The Haunting of Agent Orange within the Waters of Rivers and Bodies for Vietnamese Australians

BOI HUYEN NGO
University of Technology, Sydney

A contemplation on inter-generational haunting

Like many Vietnamese, I was brought up within my family to believe in the existence of ghosts. Ghosts as the strange forms of the past which can either be in the present or the future. For many Vietnamese refugees, their relationship to the past can best be approached and understood through their connection to a belief in ghosts.

'Experimental history' allows a space for what historian Klaus Neumann terms, 'the trash of history' to be recorded, described and analysed. Within 'the trash of history' are the complex histories that haunt the refugee experience and imagination. (See also Muecke 1996). Speaking from my own experience, refugee memories of the past are expressed within family oral history, retold as macabre jokes, speculated in gossip, and bound up in (unscientific) beliefs in the existence of apparitions, phantoms, ghosts. Neumann states, 'I pay attention to the trash of history. I claimed that it could be found in everyday historical discourse: histories in the form of jokes, anecdotes and gossip…. The trash of history is comprised of instants, of images flitting past, of the unspectacular and the non-momentous' (27). Within traumatic refugee experiences, detailed narratives of the past are largely repressed. Rather, the memories which constitute what is considered the 'trash of history' are expressed in unspectacular ways. These are the memories which make up the small, subtle expressions of everyday family life, memories which are situated outside of the chronology of traditional narratives and historiography. These are the recollections conjured by the smell of the basil, the sound of the water, the nonchalant shrug of the shoulders, the recurring dreams, the feeling of being watched by a ghost.

This essay argues that the belief in ghosts is the 'trash of history' and an example of the structure of haunting within refugee experiences. Paradoxically, the 'trash of history' does not concern itself solely with the past. Michael Mayerfield Bell states

> the ghosts of place are not only ghosts of the past; they can as well be of the present, and even the future. However, we locate them temporally, the ghosts of place are always presences and as such appear to us as spirits of temporal transcendence, of connection between past and future. (816)

To take on the perspective of history as a haunting is to understand that time is not linear. It is to dismiss Western ontological perspectives and their dichotomies that divide the past and the present, the living and non-living, the being and non-being. Rather, to exist within a non-linear history of haunting, is to live spectrally (to be both in the past and in the

present), to possess a sense of responsibility, knowing that the past shapes the present, and acknowledging that the past, in all its shadowy forms, cannot be buried.

When one explores the haunting perpetrated by Agent Orange (a chemical defoliant made up of a 50/50 mixture of 2,4,5-T and 2, 4-D), one explores the (ir)responsibilities of chemical warfare beyond a set space and time. Chemical warfare is slow violence seeping into temporality, into multiple environments, and into multiple bodies. It haunts; it insinuates; it multiplies; and then it appears. It becomes visible, materialising in sediments, in water, in blood and in our mother's milk. In ethical terms, it is important to understand that, when writing about chemical warfare (and its adverse effects on civilians, veterans and refugees), that chemicals do not work in predictable patterns, achieving predictable conclusions – especially given the particularity of different biological beings. Toxicity (in this case, the colour-coded herbicide defoliant, 'Agent Orange') affects different generations of families differently. It affects different environments, different fish, and different rivers differently. Perhaps we should understand Agent Orange as a haunting, a ghost that comes and goes within human inter-generational experiences and in the environment. A woman exposed to Agent Orange contamination (and who has children with disabilities) stated in an interview for social research on the impact of chemical warfare on women's reproductive health; 'Vietnam is now a country of peace, extending hands to former enemies, but the victims of Agent Orange will never live in peace' (anonymous interviewee; cited in Tuyet and Johansson 163). By using the refugee experiences of my family, I will explore Agent Orange as a haunting, one of such enormity that its invisible violence is within our bodies, and within the environments we inhabit. Agent Orange is the intangible geospatial coordinate connecting our present and past homelands.

How the Haunting Began: Agent Orange in Vietnam

The dioxin contaminate or compound in Agent Orange is 2,3,7,8- tetrachlorodibenzo-p-dioxin (TCDD). The herbicide itself is named for the orange bands painted on the chemical drums. Between 1962 to 1971, the US military used Agent Orange as a part of 'Operation Ranch Hand'. During the war, the defoliant affected Vietnam and its civilians, and continued to do so for generations afterwards. Operation Ranch Hand is considered to be the first planned ecocide, in which entire ecosystems were systematically destroyed (Waugh 118). The term 'ecocide' was first coined by academic scientists, such as American botanist and bioethicist, Arthur W. Galston (1920-2008), who protested, successfully, against the continuation of the herbicidal warfare (Zierler 2). The US aim was to defoliate forest and rural areas in order to deprive the Viet Cong guerrillas of food crops and cover. However, most of the crops destroyed were food sources for civilians and, as a result, widespread famine followed. As an ongoing consequence of Agent Orange spraying, sickness, diseases (such as cancer), miscarriages, birth defects and disabilities – along with many other health issues are found throughout the generations in Vietnam, as well as among veterans of the Vietnam War and their offspring (Chen 2015). In present-day Vietnam, however, the high levels of dioxin within the homeland soils and water as well

as within the bodies of civilians has caused ongoing contamination, entering food chains, infiltrating water, soil, human tissue, and passing down generation after generation.

The province of Thừa Thiên–Huế (where my family came from) was the third most heavily sprayed province in Vietnam with Agent Orange, after the Đồng Nai and Bình Phước/Bình Dương province (The Aspen Institute). The province is near the border between the former North and former South Vietnam where there was heavy fighting. It was and still is a province near the Đà Nẵng airport, where Agent Orange was flown in and where it was stored. In 2014, a US-built plant, structured like a concrete oven, was built on top of the contaminated soil of the old Đà Nẵng air base, cooking the Agent Orange at 335 degrees Celsius, over several months (Haberman 2014). This was the first site the US government built to clean up Agent Orange and this difficult remediation method was a way in which Agent Orange could be decontaminated from the soil.

The Uncanny: Postcolonial illusions of Cowboys and Smokey Bear

What intrigues me is not only the strategies employed by Operation Ranch Hand for the releasing of Agent Orange, but I am also intrigued by the US attitudes and cultural outlook concerning the environment and the Vietnamese people and how these attitudes and outlooks emotionally drove the operation.

What is paradoxical is the way in which 'Operation Ranch Hand' was named, and the mascot that was adopted for the Operation. There is something intellectually nauseating about the term Operation Ranch Hand. The definition of a Ranch Hand is a worker on a ranch (usually livestock) in the USA; nevertheless, there is an implied association with farming and cultivating food. The toxic irony is that the Operation was de-farming, destroying, and colonising through a military tactic of eradication – of forests, food sources, people.

This reading of the name 'Operation Ranch Hand' evokes a cultural contrast, and a more emotional idea of how the environment is seen and other-ed by the US Department of Defence. As I looked at websites about the Ranch Hand Operation (www.ranchhandvietnam.org), I was disturbed by how soldiers were proud (still) to call each other 'cowboys'. For example, their online gallery states, 'This Gallery is for all Cowboys to share their fondest memories and flying experiences with the rest of us…' (Ranch Hand Vietnam, 2005) Postcolonialist, Michael Yellow Bird, writes in 'Cowboys and Indians: Toys of Genocide, Icons of American Colonialism':

> During the Vietnam War, the United States often thought of Vietnam in images of the American West and cast the Vietnamese in the role of Indians. It was common for American soldiers to refer to enemy territory (free-fire zones) as 'Indian Country' and for American soldiers to brutally massacre Vietnamese while fantasizing they were killing Indians (43).

Here Yellow Bird is mainly referring to the My Lai massacre but it conjures up a realisation for me. And that is that the title of the Operation Ranch Hand presents the illusion of the Old West, in that the 'Operation Ranch Hand' soldiers refer to themselves as cowboys.

Following on from this logic, then the Vietnamese are the Indians, and their environment is to be destroyed. Furthermore, Operation Ranch Hand had a partner operation whose defoliation missions were fought on the ground using backpack-sized apparatus; this was Operation Trail Dust. Once again, nomenclature conjures up allusions of the Old West as, for instance, the romanticised cowboy movie, released in 1936 and directed by Nate Watt, which was titled *Trail Dust.*

Thus the connection of the Old West to Operation Ranch Hand in the Vietnam War had obvious, deliberate and even strategic connections to colonial sentiments in its textual referents to the colonisation of the North American Indian. In the words of Rosemary Radford Ruether, 'An ecological ethic must be an ethic of eco-justice that recognises the interconnection of social domination and the domination of nature (149).

Figure 1. Orphaned black bear cub 'Little Smokey' replacing the first Smokey Bear from 1975. Source: https://smokeybear.com/en/smokeys-history/story-of-smokey

To add another layer of the abject into the emotions surrounding the Operation Ranch Hand is that the so-called 'Ranch Handers' informally adopted a mascot. They adopted Smokey Bear (Figure 1), the US mascot that successfully raised awareness about forest fires with its catchy slogan, 'Only *you* can prevent the forest fires!' (Lewis 598) Smokey Bear debuted in 1947 and is now a recognised symbol in American culture (Ad Council, 2017). Smokey Bear is still used in wildfire prevention publicity.

It is ironic that the Smokey Bear mascot used by the US Forest Service as an iconic figure to instruct the public on the risk of forest fires, was appropriated to signify the destruction of forests. This uncanny contrast perhaps exemplifies the self-delusion required to believe that one is following the 'right cause', particularly when participating in acts of cruelty, as in war. The Forest Service motto was modified from 'Only <u>you</u> can prevent the forest fire' (Figure 2) to jokingly 'Only <u>you</u> can prevent the forest' (Figure 3). Modified posters of Smokey Bear were hung around the Ranch Hand buildings from 1965, mainly in Bien Hoa Air Base in Vietnam as well as in training grounds in Virginia and Florida (Lewis 598).

Figure 2. A poster of the Smokey Bear for the forest fire prevention campaign

Figure 3. A modified poster of Smokey Bear for the Operation Ranch Hand Source: James G. Lewis on Smokey Bear in Vietnam.

I use the term 'uncanny' in this particular case, drawing from Sigmund Freud's contemplations of the *unheimlich* (uncanny) in which fear can arise from the strange being familiar and the familiar being strange. He states 'what is "uncanny" is frightening precisely because it is not known and familiar' (Freud 221). This is akin to the notions of anxiety as described by Martin Heidegger in *Being and Time* (1927), where the formation of anxiety arises when home doesn't feel homely. Smokey Bear is this adoption of homeliness within horror (both the horror of being in/at war as well as the horror within the inhumane act of spraying Agent Orange). The familiar within the strange in which aspects of homeland haunts unfamiliar spaces in distorted ways. The cowboy, the Smokey Bear and the toxic dioxin.

Traveling through bodies of water

Water is hard to decontaminate. Agent Orange is able to settle within sediments (benthic zones) as well as travel within the waters themselves. Through the contamination within the water and the benthic zones, it contaminates the fish, a major source of protein for Vietnamese people. Dioxin in Agent Orange is hydrophobic and lipophilic (Tai et al. 6626), and is thus able to combine with, dissolve within or travel through water, lipids and fat. Thus it infiltrates boundaries; bodies of water, bodies of fish, bodies of crabs, bodies of vegetation, bodies of rice fields and bodies of blood and milk. Any attempt to

decontaminate or detoxify waters and liquid can result in the dioxin dispersing to another source. A tragic example is breast milk. Research collaboration between Vietnamese and Japanese biomedical and environmental Universities and Departments have found that 'Breastfeeding was noted as an important route of dioxin release in the nursing mothers' (Tai et al. 6630) and yet, 'dioxin accumulates in breastmilk. During nursing, it is transferred from mother to baby, who may absorb as much as 95 per cent of dioxin in milk' (Tuyet and Johansson 163). As we saw with the dioxin in the water, and with its transference to fish, then into the bodies of people, instead of a gradual decontamination, the result is bioaccumulation.

After a long journey of escape from Vietnam on a boat, living in the Hong Kong refugee camp, and moving from home to home over the years, my immediate family settled in the suburb of Strathfield, which borders Homebush. We were close to the Sydney Olympic Park and the shorelines of Parramatta River. When my family visited my Vietnamese family in the Quảng Điền district, they would describe their home in Australia as 'the home near the Olympic stadium.' It was a way of expressing pride, to be close to an iconic place. We enjoy the shorelines where we go cycling, have a picnic or go night strolling along these shorelines almost every weekend, along Sydney Olympic Park, Rhodes, Breakfast Point.

It is by the Parramatta River, in the setting sun, that my extended family (including my two uncles and their families) have picnics and exchange intimate conversations about life, relationships and the past. Many Vietnamese Australians connect with Australian rivers as a poignant way to remember their past homeland of Vietnam. Researchers Allison Cadzow, Denis Byrne and Heather Goodall explore the Vietnamese Australian relationship with Australian rivers and lakes. For the Vietnamese, rivers and lakes are associated with calmness, family unity and nostalgia about the past. A Vietnamese Australian (named Huy Pham) is quoted as saying, 'In Vietnamese culture we think of water as life, it's calming… The river is a big part of Vietnamese culture because in rural areas, people use the water from the river for the rice fields.… To some people, when they look at the rivers it makes them feel a bit at home… it reminds them of their memories in Vietnam' (qtd. in Cadzow et al. 126-127). This is different from their relationship with the beach and ocean, which (as a result of their refugee experiences), can carry traumatic associations, and so they approach the ocean with general reluctance to immerse themselves into ocean water (Levett 2009). It is from deep cultural and nostalgic roots towards the Vietnamese river landscapes that my family comes back to walk along the Parramatta River, close by our home.

Along Parramatta River, there are signs down by the shorelines telling the public not to fish. These signs usually come with no explanation, just a cartoon of a man fishing and a big red cross through it (See Figure 4 below). We never thought too deeply about these rules, assuming it was an environmental effort to stop overfishing. However, during my research for this project, I found that the Parramatta River, particularly around the area of Rhodes and Sydney Olympic Park, is toxic; it is contaminated with dioxin from Agent Orange. During the Vietnam War, Union Carbide Corporation (owned by The Dow Chemical Company since 2011) was one of the main manufacturers of the Agent Orange and had a factory in Rhodes, by the Parramatta River. Due to contaminated reclamation (both soil and groundwater) overflowing into storm and waste-water drains, and then on

into the rivers (McGrath 2012), the waters of Parramatta River are contaminated. I remember feeling disturbed, filled with an uncanny strangeness upon finding this out, that the phantom waterborne landscapes of the Thừa Thiên–Huế province has risen before me, had double-exposed itself, like a photograph's faint secondary image. There it lay, reflected, on the river near at Homebush. Despite escaping the Thừa Thiên–Huế province, the ghostly past in the form of Agent Orange is a presence, a deadly apparition, a legacy, for my family. It follows us, traveling by water, to our home in Sydney.

Figure 4. No-Fishing sign alongside Parramatta River at Breakfast Point. Source: the author.

The emotional affect upon my family, once they realised that Agent Orange was present in the waters of their new homeland, has revived unwanted visceral and sensory memories of their war and migration experiences. Their migration experience traces a circular history of toxicity in which Agent Orange (as well as being manufactured in the USA) was also manufactured in Australia (McGrath 2012), released in Vietnam and contaminated Australia and Vietnam. The result is contamination in Australia, in Vietnam, and in the human bodies that inhabit both geopolitical spaces.

Although water has the ability to cleanse it cannot wash away toxins. Rather, Agent Orange is diluted and carried within water. The human body consists of mainly water (where adult bodies consist of approximately 57-60 percent of water and infant bodies consists of 75-78 per cent of water) (Helmenstine 2016) and so like the river systems that carry the legacies of Agent Orange, it is possible for the human body to carry Agent Orange through its waters, through the generations.

Within the waters of our bodies

When it comes to determining how Agent Orange is carried or diagnosed, the chemical effect on the human body can be enigmatic; it is a shape-shifter, wearing many faces that can make medical diagnosis difficult. Obscure language is often used when describing the role of Agent Orange and its connection to the diseases and disorders of Vietnam veterans (and their children). Journalist, Clyde Haberman writes, 'Often enough, that linkage has not been established incontrovertibly. Studies on Agent Orange's effects tend to use language that is less than absolute. Certain illnesses, for instance, are said to be "associated" with dioxin exposure. Or there is a "presumptive" connection' (Haberman 2014). US veterans of the Vietnam War have experienced and documented difficulties in getting compensation for the illnesses caused by Agent Orange (Cohn 2013). A possible

reason why veterans experience this difficulty is the ambiguous nature of Agent Orange effects on the body. Despite the multiplicities of effect after exposure to Agent Orange, however, it is evident that it interferes with the production and function of hormones, enzymes and growth factors (Tuyet and Johansson, 157) and therefore can cause complications in reproduction and development of the human body (WHO 2017).

One of the most comprehensive scientific studies on Agent Orange was conducted by L. Wayne Dwernychuk, et al (2002). In 'Dioxin reservoirs in southern Viet Nam – A legacy of Agent Orange' researchers examined contamination within a large sample of humans from various areas, along with environmental contamination. Samples were taken between 1996-1999 from a variety of locations, comparing contamination samples from people who lived in heavily sprayed areas in the former South Vietnam, and contamination samples from people who lived in areas with less exposure to Agent Orange. (The Aspen Institute records the number of gallons of Agent Orange sprayed in each region of Vietnam; see 'Maps of Heavily Sprayed Areas of Dioxin Hot Spots.') Samples were taken from soil and fishpond sediments, vegetable tissue (rice, manioc, vegetable cooking oil) and animal tissue (ducks, chicken eggs, cultured fish, wild fish), human blood and breast milk. The human samples were forwarded to the AXYS Analytical Services, a trace organics laboratory approved by the World Health Organisation (WHO) for dioxin analysis.

Not surprisingly, the result was that South Vietnam was significantly more contaminated with dioxin than the North. This is consistent with research conducted by Michael G. Palmer who wrote that 'Dioxin blood levels were found to be between 25-170 times higher in sprayed villages that in northern villages' (1062). Another research result, reported by Arnold Schecter et al. states that 'In the southern samples [of Vietnam], mean TCDD levels in blood, milk, and adipose tissue are relatively similar (12.6, 7.5 and 14.7 ppt (part per trillion) lipid, respectively). In samples from the north, mean levels for blood, milk and adipose tissues are lower (2.2, 1.9 and 0.6 ppt, respectively)' (Schecter et al. 518).

Thus, 'humans, at the top of the food chain, can bioaccumulate and biomagnify chemical contaminates' (Dwernychuk 128). This is evident where throughout much of the South of Vietnam, regardless of the level of exposure to Agent Orange spraying, the difference in TCDD concentration in breast milk is slight, possibly indicating that contaminated food items originating from one valley gets transferred to another valley (one that might have less contamination for example) thus appearing to equalise the TCDD concentration in breast milk (Dwernychuk et al. 130) Agent Orange—scentless, intangible, invisible to the naked eye—travels through geographies and the biographies of people.

Agent Orange in the Parramatta River

In 2004, the New South Wales (NSW) Department of Health released a publication titled *Rhodes Peninsular: Small area, cancer incidence and mortality study.* The study found that despite dioxin contamination of the Rhodes area and the Parramatta river, there was no significant increase of cancer for people living around the Rhodes Peninsular compared to other people in NSW (Emmett et al. i). Regardless of these findings, commercial fishing in

Sydney Harbour was banned in 2006, a precautionary move given that the Parramatta River (with its dioxin-contaminated fish and water) ultimately leads to the Sydney Harbour (McGrath 2012).

Despite the NSW Department of Health's study regarding the low cancer incidence and mortality for the Rhodes Peninsular population, Parramatta River winds through the West of Sydney where a large population of Vietnamese Australians live. For them, the existence of the invisible Agent Orange remains a ghost that haunts these Vietnamese- Australian waters; for them, it is a spectre of the past that has followed them to their new homeland. It is an embodied memory, a Freudian uncanniness, the unhomeliness of home, that will always haunt the psyche of the community. And the responsibility and the uncanniness of Agent Orange in Vietnam extends beyond the South China waters to the emotional experiences of the Sydney community.

I found a website (www.ourlivingriver.com.au) belonging to the Parramatta River Catchment Group (PRCG) called 'Our Living River'. The PRCG collaborates community groups, State government agencies, and local councils. Their aim is to make Parramatta River swimmable again by 2025. The website does not mention why the Parramatta River is not swimmable other than broadly stating that it is 'polluted'.

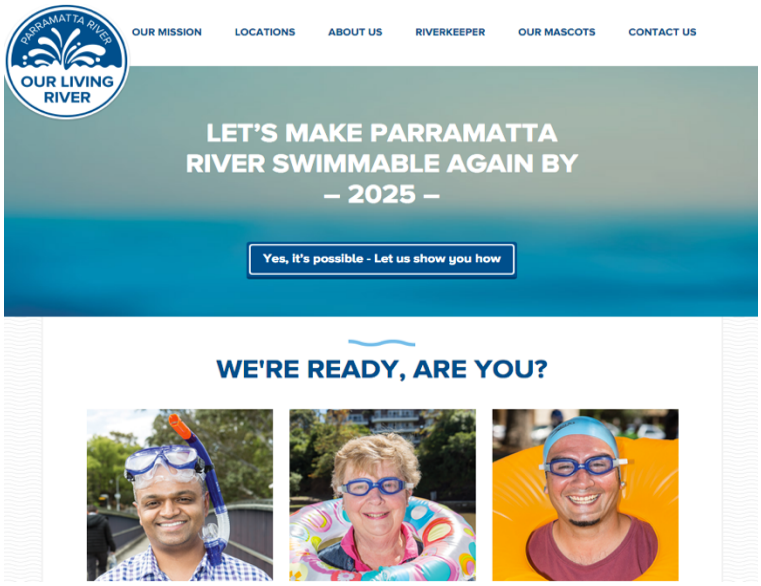

Figure 5. A section of the PRCG website home page

Nevertheless, perhaps 2025 will be the year that Vietnamese Australians can look upon Australian rivers and lakes as sites associated with calmness, family unity and an exorcism of the past by helping 'To make the river live'.

WORKS CITED

Ad Council. 'Smokey Bear'. 2017. Accessed 23 February 2017. https://smokeybear.com/en

Aspen Institute, The. 'Agent Orange in Vietnam Program: Visit Maps of Heavily Sprayed Areas and Dioxin Hot Spots'. 2016. Accessed 23 February 2017. http://www.aspeninstitute.org/policy-work/agent-orange/what-agent-orange/map-dioxin

Bell, Michael Mayerfield. '*the Ghosts of Place*'. *Theory and Society* 26.6 (1997): 813-36. Print.

Cadzow, Allison, Denis Byrne, and Heather Goodall. 'Waterborne: Vietnamese Australians and River Environments in Vietnam and Sydney'. *Transforming Cultures Journal* 5.1 (2010): 112-41. Print.

Chen, Yanqing. 'Vietnam vets link Agent Orange to children's illnesses'. June 24 2015. Accessed 23 February 2017. http://www.militarytimes.com/story/veterans/2015/06/24/vietnam-vets-link-agent-orange-to-childrens-illnesses/28939139/

Cohn, Marjorie. The Struggle Continues: Seeking Compensation for Vietnamese Agent Orange Victims, 52 years on.' October 10 2013. Accessed 23 February 2017. http://www.huffingtonpost.com/marjorie-cohn/the-struggle-continues- se_b_3736761.html

Dwernychuk, L. Wayne, et al. 'Dioxin Reservoirs in Southern Viet Nam – A Legacy of Agent Orange'. *Chemosphere* 47 (2002): 117-37. Print.

Emmett, Katty, et al. *Rhodes Peninsula Small Area Cancer Incidence and Mortality Study*. Gladesville, NSW: NSW Department of Health, August 2004. Print.

Freud, Sigmund. 'The Uncanny'. *Writings on Art and Literature: Sigmund Freud.* Eds. W. Hamacher and D.E. Wellbery. Stanford California: Stanford UP, 1997. 193-229. Print.

Haberman, Clyde. 'Agent Orange's Long Legacy, for Vietnam and Veterans'. Retro Report, *New York Times* 11th May 2014. Accessed 19 February 2017. http://www.nytimes.com/2014/05/12/us/agent-oranges-long-legacy-for-vietnam-and-veterans.html?_r=0

Helmenstine, Anne Marie. 'How Much of Your Body is Water?' Accessed 31 October 2016. http://chemistry.about.com/od/waterchemistry/f/How-Much-Of-Your-Body-Is-Water.htm

Levett, Connie. 'Trauma survivors face their fears in the shallow end'. 26 January 2009. Accessed 23 February 2017. http://www.smh.com.au.ezproxy.lib.uts.edu.au/news/national/trauma-survivors-face-their-fears-in-the-shallow-end/2009/01/25/1232818248012.html

Lewis, James C. 'James G. Lewis on Smokey Bear in Vietnam'. *Environmental History* 11.3 (July 2006): 598-603. Print.

Martin, Heidegger. *Being and Time*. Trans. Joan Stambaugh. New York: State U. of New York P, 2010. SUNY Series in Contemporary Continental Philosophy. Print.

McGrath, Chris. 'Sydney Harbour's toxic legacy shows value of green safety net'. 17 December 2012. Accessed 27 February 2017. http://theconversation.com/sydney-harbours-toxic-legacy-shows-value-of-green-safety-net-11197

Muecke, Stephen. 'Experimental History?' *Australian Humanities Review*. (July 1996). Accessed February 23 2017. http://www.australianhumanitiesreview.org/archive/Issue-July-1996/muecke.html

Neumann, Klaus. 'But is it History?' *Cultural Studies Review* 14.1 (2008): 19-32. Print.

Palmer, Michael G. 'The Legacy of Agent Orange: Empirical Evidence from Central Vietnam'. *Social Science & Medicine* 60 (2005): 1061-70. Print.

Parramatta River Catchment Group (PRCG). 'Parramatta River: Our Living River'. 2016. Accessed 23 February 2017. http://www.ourlivingriver.com.au/

Ranch Hand Vietnam. 'About Operation Ranch Hand Vietnam: Southeast Asia 1961-1971'. 26 June 2005. Accessed 23 February 2017. http://www.ranchhandvietnam.org/

Ruether, Rosemary Radford. 'Toward an Ecological-Feminist Theology of Nature'. *Healing the Wounds.* Ed. Judith Plant. Philadelphia: New Society Publishers, 1989. 144-150. Print.

Schecter, Arnold, et al. 'Agent Orange and the Vietnamese: The Persistence of Elevated Dioxin Levels in Human Tissues'. *American Journal of Public Health* 85.4 (1995): 516-22. Print.

Tai, Pham The, et al. 'Dioxin Concentrations in Breast Milk of Vietnamese Nursing Mothers: A Survey Four Decades After the Herbicide Spraying'. *Environmental Science and Technology* 45 (2011): 6625-32. Print.

Trail Dust. Dir. Nate Watt. Prod. Harry Sherman. Perf. William Boyd, James Ellison and Gwynne Shipan. Paramount Pictures, Inc., 1936.

Tuyet, Le Thi Nham, and Annika Johansson. 'Impact of Chemical Warfare with Agent Orange on Women's Reproductive Lives in Vietnam: A Pilot Study'. *Reproductive Health Matters* 9.18 (2001): 156-64. Print.

Waugh, Charles. '"Only You Can Prevent a Forest": Agent Orange, Ecocide, and Environmental Justice'. *Interdisciplinary Studies in Literature and Environment* 17.1 (2010): 113-33. Print.

World Health Organisation (WHO). 'Dioxin and their effects on human health'. October 2016. Accessed 23 February 2017. http://www.who.int/mediacentre/factsheets/fs225/en/

Yellow Bird, Michael. 'Cowboys and Indians: Toys of Genocide, Icons of American Colonialism'. *Wicazo Sa Review* 19.2 (2004): 43. Print.

Zierler, David. *Invention of Ecocide: Agent Orange, Vietnam and the Scientists Who Changed the Way We Think about the Environment*. Athens, Georgia: UGP, 2011. Print.