



Caption TK

Introduction

Sir Sidney Nolan (1917–1992) is one of the most experimental modern painters to emerge from the austerity of the 1930s and the violence of the Second World War. Painting with glossy and intensely colored commercial paints on scraps of cardboard, blotting paper, and sheets of builder's wallboard called Masonite[®], he invented a new Australian identity through evocative landscapes and storytelling. Nolan often painted a troubled European presence, using the subjects of nineteenth-century historical figures—the bushranger Ned Kelly, the shipwreck survivor Eliza Fraser, the central Australian explorers Robert O'Hara Burke and William John Wills—and such contemporary subjects as drought-affected cattle. He continues to be celebrated for his ability to make the people and places he painted extraordinary.

Nolan was born into a working-class family in Melbourne and grew up through the interwar years. He undertook training in the trade of commercial art at Prahran Technical College and started work in a factory at the age of fourteen painting illuminated signs for the roofs of commercial cars. From 1933 to 1937 he worked in the advertising department of Fayrefield Hats, a men's felt hat company, cutting out shapes and painting window and trade displays. Despite having little, if any, training in the fine arts, on the eve of the Second World War Nolan decided to give up paid employment and embark on a career as an artist.² The works painted between 1938 and 1947 are some of the most inventive and seminal of his career. Few, however, sold at their first exhibition, and it was not until the late 1940s, when he was settled and exhibiting in Sydney, that he found critical and commercial success.

Financial reward and the end of the Second World War gave Nolan his first opportunity to travel outside Australia. In 1950 he drove through Spain, Portugal, Italy, and France in a Hillman Minx car freighted from Australia. Three years later he moved permanently to England, though he continued his travels, including living for nine months on the Greek island of Hydra. Beginning in 1958 he spent several years in the United States, with extensive travels in Africa in 1962, including Kenya, Tanzania and Ethiopia, following in the footsteps of his favorite poet, Arthur Rimbaud (1854–1891). He traveled to Antarctica in 1964, and then Mexico, India, China, and Cambodia. Between his travels Nolan lived in London, where he had a successful career through the 1960s and '70s. In the 1980s Nolan moved to the Welsh border country and in 1983 purchased an estate called The Rodd. His last decade at The Rodd was remarkably creative, the results of which are only now becoming known and appreciated.

Nolan fearlessly applied his experience and knowledge of non-artist's paints from commercial industry to his own art in the early years of the Second World War. Although it was not uncommon for artists emerging in the postwar decades to explore materials



FIGURE 10
Verso of Sidney Nolan, *Untitled (Ship)*, Dec. 11, 1941. Nitrocellulose on slate, 25.7 × 50.8 cm (10 ¼ × 20 in.). University of Queensland Art Museum. Purchased with the assistance of the Alumni Association and the Peter Stuyvesant Cultural Foundation, 1977.

FIGURE 11
Sidney Nolan, *Luna Park*, 1941. Nitrocellulose lacquer on canvas, 67.0 × 84.0 cm (26 ¾ × 33 ½ in.). Art Gallery of NSW. Purchased with funds provided by the Nelson Meers Foundation 2003.



during later conservation treatments. The white pigment in nitrocellulose paints is titanium white (titanium dioxide), appreciated for its opacity and fine particle size; this pigment renders *Luna Park* brilliant in its cool tonalities. Two further 1941 paintings by Nolan with similar color palettes have also been tested and identified as nitrocellulose paintings—*Bird* (December 4, 1941) and *Untitled (Round Tree)* (c. 1941; fig. 12)—suggesting that nitrocellulose lacquer was Nolan’s principal paint medium through 1941.

FIGURE 12
Sidney Nolan, *Untitled (Round Tree)*, c. 1941. Nitrocellulose on plywood, 38.1 × 25.4 cm (15 × 10 in.). Art Gallery of NSW. Purchased 2013.



Nitrocellulose Lacquer

Elaborate window displays were an important part of the modern cityscape in the 1930s. Advertising had become a huge industry, and brightly colored and glossy paints played an important role in inciting desire through the suggestion of glamour, luxury, and fashion. The paints used in such displays were quick-drying spray paints based on new types of resins and dyes. The most popular paint type was nitrocellulose lacquer. Developed initially as a strengthening and sealing coating for cloth-covered airplanes, it became a popular colored paint in the 1930s.



FIGURE 32
Sidney Nolan, *Ned Kelly: "Nobody knows anything about my case but myself,"* 1945. Ripolin oil enamel on cardboard, 63.0 × 75.0 cm (24¾ × 29½ in.). Heide Museum of Modern Art. Purchased with funds provided by the Friends of the Museum of Modern Art at Heide and Heide Circle of Donors 1998.

FIGURE 33
Zinc X-ray fluorescence map of *Ned Kelly: "Nobody knows anything about my case but myself"* (see fig. 32), rotated 180 degrees.

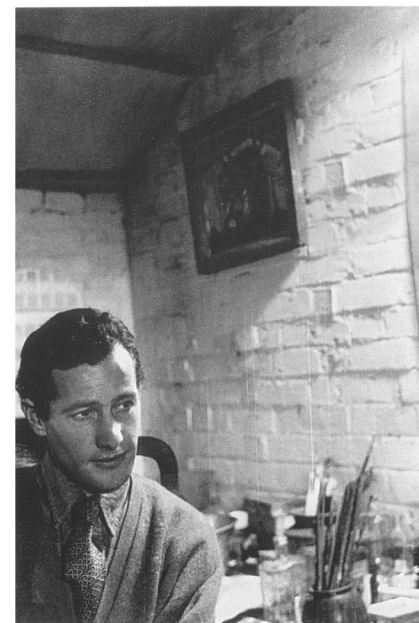
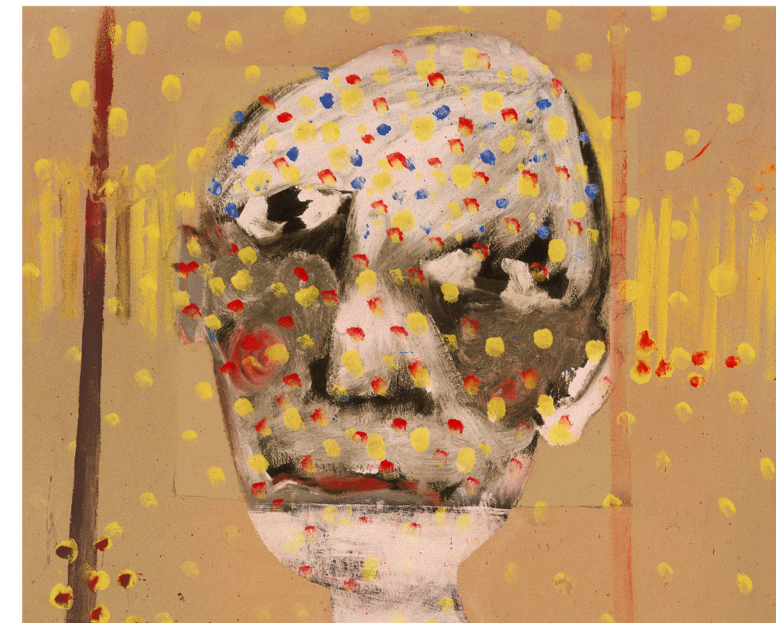


FIGURE 34
Albert Tucker, *Nolan in Parkville studio, Sept. 1944.* Heide Museum of Modern Art. Gift of Barbara Tucker 2001.

FIGURE 35
Color reconstruction of under painting revealed by X-ray fluorescence mapping of *Ned Kelly: "Nobody knows anything about my case but myself"* (see fig. 32).



Boy in Township in 1943, Nolan turned the painting upside down before applying a second working, in this instance the paint of the helmet, so the hidden head is now, ironically, hanging by its neck from the top edge of the painting. The rotation of the hidden portrait accounts for the strange placement of the slot opening, more to the bottom of the mask than the top. The subject of the hidden portrait revealed by the XRF imaging is difficult to assign with certainty. Both Ned Kelly (as revealed by the death mask cast in plaster after his hanging) and Nolan (fig. 34) shared the physical features of a broad nose and rounded chin.

A digital color re-creation of the lower painting, based on the elemental signatures of four of the Ripolin paint colors Nolan used, shows a surprisingly complete portrait and a strange array of colored dots (fig. 35). Each color of dots is confined to a certain area of the painting: while the yellow dots (detected by the presence of chromium) are spread throughout, the red (barium) are restricted to the face (a group of red dots to the right side of the head are associated with the later reworking and introduction of flowering vegetation), and the blue (iron) are located only on the forehead. Whatever the intention of the dots, they imbue the portrait with a feeling of unease, whether of illness or disruption and anxiety. The whorl on the cheek, seen in both the red and white maps, is likely pink on the now hidden painting—the color re-creation being unable to replicate the color mixing of actual paints—achieved by applying red paint onto wet white paint and merging together with a finger. Interestingly, a cheek whorl or tattoo reappears decades later in Nolan's repertoire, in portraits he painted with spray cans, including a work titled *I Shall Tattoo Myself* (1982; see fig. 92), the title being a quote from one of Nolan's favorite poets, Rimbaud (Clark 2017). Perhaps, then, the portrait underneath the Kelly mask is a blend of three figures: Kelly, Rimbaud, and Nolan himself. While this high-end imaging may have revealed a formative source for the conception of the Kelly figure in Nolan's paintings, *Ned Kelly: "Nobody knows anything about my case but myself"* continues to elude easy interpretation, retaining the mystery of its subject. Later, in 1984, Nolan hinted at the transference between the Kelly subject and himself: "Really the Kelly paintings are secretly about myself. You would be surprised if I told you. From 1945 to 1947 there were emotional and complicated events

FIGURE 63

Exhibition of four of Sidney Nolan's Fraser Island paintings at Moreton Galleries, Brisbane, Feb. 17–28, 1948. Left to right: #10 *Hervey Bay*, #9 *Swamp*, #8 *Island*, #7 *Indian Head*. Silver gelatin photograph. Cooper Collection, Fryer Library, University of Queensland.



painting, with figure, was created in Queensland. Although this time coincides with Nolan's decision to end his relationship with Sunday Reed, he had not developed the antipathy toward her that many authors, and later Nolan himself, have suggested lies at the heart of the animal-like pose of the Mrs. Fraser figure.

When an amnesty for army deserters was declared in 1948, Nolan applied for and received a dishonorable discharge. This enabled him to exhibit openly—his Fraser Island paintings in Brisbane, and in April of that year the Kelly paintings in Melbourne. Over the next five years Nolan, Cynthia, and Jinx traveled extensively through central, northern, and western Australia. Nolan had a number of successful Sydney exhibitions with subjects derived from these travels and from photographs taken during his 1947 Queensland stay. After poor reviews in Melbourne and Brisbane of both the Fraser Island and Kelly exhibitions, it was Sydney that finally embraced Nolan's vision of place and people. Financial and critical success enabled him to embark on the next stage of his ever-changing repertoire of paint media and subjects.

Ripolin and Zinc Soaps

Ripolin is notable for being primarily formulated with the white pigment zinc oxide. The presence of zinc white in oil-based paints became increasingly common from the late nineteenth century, initially as a less toxic alternative to traditional lead white and later used in combination with titanium white to improve paint film properties. Its good suspension in oil transformed the viability of early ready-mixed house paint production. Although zinc white was consciously sought by some artists for its resistance to yellowing and blackening, it lacked the hiding power of both lead and titanium whites; it was therefore most frequently used in combination with other white pigments and in colored formulations. The use of zinc white without additions of other whites in the Ripolin colors prior to the 1950s is unusual and probably part of the attraction to Nolan, who particularly liked working with somewhat transparent paints.

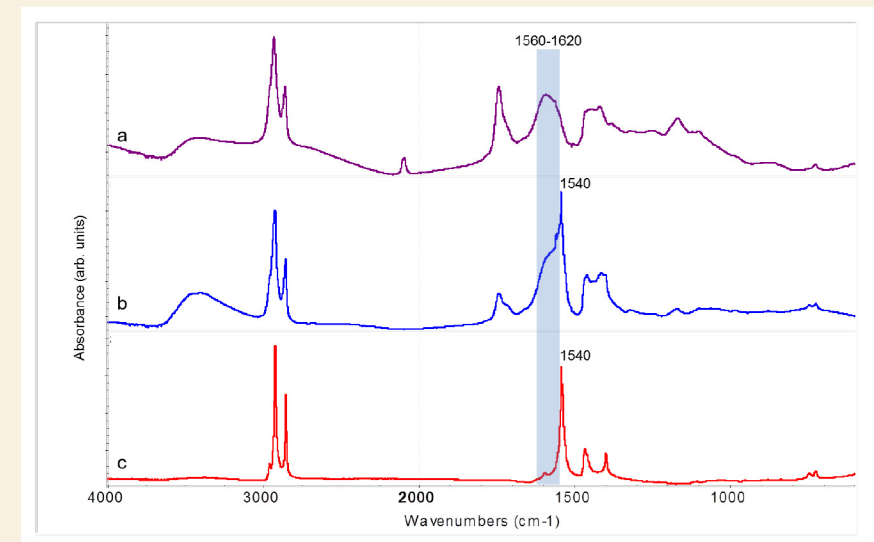
Unfortunately, the reactivity of zinc oxide in oil is now associated with a variety of deterioration phenomena in paintings. Zinc soaps formed by reaction of the pigment with fatty acids derived from the oil medium have been implicated in formation of disfiguring lumps and textural change, insoluble surface deposits, and loss of adhesion and strength between or within paint layers. Paints with any amount of zinc oxide and a source of fatty acids appear vulnerable to this problem. Interestingly, though, Ripolin paints seem less prone to zinc

soap-related degradation than many other zinc oxide-containing paints. When examples of deterioration with Ripolin have been reported, the paintings typically contain combinations with other paints or fatty acid sources (Townsend, King, and Ormsby 2016).

When zinc oxide is mixed with a drying oil, bonds rapidly form between zinc ions in the pigment and carboxylate groups in the oil. This interaction is evident in FTIR spectra of the paint as a broad vibration peak characteristically centered between 1560 and 1620 cm^{-1} . This broad peak is typically present in spectra of Ripolin paint samples taken from paintings by Nolan (fig. 64a). The zinc carboxylates do not in themselves appear problematic, and current thinking suggests the broad vibration reflects zinc ions paired with carboxylate groups still bound to the glycerol backbone of the oil (Hermans et al. 2015). In this form the zinc carboxylates remain connected and distributed throughout the polymerized oil network. If, however, there is a source of free fatty acids or the paint is exposed to conditions favoring hydrolysis of glycerol ester bonds, there is scope for untethered zinc carboxylates—especially zinc soaps of the long-chain saturated fatty acids, zinc stearate and zinc palmitate—to form. These mobile phases have a tendency to migrate and aggregate to reach a thermodynamically stable state as closely packed crystalline structures. The crystalline arrangement is reflected in FTIR spectra with a characteristic sharp antisymmetric

FIGURE 64

FTIR absorbance spectra of paint from (a) Sidney Nolan, *Mrs. Fraser* (1947; see fig. 53), dark blue paint (oil, zinc white, and Prussian blue); (b) zinc white oil ground layer from a painting dated 1980; (c) zinc stearate, QAGOMA synthesis.



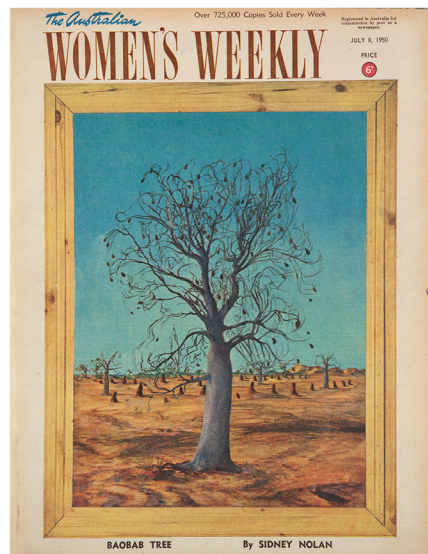


FIGURE 65
Sidney Nolan, *Boab Tree*, 1950.
Cover of *Australian Woman's Weekly*, July 25, 1950.

FIGURE 66
K. Redshaw, Sidney and Cynthia Nolan at David Jones' Art Gallery, Sydney. *Sydney Morning Herald*, July 29, 1953.



may have been caused by Nolan moving the painting upright before the paint had dried through its full thickness or working with the painting propped up, as shown in photographs of him in his Sydney studio at his home at Wahroonga (fig. 68). In contrast to the thickly painted sky, the landscape has been worked thinly with scumbled Ripolin, leaving exposed in many areas the unprimed hardboard support. In this instance, the support is not a dark-colored Masonite board made from Australian hardwoods but a pale board made from softwood. Perhaps it was the board's inherent color that inspired Nolan to leave it unpainted between swatches of color in the foreground. However, over time the exposed areas of the board have darkened, possibly through contact with moisture or solvents; as a result, there is now some discordance between the colored areas and those left unpainted.

In 1950 Nolan was preparing for a David Jones exhibition to be held in April while working on watercolors for a Macquarie gallery exhibition and a series of paintings on the subject of the nineteenth-century central Australian explorers Burke and Wills for exhibition in June. This prolific and frantic production, in which large numbers of paintings were produced in small timeframes between travels, became Nolan's preferred way of working, but one he sought, at least in this early period, to keep to himself. As he put it, "One has to learn to sprint while giving the appearance of walking."³

While painting the pieces inspired by his trips to Queensland and central Australia, Nolan's palette underwent a dramatic shift. The landscape itself probably dictated a move toward strong earth tones. One critic noted in viewing Nolan's paintings on exhibition in 1950, "When you enter the gallery the blaze of reddish-brown hits you like a ton or two of real red earth" (quoted in G. Smith 2003, 23). An undated note by Nolan describes the Ripolin colors he used for these paintings; apart from the Blue 17,⁴ they relate well to the cans found in his Wahroonga studio: "Undercoating white (no. 1), canary (no. 4), red (no. 16), blue (no. 17), ochre (no. 56) and black (no. 1105)" (G. Smith 2003, 22). In a letter of July 4, 1957, he stated in relation to the central Australian paintings the reasons for his choice of Ripolin: "Well I've used Ripolin on Masonite because I found out that in order to reproduce this light, this very intense bright light which was flooding over everything, one had to adopt a different sort of palette from the conventional oil palette one and Ripolin on Masonite seemed to bring about this translucent sky and it set up the effect I wanted" (G. Smith 2003, 22).



FIGURE 67
Sidney Nolan, *Pretty Polly Mine*, 1948. Ripolin oil enamel on hardboard, 91.0 × 122.2 cm (35 7/8 × 48 1/4 in.). Art Gallery of NSW. Purchased 1949.

FIGURE 68
A. L. Frazer, Nolan painting *Unnamed Ridge* in front room of Wahroonga house, 1949. Silver gelatin photograph, 15.8 × 21.0 cm (6 1/4 × 8 1/4 in.). Cooper Collection, Fryer Library, University of Queensland.



FIGURE 91

Alex Ramsay, Rags used as stencils and dabbed into wet spray paint in Nolan's studio at The Rodd, 2017.

FIGURE 92

Alex Ramsay, Table of spray cans and model boats used for America's Cup paintings in Nolan's studio at The Rodd, 2017.



FIGURE 93

Sidney Nolan, *I Shall Tattoo Myself*, 1982. Acrylic spray paint on canvas, 184.0 × 162.0 cm (72½ × 63¾ in.). Collection of The Sidney Nolan Trust.

FIGURE 94

Sidney Nolan, *Portrait of Brett Whiteley*, 1982. Acrylic spray paint on canvas, 184.0 × 162.0 cm (72½ × 63¾ in.). Collection of The Sidney Nolan Trust.

1982 bear a remarkable likeness to the hidden portrait revealed by synchrotron-sourced XRF mapping on the Kelly painting of 1945 (see fig. 35 and discussion in chapter 3). Did Nolan remember the head he had obscured with Kelly's helmet almost forty years earlier? Is this later incarnation a clue to a possible subject (or multiple subjects) of that earlier painting, and Nolan's personal transference through his painting into the figures Ned Kelly and Arthur Rimbaud? Nolan himself said of the portraits in spray paint, "I thought that they would turn out hazy and lyrical, but they were traces left in my brain, kind of half memories, lines in my brain" (quoted in Nolan Gallery 1987).

The spray paintings from 1982 have an overall gloss that is not a feature of the Buntlack paints, suggesting that clear lacquers were applied as finishing layers. Abundant boxes of Blair Spray Clear Protective Coating indicate that this was the most favored of the numerous types of clear coatings in the studio. An acrylic like the Buntlack, it would have been compatible with the colored layers and should have good light-fastness, but future solvent-based removal of yellowed coating layers may be problematic owing to the similar composition of coatings and paint layers.

As Nolan developed his spray-painting techniques, paint effects become increasingly difficult to understand by visual examination alone. Studio contents suggest that other materials were sometimes used in combination with the Buntlack, including metallic spray paints made for touching up cars and a diverse range of clear spray fixatives and coatings. Many of the spray coatings in the studio have been analyzed and identified as the same acrylic resin as in the Buntlack colored paints (see appendix II, table 5), but some, such as Frisk Lac™ gloss (ethyl cellulose) or Rowney Perfix™ (polyvinyl acetate), might provide the effects seen in paintings from the mid-1980s, particularly the Chinese landscapes from 1986. The exact processes involved are not clear, and many of the Buntlack works, such as *Portrait of Brett Whiteley* (1983; fig. 94), have mysterious resist patterns, separations, and pooling of paint across the surface in a complex interplay between colored and clear layers. Elwyn Lynn (1987) wrote that in the early 1980s portraits Nolan "dispersed the paint by spraying it and so diluted it and floated it