

# GEORGIA WALLACE-CRABBE

## *The Earth And the Elements*

A Five-Channel Video Installation (2015)

Hd Video 26:46 Minutes, 5:1 Audio

The Australian resource extraction industry has been called “the largest movement of earth in the planet’s history” (*Guardian* 2013). The multiscreen video installation, *The Earth and The Elements*,<sup>1</sup> shown in March at the Digital Media Centre Gallery in the Innovation Campus, University of Wollongong, explores the concept of “interconnectedness” between China and Australia and ecological issues arising from the extraction and flow of mineral resources from one country to the other, where they are transformed into energy, infrastructure and manufactured goods.

The work uses the Chinese Daoist concepts of the Five Elements (*Wu Xing*) and the circular universe in dynamic flux as a framework to visualise the movement of materials between the two countries, the work proposes that Australia and China are equally implicated in climate change.

The Daoist concept has two main interlocking systems which govern the universe: *Yin/Yang* and *Wu Xing*, the Five Elements or Five Phases—Wood (木 *Mu*), Fire (火 *Hue*), Earth (土 *Tu*), Metal (金 *Jin*), and Water (水 *Shui*). The number *five* is important in Chinese culture: there are five flavours (sweet, sour, bitter, pungent, salty), five classics of Chinese literature, five sacred mountains and five cardinal relationships in Confucianism. The concept of Five Elements and a circular universe in constant flux provide a framework for the installation, with five screens arranged as a pentagon.

The “stories” of interconnectedness are told through this elemental framework, visualising the material flows of coal and mineral ore and their transformation through combustion, manufacturing and environmental outputs from these processes, the work uses the elements as a mode of telling the stories of this exchange. Observational footage of both countries shows the movement of materials across the planet. The result is metaphoric: iron ore is *Iron* and coal (carbonised plant matter) is *Wood*; *Fire*, *Earth* and *Water* are represented as environmental impacts—coal mine fires, forest clearing, the aftermath of bushfires, and water pollution. *Wood* and *Metal* frame the movement of coal and mineral ores, while the *Earth* and *Water* are referenced through environmental outflows, evoking climate change and its impact on Australia’s fragile landscape. *Fire* is experienced as combustion in coal fired power generation, metal smelting, and bush fire.

As we know, coal is a sedimentary rock derived from fossilised life forms and a fossil fuel of which Australia has an abundant supply.

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<sup>1</sup> *The Earth and the Elements* will be shown at UNSW Galleries, Sydney, as part of a major exhibition about resources and climate change opening in September 2016.



Coal-fired power stations are China's biggest source of air pollution and the world's biggest emitters of greenhouse gases. The extraction, processing, transportation and combustion of coal, produce wastewater, airborne pollution and solid waste, and also contribute to climate change (Greenpeace 2007).

Despite the known impact of coal burning on the environment as climate change, Australia is rapidly expanding its coalmines and ports. Footage of Queensland's Bowen Basin, the Illawarra and Hunter Valley reveal "monumental" images of two kilometre-long coal trains streaming across the landscape to giant ports. Aerials of Bowen's Hay Point coal port—Australia's largest—reveal the massive scale of the operations. A current proposal to expand nearby Abbot Point Coal Terminal (Mackay), threatens the Great Barrier Reef, in addition to existing threat from ocean warming and acidification. Such images evoke the monumental sublime: huge piles of black coal evoke environmental philosopher Timothy Morton's notion of the "hyperobject": "objects massively distributed in time and space relative to human scales" (Morton 2011).

Coal mining in Australia and its impact on farmland in eastern Australia is closely linked to the issue of CSG. In the same way that mining leases can be imposed on Aboriginal traditional owners in remote Australia without their consent, CSG extraction or "fracking" may be imposed on landowners without legal recourse to resist.

Among the impressionistic images of industrial landscapes, there are a few talking heads, to help the viewer contextualise the issues. Chris Pavich (National Parks and Wildlife) says "where there is coal and there is a viable way to get it out, chances are they will mine it". Nell Schofield, at the the Mudgee People's Conference holding up a doughnut, declares: "Doughnut mining—they take the dough, we get the hole!" Loreen Samson, an Aboriginal artist from Roebourne WA says: "The iron-ore *is* the land! They are crushing

our stories, our rock art”.

Despite global fluctuation on the iron-ore price, the Pilbara in north-west Australia has experienced the mining boom. Shipped from the north-west to the southeast to the Port Kembla smelter, the crushed ore is used to produce many grades of steel, which is then exported to China and Japan. With a slowing economy however, China is increasingly importing the iron-ore directly rather than the value-added steel.

The elemental nature of fire, essential to humans but destructive as a power when unleashed, is evoked by coal-fired power generation, steel smelters, bushfire and the 2013 fire in the Hazelwood open-cut coal mine. Earth is depicted as “natural” in its undisturbed state or unnatural when disrupted by mining or “gouging of the earth”. Images of earth work for construction of dams and roads, damaged landscapes from mining, land-clearing and over-grazing—the causes of desertification in both countries. Water is vital to all life. Australia, a land of drought and flood, faces an unknown future from climate change, as the aquifers of Murray-Darling River System are increasingly compromised by mining. China is a vast country spanning almost half the Asian continent, floods and typhoons, droughts and earthquakes symbolise nature in its elemental form. However, in China giant hydro schemes, built to provide power for growing urban centres, flood villages and displace populations.



In making the multi-screen work, filming was spread over several years, with locations in NSW (the Hunter Valley, Mudgee, the Illawarra), North Queensland (Bowen, Mackay and the Bowen Basin), WA (Roebourne and the East Pilbara) and China (Beijing, Shanghai and the corridor between them). The Chinese footage is impressionistic: the landscape features humans only as necessary, as one element of many. Multi-sourced

footage was used with other filmmakers assisting with material that is hard to access: such as Chinese coal ports courtesy of Chinese photographer/filmmaker Wang Jiuliang (director of *Beijing Besieged by Waste*), Firelight Productions for outtakes from their bushfire film *Scorched*, and aerials of the Sydney water catchment from Russell Kilby's documentary *The Man from Cox's River*.

The five channels of video correspond to the five elements: projected onto five large screens loosely arranged as a pentagon in the space; the resulting environment is immersive as the screens encircle the viewer giving them a sense of the monumental scale and impact of rapid growth in China. Images from many regions show the impact of mineral extraction on Australian communities, indigenous and non-indigenous, and environmental impacts in both countries evoke the global crisis. Moving through the space the viewer experiences the 26-minute five-screen work as an interactive engagement.

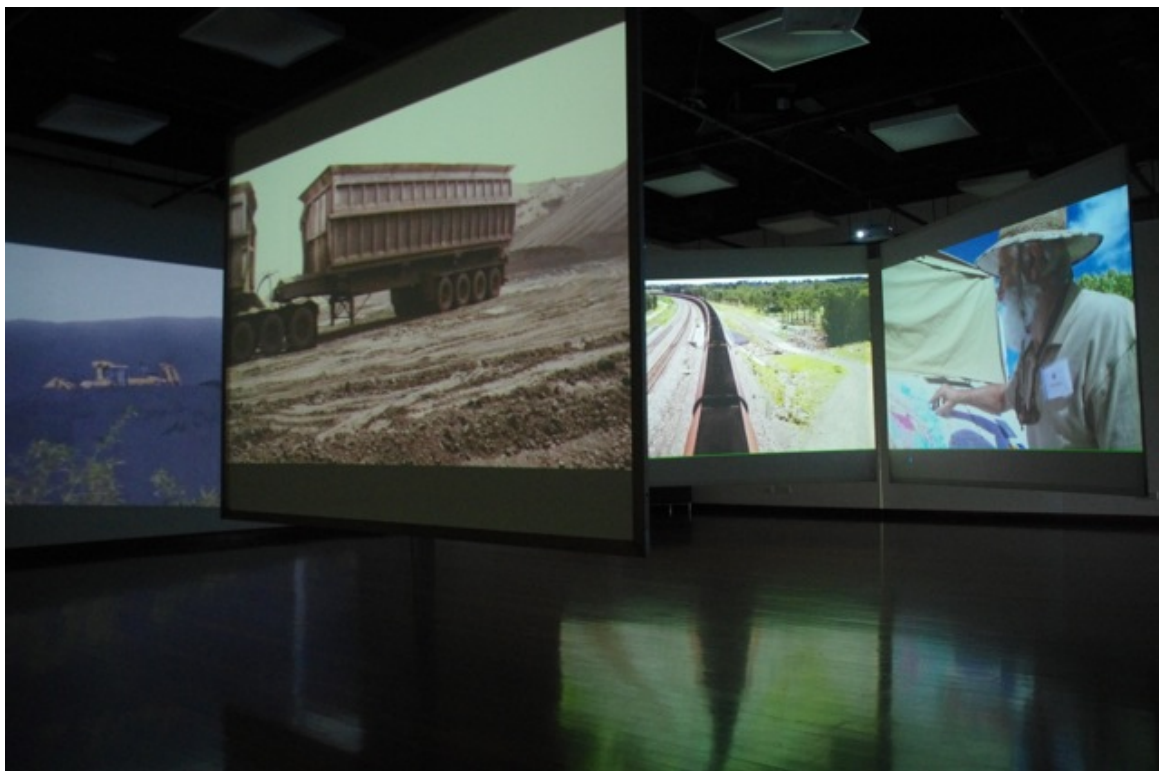
As not all screens are visible from any one vantage point, so the audience must select which images to view concurrently and make decisions as to which shots to savour, thus producing his or her own experience and understanding based on the connections made between the images. This non-linearity is combined with temporally and spatially extended moments such as trains crossing the screen in real time, or a time-lapse shot spanning two screens. All these techniques explored in screen installations contrast with traditional cinema montage. The architecture of the installation works in parallel with the essential non-linearity of digital video, creating a space that contemplates ecological issues in relation to globalisation and the resources exchange between the two countries.

One viewer likened the compositional approach to that of silent films, where the limits of the lenses in depth of field, obliged the filmmaker to work with all three planes simultaneously—foreground, mid-ground and background—an approach similar to Chinese landscape painting. Kinaesthetic editing evokes Dziga Vertov's 1929 experimental classic *Man With a Movie Camera*: in the absence of humans, choreography of mechanised movement, and symmetry, motivate screen direction; trains travel left to right synchronously with trains on other screens; shapes mirror each other such coal piles lined up mimic high-rise buildings; construction cranes move in sync.

Such attention to rhythm and composition are methods for working with the multi-screen format. As a time-based art, the editing of expanded cinema (or Post Expanded Cinema as I call it) has much in common with musical composition. As in earlier documentary traditions there are no foreground characters, dialogue or narrative: so observed events, movement of matter and observation of the function and sequence of different mechanical processes, creates a non-linear, multi-screen "multi-verse" which, while not fully interactive, is interactive in the viewer experience. The focus on pattern and repetition as compositional elements, allow the materials to determine much of the narrative. There is a desire to allow the materials to generate their own connections. My goal in the work was always five channels of 20–30 minutes in length. My first rough cuts for a 2014 test exhibition were edited as separate channels and combined at the end to be played simultaneously. After each test projection, I would go back to the studio and re-edit, to

vary the rhythm or sequence order for the next screening. This proved too painstaking, so I resolved to cut five layers at once in low-res, in one wide-screen FCP (Final Cut Pro) window. The result required hours of rendering, however, the results were more immediate. The limitations of Final Cut Pro also resulted in the film having to be exported and reimported into Premier Pro for the final hi-res output. This process contributed to a smoother workflow for the final work through multiple stages of testing.

Regarding the viewer experience of *The Earth and the Elements*: as the viewer enters the space without pre-conceived ideas of what they will see, they first become aware of images of an industrial landscape dominated by earth-moving activities on all screens—movement and action. It is a dynamic, active environment, chaotic and immersive, like the industrial environments depicted. However, unlike being in those environments, in the gallery, the viewer is isolated from the activity, there are few humans present, or if present, they are minute in scale and therefore seem inconsequential. The mechanisation of mining has depopulated the Australian landscape. Only later in the piece does the viewer see humans as they piece cars together on Chinese assembly lines, or hear from people in interview grabs, articulating the issues.



The work asks the viewer to engage with industrial landscape and infrastructure, and provokes them to see a more elemental world of materials brutally extracted and transported. These elemental landscapes are linked by the flow of transportation and transformation: pouring, conveyors, trains, diggers, trucks and ships. The scale is dehumanising and yet all this activity is for our benefit.

A visual and aural experience, the five video channels of the installation allowed me to connect and flow the images together into new meanings and associations through

juxtaposition and controlled screen direction of the various flows. The images propose a rhetorical argument that comes through the destructive forces depicted. There is no doubt that what is happening to the raw elements of water, air and fire is their transformation from one state to another and the resultant energy that is a by-product of that transformation. There is also an energy cost to much of this: burning coal and harnessing hydro does produce energy but there has still been a considerable energy cost in setting it all up. Moving coal from one place to another is a transfer of potential energy, from an inconvenient location to a more convenient one also comes at an energy cost.

The overall impression generated is that the energy is now destructive. This is a reversal of how images of these elements have been used in previous media images especially in industrial films to represent progress, wealth, success, employment, and achievement. In the past in media images of resources exchange were used to glorify human achievements like propaganda films about heroic workers. But here they have acquired a lyricism and a nostalgia that comes from the obvious loss of the human scale, and the emptiness of the spaces. The movement is by machines, not animals or humans. Some of the mining and transport machines resemble dinosaurs in scale and shape; others are robotic, and remote controlled.

One viewer's description of the work:

The presentation of the multi-screen event had a very Brechtian architecture that was melded into the character of the work, via the element of choice. The viewer is aware of the artifice of multi-screen construction, which is based on both the five Daoist elements, and the streams of action focus on transformative processing, on the different screens.

However, the combination of the way the human eye works (desiring to focus on the specific, when presented with several screens) and the content design (where the human is not central) leads to the viewer becoming the subjective principle, the active viewer. The human eye must select what to watch within the screens of endlessly processing elements. In setting things up this way, the creator hopes the viewer will be transformed, like the elements, in their viewing (and like all Brechtian architecture, be motivated to create art-motivated change, in the real world).

So for me the sense of endless processing, with minimal human presence, is key, because the viewer is the absent human presence, with the capability to change the way the elements are processed in the future. The intermeshing of Western and Daoist conceptions of environment and context, and the political implications of the Chinese/Australian relationship through the transferral of matter ("no matter can be created or destroyed") underlines the choice we face as humans: whether to continue to exert a superior will on the elements and environment as suggested in the Judeo-Christian bible or whether to exert our choice in a different direction, and through Brechtian revolution to acknowledge our place as part of the Daoist environment, among the elements (Tintner 2015).

Art, in reflection of our lives and culture, has a vital role to play in warning of the damage we are doing to the planet. China's demands for energy, fuel and raw materials are intertwined with Australia's future due to our abundance in these materials, such as mineral ores. The multi-screen video shows the processes of industrial development, technologisation of China and the wealth boosting of both countries within the framework of the elements. This format brings it closer to the viewer but also implicates the viewer in the viewing process. Choices must be made in what to view, just as choices must be made in what to save in planet Earth.

Climate change is a complex phenomenon: "one can see weather but even the most qualified scientists have trouble describing climate systems" (Morton 2010). However in Rancière's words, "Nothing is unrepresentable as a property of the event. There are simply choices" (Ranciere 2008, 129). What are the artistic choices at our disposal for evoking Morton's "hyperobject"? Is it time for multiscreen art to "think the ecological thought"? By its structure, this multiscreen video offers a tool to respond to the complexity of these issues and attempt to place climate change at the centre of cultural debate.

#### Works Cited

*Guardian*. 2013. The "Largest Movement of Earth." *Waste Not*. Total Environment Centre Education Guide, 2013.

[http://www.tec.org.au/wastenot/images/STUDY\\_GUIDES\\_PDFs/Waste\\_Not\\_Geography\\_Senior\\_Secondary\\_1.pdf](http://www.tec.org.au/wastenot/images/STUDY_GUIDES_PDFs/Waste_Not_Geography_Senior_Secondary_1.pdf) accessed 4 July 2015.

Greepeace, 2007. *The True Cost of Coal in China*.

[http://www.qualenergia.it/UserFiles/Files/The\\_true\\_cost\\_of\\_coal%20\\_sintesi.pdf](http://www.qualenergia.it/UserFiles/Files/The_true_cost_of_coal%20_sintesi.pdf) accessed 5 July 2015.

Morton, Timothy. 2007. *Ecology Without Nature*. Boston: Harvard University Press.

\_\_\_\_\_. 2010. *Ecological Thought*. Boston: Harvard University Press.

\_\_\_\_\_. 2011. *Dawn of the Hyperobject*. <https://www.youtube.com/watch?v=NS8b87jinqnw> accessed 4 July 2015.

Rancière. Jacques, *The Future of the Image*. New York: Verso, 2008.

Reid, D. P. 1993. *Guarding the Three Treasures: the Chinese Way of Health*. London, Simon & Schuster.

Rowe, Sharon and James D. Sellmann. 2003. "Ecofeminism and Classical Daoist Philosophy." *Environmental Ethics* 25.2, 129–148.

Samson, Loreen. 26 April 2012. Interview with author at Roebourne Art Centre

Titner, Chryssy. 2015. Personal communication to author.

Woodley, M., Interview with author at Yindjibardi Corporation offices (video record kept) 29 April 2012.