Isolation and remoteness are important defining features of Woomera Village, located within the South Australian arid region. As a remote settlement it once played host to the industries of armament and rockets. Commencing in 1947, the highly guarded goings-on in Woomera were linked to Cold War global politics and security. In one sense the physical attributes of the architecture and landscape can be viewed as ensembles of infrastructure serving a range of domestic and logistical purposes. But as figurative entities, the various ensembles to be discovered in Woomera also relate to the machinations that underpinned the oeuvre of Ian Fleming’s (1908-1964) James Bond novels, such as Goldfinger. The eventual demise of bombs, satellites, nuclear testing and the like, effectively saw the shrinking of Woomera’s population from around six thousand people to a mere hundred or so. Relics of industry and infrastructure, including the now defunct detention centre for illegal immigrants, were cast despondent in the Australian desert. Natural degeneration has produced ruinous places and settings, making tangible the forces of boom and bust in the context of the arid and remote landscape. Drawing on historic research and fieldwork, this paper explores aspects of remote and ruined landscapes alongside attempts at design and interpretation.
Introduction

The Cold War had a significant impact on the late twentieth century, producing physical places and infrastructure across the globe. The unique qualities of this impact vary in every country: distinctive geographies and defence legacies playing a key role. Woomera Village in South Australia is an important case in point. It was developed in 1947 to house and service defence and civilian personnel associated with the Long Range Weapons Project (L.R.W.P.), a joint enterprise between the United Kingdom and Australia. The L.R.W.P. evolved in the wake of Germany’s V2 missile, weaponry that had caused significant destruction in London during World War II. The Woomera Prohibited Area (W.P.A.) consists of 122,188 square kilometres of territory, fanning out in a northwest direction across the continent. Woomera Village, approximately 500 kilometres northwest of Adelaide, lies at the geographic base-point of the W.P.A.

At its peak during the 1960s and 70s, the population at Woomera reached around 6000 people. The fabric of the W.P.A. and Woomera Village combined represent some of the most significant expressions of the Cold War in Australia including buildings and the suburban morphology of the settlement itself, isolated in the South Australian arid region. Its landscape, and in particular, the Woomera Arboretum, streetscapes and parks all had special qualities that stemmed from the arid location, but today, much of this has been abandoned, demolished or left in ruin. This paper foregrounds geographic context, landscape and infrastructure to explore aspects of Woomera’s environmental history alongside a series of speculative and creative designs based on the ruins of a historic Cold War landscape.

Ruins, Environmental History and Human Experience

The meaning of ruins in landscape is a vast topic spanning a number of different intellectual fields. David Lowenthal noted that “most places contain the debris and cradle the memory of innumerable past events” and placed relics and ruins within a three-part system that, along with the dimensions of “history” and “meaning” jointly aided knowing the past. Lowenthal was primarily concerned with organically evolved landscapes, but in landscape design, the conscious incorporation of ruined buildings or structures has been important over centuries. Ruins found or built within picturesque gardens in Europe provided an avenue for association, for making past events tangible. As John Dixon Hunt explained, a ruin might throw “historical colour…upon its surroundings”, augmenting the experience of a romantic landscape. In contemporary vernacular landscapes, J.B. Jackson discussed “the necessity for ruins” in the American context, proposing that in order for a particular aspect of the past to become valued and preserved, society must first perceive that aspect in a state of ruin or neglect, and discontinuity. He argued that the process of restoring must come from re-valuing the origin of some aspect of cultural life: renewal and reform follow death and rejection. Jackson also noted that such a phenomenon is particularly strong when a culture decides that the original state of the element that has died was “seen as holy or beautiful” and considered the nuances of examples such as ruined farmhouses, degraded natural landscapes, and urban slums.

Ruins have the potential to profoundly alter the way one perceives and associate with the environment. Places made defunct can promote a deep questioning when experienced directly, or even when viewed remotely. For example, sculptor Gordon Matta-Clark made purposeful physical intrusions into pre-existing conditions, enabling the identity of a building, place or object to be preserved whilst also appearing to be in a state of ruin. When viewed in photo-documentation, the resultant forms blur and obscure predictable readings, even if the meanings behind these works were, as Dan Graham noted, “profoundly pessimistic”. Forgotten or neglected spaces or landscapes can be confronting with a sense of abject failure, serving as powerful instigators for reflection. As Gisli Palsson argued, in semi-natural landscapes far removed from urban or developed areas, ruins have enabling potential, “[as] ruined sites... places of dereliction clearly illustrate the interconnected nature of the landscape’s formation processes, between the supposedly natural and cultural.” They help to define the history of an environment, and the physical and sensorial ensembles, which include natural, cultural, ecological, social and other phenomenon experienced in unique ways. In
Palsson's analysis, contemporary ruins potentially allow mental space and energy for imaginative interpretation and he used direct accounts of experience and journey in his analysis of ruined landscapes in Iceland. The way in which ruins are discovered, the time of day and other circumstances relating to the position of the body in space, can impact on imagination and formulation of meaning. In this way, ruins as discovered or explored during journeys to far flung and inaccessible places can be important in perceiving the history of an environment, their gravity or weight often augmented by new or unfamiliar sensorial environments and sequential experiences.

In attempting to write an environmental history of the Snowy River in southeastern Australia, academic George Seddon spent 6 years in the early 1980s exploring rugged and difficult to access places. Seddon defined the task as charting the reciprocal nature of human interaction with a setting and discussed the importance of what he termed "imaginative possession", that is, something "...pre-eminently won for us by poets, painters and storytellers [and one that] grows from intimate experience and love, and thus can be strengthened by scientists and bushmen, by farmers and photographers and dingo-trappers. It is antithetic to the crudely exploitative." His writing of the Snowy River's environmental history revealed gaps in knowledge amidst obscure or lost meanings - or perhaps to put it another way - the ruins of historical knowledge. But rather than regarding these gaps as inadequacies, he discovered their importance in communicating aspects of the landscape's formation. This extended to such things as unexplainable contradictions in historic narrative or false myths embedded in naming and renaming geographic locations. In broadly charting the ruination of the Snowy River a deeper appreciation of the sense of the past became evident. Seddon also valued his direct encounter with the river and people, including sagas of failed canoeing forays and the way these aided reflection on cultural norms, behaviour and tradition through time. He concluded his book, perhaps a little nostalgically: "The best part of the search, for me, is the journey itself. What the river offers above all else is the sense of space, an experience fast disappearing from this crowded globe." 

Another kind of 'writing' of environmental history can be found in the activities of the Center for Land Use Interpretation (C.L.U.I.) in the United States of America. This organisation has over the past two decades made extensive exploration of Cold War military sites, along with other remote and defunct places perhaps fittingly coined as "Dead Technology". Founded by Matthew Coolidge in Los Angeles in 1994, the C.L.U.I. has field stations across the U.S.A. and their research includes "site-characterization", a process based on typologies and aimed at creating data sheets and files documenting naming, physical descriptions, geographic locations, as well as photographs, film, postcards, coasters and other paraphernalia. In relation to the C.L.U.I.'s documentation and interpretation of the Nevada Test Site (N.T.S.) and its Peace Camp, which includes the physical detritus of four decades of anti-nuclear demonstrations, the C.L.U.I. state: "This guide is intended to be a reference work for researchers interested in the N.T.S., for armchair tourists, and as a guide for those who visit the site itself." Rugoff observed that C.L.U.I.'s method of accumulating and presenting data was neutral in pitch and indiscriminate in stance. He argued that the result was a "...benignly subversive approach: we may end up looking at one place or activity through a lens we normally reserve for evaluating another", suggesting that the C.L.U.I.'s methods provide mental space for critical reflection and perhaps the construction of new or alternative narratives. Like Seddon's research, a crucial part of the C.L.U.I.'s practice is fieldwork and the manner in which the road trip can contribute to alternative modes of interpretation.

To return to the case under examination in this paper: What values can be ascribed to remote places like Woomera and the ruins of architecture and landscapes of the recent past? Some argue that Woomera's heritage value be developed by way of Cold War tourism, however, current governance combined with an itinerant population, issues of restricted access and the fact that the village lies approximately five kilometres off the Stuart Highway, all compound difficulties in managing Woomera as functioning infrastructure and as a site of heritage significance lying isolated in the South Australian desert. A new heritage centre and swimming pool were opened in the mid-1990s, but generally the infrastructure of the village has been gradually dismantled since the 1990s when the American-Australian Joint Defence Facility, Nurrungar, closed. Sporadic activity in the W.P.A. - including rocket research, military drills, and the Woomera Immigration Reception and Processing Centre (W.I.R.P.C., closed April 2003) - has not countered the contraction and ruination. Research undertaken during a series of four fieldwork exercises to Woomera between 2001 and 2010 has explored a range of historic themes in a bid for alternative approaches. It has generated creative output that links immersive documentation exercises with speculative design. In this sense, a working definition of ‘interpretation’ was adopted from the Burra Charter for its enabling capacity. It states that interpretation may be: "a combination of the treatment of the fabric (such as maintenance, restoration, reconstruction), the use of and activities at the place, and introduced explanatory material. It may include exhibitions, events, publications, art works and other forms of expression, and is not confined to place."
Immersive Documentation: Histories of Surviving the Indigenous Environment

The designed landscape of Woomera was an attempt to create an oasis sustaining healthy domestic lifestyles “despite the isolation, climate and high degree of social control”. The ambitious plan to establish vegetation in parks, streets, home gardens, and as a green belt encircling the village, was aimed at improving living conditions for what was essentially a settlement set atop the treeless Arcoona Plain (Figure 1). The sense of optimism that Australia’s “Dead Heart” could be made useful was given credence by R.H. Patterson, an arboriculturist appointed to the Commonwealth of Australia Department of Works in 1948 to research and establish the Woomera Arboretum, the infrastructure for the transformation. His contributions reflect significant narratives in the profession of landscape architecture in Australia due to his conviction in the plant propagation program. His report of 1953 included experimentation in plant selection, soil management and improvement, planting techniques, watering and waste recycling using effluent sourced from Woomera’s sewage treatment works to sustain the introduced plant material. A system of hexagonal terracotta pipes submerged at the base of trees and capped with purpose-made galvanised capping lids enabled the roots to be irrigated deeper beneath the surface. Patterson had many collaborators and their enthusiasm and ingenuity was widely supported. A form of social cohesion and pride ensued with garden competitions and schemes to grow vegetables on a mass scale. Entries in the local news bulletin, the Gibber Gabber, reflect the optimism and pioneering attitude: “…the clothing of a barren area with vegetation which nature had denied it…. who knows what the final result of all this work may be for the vegetation of Australia’s arid centre?” One writer was struck by reputedly phenomenal growth of vegetation and recorded in 1955 that the “afforestation scheme…may revolutionise the dry and treeless areas of inland Australia.”

In recent decades as the population diminished so did the availability of grey water. The extent of gardens, streetscapes and parks has shrunk. Save for the extant Breen Park, which since inception served as a recreational space linked to the Arboretum (Figure 2), the remains of the Arboretum’s gridded rows of trees is barely determinable. A remnant terracotta pipe occasionally protrudes from bare earth amidst building materials and rubble, remnant galvanised caps can be found strewn nearby. Avenues of dead trees trace the alignment of streets recently erased. Elsewhere an ensemble of rocks, boulders and steps topped by a dead palm tree suggest a different kind of ruin, the origins of which appeared to be ornamental. This enigmatic relic was unofficially nicknamed ‘The Ziggurat’ by researchers during extensive fieldwork in 2005. Their measured drawing revealed its layout to be in the shape of a 20 x 8 metre letter ‘W, perhaps intended to be interpreted from the air, making tangible the pride that gardeners and designers instilled in their village. Other kinds of immersive drawing studies have captured the palpable sense of abandonment contrasted with natural regeneration: indigenous plant materials from the adjacent Arcoona Plain are presently reclaiming the Village. In a kind of colonisation in reverse, the ruins of culture and nature are becoming inseparable, challenging the notion that a division ever existed. (Fig. 3)
Isolation set up striking contrasts in time and scale. Some residents developed meaningful aesthetic appreciations of the indigenous landscape. One recorded: “Everywhere the incredible age of this country seemed to dominate one’s consciousness, and the children grew up in two contrasting worlds - the modern world of rocketry inside the village and the ancient land outside.”

M.T. Rigby’s, Woomera On The Web (1997-2008), serves past residents and is a vibrant and valuable repository of memories and experiences of residential life in Woomera. In the context of Woomera’s systematic dismantling (ruination) it encompasses reflections of loss, absence and perceptions of change over time: “The house on Kinka Street was made of aluminium, so in the heat of the day it was very hot (without the cooling) but at night it lost its heat rapidly….Now it seems it [Woomera Village] is a shadow of its former self with many of the houses and streets gone….I am so glad I was in Woomera in its heyday. It holds a unique place in my memory and to my knowledge there was nowhere else on Earth like it.”

Feats of adaptation and resilience correspond with expressions of creative improvisation characteristic of settler communities in the region. One historian noted of nineteenth century colonists: “All this adds up to a story of great daring, of courageous effort, of tremendous hope – but a story that must also tell of retreat, abandonment, despair.” Ivan Southall noted that the extreme conditions produced ingenuity, stating that his interpretation “tells of people and places, and of an unusual town built at the fringe of one of the most inhospitable regions on earth…a story of isolation, of patience, of frustration, of imagination, and even of daring.”

For example, a standard detail for a park picnic table framed in steel with a surface of flagstone was observed as an ornamental frieze within the Senior Officers’ Mess (Figure 4). In another example, the building footprint for the Woomera Cinema (Figure 5), designed by the Department of Works (South Australian Branch) in 1962, was based on the shape of a rocket engine. Prefabricated housing at Woomera was linked to “Operation Snail”, a program that saw migrant families reside in three pre-fabricated housing types: the Hawksley, the Riley-Newsum and the Econo. The rolling-out of housing stock occurred with speed and efficiency, even if solar planning and design lacked thought in terms of the extremes in temperature.
Most of Woomera’s prefabricated dwellings have been demolished or removed. A 1952 plan for the deployment of prefabricated house types\(^4\) illustrates a distribution pattern that has all but disappeared, along with bitumen roads and other semblances of a settlement. Field surveys revealed one of the last remaining aluminium clad Econos, physically cut in two halves and lying in a state of ruin in the small roadhouse town of Pimba, five kilometres from Woomera Village. In curating a photographic survey of ruination, Lucy Salt broadened her scope to include themes of permanence and nomadic existence, in order to more effectively communicate the Econos’ and Woomera’s destitute state. She forced a connection between her images and those appearing in Jock Marshall and Russell Drysdale’s *Journey Among Men* (1962), a travelogue of what was formally a zoological expedition around Australia in 1958 but which had expanded to include an appreciation of people and landscape, with the authors noting: “Soon we found ourselves as much interested in people as in animals.”\(^4\) Salt’s photograph of the Econo (Figure 6) bore the title: “Bill seemed none the worse for his session at the Fitzroy Crossing”\(^4\), a title that had been used for one of Drysdale’s sketches of a person, ‘Bill’, in another place (and state of mind) but at a similar time. Salt concluded: “The appropriation of the annotations from *Journey Among Men* acts as a mnemonic device to trigger memories of the older stories, while at the same time prompts viewers to dismantle the surface image and undertake a more complex interpretation.”\(^4\)

![FIGURE 6 “Bill seemed none the worse for his session at the Fitzroy Crossing”, photograph by Lucy Salt, 2008; Caption title from Jock Marshall and Russell Drysdale, *Journey Among Men*, (London: Hodder & Stoughton, 1962), 7.](image)

**Speculative Design: Narration, Fiction and Journey**

In attempting to link immersive documentation with speculative design, two thematically based research projects were pursued in parallel with the staging of two design studios at the University of Melbourne.

In 2008 the creative potential of fictional narratives as a hinge for exploring extant ruins was tested. Woomera’s place in the public imagination can be explored in media, newsreels, oral histories, documentary films and literary fiction. The testing of rockets and the geographic location had the potential to conjure in the Australian public a sense of mystery and intrigue. Correspondingly, Cold War espionage and secrecy produced distinctive shapes and structures – underground dwellings, concrete bunkers, spy-bases hidden away - and landscapes, such as volcanic islands, remote coastlines or deserted settings like the Australian outback.\(^5\) Ian Fleming’s (1908-1964) character James Bond and his fictional Soviet counter-intelligence organisation, S.M.E.R.S.H., in *Goldfinger* (1959)\(^6\) found comparison with organisations in Australia such as the Australian Security Intelligence Organisation (A.S.I.O., 1949). The kinds of isolated and remote sites so crucial in Fleming’s fiction had counterparts in fictions by Australian writers such as Arthur Upfield (1890-1964) and Sydney H. Courtier (1904-1974). Upfield laced some novels with characters, places and events that seem inspired by the Cold War; helicopters flying through the desert at night in *Man Of Two Tribes* (1956);\(^7\) the mysterious arrival of foreign agents and espionage in *The Clue of the New Shoe* (1955)\(^8\) and *The Will Of The Tribe* (1962).\(^9\) Complicit to such plots were the road trip, the overnight train ride, the escape event, and the entrapment. Australia’s links to nuclear armament and looming apocalypse, as depicted in films like *On The Beach* (1958),\(^10\) could also be linked to Woomera given the village’s role in the atomic test trials at Maralinga.

A striking example of Australian crime fiction was found upon which to base a design studio. The plot of *See Who’s Dying* (1967)\(^11\) by Courtier consisted of a James Bond-like-dash through the Australian desert whereby the hero attempted to uncover a secret underground missile facility built by the Chinese and containing nuclear armed rockets.
with programmed trajectories centred on each capital city within Australia. Within the design studio, fieldwork to Woomera produced a wealth of data by way of photographs, drawings, historic documents, objects, ephemera and importantly, the physical experience of selected landscapes. For example, researchers descended deep into a nearby opal mine at Andamooka in order to become immersed in tactile, olfactory and auditory qualities of the subterranean. Ultimately, this reconnaissance underpinned design ideas for an outdoor performance space within the Union Courtyard at the University of Melbourne. The hypothetical proposal involved the dramatization of See Who’s Dying via a performance by the University’s Union House Theatre company. In re-imagining Woomera in the narrative mode, a series of creative tasks ensued: the redesign of a dust jacket for the novel; a bill poster advertisement for the theatre company’s performance (Fig. 7); and, a stage-prop based on a selected chapter of Courtier’s novel (Fig. 8). These tasks led to a speculative landscape plan, layered with representations of place, history, and personal experience, in freewheeling and imaginative ways.

The second research project explored the theme of mobility. Historic accounts of people and events in and around Woomera include road trips involving endurance of extreme conditions. Within Woomera’s rocket testing industry, details abound of moveable research facilities or mobile “behaviour cameras” used to observe, track and photograph or film projectiles being tested. Beyond the rocket range proper, characters such as Len Beadell and his gang built many of the roads and highways in the region. Beadell used innovative ways of surveying and road building at an unusually large scale, appropriating the humble Land Rover to be used as a moveable surveyor’s staff large enough to be seen at great distances through the lens of a dumpy level. Such histories of infrastructure, transport, charting and adapting in remote parts of Australia are part of a much larger narrative that amongst others includes outback mailman, Tom Kruze M.B.E., who ran a notorious mail delivery service between Marree and Birdsville along the Birdsville track in a 1936 Leyland Badger. Kruze’s story was indelibly recorded in John Heyer’s multi award-winning docudrama of 1954, The Back Of Beyond, the narrative and the cinematography of which became the basis for a design studio and fieldtrip to Woomera in 2010.

Drawing upon histories of journeying, a group of researchers constructed a mobile studio for the express purpose of documenting via watercolour painting the ruins of Woomera and region. The idea for using watercolour painting as a form of intense observation evolved from a fieldtrip to Woomera conducted in 2001. In that research trip, water colour sessions beginning at Sam were devised as a form of immersion, using the spectacle of sunrise, and the act of painting in darkness, as a ploy. Renderings were produced depicting the W.I.R.P.C. at a time when the detention centre was firmly in the national political spotlight. A selection of these darkened, half-lit sunrise images were exhibited in Berlin and labelled: “art from the middle of nowhere”. John Wolseley, an artist of the Australian outback, once surmised “…a painter of landscape has become more and more an ecologist the further he has travelled from Eden” suggesting, perhaps, how representing landscape whilst physically and metaphorically travelling through it, can enable an understanding of changing landscapes over time. Accepting the rituals of painting and travelling, the research group bought a secondhand steel 6 x 4 open trailer and in six weeks designed and constructed a plywood box to
sit on top. The mobile studio was able to store easels, paints, paper and other useful things like cooking gear, wine rack, and fold-up chairs. It became their kitchen, seminar room, bar and importantly, their catalyst, for observation and interaction with people who they encountered during a two-week fieldtrip. The collection of paintings that were produced documented many facets of Woomera and included the broader region: the remains of Kingoonya, a cemetery at Andamooka, Kruze’s truck in Maree, etc. In Melbourne the trailer was painstakingly dismantled and reassembled centre-stage within the Wunderlich Gallery (Fig. 9). Together with the ensemble of student works58 and a rolling display of hundreds of road-trip photographs, the exhibition captured a passing through Woomera’s vanishing fabric.

Conclusion

This paper explains a range of strategies for combining the writing of histories of environment with the creative act of design. These strategies could be compared and contrasted in other contexts, but in this case the emphasis has been to consider the ruins of Cold War landscapes with a particular emphasis on the remote landscape of Woomera. The selected extracts of historic information and the few examples of design and interpretive projects presented here are only a fraction of the research, ideas and creative works that have been generated over a ten year period. In terms of heritage practice, this paper demonstrates the capacity for creative invention when related places, related objects, cultural relics, events and people are combined with fieldwork and ritualistic return to site. The studies presented here include important contributions to historic analysis, but it is the process of immersion in site and the ensuing experiences - improvisation, plans gone wrong, personalities and the serendipity and adventure of travel - that makes possible the unique act of singing into existence a place and its pasts.

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Andrew Saniga *Cold War Manifestations in Australia: Interpreting Ruins in Remote Landscapes*

Endnotes

3 Lowenthal, *The Past*, 185-259
16 Seddon, *Searching*, 313.
20 Center for Land Use Interpretation [Matthew Coolidge], *The Nevada Test Site: A Guide to America's Nuclear Proving Ground* (Los Angeles: The Center for Land Use Interpretation, 1996), 5.
21 Ralph Rugoff, “Orcling the Center” in *Overlook*, 37.
22 Matthew Coolidge, interview with Andrew Saniga (Los Angeles: 7 May 2014).
26 Garnaut, Freestone and Iwanicki, “Cold War heritage”, 557.

37 Ivan Southall, *Woomera* (Sydney: Angus and Robertson, 1962), x.


41 Commonwealth of Australia, Department of Works, Woomera S.A., ‘Sewerage, Water and Electrical Reticulation Village of Woomera As Constructed on 1.2.56’ (Drawing Number V5/124), Woomera Historical Museum.


50 See film *On The Beach* (Limitas Productions Inc. All Rights Reserved, 1959).


55 *The Back Of Beyond*, film directed by John Heyer (Shell Film Unit, 1954).


57 John Wolseley, *Orienteering: Painting in the Landscape* (Bunwood: Deakin University Press, 1982), 127.

58 John Wolseley initially consulted on the project and later returned to narrate one of the student designs: see *The Brooch Claymation* by Emerald Wise and Dee-Ann Simmons with John Wolseley on YouTube.