN
Silver Reinette Apple 1875
77. UNKNOWN
Bunce Apple c.1875



19. C.C. Brittlebank Peach and Destructive Insect

