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An Appreciation and Analysis of  
*Edward Burtynsky – Manufactured  
Landscapes*: a Film by Jennifer Baichwal

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A factory that makes 20 million irons a year. A dam which razed 13 cities to the ground and displaced over a million people. A city where skyscrapers stretch back as far as the eye can see. These are the subjects for renowned photographer Edward Burtynsky's camera. *Manufactured Landscapes* travels with him through China, witnessing that country's massive industrial revolution and visiting sites never before seen in the West. The film, like his stunning and disturbing photographs, meditates on human impact on the planet without trying to reach simplistic judgments or resolutions. In the process, it shifts our consciousness about the world and the way we live in it. (Mercury Films, n.d.)

The above is a synopsis of the film *Edward Burtynsky: Manufactured Landscapes*, directed by Jennifer Baichwal. While I can relate to the statements made in this synopsis, my experience and understanding of this 90-minute journey is much more intense and complex. In this essay, I will attempt to dissect and examine my experience and understanding of this

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film using Karen Raney's five aspects of visual literacy: 1) *perceptual sensitivity*, 2) *cultural habit*, 3) *critical knowledge*, 4) *aesthetic openness*, and 5) *visual eloquence* (Raney, 1999, pp. 45-46).

### Perceptual Sensitivity

Perceptual sensitivity can be defined as an innate and learned visual adeptness (Mullen, 2008, p. 2), a basic level of visual reception (Stankiewicz, 2003, p. 318).

As regards representation, perceptual sensitivity would include things like the ability to determine what two-dimensional images depict, to see figure and background in a mesh of marks, to distinguish between surface textures or shades of color, or to perceive a continuous moving image from thousands of separate film frames. (Raney, 1999, p. 45)

In *Manufactured Landscapes*, perceptual sensitivity is experienced throughout, at a basic level of visual reception. Alternating moving and still images are successively presented, which need to be deciphered in terms of what is being represented, as a whole and in detail. This is a very necessary first step to experience this film, at a basic sensory level, since being able to make out what exactly is represented in the images is a prerequisite to further experience and understand the film in terms of its content and connotations.

So what is being represented in the still and moving images of this film? To summarize, *Manufactured Landscapes* captures the images of an increasingly industrialized China: its factories, transformed landscapes, workers, products, and wastes, through the lenses of Burtynsky and Baichwal. At intervals, Burtynsky's body of photographic work and archival footages from the last 25 years, addressing the same subject of industrialized landscapes, are also shown.

Coincidentally, perceptual sensitivity is similar to the stage of description in the critiquing process (Payne, n.d.). In this process, the viewer describes in a detailed and objective manner what concrete things are seen. When applied to *Manu-*

*factured Landscapes*, the description includes scenes as a whole, such as factories with workers, quarries, mines, recycling facilities, and bundles and piles of recycled materials, as well as scenes in detail, such as the many small parts of recycled materials that make up the larger picture, e.g. *Ferrous Bushling No. 17* (<http://edwardburtynsky.com/>, Works, Urban Mines, Metal Recycling).

While in perceptual sensitivity, the experience is mostly sensory and the understanding mostly descriptive, there are times when an emotional and mental experience is triggered, and an understanding that is interpretative is inevitable. One such example can be found at the beginning of the film, when the camera steadily tracks at a walking pace alongside the aisles of a factory, showing workers diligently at work, in real time, with no music or narration, for more than five minutes. During this time, there is a continuous level of visual reception, to such a degree that the reception becomes over-saturated, and the stomach starts churning, that the initially sensory experience results in an emotional state of boredom and frustration. Subsequently, a mental conclusion can be drawn, that this particular sequence can be interpreted as the monotony and rigidity imposed on workers' lives by industrialization.

This type of emotional and mental experience is also noticeable when one of the shipbreaking images of Chittagong, Bangladesh, is presented: *Shipbreaking No. 30* (<http://edwardburtynsky.com/>, Works, Ships, Shipbreaking). At first, a big ship in the mud can be seen; but when the camera zooms in, three small human figures can be found in the foreground. Such a discovery leads to an emotional jerk, when the smallness of humans is felt in the otherwise immense scale of existence. With this mental realization, an interpretative understanding of the image, that is, the insignificance of humankind in relationship to nature, immediately follows. Such an understanding is perhaps at a certain level in accordance with Gestalt psychology, when the viewer's eye automatically seeks a meaningful whole, unity, and understanding of the visual form through cumulative perception.

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### Cultural Habit

Raney defines cultural habit as a “predisposition to see in certain ways which varies according to what we have been exposed to” (1999, p. 45). In other words, this is the kind of visual literacy that the viewer has culturally accumulated, that is built on a certain repertoire of visual knowledge, previously shaped by established conventions.

In my experience of *Manufactured Landscapes*, my cultural habit as a graphic designer and educator comes into play. That is to say, my experience in this realm is affected by the cultural conventions already established in the discipline of graphic design, such as the use of design elements, principles, and strategies. From this perspective, my understanding of the film consists of the analysis of visual compositions. For example, the use of design elements such as lines, shapes, colours, textures, and space can be appreciated in every frame. Likewise, the design principles of emphasis, hierarchy, balance, and unity with variety are sought out. It is also interesting that quite a lot of the images are composed using one-point perspective, e.g. *Manufacturing #17* and *Manufacturing #18* (<http://edwardburtynsky.com/>, Works, China, Manufacturing) and the rule of thirds, e.g. *Bao Steel #2*, *Bao Steel #7*, *Bao Steel #8* (<http://edwardburtynsky.com/>, Works, China, Coal & Steel).

Culturally, I am also accustomed to the convention that black and white images or footages are associated with history, so that when these images or footages are shown, mentally they are interpreted as historical facts, warnings that they are things that have been done and cannot be reversed, thus evoking emotions of nostalgia and concern.

At another level, as a citizen of the digital age and having been exposed to fast-paced, action-packed movies such as the *Bourne Ultimatum*, there is a bit of difficulty and unease when experiencing the beginning of the movie, when the camera tracks alongside the aisles of the factory, in real time, for over five minutes, all the way to the title credits. As John O'Donohue critiques digital technologies in his book of essays, *Beauty: The Invisible Embrace*,

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The self has become anxious for what the next instant might bring...The mechanics of electronic imaging reverses the incarnation of real encounter. But a great journey needs plenty of time. It should not be rushed; if it is, your life becomes a kind of abstract package tour devoid of beauty and meaning. (Mullen, 2008, pp. 1-2)

Surely, Baichwal did O'Donohue justice by providing the viewer with an experience that is the incarnation of real encounter.

### Critical Knowledge

Critical knowledge can be defined as "the awareness of things that mediate representation" (Mullen, 2008, p. 2), that pertain to their histories and structures (Stankiewicz, 2003, p. 318), or as Raney explains,

This would include knowledge of the ways that visual images have been used throughout history, awareness of different kinds of intentionality, of how an image, object or event is put together to offer a particular experience or to set up a certain kind of spectator. (1999, p. 45)

When looking at *Manufactured Landscapes* in this aspect of visual literacy, my experience is mostly cognitive and intellectual, leading to an understanding that is interpretative, in terms of its intent, connotations, and context. This is an aspect that sometimes requires research, or in Raney's terms, "informed judgement" (1999, p. 45).

Similar images that were done in history came to mind. For example, some of Burtynsky's landscapes evoke a sense of mysticism and starkness that is not dissimilar to those of the Group of Seven. *Inco-Abandoned Mine Shaft No. 13* (<http://edwardburtynsky.com/>, Works, Mines), for example, bears striking similarities with *Waterfall, Algoma*, by Lawren Harris (<http://www.artcountrycanada.com/group-of-seven-harris.htm>): the rugged, clear-cut, angular facets; the accentuated, linear, crystallized accents; the stark, massive rock formations, contrasted with smooth, glassy reflections in an emerald pool. *Uranium Tailings No. 12* (<http://edwardburtynsky.com/>, Works, Tailings), with its sparse verticality of barren, stripped

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tree-forms, bears exaggerated reminiscences of the lonely, wilting silhouettes found in such classics as *Beaver Swamp*, *Algoma*, and *Above Lake Superior*, by Lawren Harris (<http://www.artcountrycanada.com/group-of-seven-harris.htm>), and *Tamarack Swamp* by Tom Thomson (<http://www.artcountrycanada.com/group-of-seven-thomson.htm>).

On the other hand, the real-time, tracking shot in the beginning of the film is not dissimilar to Michael Snow's *Wavelength*: a 45-minute experiential film, that is a continuous zoom from its widest field, that is, from one end of an apartment, changing the focus slowly, to its smallest and final field, that is, the photograph of the sea on the wall. As explained in Snow's statement for the Experimental Film Festival of Knokke-le-Zoute in Belgium,

I was thinking of, planning for a time monument in which the beauty and sadness of equivalence would be celebrated, thinking of trying to make a definitive statement of pure Film space and time, a balancing of 'illusion' and 'fact', all about seeing. (Monk, 1994, p. 322)

As the critic Amos Vogel states, "Wavelength ranks among those films which force viewers, regardless of how they react, to carefully consider the essence of the medium and, just as unavoidably, reality" (Gregor, 1983). By the same token, Baichwal forces the viewer to experience and consider the reality that is a routine in industrialized China. These similarities help me situate Burtynsky's work in a Canadian art historical context.

Another important element of the film is its music, composed by Dan Driscoll. Sometimes fluid, sometimes urgent, but always reverberating and sparing, it reminds me of the minimalist music by such composers as Michael Nyman, Philip Glass, and Steve Reich. Such music sets up an atmospheric structure that is conducive to an objective, yet potentially emotional experience.

The narration of the film by Burtynsky himself plays a major part in building the critical knowledge surrounding the film. By verbally stating facts and statistics (e.g. 50% of the world's

computers end up in China to be recycled, the Three Gorges Dam is 600 kilometres long and takes 15 days to fill), and Burtynsky's own views as an artist (e.g. "what we're doing is creating problems that run deep...it's not a simple right or wrong, it needs a whole new way of thinking."), I am more able to make an informed judgement as a spectator.

Lastly, the film is also situated in an environmentalist context. Having won the Al Gore Reel Current Award, it is ranked with such films as *An Inconvenient Truth* and *Rivers and Tides*, for its contributions to a global environmental consciousness.

### Aesthetic Openness

Aesthetic openness is described as the experience of the immediate or unmediated experience of meaning (Mullen, 2008, p. 2). In this realm, the viewer may experience the Sublime or a powerful and overwhelming impact that is immediate and aesthetic.

In *Manufactured Landscapes*, there are moments of this awe-inspiring experience, which is at the same time sensory, emotional, and psychological. Burtynsky's images are shot in such an overwhelmingly large scale and in such visible detail that an overwhelming impact is inevitably felt. The sheer size and environmental impact of the Three Gorges Dam, for example, are arresting and disturbing, as scenes of what resemble bombed out landscapes, with displaced residents taking their own cities apart, are shown in detail, e.g. *Feng Jie #3* (<http://edwardburtynsky.com/>, Works, China, Three Gorges). I find it natural to be aesthetically touched during this film, also because Burtynsky's works are so formally composed and with such an awe-inspiring atmosphere of stillness and mysticism.

It is interesting that Raney points out that aesthetic openness "makes way for the illusion that our frames of reference are gone and that meaning is being directly grasped" (1999, p. 46). In other words, the "real" issues (environmental devastation) behind the images are temporarily forgotten and are masked by a carefully constructed sense of aesthetics. Raney

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also states that “critical knowledge can extend aesthetic openness, or it can hamper it” (p. 46). This is true in my experience of this film. For example, my knowledge of the works of the Group of Seven and Michael Snow extends my direct aesthetic experience of this film, while my knowledge of the dire facts of our environment hampers and pollutes my otherwise delightful, aesthetically pleasant experience.

### Visual Eloquence

Visual eloquence, in my opinion, is the most important aspect of visual literacy, since it educates the viewer of the creative, art-making process. In visual eloquence, all the previous four aspects of visual literacy are integrated to make a work of art (Raney, 1999, p. 46). In this sense, visual eloquence is a predominantly mental and creative experience, leading to the analysis, interpretation, and critique of a work.

Various techniques are employed in putting the film *Manufactured Landscapes* together. Firstly, still images of Burtynsky's work are inserted in the format of a slideshow throughout, that is, still images alternating with moving images. The film being a documentary of Burtynsky's art-making process in China, it is logical to show the viewer the end products, as well as to show some of his previous work, so as to convey a sense of continuum, which is Burtynsky's journey of exploration. The still images themselves greatly enhance the aesthetic experience of the moving images, which Baichwal consistently attempts to emulate Burtynsky's work in terms of framing and composition.

The relationship between the process of art-making and its end products is further brought out by the technique of transitioning between moving images and still images. For example, a moving image may transition to a still image of the exact image, which, when zoomed out, becomes a real photograph on the wall of a gallery, being looked at by a museum-goer. This technique serves to bridge different stories, different locales, and different peoples, enhancing the theme of global connectedness, which recurs in the film.

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Secondly, black and white archival footages are inserted throughout, to differentiate a current experience, which is the journey when *Manufactured Landscapes* was filmed, from past experiences, which were shot in Burtynsky's previous trips. These include the footages of "Zhejiang and Fujiang Provinces in 2004" and "Chittagong Shipbreaking Beach in Bangladesh in 2001". Presenting these footages in black and white may serve two purposes: firstly, it may demonstrate creative integrity by making it clear to the viewer which parts of the film are from archival footages and what is not; secondly, by transitioning and alternating between current, colour moving images and archival, black and white moving images, it may remind the viewer that what happened in the past is irreversible history, but what is happening now can still be changed. Therefore, this technique may be interpreted as symbolic.

Thirdly, in terms of cinematography, Baichwal shows our changing relationship with nature effectively, by emulating Burtynsky's use of proportions in his work. For example, elements of raw nature, such as the sky, consistently take up minimal space in the compositions, e.g. *Urban Renewal #5* (<http://edwardburtynsky.com/>, Works, China, Urban Renewal). A couple of times, Baichwal moves the camera quickly to capture a flying bird; this gesture is almost symbolic of an attempt to hold fast to what is left of nature, that it is such an unusual sighting that it must be kept on film and be cherished forever.

Commonly used techniques in cinematography used in this film include panning, tilting, tracking, zooming in and zooming out. These techniques are used to emulate Burtynsky's creative process, such as framing, or to guide the viewer in a viewing experience that is intended by Burtynsky. For example, one of the shipbreaking images in Bangladesh, *Shipbreaking No. 30* (<http://edwardburtynsky.com/>, Works, Ships, Shipbreaking) is first shown as a whole and then zoomed in to show a detail, which is an otherwise negligible tiny human figure.

Fourthly, another technique used in this film may be what has been referred to as *transmediation*, which is a “cognitive activity used to make sense of information presented to reader[s]/viewers through the multiple sign systems encountered in the environment...moving between images, text, sound, and voice or experiencing any of these media simultaneously is a form of transmediation” (Black, Davidson, Mullen, 2007, p. 28).

Fifthly, the storyboarding of the film is such that, instead of presenting one cycle of the four stages of story: introduction, conflict, climax, and resolution, for the whole film, the film is made up of multiple cycles of stories. This choice may be due to the fact that there are many stories to be told within the big story of industrialized China, and this technique is used to more clearly organize and present them. Another possibility is that, the intensity of the subject matter of the film is such that, it may require periodic moments of resolution, so that a certain calmness and sense of objectivity may be restored for the viewer. These multiple cycles are made easier to perceive, to a certain extent, with the help of sound editing, in that the music corresponds to the stages of climax and resolution accordingly.

Finally, interviews of different people in different roles are integrated in the film, such as workers, young and old, public relations officers reciting official lines of success and progress, and residents of Shanghai in the old, and new, posh districts. Representing these different people serves to enhance the film's and Burtynsky's own chosen position of objectivity, leaving the viewer the freedom of his or her own interpretation and conclusion.

As Burtynsky states in an interview in CBC's *The Hour*:

I like the idea that I'm not telling them how to see the picture, there's a kind of open narrative to it...I think somebody who's an environmentalist would look at it one way and somebody who's an art historian might look at it an-

Raney	Examples in work	Experience & Understanding
<b>Perceptual Sensitivity</b>	Throughout: having to decipher what is represented in images as a whole and in detail	E: Sensory, emotional U: Description (sometimes interpretation)
<b>Cultural Habit</b>	<ul style="list-style-type: none"> <li>• Counter-culture: real-time pace vs. artificially accelerated tempo</li> <li>• Compositional strategies: e.g. rule of thirds, one-point perspective</li> <li>• Design elements: line, shape, colour, texture, proportions</li> <li>• Design principles: emphasis, hierarchy, balance, unity</li> <li>• B&amp;W footage: associated with history</li> </ul>	E: Sensory, emotional, mental U: Analysis, interpretation
<b>Critical Knowledge</b>	<ul style="list-style-type: none"> <li>• Still images: mystical landscapes, e.g. Group of Seven</li> <li>• Time-based images: tracking shot, e.g. Snow's "Wavelength"</li> <li>• Music: minimalist, e.g. Nyman, Glass, Reich</li> <li>• Environmentalism: e.g. Al Gore Reel Current Award</li> <li>• Narration forms informed judgement</li> </ul>	E: Cognitive, intellectual U: Interpretation
<b>Aesthetic Openness</b>	<ul style="list-style-type: none"> <li>• Overwhelming scale, volume, repetition</li> <li>• Awe-inspiring, stunning, yet disturbing images</li> </ul>	E: Sensory, emotional, psychological U: Interpretation
<b>Visual Eloquence</b>	Techniques used to create work: <ul style="list-style-type: none"> <li>• Sound editing</li> <li>• Film editing: e.g. fading out, transitions</li> <li>• Filming techniques: e.g. tracking, panning, tilting, zooming in and out</li> <li>• Colour/B&amp;W footages</li> <li>• Still/Time-based images</li> <li>• Cinematography</li> <li>• Story-boarding</li> <li>• Interviews with people in different roles: e.g. PR, workers, nouveau-rich</li> </ul> Themes conveyed: <ul style="list-style-type: none"> <li>• Theme of a transformed landscape</li> <li>• Theme of global connectedness</li> <li>• Theme of our relationship with nature</li> <li>• Theme of progress</li> </ul>	E: Mental U: Analysis, interpretation, critique

Table 1

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other way, an industrialist may look at it another way, so there are these readings that people can enter into it and that there are multiple readings that are not necessarily just to be read one way. (Burtynsky, n.d.)

My experience and understanding of *Manufactured Landscapes* are summarized in *Table 1*.

### Conclusion

In enhancing the study of visual culture as an integral part of art education, practical methods of pedagogic delivery need to be proposed in order for the art educator to better plan and implement a curriculum. Efland (2004) discusses two “rival visions” of art education: one view favouring aesthetic experiences as the primary purpose of art education; the other view emphasizing visual culture, in particular the study of popular culture, as the mission of art education. To resolve the two opposing views, Efland recommends an approach that includes both *aesthetic criticism* and *interpretive criticism*: combining the study of both formal and stylistic aspects of art, with the interpretation of personal, social, and cultural meanings in the context of visual culture. While Efland’s recommendation affords a compromised solution, it only addresses art education in terms of the verbal or textual appreciation, analysis, and interpretation of various forms of cultural production, in the context of criticism, omitting the place of art production altogether. As Aguirre (2004) points out, “the textual has an absolute primacy over the visual and this is rather paradoxical in an educational context which deals with the communicative power of the image” (p. 266). For this reason, Aguirre proposes what he calls “comprehensive production...as an interpretative and formative method which in art production becomes a tool for the interpretation of culture....” (p. 266).

In light of Efland’s and Aguirre’s recommendations, I find Raney’s approach to visual literacy even more multi-dimensionally structured and multi-planar, affording diverse ideas and possibilities in the practical application and implementation of an art or design curriculum. Raney’s five aspects of visual literacy: 1) Perceptual Sensitivity (a basic level of visual reception or representation), 2) Cultural Habit (a cultural

predisposition to see in certain ways), 3) Critical Knowledge (an awareness of things that mediate representation), 4) Aesthetic Openness (experience of the Sublime), and 5) Visual Eloquence (how the previous four aspects of visual literacy are integrated to make a work of art), not only speak to the verbal and textual aspects of art appreciation, analysis, and interpretation, but also the pragmatic aspect of art production as well.

As a design educator, some ideas that I would like to recommend in contextualizing Raney's approach in a design curriculum are as follows:

1. Perceptual Sensitivity could be applied to the study and application of theories relating to visual reception and representation: e.g. how the eye perceives and follows a visual path, gestalt psychology, the properties and relationships of colour, shape, balance, scale and proportion, illusion of space and perspective, rhythm and movement.
2. Cultural Habit could be explored in the contexts of different cultural conventions, e.g. how type is read, what different colours symbolize in different cultures, how different symbols are understood and used in different parts of the world.
3. Critical Knowledge could be studied in terms of key, influential historical and contemporary issues, developments, trends, and movements, across all disciplines that may impact or inspire the world of design. The importance of research could also be incorporated and emphasized.
4. Aesthetic Openness could be investigated in the creation and exposure to diverse aesthetic experiences, including how viewers respond directly and spontaneously to diverse forms of visual, cultural productions.

5. Lastly, Visual Eloquence could combine the knowledge and skills learned in the previous four categories, perhaps culminating to a group or final project or thesis.

I believe that a systematic and organized curriculum based on the above recommendations would greatly enhance a design or art curriculum, educating today's students in a more well-rounded manner and equipping them with an awareness that does not isolate any one facet or lens, stylistic or otherwise, but rather, promote the expression of the human condition and experience as a whole, that is embodied in art and design.

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