

# „Landscape of resistance“ – the Fitzgerald Biosphere catchment

Ian Weir

If ‚landscape‘ is a cultural construction then how might we found landscapes capable of resisting the homogenising forces of development – forces exerted by often ubiquitous conditions such as landscape photography and architectural typology? This essay discusses the author’s ten-year attempt to construct a ‚landscape of resistance‘ in the Fitzgerald Biosphere catchment – a remote, biodiverse region on Western Australia’s south coast.

Dr. Ian Weir is a multidisciplinary practitioner and researcher with a keen interest in exploring the creative potential that lies within the space between biodiverse landscapes and their representation and inhabitation.

His mediums of exploration are high-end land survey, photography and architectural interventions. His research has led to a number of exhibitions of photographic and cartographic artworks and the production of bushfire responsive houses on the south coast of Western Australia. Ian teaches design in the landscape architecture stream at Queensland University of Technology as well as running his architectural design and research practise [ianweirarchitect](http://ianweirarchitect.com).

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A resilient landscape is most often conceived of as being one which is resilient to biophysical conditions, such as water erosion or water scarcity. We forget too readily that ‘landscape’ is itself a cultural construction, not a physical condition, and as such ‘it’ can exhibit degrees of resilience to the forces of cultural change – forces (ideas, preconceptions, predetermined typologies etc) which are often quite subtle but are nevertheless intrinsically linked to the management (or mismanagement) practises we enact within the biophysical environment.

How then do we construct a landscape of resistance – one which is resistant to the imposition of unsustainable management practises and human inhabitation patterns?

A case study for such questioning is the Fitzgerald Biosphere catchment on the south east coast of Western Australia – an area of some 600 square kilometres which is recognised by UNESCO’s ‘Man and The Biosphere’ for its biological richness and human habitation. The catchment falls within the greater bioregion of the South-west Botanical Province, which is the only bioregion within Australia to be recognised on Conservation International’s register of 34 global ‘Biodiversity Hotspots’. The primary criterion for achieving Hotspot status relates to the likelihood of significant biodiversity loss. Due to land clearing and associated soil salinity the Botanical Province retains only 11% of its indigenous vegetation yet still retains over 4.300 endemic plant species. A majority of the botanic diversity is found not within fertile soils and forests but rather in very nutrient-poor sand plain landscapes known as ‘kwongan’.

While being host to such biological richness kwongan has a poor reputation amongst land owners and developers. It is derided for both its aesthetic and physical characteristics: being scrublike, bushfire prone and yielding to four wheel drive vehicles. Furthermore, it is also virtually ignored by artists (unless they are botanical illustrators) and architects and building designers who most often platform their sites with earthmoving equip-

ment before commencing their designs. Evidence of the latter can be found at Point Henry subdivision in the Biosphere catchment, where the author spent eight years researching methods of achieving site-specific architecture for remote bio-diverse landscapes.



Fig. 1: The Fitzgerald Biosphere catchment  
[All illustrations and photographs by the author except where noted]



Fig. 2: 1 Fitzgerald Biosphere Catchment  
2 Fitzgerald River National Park  
3 Point Henry Peninsula



Fig. 3: Kwongan heath – PhD study site on Point Henry



Fig. 4: Cleared sites on Point Henry – some are architecturally designed!

I came to the realisation that buildings are designed on representations of landscape (maps, contour plans etc) rather than the physical landscape itself and therefore in order to develop greater site-specificity I must first develop novel site and place specific representations of the landscape itself. In short – I must first construct the landscape ‘idea’ before I could spatiality intervene within the landscape. Of course design is not so causal – and we know from David Leatherbarrow and others that sites are constructed as much from spatial interventions (built form) as they are from any preceding representation. Nevertheless my overarching goal of encouraging greater engagement between people and the particularities of Point Henry was somewhat achieved through a diverse range of mediums which I employed in my study. These included: photographic artworks, motivational talks to artists, built works of architecture, site installations, botanical studies, membership of local development committees and even the purchase of four hectares of kwongan landscape (which I named ‘Content Too’ after our farm in the catchment: ‘Content’). This creative research was presented to the catchment community

via three public exhibitions, one of which toured Western Australia for two years as well as a local art symposium and workshops. Furthermore I coordinated three University of WA architectural and landscape architectural design studios within the catchment. These were aimed at developing an understanding of the relationships between perception and aesthetics within the context of both the biophysical and cultural landscape.

I borrow ‘landscape of resistance’ from James Corner who calls upon designers to rethink the means by which we might conceive of a landscape design practise which is more culturally and environmentally sustainable. Corner’s concept builds on Kenneth Frampton’s articulation of ‘Critical Regionalism’, which is useful for the key flaw in Frampton’s argument is that it relies on the vernacular (read ‘sustainable’) to provide cues, keys and foils to a universal modernist aesthetic. Whereas the least resilient landscapes are arguably those that are without clearly identifiable histories of sustainable inhabitation – like my study at Point Henry which is being developed for permanent housing for the first time, and the greater Biosphere catchment which has only been farmed for two generations.





Fig. 5: Content – the author's home for his first 12 years (1963-1975) [Photographer unknown 1961]

## Identity and resilience

Creating a landscape of resistance involves articulating an identity for a place. Without the articulation of a unique place-specific identity the 'local' gets consumed by the 'regional' and so on. Needless to say it is a massive task to create a culturally resilient landscape, but that, I argue is ultimately the context within which our discipline should work – defining the specific from within the general. Defining Point Henry, within the Biosphere catchment, within the Botanical province ... has been a self fulfilling and propelling research project, one motivated by the urgency of loss, not so much loss of biodiversity but the potential for loss of the ability for this particular (extremely remote and biodiverse) landscape to generate new forms of representation, language and spatial intervention and thus contribute to and broaden understandings of landscape design practise.

Some examples of my creative research are as follows:

**Earth as Light:** using light based mediums to express the earth itself as light and animate. This work, which used stereo durational photography and light projections, was motivated by the propensity within architecture for forms which were derived from either a 'touch the earth lightly' ethos or digitally emergent animate forms (e.g. Greg Lynn). Both positions are problematic because they are based upon the preconception that the earth/site has an inert gravitas – lands-

cape is thus cast as a convenient foil to these superficial form-making exercises. Motivated by John Rajchman's articulation of Lightness (in Rajchman, J. *Constructions, Writing in Architecture Series*) I sought to instead represent the earth itself as light and animate and in doing so develop an architecture which reveals rather than suppresses the dynamism of landscape to its inhabitant. *Earth as Light* was exhibited at the University of WA's Cullity Gallery in August 2000 (solo exhibition).

**Eyes Wide Open:** a more didactic series of works than *Earth as Light*. Here I developed large format digital prints incorporating from satellite imagery, botanical data bases, and botanist's anecdotes and my own landscape photography. The statement (by botanist K Newbey) "If you tried you could discover a new species everyday when some scientists are delighted to find one in a lifetime" overlays are list of the 3.500 or so plant species that scientists have found to date in the Fitzgerald Biosphere catchment. A similar sized panel (1.2 x 2.5 metres) lists the 25 (only) species that are grown by the broad acre farmers in the catchment. *Eyes Wide Open* was held at Gorepani Gallery, Albany in 2003 and featured three invited artists from the great southern region of Western Australia.

**Terrestrial Laser Scanning:** The texture of the 'point cloud' data from laser scanners bore a strange resemblance to the visual character of the kwongan heath of my study site. Using this technology for the first time to measure vegetation, the scanner has produced both an enigmatic representation and an empirical measurement in Cartesian coordinates. The result having both a poetic exhibition value and a factual record of the spatial structure of the landscape. The changeability of vegetated landscapes – in this case one which is regenerating from bushfire – is capitalised upon by repetitive measurement. For example, Before and after the fire incorporates two scans (literally one taken before a bushfire and one from the same position after the fire). In this way the dynamism of landscape is captured in a means which has direct relevance to



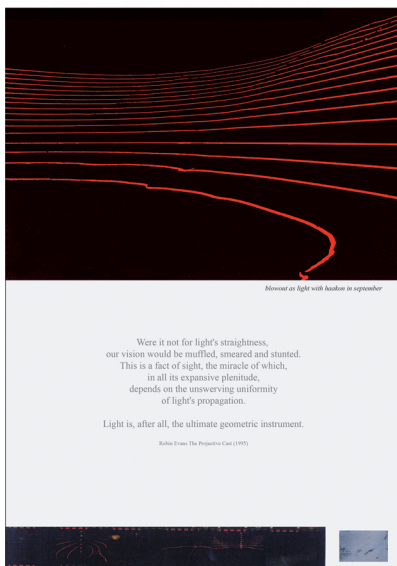


Fig. 6: Blowout as light with Haakon. Long exposure (three hours) of laser light projected in a dunescape in the Fitzgerald Biosphere Catchment, with text from Robin Evans, Architectural theorist. [Ian Weir 2000]

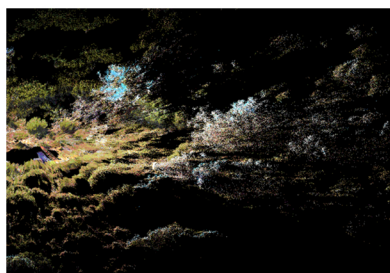


Fig. 8: Terrestrial Laser scan of kwongan landscape on Point Henry, Fitzgerald biosphere catchment. [Ian Weir 2004]

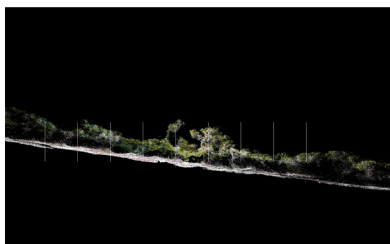


Fig. 9: Before and after the fire. Merged terrestrial laser scans taken before and after a fire on Point Henry. [Ian Weir 2004]

architectural design which always deals with the concrete and the finite. Form is generated and realised through the medium of measurement and here the previously un-measurable (the dynamic kwongan) has become a quantifiable factor in the design process. In short it has been concretised as a vegetative 'ground' in the same manner in which we normally attribute the mineralised one.

Lightsite: celebrating connectivity between people and their landscapes in the Fitzgerald Biosphere catchment. Here a room-sized demountable pinhole camera was transported for six months through a variety of landscapes in the catchment. Key people (farmers, fishermen, botanists) were placed inside the camera where the only light entering came through a small aperture in one



Fig. 7: One in a lifetime. 1.2 x 2.5 metre digital print of 3,500 species found to date in the Biosphere catchment, with quote from local botanist Ken Newbey (deceased). [Ian Weir 2003]

wall. Importantly the room-sized camera did not have a floor and was built directly over each person's landscape (a wheat field, sheep yard, fishing spot, kwongan heath). In doing so not only the person, but their physical landscape was revealed by the light coming through the aperture which itself was reflected off their landscape and projected inside.

The idea behind the work was to collapse, what has become in landscape theory, two opposing understandings of landscape: *landskip*, the graphic picture or framed landscape, and *landschaft*, which is the not graphic but rather encapsulates our idea or mental picture of landscape. The latter is usually attributed (by James Corner and others) to those that work the land and is cast as being more sustainable than scenic superficiality of *landskip*. Of course those that work the land and are embedded within it, value their home as much for its scenic attributes as their eidetic memories: they are nevertheless intertwined. Thus, *lightsite* seeks to incorporate the two by bring forth the relationship between eidetic memory and scenic landscape. It does so through the medium of light. *Lightsite* was commissioned by the Perth International Arts Festival through a Regional Arts Fund grant. It toured Western Australian regional galleries for two years (2006/2007) as part of the 'Hotspot' collection of artists from WA's great southern region.



Fig. 10: Barb on Content Too. Five minute long exposure of local botanist Barbara Miller-Hornsey. [Ian Weir 2006]



Fig. 11: Jack's Bay: the architecturalisation of memory. Five minute long exposure taken inside room-sized floorless camera obscura. [Ian Weir 2006]

The Hollingworth House: a bushfire responsive house on Point Henry. This house was not designed to be resilient to bushfire per se but to provide greater connectivity between the inhabitant and the multiplicities of conditions of their kwongan landscape. Physical proximity between the Hollingworth's and the kwongan heath is achieved through a variety of fire safety measures such as fire resistant glazing and shutters, a fire safety zone and the overall landscape design. Since Victoria's 'Black Saturday' tragedy the Hollingworth house (and its landscape) has achieved considerable attention in Australia as an example put forward (by the media) as a means of living sustainably with bushfire-prone landscapes. Rather than relying on once-in-a-lifetime measures (such as bunkers) the primary strategy here is to bring bushfire into the daily life of the inhabitant: the fire shutters, for example have to be used on a daily bases to control the sun. In doing so the two otherwise opposing goals of bushfire safety and biodiversity conservation are somewhat reconciled.



Fig. 12: Lightsite camera obscura sited in Content Too, the author's PhD study site.



Fig. 13: The Hollingworth House – Point Henry, WA (fire shutters down at dusk) [Photograph by Andrew Halsall 2008]



Fig. 14: The Hollingworth House – with the perforated fire shutters down at dusk. [Photograph by Andrew Halsall 2008]