

# CAMOUFLAGE AND ITS IMPACT ON AUSTRALIA IN WWII: AN ART HISTORIAN'S PERSPECTIVE

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## Abstract

The impact of modern camouflage on Australian military practices and on the public imagination intensified during the Second World War. A new organisation was created to support national security through concealment and deception. Its core members were civilians and included a zoologist who specialised in animal camouflage as well as a group of Australia's leading artists who specialised in optical tricks and visual illusions. While concealment and deception remain central to contemporary approaches to national security (i.e. part of a counterintelligence strategy), the history outlined here draws attention to ethical conflicts and conceptual struggles in relation to camouflage and warfare that were important in WWII, but may seem quaint today.

**Keywords:** Camouflage, WWII, art, counterintelligence, deception, visual illusions, science, animals, manliness

## INTRODUCTION

It is no good pitting rugged western manly virtues against an enemy who is not impressed by them and who combats them, wisely enough, with the cunning of a jungle beast uninhibited by any considerations of military deportment and concerned only with the most effect method of destroying his opponent (Editorial, 1942).

“We must become more jungle minded,” wrote the Editor of the Brisbane *Telegraph* in the article quoted above. It was 1942 and a concerted effort was underway to train Australian soldiers to become “jungle minded” in the New Guinea area. For Professor William John Dakin (1883–1950), the Technical Director of Camouflage for Australia and the SW Pacific, the answer to the New Guinea problem lay in training soldiers to become camouflage conscious. Like the author of the newspaper column he also believed that Australian soldiers were too

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inhibited in mind and body for jungle fighting. When writing camouflage manuals for troops his instructions were to blend with the background, think deceptively and change the position of the body to horizontal postures such as crouching and crawling. To jungle soldiers he wrote: “learn to crawl properly. You should be flat on the ground!” (Dakin, 1947a: Appendix K–N, 32)

Dakin was a zoologist, and his approach to deception in human warfare was based on the study of animals that creep, crawl, and slide on their stomachs, stay close to the ground, and freeze still by instinct (Dakin, 1918: 272). He hoped that Australian soldiers in Papua and New Guinea would rediscover animal-like instincts arguing these had been lost over time due to civilising processes. By identifying with wild animals he was convinced that Allied militaries would gain superiority in the fight to win the War.

Today, this history seems quaint: military personnel and counter-intelligence agencies regard as normal business and as a cornerstone of practice the dynamics of concealment and deception even though the appearances of animals is no longer their starting point. In a digitally networked age of surveillance and counter-surveillance, global systems of code have transformed the logic of those earlier modernist perceptual constructions of camouflage. As Ross Gibson has shown about camouflage in the twenty-first century: “more than just a trick to the eye, most camouflage operates as an event, as a series of actions applied to objects and intensities occurring in space and time” (Gibson, 2015: 201).

It is also strange to think there was ever a time when soldiers had to be convinced of the advantages of camouflage for warfare. But as this paper shows hiding, subterfuge, and disguise as a way of thinking and as a paradigm of behaviour was, at the time of WWII, still in the process of becoming second nature to military business despite the decisive advances made to the formal integration of camouflage into military operations in the First World War. Addressed here is a very particular history for national security when the old practice of camouflage was based in the idea of tricking the eye, and when it seemed logical to look for help outside military organisations to one special group of citizens who excelled at visual illusions—the artist community of bohemians and radicals who had made perception in the visual field their speciality.

This paper is also about the exchanges of artists, military tacticians and biological scientists in the push to resolve the issues surrounding jungle camouflage in the New Guinea area in the Second World War. The aim is to show how the necessity for camouflage presented a challenge to conventional warfare

and disturbed long-held ideas of manliness in combat and military deportment. Points about the impact of WWII camouflage on motivating military change will be illustrated through the discussions they evoked in the Australian popular press where the topic of deception was enthusiastically aired during the war. Three main matters emerged in the press: the importance of concealment and deception for national security; the oddity of Australia's leading artists (under supervision of a zoologist) advising the military on camouflage and also basing their ideas on animals; the challenge that wartime practices of subterfuge presented to social values in peace-time, especially honesty.

#### NATIONAL SECURITY AND ESTABLISHMENT OF A COMMITTEE

*Modern art* is how camouflage was described to Australians through the press in 1942—one that has “that subtle capacity for defacing an object or for suggesting an object that is not there” (Weston, 1942). Camouflage warfare was a game of hide-and-seek where things went unseen in plain view, or seemed present when actually absent.

Camouflage captured the imagination of the public to such an extent that hardly a day went by without some news of concealment schemes by allies and enemies, or updates on new efforts to formalise camouflage training and fieldwork in Australia for the Army, Air Force, and Navy. A new emphasis on aerial warfare and the need to respond to aerial optics and surveillance had driven the need to increase camouflage consciousness. But when Darwin was bombed in 1942, the question of how to hide bodies, things and operations from the aerial view made camouflage defence a priority for Australia, even though planning had begun earlier in 1939.

The first public announcement was July 1941. Under National Security regulations the Federal Government established a Central Camouflage Committee chaired by William Dakin within the Department of Home Security. Every action to conceal or disguise military or civilian sites would have to go through Dakin's committee to ensure:

That any camouflage schemes bore a proper relation to their surroundings, the nature of buildings nearby, and conditions peculiar to Australian light and background. The committee would include civilians with special qualifications. (“Camouflage Plan,” 1941)

When it came to light that the Defence Central Camouflage Committee included scientists and artists researching concealment and deception by studying animals,

the story of camouflage became more intriguing. Seemingly new to camouflage warfare from the Australian public's perspective in 1941—but in fact a continuum from WWI—was the secondment of artists to work alongside military organisations, and the model of animals including emus, kangaroos and insects for schemes and designs (“Nature’s Aid,” 1941).

The First World War integrated theories of concealment and deception from biology based in Charles Darwin’s and Alfred Russel Wallace’s observations of mimicry as an adaptation in insects that enable them to hide from predators. Their ideas influenced every subsequent scientist of military camouflage in the First and Second World Wars including Abbott Thayer, Hugh Cott, Edward Poulton, William Pycraft, and William Dakin.

### ARTISTS AND ANIMALS

The First World War was also the first war to deploy artists to camouflage duties. The aesthetics and principles of concealment and deception in WWI were recognised as the modern development of an ancient art. But what changed in WWI were the establishment of specific camouflage units and the collaboration in the design of wartime camouflage by institutions dedicated to science and art as well as war. Lucien-Victor Guirand de Scevola (1871–1950), an artist, was the founder of the first French camouflage division, and liked to remind people that just prior to WWI *camouflage* was a term for criminals hiding from the police (Kahn, 1984: 148–149).

Camouflage was furtive, shady, and cunning. He saw this as its strength for modern soldiering, but traditional soldiers often disagreed thinking instead that the new camouflage strategies were a sign of cowardice for achieving “purely *protective* concealment” (Reit, 1978: 65). An interesting case from that period is Theodore Roosevelt who, according to Alexander Nemerov, considered camouflage as “a form of effeminate cowardice, a mere defensive strategy [that] all but announced an unmanly desire to hide instead of fight” (Nemerov, 1997: 79).

Despite strong views challenging the value of camouflage to war, each military country participating in WWI used artists to apply disruptive patterning and other methods of deception and concealment, to military objects. The ships of WWI are now the most celebrated camouflage experiments of that time. They were based on observations of nature including the effect of stripes on zebra, and also on the abstract experiments of modernists. At the onset of war most art practitioners were dedicated to art for art’s sake and the self-sufficiency of beauty

in art. But when war descended they were given the utilitarian task of applying to military objects, including ships, the painter's strategy of altering perception through pattern and colour. The idea, as Roy Behrens explains in relation to soldiers in French artillery teams wearing cagoules (shapeless hooded robes), was to deform anything worth protecting by hiding recognisable elements of form:

By applying broken colour to artillery, the camoufleurs' intention was to make their positions harder to spot (by subverting the continuity of the cannon's shape through high difference disruption). At the same time, by wearing dingy hooded robes, their goal was to prevent themselves from standing out (by merging visually with the ground through high similarity blending, or background matching). (Behrens, 2015: 2)

So the idea of utilising artists for wartime camouflage, and looking at animals as models, was not new in 1941. Two artists who excelled in their work for the Department of Home Security and worked closely in Sydney with the Army at George's Heights as well as with the Air Force at Bankstown and the Navy at Garden Island were Frank Hinder (1906–1992) and Max Dupain (1911–1992). Although Dupain would later call himself a 'pacifist' he also acknowledged that it was simply expected that artists would get behind the war effort to defend democracy and protect national borders from Japanese invasion: 'even in remote Australia the war was in everybody's life' (Dupain, 1986: 14–15).

In 1941 Dupain and Hinder helped Dakin write an important book, *The Art of Camouflage*, which was republished in 1942 as a handbook for the Australian military. They experimented wearing different colours and patterns to find optimal ways to make soldiers inconspicuous. They counter-shaded their bodies the way they had observed in fish and birds: dark on top, light underneath so that gradations of light and shade assist the illusion of the animal's effacement as a solid object. Like animals they utilised disruptive patterning to help their forms blend into backgrounds.

From Dakin's point of view, it was vital to educate soldiers that camouflage was not a sign of passivity or cowardice. Yet he was highly conscious that by working for a department called *Home Security* the role of camouflage could be misconstrued as not only passive but also decorative and feminine rather than part of the science of war:

The title "Home Security" may be regarded as a somewhat misleading expression. It tends, perhaps, to emphasise a passive attitude. Whatever the name may indicate, those in control of Camouflage realise very clearly that

its closest association is, and must be, with the perfection of a fighting machine, as it always has been (Dakin, 1947b: Appendix O, 3).

William Dakin was a provocative character and turned the valuable work of his artist team into controversy by encouraging the Minister of Home Security, Hubert Lazzarini, to argue the case to the Prime Minister, John Curtin, that camouflage in WWII was not a matter for military experts – it was “a matter for science and scientific experts together with architects and artists” (Lazzarini, 1942). Consequently, *The Art of Camouflage* defined camouflage as “art (with a scientific basis)” applied to armies in the field (Dakin, 1941: 3).

Dakin’s insistence that civilians knew more about camouflage than the Services led to the Australian Army deciding to go its separate way from the Department of Home Security. The Minister for the Army preferred the Army itself to control camouflage research and operations (F.M Forde, 1942). Despite losing control of Army initiatives, Dakin and the team of camouflage artists continued to have influence, particularly within the Air Force, and especially through programs and publications on camouflage for troops involved with tropical fighting. Between 1943 and 1945 at least eight artists in the Department of Home Security were stationed for up to six months in Papua and New Guinea, including at the Department’s headquarters for camouflage on Goodenough Island (Welch, 1943). Artists Max Dupain and Robert Emerson Curtis were both sent to Goodenough—their mission was to educate the troops to be more camouflage conscious and jungle-minded.

Victor Corlett was also among the eight deployed in the tropics. He noted that Allied personnel cleared large areas of jungle and kunai grass with bulldozers making it impossible to hide ground activity from aerial view. At Nadzab and Kiriwina the RAAF did not observe “blackout” at night leaving them visible to nightly enemy aerial reconnaissance. Soldiers made military objects conspicuous with poorly designed static camouflage. Moreover, he observed that too few soldiers were aware of how to adapt their bodily conduct and behaviour in rainforests (Corlett, 1943: 10).

To communicate the theory and practice of concealment and deception to Australian troops in the SW Pacific, the Department of Home Security printed a selection of manuals. It was in *Camouflage Bulletin 7* that Dakin explained the concept of instinct, and specifically, the instinct of “wild” animals to hide. He argued that animals in a state of nature are driven by the kinds of survival instincts also needed by soldiers in the field. The type of animal Dakin wanted

Australian troops to emulate was one driven to:

Choose dark corners as hiding places, during the day. Above all, they have learned through thousands of years of the struggle for existence that being seen is not merely a matter of colour but far more often a matter of injudicious movement and bad choice of resting place. The correctly coloured animals of the jungle have an instinct which automatically causes them to resort to the correct background and to remain immobile whilst they wish to be hidden. The soldier has to learn both these things (Dakin 1947c: Appendix O, 7).

War justified rediscovering methods of survival practiced by animals, and “animal cunning” was held up as an important model of correct behaviour. What was admired most was the way creatures with sharp instincts utilise space, colour and light to make themselves invisible and it was Dakin’s aim to equip soldiers with a similar intuition for making their bodies “disappear.” A camouflage manual printed for Australian soldiers in the New Guinea jungle explained about “The Ten Big Sins of the Hunter and the Hunted”: one deadly sin was the inability to hide due to “being a conspicuous colour or shape (or both)”, and alternatively “being a misfit in the background pattern” (Dakin 1947: Appendix K–N, 3).

Traditional Western approaches were proving useless for tropical warfare, and disastrous in the face of a smarter Japanese enemy. The author of the Brisbane newspaper column quoted at the start of this article put it this way:

To conventionalised Western military minds, the Japanese methods of covering themselves with mud, painting themselves green, letting off firecrackers to create a diversion and employing every conceivable trick might have seemed puerile. The fact remains however that these ruses have been terribly effective and must not only be followed, but surpassed (Editorial, 1942).

Discard inflexible “Continental” approaches to warfare, argued the writer, and find adaptable, Australian solutions. Because Dakin thought of war as a logical but temporary return to the animal origins of civilised man he encouraged in soldiers the discovery of a primitive masculinity, and “the beast within” (Mitman, 1997: 262). A series of camouflage posters urged soldiers to behave like tigers in the wild lying hidden in long grass before springing towards prey. Far from serving the weak, camouflage as practiced by predatory animals was a model of virility and offensive action; which is why Frank Hinder liked to remind the troops that “the tiger conceals to attack!” (Hinder, c1943). But he sensed that all too often members of the military found it unnatural to mimic the behaviours of

animals. Weren't humans superior to animals? Wasn't it unmanly to hide and somehow demeaning to the human race, even in war?

Victor Corlett, for example, noticed that traditionalists in the Australian Air Force in the New Guinea area preferred to wear khaki—which showed up vividly against the dark vegetation of the SW Pacific—rather than the new uniforms, which were green. Neither could he convince troops to wear Skin Tone Commando Cream to make their skin black and prevent those pale European faces shining under the stars at night. A women's cosmetic manufacturer had concocted the cream for the Department of Home Security; it was designed especially for the tropics. Being aware one's physical colour and shape, as well as sound and smell in tropical rainforests was common sense but “will the Services ever realise that?” complained Corlett (1943: 10).

### CHALLENGE TO SOCIAL VALUES BASED ON HONESTY IN PEACETIME

For tropical fighting Dakin and the camouflage artists argued that shadowy behaviours were laudable along with primitive and instinctual actions, the opposite of behaviours encouraged in Australian society in peacetime. A conceptual inversion happened when citizens wrote about the ethics of camouflage in war compared to the ethics of concealment and deception in everyday life. Dakin himself made a clear separation.

In civilian life he admired and respected men who were mobile and active and moved quickly through life, and who were also conspicuous and stood out in relation to other men. But in war the converse was true; the men he admired were the ones most likely to beat other men by hiding in silence, becoming invisible, and freezing still, actions, he said, that are “practised beautifully by many kinds of crabs” (Dakin, 1953: 74).

What a different world-view, what a different ethos surrounded war and society in the first decades of the twentieth century in terms of decorum, ethics, and behaviour. In Britain in the Second World War when artists were also seconded to work in camouflage, Roland Penrose (1900–1984), who was well known at the time as a surrealist and associate of Pablo Picasso but also an expert on camouflage for national security, found it difficult to make the concept of camouflage palatable and ethical for the older generation.

His views and ideas on camouflage were reported in Australia in 1942 in a newspaper article where he described camouflage as “a young word and a

fledgling science” and argued its application to warfare in WWI had been crudely attempted (Penrose, 1942: 3–4). The shift, he argued, to more sophisticated camouflage practices was the outcome of “camouflage discipline” in WWII. By this he meant a set of rules about behaviour in wartime to counteract the enemy’s aerial cameras and surveillance, and a new code for behaviour that placed greater emphasis on the practice of hiding.

But it was the concept of hiding that was the root cause of the difficulty he experienced in conveying the importance of camouflage to older soldiers. Penrose had prepared a camouflage manual for the Home Guard in Britain and in it he was forced to address what he recognised as the “problem” for traditionalists. He conceded that for the older citizen who believes in conventional warfare the concept of hiding might not only seem revolutionary but for him “the idea of hiding from your enemy and the use of deception may possibly be repulsive. He may feel that it is not brave and not cricket.” (Penrose, 1941: 4).

During the interwar years, citizens reflected on the implications of camouflage. They contemplated the ethics of living in a society that also encouraged the values of concealment and deception. Some tried to discourage the public from what was seen as the dishonest practice of camouflage. One Australian newspaper reported how:

Camouflage is the trick of making a thing look like something else ... The honest person never tries to camouflage. He does not pretend to be something that he is not. Don’t camouflage. The trick is easily spotted, and it is always a sign that there is something wrong somewhere. Be yourself. Be the best yourself that you possibly can, and you’ll never need camouflage (“Camouflage,” 1936).

Therefore, when the Second World War descended, a level of existential anxiety about humanity’s increasing stealth and deception added a sobering note to the excitement surrounding innovations in the field of camouflage. When whole armies and towns could be concealed from view, and with daily proof that the surfaces of appearances of objects, individuals and events could not be trusted, a more cautious voice crept into public discourse extolling the virtues of openness and honesty. By the Second World War the word “camouflage” had become as much a cautionary social metaphor as it had a military and biological term.

## CONCLUSION

As WWII continued into its sixth year, camouflage's image evolved into a sign of humanity's increasing intelligence. But the amazing camouflage deceptions of WWII were good reason, writes Hillel Schwartz, for people to ask: "where, then are our own skills at disguise, decoy and deception leading us?" (Schwartz 1996: contents, n.p). What warfare and national security has retained from camouflage in the twentieth century is the strategy of hiding and revealing. But the deliberate confusions created by camouflage in the Second World War, which were primarily based on objects and bodies in real space, are now, as today's newspapers keep reinforcing, superseded by the subterfuges at play with information technologies and virtual space and what was described by Jacques Richardson at the beginning of this millennium as "ruse, imposture and disinformation of virtually infinite possibilities" (Richardson, 2002: 196).

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