2014

Toward A New, Musical Paradigm of Place: The Port River Symphonic Of Chester Schultz

Robin Ryan

*Edith Cowan University, r.ryan@ecu.edu.au*

10.1215/22011919-3614926

This article was originally published as: Ryan, R. (2014). Toward a New, Musical Paradigm of Place: The Port River Symphonic of Chester Schultz. Environmental Humanities, 4(1), 41-67. Original article available here

This Journal Article is posted at Research Online.

In privileging music as a focus for applied ecology, the goal of this essay is to deepen perspectives on the musical representation of land in an age of complex environmental challenge. As the metaphor driving public narration of environmental crises, the notion of Earth as our home—signified by the prefix “eco”—brings with it a critical expectation for the musical academy to retreat from bland talk about a “sense of place.” Based on the premise that damaged ecologies are a matter of concern to many people, Indigenous and Settler; and building on the late Val Plumwood’s theory of “shadow” or “denied” places (Plumwood, 2008), the author introduces Within Our Reach: A Symphony of the Port River Soundscapes by anti-elitist South Australian composer Chester Schultz (b. 1945). Inspired by the tradition of R. Murray Schafer’s performances for outdoor sites, Schultz predicted this niche symphony on the noise-polluting defoliation of Adelaide’s “wetland wonder,” the Old Port Reach. Presented as a series of narrative soundscapes, the symphony harnesses the power of music, including popular genres, to engender a sense of local “belonging” to the Port. In an ecological subtext an Indigenous Elder sings in the re-awakening language of the Kaurna people who, in 1890, were evicted from their “nourishing terrain” (terminology after Rose, 1996) by the CSR Sugar Refinery. Schultz’s ethical musical representation of local oral, natural and industrial history generates a benchmark opus for what shadow place composition might sound like in the modern global city.

Islands of quietness in the ever-rising sea of noise are becoming priceless antiques: places where you can hear your friend breathe, or a bird half a kilometre away. They don’t appear on maps, and are smaller and more fragile than the mappable islands of clear space. They are assets that are rarely included in the equations of urban developers, and are constantly and irreversibly being destroyed without compensation.1

The pitches and rhythms of industry are everywhere, underscoring a diminished relationship of humanity to the more-than-human world in an era of environmental change that is real, various, and complex. Rose et al. describe how, since the 1960s, interest in environmental

1 Chester Schultz in unpaginated CD booklet Within Our Reach: A Symphony of the Port River Soundscapes (Adelaide: The Waterhole, 1995).
issues has gradually gained pace to produce strong ecocritical research agendas across the disciplines. One nascent interdisciplinary field, “ecomusicology,” offers what Allen describes as “new social critiques about the intersections of music, culture, and nature—and, in general, about the world around us.”

The “greening” of music—the adoption by composers and musicians of caring and respectful environmental values—works to circumvent aspects of commodity culture that marginalise nature and place. Ecomusicological studies thus contribute to Rose et al.’s vision of various approaches to environmental scholarship coming “into conversation with each other in numerous and diverse ways,” not least to address what Allen describes as “a failure of holistic problem solving, interpersonal relations, ethics, imagination, and creativity.”

Soundscape Ecology and the Ecological Self
R. Murray Schafer (b. 1933) founded the World Soundscape Project (WSP) in 1971 as an initiative for understanding and managing sonic environments. He single-mindedly expanded on the view that society at large is an organism responsible for the physical degradation of the soundscapes we inhabit, and to which we listen. The sustainable ethos of “sound ecology” continues to inform our critical sense of place.

Ingram—in his seminal work The Jukebox in the Garden (2010)—observed how “the psychic and social structures in which we live” have become “profoundly antiecological, unhealthy and destructive.” Ingram thus promoted a notion of the “ecological self” that privileges music as a vital art form for exploring human relationships with natural and built environments. As Pedelty has noted, different anthropogenic ecosystems produce dramatically different soundscapes due to the complex, reciprocal, and systemic relationships among social, cultural, and material factors. Allen lists noise pollution amongst a list of the concerns represented by acoustic ecologists, sound artists, and soundscape artists who take both artistic and activist approaches to increase awareness about such issues.

---

4 Rose et al., “Thinking Through the Environment,” 1-2; 5.
5 Allen, “Prospects and Problems,” 414.
8 After Ingram, The Jukebox in the Garden, 5; 7.
In opening up a conversation about music’s potential for depicting damaged ecologies, it is clear from Allen’s explorations of both “idyllic” and “grotesque” elements in the works of Beethoven, Berlioz, Brahms, Knecht, and Mahler that the symphonic genre is a fertile text for ecocritical musicological interpretation. Might a rhapsodically inspired work such as Beethoven’s Sixth Symphony, the Pastoral, Opus 68 (1808), yet possess some agency and power—as a historic reference point—to promote environmental awareness? Like a classic painting by Beethoven’s contemporary, the romantic landscape artist Caspar David Friedrich, this masterpiece arguably “walked before the fact” of serious anthropogenic land degradation in Germany.

Watkins has observed the “oft-noted tendency of pastoral writing to devolve into a willful escapism fixated on the image of a tension-free nature, a strategy that fails to do justice to the complexity of human interactions with the natural environment.” Guy points out that music scholars still largely ignore environmental degradation. Many an opus is context-sensitive to the hues of iconic scenery, yet few have portrayed damaged environments. Accordingly, I take up an interest in music that engenders awareness of the unruly, changing nature of industrial landscapes. To deepen perspective on the relationship between composer, community, and diminished local Australian space, I will foreground the opus Within Our Reach: A Symphony of the Port River Soundscapes by South Australian composer-historian Chester Schultz.

A strong sense of human and non-human presence in the landscape will emerge in this work as Schultz energises a port community (i.e. an industrial service zone) to engage ecologically and musically with the specifics of land management, past and present, on their home turf. I venture that the symphony—at once aesthetic, ecological, ethical, political and spiritual—profiles a sense of what “shadow place” composition might sound like. To my knowledge the only symphonic antecedent for this emerging musical paradigm was Symphony on a City by John Antill (1959; commissioned by the port city of Newcastle, NSW in 1958).

12 Friedrich depicted nature as a “divine creation, to be set against the artifice of human civilisation” (http://www.caspardavidfriedrich.org/). He and Beethoven lived at a time when there was less industry to pollute the rivers and atmosphere and a smaller population. After 1950, many rivers in Germany were straightened and many nearby wetlands drained. The ease with which water could now flow downstream has resulted in vastly more flooding (Dr Robert Jones, Jülich Research Centre, Germany, Email to the author, 4 April 2014).
16 Antill scored the 3-movement symphony to finish with a mighty blow on a tremendous sheet of steel, in honour of Newcastle’s main product. See Beth Dean and Victor Carell, Gentle Genius: A Life of John Antill (Arncliffe NSW: Akron Press, 1987), 150.
**Indigenous Voices in Australian Composition**

Australia was colonised during the Industrial Revolution when, as Newton points out, Europeans not only had technological superiority (over the Aboriginal peoples), but interest in blatant exploitation of the land.\(^{17}\) Kelly, in addressing the role of nature-writing vis-à-vis the tension of colonial history, suggests that

> While works in the nature-writing genre cannot and need not address such complex issues directly or in every circumstance, some stance towards settler relationship to land and to its Aboriginal custodians needs to be taken, at least implicitly, within the text.\(^{18}\)

This injunction holds equally for music, for “sounds,” in the words of Feld, “emerge from and are perceptually centred in place, not to mention sung with, to, and about places.”\(^{19}\) A few colonial and post-colonial Australian composers (e.g. Nathan, Antill, Sutherland, Douglas, and Penberthy) attempted to reflect the human history of Australian landscape by “borrowing” indigenous content. However it became evident that the spirit of so ancient a musical culture could not successfully be couched in the excesses of European musical apparatus.\(^{20}\)

Noting that the Australian landscape is often used as an icon for ecological theorising and activism,\(^{21}\) Richards documented a serious interest in Aboriginality reflected in the compositions of several contemporary Australian composers. Peter Sculthorpe incorporated Aboriginal notions of place and spirituality into works such as *Port Essington* (1977), *Djilile* (1977), *Manganinnie* (1980), *Earth Cry* (1986), and *Kakadu* (1988). Sculthorpe confesses to being political in his work, which, he claims, “has always been about the preservation of the environment, and, more recently, climate change.” His *Song of the Yarra* (2009) embraces these issues and also speaks of Reconciliation with Aboriginal Australia.\(^{22}\)

Sculthorpe’s shift from a physical/literal sense of nature and place towards *environmental* place is significant, for as Rose *et al.* remark, radical reworkings matter for all branches of the humanities insofar as they struggle to explore the implications of new narratives that are calibrated to the realities of our changing world.\(^{23}\) To develop understanding of music’s potential for shaping a nature-endorsing political outlook, the following section examines some definitions and tropes that might advance musical conceptions of ecologically compromised landscapes.

---


\(^{22}\) Peter Sculthorpe, “Rites of Passage,” *Limelight* May (2009), 36.

\(^{23}\) Rose *et al.*, “Thinking Through the Environment,” 3.
Nourishing Terrains and Shadow Places

Standing in welcome relief to Seed’s definition of *economics* as “the housekeeping of various societies” [who must soon] “learn to stop taking out more than they put back”\(^{24}\) is a notion of “caring for country” that is quintessentially Aboriginal (after Rose, 1996). Rose notes that a “healthy” or “good” country is one in which all the elements nourish each other because there is no site, no position, from which the interest of one can be disengaged from the interests of the other *in the long term*.\(^{25}\) “Nourishing terrains” actually signify diverse forms of nourishment because country consists, multi-dimensionally, of people, animals, plants, Dreamings, underground, earth, soils, minerals and waters, surface water, and air.\(^{26}\) Because of this richness, “country is home, and peace; nourishment for body, mind, and spirit; heart’s ease.”\(^{27}\)

The soundscape CDs produced by ethnomusicologist Steven Feld during his explorations of the intimate relationships between the Kaluli peoples of Papua New Guinea and their ambient environments demonstrate how a sense of value of the beauty and fragility of a balanced Indigenous ecosystem (nourishing terrain) might provide a barometer for environmental health (or otherwise).\(^{28}\)

Here, I concur with the view of the late Australian ecophilosopher Val Plumwood that it is unrealistic for Westerners to aim for such an integrated style of relationship because our relationships with “place” are usually multi-sited (discussed further below).\(^{29}\) Ellul in fact discerned that the older environment sometimes serves as an ideological reference for those who have been plunged into the new one.\(^{30}\) The recent commercial demand for dulcet-toned New Age recordings that foster the illusion of healthy ecosystems only goes to show that many of us live in ways that are distanced from immediate and intimate contact with the more-than-human cycles of life and death and the turning of the seasons. We are forced to accept technically produced substitutes.

Numerous cultural readings emphasise the instability of the concept of “nature” in Western parlance. One approach, remarked by Soper, advocates locating the destruction of nature at the level of specific relations of production and consumption in order for us to develop a stronger sense of our involvement in, and reliance upon, the industrial processes and means of communication whose effects we so deplore.\(^{31}\)

---


\(^{26}\) Ibid., 8.

\(^{27}\) Ibid., 7.


Plumwood’s ecological conception of dwelling recognises “shadow places of the consumer self” as being “all those places that produce or are affected by the commodities [one] consume[s], places consumers don’t know about, don’t want to know about, and in a community regime don’t ever need to know about.” Shadow places, then, are the places delineated by one’s “ecological footprint,” or that carry the ecological impacts of supporting one’s life while at the same time eluding knowledge and responsibility. PLUMWOOD thus looked to the kinds of adaptations we would all need to make to engage ethically with contemporary globalised earth systems. Her approach, in the words of Rose,

avoids all those abstract questions of who or what is morally considerable, and what may be meant by that. Rather than querying others, it asks the human to query herself, and it seeks to open the human to the experience of others in the contexts of their own communicative and expressive lives.33

To deal with our fractured place relationships, Plumwood left us with an injunction to cherish and care for (our) places, but without in the process destroying any other places. This accountability practice requires a mindful “multiple place consciousness,” “an ethics of place, and a politics of place,” given that one form of denial is to be able—as privileged nations—to ignore, neglect or deny our energy use and pollution trail that is “picked up after” by the biosphere.34

If nourishing terrains so easily deteriorate into shadow places, how should we define an ecologically progressive work of art? For Buell such a work will be one in which “human accountability to the environment is part of the text’s ethical orientation,”35 while Ingram recognises that “real ecosystems may be too complex to act as coherent wholes, and are better characterised by patchiness.”36 In the following section I introduce the environmentally based oeuvre of Chester Schultz as a context for advancing the notion that we may be able to push forward the process of understanding damaged ecologies by positioning ourselves within them.

**Introducing Chester Schultz: Early Works and Influences**

Chester Schultz (b. 1945) was raised in the small cove of Ngartong at Encounter Bay, Victor Harbour, where he began composing “under his own steam” at the age of twelve. Following an honours degree in history (1967), Schultz studied ethnomusicology with Cath Ellis at the University of Adelaide and composition with (Jindrich) Feld, Tahourdin, Meale, and Dudley (B.Mus; 1975). He became a disciple of Schafer, who “always said that acoustics and musical aesthetics have been main factors missing from both urban design and ecological thinking.”37

---

37 Chester Schultz, E-mail to the author, 30 December 2013.
Schultz’s radiophonic cassette *Sounds Like Work* (1976-8) described the urban workplace as “a thinking point about what we do and have done to us when we work.”

In a strange historical quirk the Aboriginal rock band *No Fixed Address* took their name from a dramatic musical Schultz wrote in 1979 to depict the isolation, mass consumerism, and breakdown of community life in urban Australia. Loathe to languish in tired musical epistemologies, or even to pursue the usual conformities of the global success machine, the composer brings individual vision to works featuring the found and natural sounds of local environment: “Sometimes I make musical pieces from recordings of it, or use recordings with live performers, or imitate it blatantly. Port Adelaide, where I live, is as usable as the bush.”

Schultz’s musical conversation about the devastation of run-away modernity with its damage to ecosystems and individuals of many species, including humans, became apparent in *Songs Further Out* (1987), a dramatic cantata featuring seven solo voices and a large chamber group. Schultz conceived *Vision*, the final movement, at Outer Harbour, Port Adelaide, where live sheep were being exported to the Middle East. A quarter of a century on from the cantata’s premiere, *Vision*’s ecology remains contested in Australia—evidencing just one area in which musically focused research might contribute to the wider field of political ecology. The composer is quick to promote direct listening to various environments as a way to value and relate to the land:

> Sound architecture, whether as composition in its own right or as part of other kinds of music, is one excellent and powerful way of opening ears to this—much better than photos, because sound takes time and therefore requires a time of quiet attention which we can easily avoid with photos.

Likewise, Schultz’s position regarding the use of Aboriginal musical materials is clear: “We hold some importance to copyright in our own culture. Well, we ought to hold the same importance to copyright in other people’s culture too.”

Schultz has been barely recognised for his national worth in projecting the deepest and most extensive knowledge of Australian traditional Aboriginal and contact music of any Australian composer. His 1984 settings of poetry and prose by Indigenous Australians in English and Pitjantjatjara (*Tjamuku ngura; The Land of the Grandfathers*) were followed by the seascape composition *Ngartong: Encounter Bay Jubilee Music for 12 Cellos* (1986). This significant artistic response to the intelligent, social and graceful life of whales and the relentless pursuit of these placid beasts for profit commemorates the disruption to Ramindjeri tribal life following the establishment of two whaling stations near Victor Harbour in 1837.

Schultz’s authorship of *Our Place Our Music* represented the first continent-wide survey of contemporary Aboriginal music; moreover his longstanding association with Nunga

---

39 Robyn Holmes premiered *Songs Further Out* with the Pro Canto Singers on 30 November 1987 at Elder Hall, University of Adelaide.
40 Chester Schultz, letter to Mark Wilson, 16 October 1990.
language revival has contributed to the successful revitalisation of the “sleeping” Kaurna language of the Adelaide Plains and a new and extensive understanding of the Aboriginal place names of the region. Evans advances the view, in support of such work, that loss of the rich fund of ecological knowledge encoded in language diversity diminishes the adaptational strength of our species because it lowers the pool of knowledge from which we can draw.

Schultz arranged Five Torres Strait Songs and contributed to Narrunga, Kaurna and Ngarrindjeri Songs (National Aboriginal Languages Project, 1990). His contributions to the songbook Kaurna Paltinna have provided the Kaurna people with a new way of musically expressing their stories. The verses Schultz added to Yarna Tappa (“The Bald Track”) interpret the degradation since settlement of this native track from Adelaide to the bald scarps at Sellick’s Hill. The destruction of the environment—added to the diminishment of culture and language—is obviously a matter of concern to many people, Indigenous and Settler, the genius of music surely being to work outside these concerns.

**Feld’s “Echo-Muse-Ecology”**

Feld argued that peculiar modes of knowing may be enabled by acoustic experience. These sonic ways of knowing (“acoustemologies”) evolved from Schafer’s observation that the sonic composition of our natural and created environments can be listened to perceptually and cognitively as well as musically. On re-reading Schafer’s suggestion that people echo the soundscape in language and music, Feld transformed himself from an ethnomusicologist to an “echo-muse-ecologist”: “Ethno” always implies otherness, but “echo” is about presence, about reverberant pasts in the present, presents in the past.

Schultz is South Australia’s echo-muse-ecologist. The following section describes how, in challenging the public to drink in the ambient sounds of real life, he became the first composer to value the acoustic heritage of the city of Adelaide. Even as far back as 1979, an Adelaide critic described his music as being “eclectic more so than Britten.”

Schultz writes from and back into the Australian experience with a background of global awareness of environment, and of how people are battling to live well in it. He compares his experiences of life in suburbs with different demographics:

---

43 Schultz is currently the place names and historical consultant researcher at Kaurna Warra Pintyanthi.
44 Nicholas Evans, *Dying Words: Endangered Languages and What They Have to Tell Us* (Malden, MA: Wiley-Blackwell, 2009), 19. Evans argues that the next century will see more than half of the world’s 6,000 languages become extinct.
45 The Australian Girl’s Choir performed two of these songs on their 1989 international tour.
47 The original song text c. 1839 was written by traditional owner Mullawirraburka or “King John” (Schultz, E-mail, 10 September 2012).
48 Steven Feld, “Echo-muse-ecology,” 2.
It’s much easier for the comfortable to be “balanced,” and much harder for them to notice when there is inequality … there has been (and despite gentrification, still is) a different set of local facilities and opportunities, in [Adelaide’s] west, from the “leafy” east and south. What you see depends on where you stand.⁵⁰

**Within Our Reach: A Symphony of the Port River Soundscapes**

With a broad love of sound, and as part of a continuum of manifest research and compositional activity in, and for, the Port Adelaide community, Schultz completed the opus *Within Our Reach: A Symphony of the Port River Soundscapes* (henceforth *Within Our Reach*) in 1995. The symphony’s title is a pun: “within our reach/grasp” (near us where we live) is a “reach” of the river (technical term for a topographically identifiable stretch of a stream). The reach in question was called the Old Port Reach in the nineteenth century and still is by historians because it had included South Australia’s “old port” (1836-40): now part of the built-up West Lakes Shore.

In illuminating anthropogenic impact on the Port environment and, in turn, the (altered) environment’s impact on the city, the genre-bending work bears no resemblance to a “symphony” in the tradition of an orchestral piece written for the concert hall. It includes performances live on-site, some on objects found there, some on “real” instruments—most using local people of all grades of musical experience, from the totally untrained to professionals, and from all age groups. Here, the broadening of symphonic form that began with Beethoven’s establishment of its character as an “individual” rather than as an “example of a type,”⁵¹ undergoes democratisation. It was in fact Schafer who declared that

> The Western notion of music is exploding in our faces, breaking out all around us, hemorrhaging into new environments. Certainly the power centers in society are shifting, multiplying, so that the authority once accorded to the concert as the nodal point for musical stimulation has withered.⁵²

Based on Schultz’s view that landscape music can be trivial or exploitative or thought-provoking,⁵³ I argue that the facilitation of the entry of Indigenous voices into a symphony predicated on a degraded environmental site moves us towards a new paradigm for the musical representation of place. Recorded between 1989 and 1994, the opus comprises 13 movements depicting the unique acoustic nature of a shadow place of home support that is not an absent referent: suburb and shadow place are one. The fact that Schultz dedicated the symphony to the sociologist-theologian Jacques Ellul (1912—1994), to the composers Olivier Messiaen (1908—1992) and R. Murray Schafer, and to all the inhabitants of Port Adelaide, bears testimony to the larger human concerns embedded in the work. It is the only Australian

---

⁵⁰ Schultz, E-mail, 30 December 2013. The 2006 Census identified the suburb of Taperoo as falling within the lowest 3% of Index of SocioEconomic Advantage and Disadvantage (PAPEPG Submission No 3, 2 November 2010).


work singled out by Cuadras in his commentary on soundscape compositions in the class of Oliveros, Westerkamp, Dunn, and Lockwood.\textsuperscript{54}

As a musical commentary on how industrialisation has led to an exploitative view of land as a commodity, \textit{Within Our Reach} illustrates the view of Schafer's colleague Barry Truax that "the real goal of the soundscape composition is the re-integration of the listener with the environment in a balanced ecological relationship;"\textsuperscript{55} and the observation of Meinig that landscape will yield to diligence and inference a great deal more than meets the casual eye. Meinig counted ten different lenses for perceiving the same scene, namely landscape as nature, habitat, artifact, system, problem, wealth, ideology, history, place, and aesthetic.\textsuperscript{56} Landscape as history, for instance, conceptualises all that lies before the eyes to be a complex cumulative record of the work of nature and man in a particular place. The landscape that Schultz depicts in \textit{Within Our Reach} is starkly defined by pollution, land reclamation, and insidious building encroachment. It is, clearly, an "exhibit of consequences."\textsuperscript{57}

\textbf{Documenting the Sounds of the Old Port Reach}

Schultz walked, listened, recorded (on analog cassette, using a variety of condenser microphones and recorders), catalogued, and edited the hourly, daily, and seasonal tempi of the Reach. He then sculpted together the different sonorities of water, wind, birdlife, hooting ships, singing, chanting, instrumental performance, the industrial sounds of demolition machines, and the various means of transport that have come to form part of a contemporary social scene.

Having immersed himself in the oral history of local people of both European and Aboriginal origin, Schultz synthesised the human narratives that illuminate the social contexts and vice versa. The Colonial Sugar Refining Company (Australia’s largest sugar company, established 1855; changed to CSR Ltd in 1974) plays a pivotal role in the story as we hear, for instance, footsteps crunching the shells of molluscs that died when a fire in the refinery caused molten sugar to pour into the river in 1926. Yet ultimately, in the course of its 77 minutes, the symphony evokes an intimate sense of home that “flies in the face” of degeneration. The composer-historian conceptualised the run-down Port as heritage that is alive and evolving through time, and in squeezing the residues of aesthetic meaning from the emasculated waterfront, he restored some public respect for the local environment:

This is “our place” to us who live around it … thus it is not a source of “sound-objects” which I could happily postmodernise out of relationship with their own context and meaning (though … sometimes I may carefully graft new meanings onto the old). Rather, I


\textsuperscript{57} After Meinig, “The Beholding Eye,” 6.
have tried to clarify the context and meaning, to make “music of place,” but with wider implications.  

Schultz laments the elimination of natural far and near sounds by machinery with his concern that, by shutting out the din, we may be shutting out other sound as well. The composer’s finely tuned ears detect, for instance, that the sugar refinery engine plays “a misty B.” Deep listening, in Schultz’s experience, slows us down so that we hear

… voices we might have ignored: the children, the homeless, Aboriginal people with long associations here, little sounds from worlds of nature and humanity seldom recognised in the plans of the planners … The sound of original dirt and growth in a tiny, polluted, but still active remnant of the ecosystem which once covered West Lakes with mangroves and mudflats … A plea for development which enhances our lives rather than pushing people around in a cityscape of increasingly hellish din and speed.

Track 1 (“Riverside”) depicts the singer (Schultz) escaping from oppressive noise to the solace of a more spacious environment (Figure 1).

The squealing of hungry young terns and the wild staccato croak of adult terns in Track 2 (“The Old Port Reach”) segues into the fluvial-shaped dynamics of “Wind, Water, Castle of Wizardry” (Track 3). The silt and rubbish that forms the east and west banks of the Port Reach blatantly signifies the existence of a culturally altered landscape which, while necessarily involving human violence and destruction, also holds on to the agency of the more-than-human world. Schultz draws out this point in his CD description of the drips and river ripples on the Glanville embankment:

Air bubbles up after being trapped under the barge by a rising tide. Water responds to wind, plopping staccato on a piece of timber near the barge hulk … Swallows are heard, along with the distant CSR work-horn and engine noise … water drips and trickles, its tempo and pitch changing as the tide rises. And the warm foggy, treacly roar of the Sugar Refinery dominates all, playing elusive notes of its own, lit up at night like an ogre’s or wizard’s castle with unknown captives in its high, inaccessible towers …

---

58 Schultz in unpaginated CD booklet Within Our Reach, 1995.
59 Flyer produced for CD launch of Within Our Reach, 13 April 1996.
The unedited performance of “Hulks” (Track 5) featured seven local musicians beating out layered rhythms on vestigial remnants of industrial junk: broken hulks and rusty bolts of sailing vessels, bits of train line, abandoned pipe, and derelict wharves. The voluntary overlays of banging, scraping, singing and speaking were embedded in the natural ambience: “acoustically and in spirit,” they were “part of it.”

The whimsical “Dance of the Mudflats” (Track 7) offers an embodied “place resounding” between non-human seagull and humanly produced guitar timbres and rhythms. “Voices” (Track 8) features the chatter of environment group members planting trees and a man with his dog enjoying the plovers and talking to dolphins. The sound of wind-guitar, sax and thumb piano precedes a snippet of the a capella “River Chant” which is to reappear in Track 13. In “East Bank - Not Really a Life” (Track 9), the composer narrates the tragic true story of the shooting of a pregnant Pitjantjatjara woman against the ambient background of a cricket on the train line, passing cars, a jet and light plane, a distant freight train, sirens, crows and magpies (these birds being the adopted names of the Adelaide and Port Adelaide football teams respectively). The soundscape thus projects anthropomorphic as well as natural representation.

Restoring the Indigenous Voice of the Port River

Rose et al. note that the whole world, at all scales, can now be understood as a “contact zone” in which interdisciplinary work emphasises the importance of Indigenous and local knowledges for vitalising traditional concepts of ethics, care and virtue.

For Ingram, part of art’s importance lies in the provision of a space for imaginative and speculative play. Music is obviously not a solution to environmental problems in and of itself, yet Ingram sees the idea that it prefigures a better society—including a better relationship between human beings and the natural world—as “an attempt to account for the profound effect that music has on its listeners.” Part of this power, as understood by Rothenberg, is that “We can hear sounds whose meanings are not intended for us as if they were music and soon call them beautiful.”

At the same time music carries with it the symbolic power to re-imagine shards of the past. Schultz’s symphony is neither oral history nor anthropology, though it relates to both. He used storytelling as an inclusive tapestry, and ethnographic recording as a vehicle for getting the stories “out there,” yet he remains convinced that too much conversation and interpretation of this type would have changed the nature of the work as (primarily) music.

To provide a sense of historical context, 200 years ago the local Kaurna people would have heard the sea from an estuary set among extensive reedbeds. The late Ngarrindjeri/Kaurna Elder Veronica Brodie (d. 2007) described the scene thus:

---

60 Paul Turner, personal communication, 3 February 1997.
61 Paraphrase of Rose et al., “Thinking Through the Environment, 1-5.
62 Ingram, The Jukebox in the Garden, 240.
64 Schultz, E-mail, 30 December 2013.
The whole area was filled with traditional *wurlies* [shelters], with Kaurna people moving up and down. It would have been a wonderful sight in those days to stand on the hill and see all the campfires lit up all the way to the Outer Harbour. It would have been like fairyland.\(^{65}\)

A description by the English maritime surgeon W.H. Leigh of the “Port creek” in July 1837 is equally entrancing:

> At the entrance of the creek, are found sandbanks covered with black swans, seagulls, ducks, and multitudes of pelicans … It was the cream of the voyage to sail up this creek, bounded as it is on either side by beautiful mangrove trees, upon which cockatoos, and many beautiful birds of their tribe, were assembled. Here and there, a pretty little inlet, or a noble branch of water striking out into the interior, gave us a view of the beauties behind.\(^{66}\)

Schultz realises that we cannot return to this dream of Eden with its primal fullness of sound, nor disown our heritage of urban dreams turned to rubbish, but “if we can bear to slow down, and learn to value assets which do not have *we made this* blazoned over them, then the little patient things may speak to us, and we may find hints of the City of God within our reach.”\(^{67}\)

The Kaurna people occupied and managed the coastal lands of Yerta-bulti for an unknown period of time up until contact, when strangers changed its name, look, feel and sound. Veronica Brodie’s grandmother (Laura Glanville Spender) and great-grandmother (Lartelare, the “keeper of the black swans”) were born on the west bank of the river in *wurlies*. In 1890, while Laura was still living in Glanville, CSR Ltd evicted the Indigenous residents and proceeded to occupy the site for the following 100 years. The 14 year-old Laura and her kinsfolk were denied the freedom to move on their own terms. In a psychological state of “placelessness,” they walked to Adelaide’s East Parklands, only to be arrested by police for begging.\(^{68}\)

Track 10 (“When the Owl Comes A-Looking”) underlines the ecosystem as an archive of social experience and cultural and political meaning, as Brodie (Schultz’s oral history consultant) narrates the story above the sounding riverscape. Brodie authorised Schultz to make geopolitical use of “Three Little Mice,” a favourite bedtime song that Laura had taught her grandchildren in Kaurna and English. Translated into Kaurna by Amery and Schultz in 1995 and sung by Brodie, its origin is unknown.

Plumwood asked the pointed question: “Is the ability to maintain access (unproblematically) to a special homeplace and to protect it not at least partly a function of one’s privilege/power in the world?”\(^{69}\) As remarked above, the linking of Indigenous experience to environmental debate is a common valorising strategy. The CSR eviction

---


narrative fits the template neatly—the struggle of powerful against powerless, Aboriginal against non-Aboriginal, and “greenie” against developer, notwithstanding the tendency of clichéd binary contestations to engender categorical imperatives that constrain interpretation. Henry, amongst others, looks to the discursive fields and practices that produce binaries, arguing that political identities are produced situationally, as the result of practice. The relationship between sameness and difference is therefore produced and articulated performatively.  

Feld promotes a role for acoustic ecology and soundscape studies in adequately and evocatively representing people’s experiential worlds, their voices, and their humanity:

... deep down we hope that by writing and circulating other peoples’ histories, by giving their voices places to speak and shout and sing from, we in some measure combat and counter the longstanding arrogance of colonial and imperial authority, of history written in one language, in one voice, as one narrative.

On Track 10, Brodie revisits her grandmother’s emotional response:

She was always angry, grandmother, when she even talked about the CSR or the Glanville site. I guess her anger was always anger at them for taking her land away. She was named after Glanville, Laura Glanville Spender, so her name went with her.

Grove records that attempts to oppose the forces of capitalist ecological manipulation have been frequent, although rarely effective in terms of restoring traditional ecological relationships. Only a small part of the Kaurna ecological vocabulary survives—often in vaguely translated forms—for Port Adelaide’s birdlife and samphire and mangrove flats, as few of the language collectors were naturalists. On this former nourishing terrain of traditional land, the river (now called Torrens) was blocked by dunes from the sea to the west, and every winter flooded into large wetlands: south to Glenelg and north into the Old Port Reach of Port River.

---

72 Veronica Brodie, Track 10, Within Our Reach, transcribed with permission from Chester Schultz.
74 Schultz, E-mail, 7 February 2014.
75 From the 1930s when a channel was cut to the sea at West Beach to drain the reedbeds, building began on the floodlands. Four decades later, the Old Port Reach was beheaded by the installation of a causeway and the development of West Lakes over its upper (southern) part, thus obliterating several kilometres of wetland, sandhills, reed swamp, and mangroves. The remnant is now often called the Jervois Basin after the Jervois Bridge that spans it. Downstream and around the corner is what might have been called the “New Port Reach” where the new port was built in 1840. It was called Gawler Reach instead (E-mails from Schultz, 31 May 2013 and 30 December 2013).
“Islands of Quietness,” to revisit my epigram—are “rarely included in the equations of urban developers.” “The Beasts of Babylon” (Track 11) references the “ruined City,” a spiritual metaphor from The Revelation of John: “Babylon the Great is fallen.” This recurring motif in Schultz’s work is generally inclusive of people who live on a city’s margins. However *Within Our Reach* extends the metaphor to the natural environment on the margins including the arboreal habitats of sparrows and pigeons destroyed in the ensuing acoustic disaster. Schultz was quick to photograph and record the overbearingly loud, clanking cranes and other hard-shelled industrial machines (Figures 2 and 3) that demolished the Sugar Refinery in January 1993, following on from its closure in 1991. Track 11 graphically depicts one “beaked monster” grabbing huge scraps of metal while a sewage pipe pisses 37 million litres of effluent (daily) into the river at the Causeway where the Reach was “beheaded.”

![Image](Figure 2 One of the huge machines of demolition at the CSR Sugar Refinery at Glanville, January 1993. CD booklet image, courtesy Chester Schultz.)

---

76 When Schultz wrote *By the Rivers of … (Melbourne)*, he specified that any other town could be substituted; i.e. the one where the song is sung (Schultz, score note, 1982).
The following track, “Ground Water, Sea Water,” depicts the swirling fluvial debris of a century of construction and deconstruction. One is riveted to sit still and listen.

This brings us back to Plumwood’s injunction, namely to “cherish and care for your places, but without in the process destroying or degrading any other places, where “other places” includes other human places, but also species’ places.” CSR evidently played a role in making Glanville—this former “dream of Eden”—a “shadow place” for others; indeed the company rendered it invisible to most of their customers. The degree to which CSR’s operations actually “support” human lives is also questionable: the No Sugar Movement dates back to 1972 when Yudkin argued—in advance of the obesity epidemic—that consumption of sugar and refined sweeteners is closely associated with long-term disease.

CSR claim to be regularly measuring their performance in energy consumption and CO₂ (greenhouse gas) emissions, while “like any self-respecting leader in sugar innovation … always adding new products to the mix.” Lambert’s comment that “Like it or lump it, few of us get through the day without adding sugar to our daily diet,” belies the fact that “We are a

---


Pavlovian population made up of sugar, honey and toffee addicts, drawn to the taste of sweetness.  

**The CD Riverbed Launch: A Free Festival**

Schultz’s conviction that the inner wellsprings are present and alive in the average person enabled an unusually wide range of people to enter the world of art-music creation and performance at the riverbed launch of the CD *Within Our Reach* (completed 1995). Advertised to take place on 13 April 1996 as a “Picnic within our Reach—a Free Festival of Mud, Mangroves, Mooching, Sound, Space, Music, Junk, History and Community,” it was promoted by the press as a “zany and sweet peoples’ event.”

Citizens read, understood and performed their map (Figure 4) through the modalities of story, song, dance, and instrumental music—much as the original Kaurna inhabitants might have achieved “belonging” there in terms of these performing media. In this sense, and if only momentarily, the map was “decolonised.” It is worth noting here that Schultz the historian is currently writing the story of the Aboriginal people who gave cultural information such as place-names and language at first contact in the Adelaide-Fleurieu region (*Feet on the Fleurieu: Kangaroo Islanders, Women, and Local Aborigines* 1826-37; anticipated publication 2015).

---


81 Samela Harris, “Mud and Music a Family Affair”, *The Advertiser*, 13 April, 1996: 27.
Due to inclement weather, everything took place at Mangrove Creek (originally named by Schultz, but renamed Mangrove Cove by council and developers). Following the spread-out events, the crowd gathered for speeches and conventional performances at a small amphitheatre in Rennie Road, near Ethelton Station. This featured a gallery of benches made of old railway sleepers, both planned and built with community input—including a contingent of unemployed people.

Many attendees relived the process by which the symphonic recording was made by “playing the environment” in an impromptu soundscape of clap-and-clang echoing under the bridge and timed automotive cacophonies of staccato horn-tooting. Dave Mills recorded segments on Schultz’s equipment although the result was inadequate due to wind as well as distances. Other events included mud stomp dancing, instruction in plant lore (its destruction, survival and renewal), and a talk by Port Environment Group members about nature in the city and their efforts to save Ethelton mangroves and mudflats.\footnote{The mangroves have extended since 1996, helped by school project plantings. Most of the boat wrecks on which the musicians played are now invisible under mangroves or mud.}

Narrative input by the late Veronica Brodie had been programmed to take place at the old Lartelare campsite. Due to fraught health, Brodie was unable to speak outdoors so she engaged people individually at the car in which she was sitting with a view of the activities. Brodie always felt comfortable whenever she went to the Port: “You feel as though you belong” (CD, Track 10). Her close friend, the Ngarrindjeri-Kaurna Elder Cherie Watkins (b. 1939), represented her with a public speech (Figure 5). Watkins is a renowned visual artist, singer-songwriter, language activist, and former teacher at Kaurna Plains School. Watkins and Schultz sang “Three Little Mice” together in English and Kaurna in a symbolic resounding of place and space.
“Sugar in the Morning”: Singing on the Refinery Site

A Soundwalk Quiz set to questions such as “How loud must you talk to be heard?” was planned for unoccupied sites with labels such as “Eric’s Hideout” (he lived here in his old car). Schultz formed The Junk Naturals (Figure 6) to perform the satire “Junk: a Natural Part of Life” on items salvaged from the demolished Sugar Refinery. The seven-piece band had already recorded a version of the pop song “Sugartime” (1958) on the CSR site to Schultz’s new lyrics: “Junk in the morning, junk in the evening, junk at suppertime; be a little junkie, and love it all the time.” The item was not included on the CD for copyright reasons.

The Birkenhead Bridge operator blew the horn by prior arrangement on cue from Schultz’s mobile phone, timed to his stopwatch. This prominent sound mark mythologises Schultz’s local environment according to his Christian beliefs, concerns, and knowledge of music history. The horn speaks (i) concretely: about past use of the estuary for fishing boats, tall ships, tourism, and cargo handling; and (ii) symbolically: in the form of an invitation or calling to “go out” or to “come in” like the boats (the horn rhythm is different in from out; and the boats reply, particularly in the last track). Schultz relates it to the familiar use of “horn calls” or “horns in the forest,” a fundamental sound-symbol in classic-romantic orchestral music from Schubert to Mahler to Britten; it is a “call from the Other.”

---

Schultz, E-mail, 30 December 2013.
The driver of a scheduled passenger train was requested by Schultz to blow the horn as it crossed the bridge (a very long blast, to get the Doppler effect). With a moving source, the Doppler pitch shift can sometimes go down in the source and up in the echo, etc. Naturally occurring echo is in fact one of the chief beauties of a built-up landscape, and the symphony uses a lot of it. It varies in speed of response (with distance from source); in perceived volume (depending on the configuration of source, listener, and bounce-walls; sometimes the echo is heard louder than the source, or the second echo louder than the first); and even in pitch.

Schultz’s symphony is not all sepia-toned: “Hulks” conveys the strange beauty (as well as the ruin) of the altered landscape. Schultz’s belief that a loss of joy in the arts diminishes the artistic/spiritual primal core of human experience is in keeping with Schafer’s conviction that every place on earth has its own magic if we listen with care. In Turner’s words: “Sadness and outrage are revealed, although ultimately hope remains.”

The Imagined Boat Voyage

The final track “Study War No More” (13) depicts an imagined boat voyage or “crossing-over,” accompanied by a miscellany of birdcalls and a ship’s horn. Schultz’s modal “River Chant” was not fully exploited on the recording but ecologically speaking it deserves to be remarked as it projects the power of sound latent in community voices gathered around water. Originally conceived for participatory improvisation around the banks of Port River in 1993, the chant’s mode was derived from the approximate landmark pitches of the river up to 1995: the low C# of the Island Seaway ferry to Kangaroo Island, and the D and E of the Birkenhead Bridge horn as it signals to boats that it is ready to let them through.

The 1996 programme note prescribes a measured movement in which rests engender “substantial silences, like geological breathing points.” The use of unspecified voices calls for a performance modelled on the unaccompanied singing of the old Primitive Baptists of Southern USA, in vigorous “lining hymns” that were not at all churchy or arty. The composer (Figure 7) directed two choirs of mostly untrained singers spaced a hundred yards apart.

---

86 The score sets no regular pulse: surges of communal improvisation are cued either visually by a conductor’s slow downbeat on every barline (if the singers are widely separated), or aurally by vocal leaders (if they are more closely grouped). Examples of this style may be found on Alan Lomax, The Gospel Ship: Baptist Hymns and White Spirituals from the Southern Mountains, Recorded Anthology of American Music, Inc., New York: New World Records 80294-2, 1994.
Attack and tempo were designed to be “not quite simultaneous.” This style of singing uses and expands the natural time delay that results either from distance or from varying speed of response. The result is physical, emotional, and direct. Varying from real unison to close canon, it proceeds in a series of waves or surges that create a wonderful sense of open space—a certain clue as to how we might define an ecologically progressive work of art.

Following the chant, Ian Edwards sings Pete Seeger’s version of the traditional “Oh, What a Beautiful City” (“Twelve Gates to the City”). In this City of God (New Jerusalem) the gates are always open (Revelation 21:2), unlike the gates of the modern global city, which fortify the few and shut out the many. Schultz had connections in mind when he introduced the song at the launch: the aforementioned eviction of the Kaurna, and of old Eric from his beat-up sedan; the on-site shooting of the Pitjantjatjara woman; and all manner of people—including horse-riders—deprived of open space.

(Chorus) Oh what a beautiful city;
Oh what a beautiful city;
Oh what a beautiful city;
twelve gates to the city, Hallelooyah!

Three gates in the East, three gates in the West,
Three gates in the North, three gates in the South,
there’s twelve gates to the city, hallelooyah! …
(Chorus)
When I get to heaven, going to sing and shout,
There’s twelve gates to the city, halleluoyah!
Ain’t nobody there going to put me out,
there’s twelve gates to the city, halleluyah!
(Chorus)\(87\)

A seagull has the last say in the spiritual journey, but not before a final fading refrain of “Study War No More” (“Down by the Riverside”) deepens the ethos of the album with view to a future in which “we might try to stop using our immense cleverness to study how to make war (on other people, on the good things of nature).” Schultz adds: “This of course will never be done except by people who “cross over” in some spiritual sense; hence the boat crossing.”\(^{88}\)

**Gifting the Symphony and Gauging the Reception**

Plush has observed how, in offering himself as a conduit for community music-making in Port Adelaide, Schultz “unintentionally conveys to the well-heeled middle class a musical view from the other side of the tracks.”\(^{89}\) We have seen how this musical view takes cognisance of Old Port Reach’s transformation from an ancient wetland wonder, firstly to a century long industrial wasteland, and then more recently to an unsightly, yet expensive set of high-rise waterside investment apartments.

Schultz maintains that he never had any intention of taking the symphony to the marketplace; he distributed it on CD and cassette for “whatever the recipient cares to donate, which includes the possibility of nothing.” Turner, in his review, ventured that the symphony is worth “a great deal more than nothing,”\(^{90}\) and the late Tristram Cary described it as “a splendid environmental record.”\(^{91}\) *Within Our Reach* received airplay on *The Listening Room* (ABC Radio) and local station 5UV.

It takes time for works of countercultural marginalia to achieve general exposure. Schultz was personally satisfied with the CD’s reception by local residents, radiating out from personal friends to the local church community, to members of the environmental group, to other composers and soundscape artists. Musical collage normally involves little attempt to integrate or communicate but the lively assembly of interaction between people and nature cohered in this case to produce a touchstone on a path of remembering. In capturing the varied resonances of the Port it projects a significant testimony of environmental knowledge and activism. The text contained in the 24-page sleeve booklet can be read as part of any school or public performance of the piece, subject to improved legibility in the booklet design.

Flowing on from the launch, *A Quiet Spot Within Our Reach: Essays on the Old Port Reach* was produced jointly by Schultz and members of the Port Adelaide Residents Environment Protection Group (PAREPG). Authors included anthropologist Sheridah Melvin,

---


\(^{88}\) Schultz, E-mail, 31 May 2013.


\(^{90}\) Turner, “Soundscape of Sadness, Outrage, and Hope,” 60.

\(^{91}\) Tristram Cary, letter to Chester Schultz, 12 April 1996.
who had recently completed a doctoral thesis on the Lartelare site. This extra educational resource was displayed in public libraries at Semaphore and Port Adelaide. In their local newsletter of April 1996, members of PAREPG summarised their experience of the celebration:

We heard of the richness of Nunga connection with the river ... recalled the variety of European history, buildings and shipping in the Port; celebrated nature with the backdrop of wheeling pelicans, ebbing tide and the mangroves; and generally enjoyed ourselves in our own back yard. Thanks Chester for reminding us that it's within our reach!

Concluding Thoughts

The environmental composition Within Our Reach: A Symphony of the Port River Soundscapes amply demonstrates the role that public space can play in shaping human-musical relationships with natural and built environments. Chester Schultz brought into being—to reinvoke the theme of this essay—a new and powerful musical paradigm for place, one in which a composition might flesh out “forms of life and production where the land of the economy ... and the land of attachment, including care and responsibility, are one and the same.”92 This dual place of community and devastation may be understood as a shadow place that is part of, i.e. connected and entangled to, a nourishing terrain.

Schultz may be seen to have crossed the nature-culture divide with a visionary grasp of the complexities germane to a shadow place that is also a beloved place. In the symphonic integration of recorded material, the music enables a home suburb to be experienced in its damage, and in its resilience, through love. The provocative encounter between acoustic and social agencies underlines that the symphony is not solely a documentary of Port Adelaide at a time of rapid change, though it is also that: “Here, the marginal, urbanised environment of the Old Port Reach represents the whole inescapable modern global City, and its possible futures.”93

Following on from Within Our Reach, Schultz’s collaboration with Indigenous musicians for the commissioned symphony Music is Our Culture (1997) achieved critical acclaim. This was partly due to the way that Schultz enabled Indigenous musicians to use the Adelaide Symphony Orchestra for their own personal expression.94 Audience member Peter Sculthorpe commented: “I felt that we had transcended music in that the whole audience … had come to be concerned with Reconciliation …[and] that was where the music really took us.”95

Postscript …

The musicalisation of Schultz’s home turf shadow place carried with it a certain authority, for “place,” in the words of Giblett, “is reliant on humans to tell its story for it, to speak on its behalf without diminishing it.”96 Composer John Peterson followed with Port Kembla (1998),

---

93 Schultz, “Notes” in CD booklet.
94 The work reflected the journeys of many Indigenous Australians, some of whom had been isolated from their birthplaces and relatives by distance and financial hardship (programme notes for première of Music is Our Culture, 13 March 1998; televised by the ABC on 14 March 1999.
95 Peter Sculthorpe, cited by Gordon Williams, “Music is Our Culture,” Sounds Australian 52 (1998), 32.
which sonically characterises the massive industrial (i.e. environmentally problematic) seaport complex at his birthplace Wollongong, NSW.97

In 2005, Karl Neuenfeldt recorded the raw soundscapes of CSR’s Central Queensland empire, adopting a low-key political stance that permitted the Bundaberg operations to speak for themselves in the local contexts of working life and folklore. On *Sweet Sounds of a Sugar Town*,98 musicians play the alternating chords of Binjera Mill’s cumulative soundscape over the differentiated pitches of crushing mills, shredder, generators, high-speed fugal separators, reciprocating steam engines, whining belts, and clattering tipplers. Sleeve notes explain the need for protective hearing to be worn in the mill.99

There is a growing expectation for soundscape artists to explain the provenance and totality of their compositions for particular regions, industries and sociocultural groups. *Rivers Talk* (2012), a radiophonic collaboration by sound installation artists Ros Bandt and Leah Barclay, deals with the ongoing ecological care of the Murray River, Mildura, Victoria, and the Noosa River, Queensland.100 Just as we cannot interpret art works outside of a cultural context; neither can we interpret them outside of an ecological one.

So what new critical languages and musical templates might characterise the ecological soundscapes of the future? As this research has shown, ecocritical interpretations of sound in culture now account for, and embrace, ecological and cultural impacts associated with unfolding environmental narratives. In their artistic interventions, it is concluded, composers adopting a place-based environmental justice critique will wrest new and distinctive approaches to shadow places. We cannot prescribe the nature of musical composition, but it is unlikely in the near future that the authority to make claims about global ecologies through this medium will become detached from the politics of the environmentally unacceptable.

---


Robin Ryan researched the first Master’s thesis on urban Aboriginal music through Monash University, followed by a PhD on musical engagement with Australian plant life. As a Research Fellow at Macquarie University, Sydney from 2001, she advised and contributed to *Currency Companion to Music and Dance in Australia* (2003). Robin is currently an Adjunct Lecturer at Edith Cowan University, Western Australia, and an active member of the Ecocritical Study Group of the American Musicological Society. Email: robinryan25@gmail.com

**ACKNOWLEDGEMENTS** I am indebted to Chester Schultz for mail discussions and for his provision of the primary sources and permissions needed to undertake this essay. Thanks also to the late Veronica Brodie for her song and story; Cherie Watkins for permission to include her image; Paul Turner for his review of the symphony’s launch; Donna Houston for introducing me to Plumwood’s “shadow places”; and Liz Reed for encouragement. Matthew Chrulew patiently assisted the editorial process, and editors Thom van Dooren, Deborah Bird Rose and Stuart Cooke augmented the constructive suggestions of my anonymous reviewers.

**Bibliography**


Houston, Donna. “Cultural Research in the Anthropocene.” Workshop series organised by Rod Giblett at the Centre for Research into Entertainment, Arts, Technology, Education and Communications (CREATEC), Edith Cowan University, Mt Lawley Campus, Western Australia, 16 May 2012.


