BOOM: Mining, photography, landscape and the city

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For over twenty years Canadian photographer Edward Burtynsky has investigated what he calls the ‘manufactured landscapes’ of mines, quarries and oil fields that result from the commodification of the natural environment. The documentation of these ‘residual landscapes’ created as a by-product of mining has been accompanied by the recording of rail cuts, shipyards and pipelines, the industrial infrastructure that allows the movement of these extracted materials. Burtynsky also records the waste dumps, scrap yards and ship breakers that dismantle the detritus of the industrial world. Through this exploration, and the more recent and varied work on China, Burtynsky makes explicit the connections between industrialisation and urbanisation, the connection between the density of cities and the vast, resource-rich hinterlands that are required to fuel and build these metropolises. Burtynsky’s work refers to the photographic depiction of similar transformations of mid-nineteenth America’s western frontier as well as the post war suburbanisation of the same landscape. While much of the critical examination of Burtynsky’s work has centred on its environmental ambiguity, ¹ a visual assessment of the work suggests that Burtynsky maps and orders these landscapes rather than simply viewing through the photographic process. As part of the biannual photography festival FotoFreo 2008 Burtynsky was commissioned to photograph the industrial terrains being created in Western Australia’s interior as the result of the current mining boom.² Australian Minescapes provides a lens through which we might consider the landscape and cities of Western Australia and the interdependent relationship between these two very different constructed environments. Many of these are transitory landscapes, destined for future refinement and reorganisation. The wealth generated by the sale of these commodities has resulted in the transformation of Perth; ambitious urban infrastructure projects have redefined the length of the suburban metropolis as well as locating new cultural and sporting buildings in the centre of the city. These changes have recast the space of the city, shifting it from its previous pre-boom state.
The documentation of this complicated space of the city is problematic for conventional cartography. However, from Louis Daguerre’s ‘first’ fixed image of a Parisian boulevard, photography has proved itself adept at recording urban space and objects located within it. Photography’s ability to reproduce a convincing model of linear perspective allowed it to challenge other modes of urban spatial representation. However, combined with the medium’s documentary propensity for realism, photography has the unique ability to record a moment in time as well as space. Despite this predisposition towards the real it is also highly constitutive medium with the photographer required to compose and pictorialise.

**Connectivity**

Burtynsky’s photographs make visible the usually unseen connection between the sites of production and consumption. However it is through a lithograph, a medium that photography largely replaced, that we get the most explicit pictorial understanding of Burtynsky’s serial investigation of the relationship between theses different landscapes. An uncredited lithograph is the final plate of his most recent monograph *Quarries.* Entitled “Residence, Tenement Houses & Stone Quarries of Albert Garrett, No. 212 State Street, Auburn New York” it is a view of a double storey Victorian manor, surrounded by croquet lawn, barn, dove cote and vegetable garden, set in a pastoral landscape somewhere between town and country. Behind the house is a row of detached quarry worker’s tenements whose workplace is located in the mid-ground of the image. On a ridge behind the quarries are a number of similarly scaled manors, some with connections to an agricultural landscape. A detail in the right foreground shows an enlarged section of the quarry and its machinery. Inserted between the photographic captions and the artist’s biography there is no reference to this image in the artists’ statement, the introductory essay or the book’s production and image credits.

In its depiction of an industrial scene the lithograph combines a temporal and spatial complexity with technical detail. It is panoramic as well as telescopic in its depiction of the scope and detail of...
a specific industrial activity. The lithograph captures and compresses Burtynsky’s fascination with industrial processes and the resultant ‘manufactured’ landscapes. The image is a pictorial condensation of the interconnectivity between the sites and techniques of extraction, refinement and construction as well as the ‘alchemic’ transformations that the capital generated by these processes permits. 4 ‘Alchemic’ in the sense that as well as the tangible materials extracted from these quarries there are a series of other abstract, physical and spatial manifestations generated. The blue stone from the quarry produces the wealth of Garrett which in turn establishes the spatial relationship between his house and that of his workers, the physical form of his vegetable garden, the design of his croquet lawn. The lithograph fixes and makes explicit the directness of these relationships. While this lithograph shares some qualities with photography- its indexicality and temporality - it also underscores the boundaries of photographic representation, a surrender by Burtynsky to photography’s limitations. The lithograph is able to operated as an ‘idealised’ image while the photograph has to maintain its relationship, as complicated as it is, with the ‘real.’

In the broader context of Burtynsky’s work the lithograph draws together the subjects of his investigation of ‘manufactured’ landscapes. While the monograph focuses on Burtynsky’s quarry images, the lithograph recalls his documentation of settlements on the edges of these terrains 5 and the early commissioned photographs of the architecture of banks. 6 Burtynsky’s career can be read as a photographic unravelling of these early bank commissions, finding the sources of the building’s raw materials, the sites of their extraction and refinement as well as the ‘residual’ landscapes created by these processes. The lithograph, as the last image in the monograph also serves as a visual endnote to Burtynsky’s search for a space that is the corollary to the architecture of the city. Michael Mitchell suggests that Burtynsky’s 2006 Iberian quarries series concluded his fifteen year search for ‘his dream image of an architecture turned inside out and upside down …the inverted ziggurat that he had long imagined.’ 7

The images in Australian Minescapes record missing elements of Burtynsky’s photographic depiction of nodes on a globalised network of extraction, transformation and transportation. 8
iron ore, gold and nickel extracted from Western Australia’s interior has fuelled its own social, economic and physical transformation as well as contributing to the current industrial and growth of countries like China and India. The photographs draw attention to how we might consider the relationship in Western Australia between the sites of industrial production and other aspects of the built environment. The scale of his panoramic images and the landscape captured forces us to reconsider the connection between these places and their equivalent of Burtynsky’s ‘inverted ziggurat’ – the space of Western Australia’s capital Perth. This is a relationship that is perpetually linked and the degree and extent of the transformations wrought on the landscape finds an equivalent in the shifting space of the city. Again the ‘alchemic’ relationship between these two constructed environments is best depicted by similarly alchemic processes of the mechanical and chemical transformation of light into photographs.

Imaging Industrialisation

To understand Australian Minescapes and its implication for the consideration of landscapes and the city it is important to locate Burtynsky’s practice in a broader photographic context. Burtynsky’s work draws on two obliquely related and similarly influential ‘schools’ of American photography – a mid-nineteenth century commercial (landscape) photography as exemplified by the work of Carleton Watkins and the influential 1975 exhibition The New Topographics. Despite the technical and temporal separation of these ‘movements’ there are considerable overlaps between their photographic pursuits. They have a shared concern with landscape and an interest in compositional ‘neutrality’; one is concerned with a photographic transparency while the other sought the negation of an obvious photographic style.

The 1975 exhibition New Topographics: Photographs of a Man-altered Landscape, curated by William Jenkins at the International Museum of Photography, brought together the work of photographers such as Stephen Shore, Joe Deal, Bernd and Hilla Becher, and (perhaps more importantly for understanding of Burtynsky) the photographs of Robert Adam and Lewis Baltz. Jenkins begins the catalogue essay with statement that “there is little doubt that the problem at the
centre of this exhibition is one of style,’ one concerned with a ‘stylistic anonymity’ at the same time transcending ‘the simple making of an aesthetic point.’\textsuperscript{10} Jenkins’s defines the topographic qualities of these photographs as being ‘stripped of any artistic frills … conveying substantial amounts of visual information but eschewing entirely the aspects of beauty, emotion and opinion.’\textsuperscript{11} When describing the work of the Bechers he suggests that they are ‘content with observation … (which) is anthropological rather than critical, scientific rather than artistic.’\textsuperscript{12} He also returns to the semantic origins of ‘topographic’ as a ‘detailed and accurate description’ which Jenkins sees as photography’s primary and exemplary qualities.\textsuperscript{13} Jenkins obliquely suggests that the ‘style-less’ work of nineteenth century landscape photographer Timothy O’Sullivan might be the model that the exhibitors draw upon.\textsuperscript{14} Part of this scientific or anthropological approach to the photography is a serial rigour as if these were the controlled elements of a scientific experiment. This rigour is technical (light, depth of field, almost exclusory black and white silver gelatine prints), compositional (a consistency of viewpoint) and naming (matter of fact titling – \textit{IP4} and \textit{Mall off 31\textsuperscript{st} Street} to name two Baltz and Shore images.) The exhibition also expanded the subject matter of the ‘landscape’ tradition, closer to a built–scape, compromised landscapes, vernacular architecture and the empty \textit{terrain vague} of the American city.

Jenkins’s curatorial introduction is almost exclusively concerned with the discussion of the stylistic approach of the photographers and he is less explicit about the depiction of a man-altered landscape that the subtitle of the exhibition suggests as a commonality between the exhibitors and which was heralded critically at the time. Jonathan Green describes \textit{The New Topographics} as the moment that in the traditions of American frontier photography, instead of looking forward at a ground to be captured, survey and exploited by the camera, turned around and viewed what they had created in their wake; ‘the conflict between man and nature.’\textsuperscript{15} They rejected the sentimentality of Edward Weston and Ansel Adams and instead sought precedent in the ‘aestheticization of the American industrial form’ such as the painting of Charles Sheeler and the late work of Charles Demuth.\textsuperscript{16} While recognising the exploitation of the land, they also sought the ‘visual potential of a damaged landscape.’\textsuperscript{17} Baltz and Adams focused on the tract housing, the office park and the
trailer park as the latest manifestation of the edge of a western frontier. Baltz’s images of industrial parks in the commercial suburb have the detachment of minimalism, what Aaron Schumann describes as ‘meticulous observation and hypnotic repetition … (which) transform the mundane into a minimalist epic.’ Baltz’s work is closer to the everyday minimalism of Dan Graham’s *Houses for America* rather than the heroic silence of Donald Judd. These observational images are cool, clear, and decisive, emptied of the protagonists who formed this landscape. Adams found in this ‘missed used freedom (that had) an unexpected glory (with) a light as clean as that recorded by O’Sullivan.’ This was the modern embodiment of America’s Manifest Destiny, a plentiful Eden transformed in the suburban pursuit of happiness. The photographs of *The New Topographics* locate suburbanisation of the natural landscape as the end game of O’Sullivan and Watkins imaging of nineteenth exploration.

**A 19th Century Topographic Window**

Burtynsky’s work has been located in a similar mid-nineteenth century context. In *Quarries* Michael Mitchell suggests Burtynsky’s technique refers to Watkins and O’Sullivan and it is easy to see why these photographers might be considered ‘topographic.’ Watkins’s photography is persuasive in the picturesque construction and transformation (and preservation) of Yosemite in a series of folios that lead to the creation of its status as a national park. Watkins was equally successful in documenting a landscape that promoted the mining of Las Mariposas, the mineral-rich estate of wealthy US senator John C. Frémont. Alan Trachtenberg suggests that one of the aims of survey photography, like O’Sullivan’s images taken during the Geological Exploration of the Fortieth Parallel, was to ‘discover what lay beneath the surface (and) to describe the surface – to analyse and to map.’

Both Burtynsky’s technical and compositional devices point to his debt to this landscape photography. Burtynsky’s depth of field, the ‘organisation of elements within the frame’ results in what Mitchell calls ‘a serene, classical technique that everyone understands. It is as if the photographer wished to make as transparent a window as possible, so that the viewer can be
taken straight into the scene and immersed in its unsettling implications." Burtynsky is also attentive to the quality of ‘aliveness’ in crisp detail images produced by Watkins. Douglas Nickel describes this quality as allowing the photographs to function like ‘mobile windows’ which allow a ‘pictorial transparency,’ a characteristic trope in nineteenth-century photography criticism. In looking at these large scale black and white images the viewer replaced the photographer in the ‘photograph’s mechanical reproduction of reality (that was) analogous to direct visual encounter.’ Nickels suggests that instead of the camera merely capturing vision, landscape photographers had to ‘amplify and manipulate the picture experience’ in order to counter the visual distortion that was inherent in photography’s mechanistic and ‘selective, abstract investigation of the visible world.’ The photographer’s skill is in subverting these aspects of the camera. Nickel’s discussion of Watkins reveals the tension between the constitutive and the passive in Burtynsky’s practice. This tension exists between the appropriation of the trope of pictorial transparency which sits uncomfortably with Burtynsky professed desire for his photography to be beyond vision, capturing and creating images that are impossible to see. For Burtynsky the impossibility of photography replicating vision is both temporal and constitutive. Despite the clarity of his images with their precise recording of objects in light, the temporal specificity of the moment cannot be reproduced. The highly detailed photographic negative created by a large format camera allows for an overwhelming level of information which instead of being representations of vision should be recognised as a composite of vision. At the most basic level of pictorial detail the photographs are an amalgamation of all the instances of surveying a scene. Contemporary responses to Watkins’s images provoked similar response; ‘Each pebble on the shore of the little lake … may be counted as on the shore in nature herself.’ Nickel describes this aspect of Watkins’s work as an ‘experiential affair’ rather than ‘intellectual.’ The bias towards the experiential is further strengthened when the political and environmental ambiguity of Burtynsky’s work is considered.

The Prospect
Burtynsky’s serial practice usually maintains the discipline of composition that this methodology entails. However, there is a range of compositional viewpoints in *Australian Minescapes*. He
grounds himself within or at the bottom of open cut mines, surrounded by their rough vertical faces. Burtynsky also utilises two different aerial points of view. He removes himself from the landscape with a high horizon line so that the worked surface and the depth of the terrain are able to be comprehended. A third aerial point of view eliminates the horizon altogether, and observes the land from a higher position that almost flattens the image to resemble that generated by satellite or aerial surveillance. Instead of these different viewpoints simply allowing different pictorial perspectives on the landscapes and remaining as purely visual phenomenon, the difference between these viewpoints is significant enough to justify them being consider as conflicting modes of representation.

Burtynsky exploits the first of these elevated points of view to allow for the removal of what Mitchell calls the ‘boring foregrounds that … add nothing to the sublimity’ of the images. This vantage point to what Mitchell suggests is Burtynsky’s utilisation of a ‘very traditional pictorial means.’ Burtynsky has expressed his own admiration for this approach; ‘That hovering - looking out across the great expanse - is something I have found to be a rich viewpoint. It turns the space into what I believe is a mythic space, an archetypal sense of the landscape.’ Instead of being representative of the archetypal or mythic space Burtynsky is actually invoking another viewpoint - the prospect. It hovers in mid air between the aerial photograph and the landscape view, oblique to the terrain it is depicting. It provides an order that would otherwise be illegible to the grounded eye with resorting to the pattern making generated by the aerial or satellite surveillance. John Macarthur suggests that the difference between the grounded landscape views and the prospect were not simply different kinds of views that required different kinds of representation; for nineteenth century picturesque theorists such as Humphrey Repton and Uvedale Price, a prospect was a kind of view that could not be a picture. Geographer Denis Cosgrove argues that the prospect was first used to ‘denote a view outward, a looking forward in time as well as space’ and that by the end of the sixteenth century carried the ‘sense of an extensive or commanding sight or view, a view of the landscape as affected by one’s position.’ The inference is that ‘one’s position’ is spatial, social and economic. Cosgrove’s analysis of the prospect suggests an economic imperative and cites its importance in
Tudor England where, in combination with the ‘malicious craft’ of surveying, it reflected a command over developed and commercially run farming estates of the Tudor enclosers and the new landowners of monastic estates.\textsuperscript{34} Similarly Macarthur distinguishes between the prospect and the landscape view as the difference between the cadastral and the pictorial. Integral to Repton and Price’s discussion of the difference between the landscape and the prospect is the importance of the foreground. Price proposes a mental experiment where one could take a foreground from an Old Master and apply it to a ‘mere prospect’ to convert it into ‘landscape.’\textsuperscript{35} This is the very foreground that Mitchell in his discussion of Burtysky’s work dismisses as ‘boring … that … add nothing to the sublimity’ of the images.\textsuperscript{36} Instead of returning to the sublime these images are actually more cartographic, more topographic, more interested in a mapping of space than the construction of a picturesque landscape view. The emergence of the verb ‘to prospect’ in the nineteenth century referred to the speculative activities of gold mining and stock market.\textsuperscript{37}

Instead of mapping the land as O’Sullivan might have to aid its future exploitation Burtynsky’s images construct a cartographic space of a residual, rather than potential, landscape out of the terrain of mining. Rather than seeking to commoditise the landscape as Macarthur suggests is the role of the prospect, a role that has largely been completed by the very literal surveying of mining companies, Burtynsky instead applies the prospect as an ordering of space so that it might be defined, limited and visually understood. In the case of Burtynsky’s prospect it is photographically measuring this landscape as a corollary to the space of the city. The panoramic depth of the prospect establishes the expanse of territory required for the city’s footprint. Placed in the context of \textit{The New Topographics} suburbanisation of the ‘natural,’ Burtynsky’s prospect is instead interested in the industrialisation of the ‘natural.’ This is established visually in his publications by locating these sites of extraction in their broader context; the Carrara quarries are first seen in the Apuan Alps,\textsuperscript{38} the agrarian landscape of Alicante foreground the marble quarries of Spain.\textsuperscript{39}
Photographic Constituency

Counter to the supposed transparency and neutrality is Burtynsky’s own exploitation of this constitutive visuality can be seen in a series of Lake Lefroy in *Australian Minescapes*. It is the application of vision to these places and its recording, passively or otherwise by the camera, that transforms these terrains into ‘landscapes’. To this end Burtynsky’s use of the term manufactured landscape is a tautology – all landscapes are created. Obliquely shot from an aircraft *Silver Lake #6, #7, #8* show a mine site on Lake Lefroy divided in sections by a winding dirt road. Despite the absence of people and presence of the obvious marks of their activity – a blast grid, the open cut mines, water tank, tyre and tailing dump – there is almost corporeal quality to the image; a system of arteries (roads) and organs (facilities) that although removed from one another, coordinate to allow the mine the operate. A closer inspection reveals that the images are of the same mine which Burtynsky has circled and re-photographed. The same scene is reconfigured by the vantage point, it is the gaze of the camera that creates and organises the scenes. The camera shifts and assigns emphasis in each composition to different pictorial elements.

A second series of images further promotes this view of the aesthetisation of these ‘manufactured landscapes.’ The grouping of three photographs, *Otter Juan/Coronet Mine #1, Tailings #1*, and *Dampier Salt Ponds* show the transformative potential of the photographic process. Photographed from the air this open cut mine and the two jetties in the salt lake, are removed from their industrial context and instead framed for their formal qualities, which results in these industrial sites being reconstituted as pieces of land art. The technological similarities between aspects of this form of art practice and mining are strong. For instance, James Turrell has appropriated the mechanisms of mining and mine site rehabilitation in his ongoing Roden Crater Project which utilizes aerial prospecting, tunneling, excavation and native plant re-vegetation in the modification and transformation of an extinct volcano in the Arizona desert into a series of viewing chambers. Instead of the active intervention that Turrell has made in the landscape it is the relatively passive process of Burtynsky’s photography (and the deft curatorial organisation of the exhibition) that transforms these pieces of industrial infrastructure into art.
Mapping Space and Form

In this mapping Burtynsky’s images oscillate between an interest in surface and form. He is interested in the precise markings on the hard surface of quarries as well as the space of ‘inverted ziggurat’ these surfaces frame. He captures the sculptural figures created by ship breaking and building as well as the patinaed surface of their hulls. The new topographies created by piles of discarded tyres as well as the colour fields produced by densified oil tanks are photographed for his Urban Mines series. Inherent in this search for form is its inverse; a delineation of space. For instance, in Burtynsky’s most striking Carrara quarry views, the precise marking of the floor and walls of the quarry allow one to imagine a three dimensional Cartesian grid that extends to and beyond the viewer as if to suggest the infinite extension of this technologically determined matrix. New rectangular caves are created in the almost perfectly vertical cliff of white marble in a landscape almost wholly determined by these linear co-ordinates. The Carrara quarries photographs illustrate a natural environment completely refigured for the purpose of its exploitation. Both interests in surface and form (and hence space) can be considered as construction of a photographic trace. With regard to surface this manifests itself as a technology palimpsest, written on the face of the quarries as an inverted industrial history that runs counter to its geological strata. Form, on the other hand, traces what was once there; a documentation of absence. These photographic traces can be seen in images of Mt Whaleback and Kalgoorlie’s Super Pit. Mt Whaleback #1 initially presents the viewer with a new topography, a series of stepped valleys and mountains with their geological surface strip away so its stratum is visible and exploitable. This is the record of what is absent, what Burtynsky called a search for the ‘phantom mountain.’ Instead of the open cut mine being considered as a loose form of Burtynsky’s search for the inverted ziggurat, here we have a silhouette with no figure, the virtual reflection of the absent Mount Whaleback.

In Super Pit #1 Burtynsky’s camera captures what is revealed by open cut mining. In the tight end of the three and half kilometre long open cut mine old tunnels and shafts pock mark the surface of the rough but consistent form of ramps, walls, roads and berms. These physical remains suggest
the spatial trace of the shafts, drives and stopes of underground mining that once crisscrossed the now empty space of the Pit. Placed alongside is a photograph of piles of silver grey timber and rusted steel. A closer inspection of Super Pit #5 reveals recognisable elements like rail track profiles, wheels and the grain and knots of timber posts. This was once the structure that supported the tunnels and shafts of underground mine. Removed from the Pit as the open cut mining disturbs this underground infrastructure the timber posts are sorted in piles, the only job done by hand in the modern process of open cut mining. This industrial topography is best described by what John Brinckerhoff Jackson called a ‘vernacular’ or ‘synthetic landscape’ whose form is produced by ‘spatial reorganization.’ Kathryn Morse in her ecological critique of the history of gold mining in North America describes it as a ‘process of disassembly.’ An inevitable corollary to this ‘process of disassembly’ is what could be thought of as a process of ‘re-assembly’ which reorganizes these residual materials into another very deliberate structure. In this case the ‘synthetic landscape’ of mining is determined by the gauge of the machine, the properties of a material and the processes to which it is exposed. In this case vast quantities of timber were cut by the woodlines, temporary railways that projected out in the eucalypt forests that surrounded Kalgoorlie. The ‘natural’ order of forest was reconfigured, transported underground and constructed into a new engineered order of post and beam structure. This facilitated a particular kind of industrial space and practice which another industrial practice a century later has removed. Relocated to the surface and reorganised Burtynsky photographs these mounds of timber with the now regenerated forest as background. The landscapes that Burtynsky depicted in *Australian Minescapes* are terrains that are determined by process. Kalgoorlie’s Golden Mile (and its most recent incarnation as the Super Pit) has been continuously mined for more than a hundred years. This long history has produced a terrain of economic agglomeration and consolidation; one that is literally being continuously refined. This is a landscape whose final form has never been considered. Instead it is a by-product, one as the result of a, complicated industrial process whose sole purpose is the extraction of a very specific material. In this case the scale of the by-product is a landscape that dwarfs the desired object that is produced.
Capital Cities

Garrett’s lithograph suggests a direct and tangible relationship between landscapes of a ‘production-consumption dichotomy’ that Francis Choay suggests is typical of nineteenth century new towns. This lithographic directness holds true for nineteenth century Kalgoorlie. The changes in the industrial landscape of the Golden Mile since the discovery of alluvial gold in 1893 have direct reverberations and parallels in the architecture that occupies the city’s mercantile grid. The Exchange Hotel illustrates an elaboration of surface and shift in materiality as it moves from tin shed to a simple masonry box to a turreted elaborate brick and iron structure between 1895 and 1900. The industrial and economic shifts from alluvial to underground, from prospectors to miners, from surface to depth, from the contingent to the permanent, from the speculative to the sustainable are registered in and on the landscape and almost literally in the architectural form and remarkably in little under five years.

While Perth is undergoing another construction boom financed by its mineral wealth, the impact of these transformations has yet to be fully realized and is difficult to gauge in its entirety. However if we look back at the cityscapes that previous booms have created we can see evidence of how these transformations were wrought upon the city. As a colonial city the relationship between urban form and capital is clearly discernable. Imbedded in Perth’s existing suburban plan is the trace of the city’s first cadastral order. In the free colony land was distributed in proportion to the machinery, live stock and labor that settlers invested. The need for equal access to the Swan River as the main transport route resulted in land grants composed of a series of long and thin lots that ran perpendicular to the river. Margaret Pitt Morrison’s superimposition of the these 1837 land grants on a plan of suburban Perth makes clear that the grid of the riverside suburbs of Belmont, Bayswater and Maylands maintains the settlement’s initial ‘capital’ order. While this is very clear and legible case of how an urban form might result from what was essentially an agrarian capital division, this kind of cartographic palimpsest as a means for understanding the development of Perth is challenged by subsequent changes to the city’s built fabric.
The relationship between capital generated by the industrial landscapes of the State’s interior and the space of the city is less fixed than the clear relationship between the initial capital investment and the suburbs of Perth. While maps of the city across its history present a recognisable urban form, its grid and landmarks familiar, these cities no longer exist. The transformation brought about by these rapid accelerations in economic activity, counter to the usual linear development of cities is so significant and the change in the physical occupation of John Septimus Roes’ colonial grid so complete that the mapped city after these booms actually represent different places. While these developments largely remain within the confines of the grid, cartographic maps are unable to differentiate between the oppositional relationship of figure and ground within the flat space of that medium. The process of demolition and reconstruction that accompanied these booms changes the city so that only fragmentary traces of its previous architectural and urban form still exist. Instead these superseded cities, whose form was unable to contain the aspirations or the economic activities of its citizens, are found as photographic cities whose memory is collected and held within the archive. The few buildings that remain from each phase of the city become significant as visual markers that allow the disorientated viewer to locate themselves in the altered streetscape. From an archive such as the Battye Library’s photographic collection and even the small sample that has been digitised and available online, it is reasonably easy to construct this ‘photographic palimpsest’ of the city. Photographers returned to the same prominent viewpoints such as the Town Hall clock tower or the high end of St Georges Terrace to record the growth of the city. The compact nature of the city of Perth’s central business district meant that it was able to be captured with even the most rudimentary of photographic equipment.

Like Burtynsky’s photographs of the Super Pit or Mount Whaleback these images of Perth and nineteenth century Kalgoorlie are moments on a trajectory of change and refinement. The final form of the city is not found in the complex combination of economics, metallurgy and physics but instead is determined by urban renewal, design-build packages, plot ratio bonuses and land speculation. Like Burtynsky’s photographs, we must also accept these images are actively constructed; in this case usually by ‘booster’ commercial photographers who sort to emphasise
the commercial success or potential of the city. While the ‘booster’ images of Perth record the space of the city, there is little physical evidence of the palimpsest that occurs in the mined landscapes. These archives store the constituent parts of photographic maps yet to be made. These are maps in topographical sense but ones that recognize the impossibility of transparency and accepted the inherent biases in commercial photography.

Instead of the binary and oppositional relationship between city and landscape that is often established in the imaging of Australia, Burtynsky’s photographs suggest the connectivity between these two constructed environments. This is a relationship that is perpetually linked through an elastic and not always consistent economic, cultural and social relativity. While part of Burtynsky’s endeavour is the revealing of industrial landscapes his work extends past their mere visualisation. Photography is able to map these spaces and terrains in a manner that augments and in some cases supersedes their cartographic representations. These photographic mappings, despite their spatial clarity, have inherent within them the tension between photography’s ability for documentary realism and constitutive art. An acknowledgment of the tension between the medium’s contradictory potentials and its ability to accommodate such divergence, allows for the construction of a complex understanding and reconsideration of the spaces of an urban/landscape continuum.

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1 Burtynsky’s environmental ambiguity is an often examined aspect of his work. See: Murray Whyte, ‘Beautiful Mines’, ARTnews, February 2004, p.70-74

This is confirmed by Burtynsky’s earliest artist statements. For instance: ‘This body of work stands as a marker defining a point that we have reached. Its intention is not to judge whether this is good or bad,’ Edward Burtynsky ‘Breaking Ground, 1984-1989’ (artist’s statement) in Tainted Prospects: Photographers and the Compromised Environment (cat), Castellani Art Museum, Niagara University, June 23- September 22, 1991, p.16

Recently Burtynsky has been less ambiguous: ‘During the course of my work, I have become anxiously aware of the consequences of our actions are having upon the world. I feel an urgency to make people aware of important things that are at stake’ Edward Burtynsky, ‘Artist’s Statement’, Burtynsky China, Steidl, Gottingen, Germany, 2005, p.7

2 Australian Minescapes, FotoFreo: The City of Fremantle Festival of Photography, Western Australian Maritime Museum, April 5 – June 4, 2008. The exhibition was commissioned by FotoFreo 2008 and supported by BHP Billiton and the FotoFreo Angels. The exhibition consisted of images of three sites in Western Australia; Lake Lefroy and Kalgoorlie’s Super Pit in the eastern Goldfields as well as Mount Whaleback in the Pilbara. These images were accompanied by four photographs from the ShipBreakers series (2000/1) which depicts the manual dismantling of single hulled tankers on the tidal flats of Chittagong in Bangladesh. The exhibition also includes projections from Burtynsky’s back catalogue that start with the early Rail Cuts (1985) to his most recent series on China (2004/5) accompanied by Philip Glass’s Low Symphony (1993). For a selection of the Australian Minescapes images see http://www.metiviergallery.com/artist_collection.php?artist=burtynsky&collection=australia
accessed 15th September 2008


4 ‘From the seventh century, the spice trade was dominated by the Arabs, eventually in concert with the Venetian Republic. The palazzos on the Grand Canal are the enduring artifacts of financial alchemy, Oriental pepper transmuted in to orientalised marble’. Floating Medicine Chests (Book Review, Matters of Exchange: Commerce, Medicine and Science in the Dutch Golden Age, Harold Cook, Yale University Press, 2007), Steven Shapin, London Review of Books, Volume 30, Number 3, 7th February 2008, p.30


The idea of Burtynsky’s work as illustrative of the global movement of commodities has been suggested by other reviews. See for example Marnin Young, ‘Manufactured Landscapes: The Photographs of Edward Burtynsky’ (Book Review), Afterimage, May/June 2006, Volume 30, Number 6, p.9

Others have located Burtynsky’s work in relation to both Watkins and The New Topographics. Less has been made of the similarity between these two bodies of work.


Jenkins, New Topographies, unpaginated.

Jenkins, New Topographies, unpaginated

Jenkins, New Topographies, unpaginated


Green, American Photography, p.166

Green, American Photography, p.167

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Edward Burtynsky, Artist floor talk, Western Australian Maritime Museum, Tuesday, 8th April 2008


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accessed 16th September 2008

As suggested by Professor Richard Read in conversation. Friday 2nd May, 2008

Edward Burtynsky, Artist floor talk, Western Australian Maritime Museum, Tuesday, 8th April 2008.

Although Jackson is predominately concerned with rural landscapes it is not unreasonable to extend this understanding to other industries such as mining. John Brinckerhoff Jackson, *Discovering the Vernacular Landscape*, Yale University Press, New Haven and London, 1984, p.8


*A CAT 793 haul truck carries 225 tonnes of rock. With an average grade of just over 2 grams per tonne, the truck carries between 450 and 500 grams of gold. If it was all in one lump it would be about the size of a golf ball. Unfortunately not every truck has gold in it. Only about 1 truck in 6 carries ore, the rest carry waste or low grade material*’ KCGM Website, [http://www1.superpit.com.au/pages/faqs.asp](http://www1.superpit.com.au/pages/faqs.asp), accessed 30th May 2007.


Margaret Pitt Morrison, ‘Settlement and Development: The Historical Context’ in Margaret Pitt Morrison & John White (eds) *Western Towns and Buildings*, The University of Western Australia Press, Nedlands, 1979, Fig 1.1, p. 5