

LEARNING FROM THE LANDFILL

by

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Jonathan Ashley Kitchens

December 2008

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To Carrie.
For your inspiration and support.

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ABSTRACT

We are a culture of material consumption. We have created a cycle of extraction, production, distribution, consumption, and disposal that perpetuates our consumptive behavior. Our culture, way of life and economy is also hinged upon this process. We have created and enacted myths that provide reasoning, support and even a need for the continuation of this lifestyle. The byproduct, as well as the foundation for this culture, is the landfill. This thesis will explore the space created by the centralized concentration of garbage and the associated myths. This thesis will also show the necessity for a new myth and outline a new vision for the landfill encompassing the man-made landscape of this culture's discarded belongings. This project will shed light upon both the beautiful potential and decay that constitutes our landfill.





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MY TRUCK

I drive a 1987 Ford F-250 king cab pickup truck. A rancher owned it before me, so it still has the headache rack and gooseneck hitch in the middle of the bed. This is one of the biggest non-commercial vehicles on the road. Maybe it is a little smaller than the SUVs I see around town; appropriately named Sequoia, Expedition, Navajo or Suburban; trucks named after the wild areas or native peoples that they have destroyed or displaced. There is or at least was some sort of justification for buying a truck of such proportions; biodiesel and SVO, Straight Veggie Oil, which I will discuss below. I wanted, probably thought I even needed, a 4wd vehicle that I could run on diesel, biodiesel, and convert to run on SVO. I wanted the 4wd to get to trailheads and access rough roads. Being in America, and more so in the West, I could not find a vehicle smaller than a ¾ ton pickup truck that was both 4wd and diesel. I was astonished to find that I was now a part of the mythology of the truck in Western America. The pickup truck has replaced the horse as both working machine and status symbol. If you were a working cowboy before the advent of mechanized travel, you needed a horse, and the quality of your horse was an outward image of your ability as a cowboy (or the capability to make enough money to affect your status as a quality cowboy). There is a very different reaction or mood created when driving into a small Montana town in a large, diesel, king-cab working rig vs. a clean, new, all-wheel-drive Audi with bike racks and storage box on the roof. The first vehicle may receive a stoic nod or even better, indifference. The second ride, however, will probably see visual scoffs, rudeness at a stop sign and possibly a variety of hand gestures. It is interesting, though, that in completely other subcultures (green movement) the large, loud truck would

get those same reactions as the yuppied Audi, until observers discovered the fuel source. Then the “veggie” rig would be lauded for its ingenuity and so-called renewable energy source. Each culture and subculture has its own preconceived notions of what is appropriate, and those often are short-sighted visions through narrow tunnels.

I bought the truck from a rancher in Dillon, MT and promptly drove it to Springfield, Missouri to have it converted to run on SVO. Debuting at the 1900 World’s Fair, Rudolph Diesel’s efficient combustion engine ran on peanut oil; renewable, clean, and apolitical. “Eventually, in both Diesel’s and Ford’s cases, petroleum entered the picture and proved to be the most logical fuel source. This was based on supply, price and efficiency, among other things. Though it wasn’t common practice, vegetable oils were also used for diesel fuel during the 1930s and 1940s.”¹ So I wanted to revert back to the original idea and convert my diesel engine to run on veggie oil. I was drawn not only to the simplicity and self-reliance of using a waste product as fuel, but also to have a lighter environmental footprint. Being conscious of my consumption and waste makes me aware that practicing a “green”, “eco-friendly” or sustainable lifestyle doesn’t necessarily look “green”, “eco-friendly” or sustainable. Furthermore, what is touted as being green or sustainable often isn’t, such as, bamboo sustainably grown in S.E. Asia then shipped across the globe for flooring or buying organic produce shipped in from California when local goods are available. Consciously buying organic or “green” is about being seen, appearances. We all want to be seen as part of the solution or as people that care about the well-being of our planet. However, as we will see, this appearance is often a paper thin mask propped up in front of a very non-sustainable way of living.

WIPERS

This is not the preferred vehicle for commuting short distances, driving in traffic or generally turning without a ¼ miles radius to do so, but a few days ago I awoke to a heavy snowstorm, we don't really call them blizzards in Montana, and quickly decided to leave the bike in the shed and drive the 1 ½ miles to school. I cranked the engine, hoping not to wake the neighbors or their young children with such an obnoxious roar at 5:30 in the morning. I turned the knob to wipe the windshield and was disappointed to see a large piece, if not the entire rubber wiper blade, stuck, frozen to the glass as the metal arm scraped across the windshield.

This realization that I would be both endangering myself and others as I drove in a snowstorm without visual acuity prompted my decision to purchase new wipers. I would now have to decide where I would go to buy them. In a small town like Bozeman there are not a lot of choices. There are a few auto parts supply stores and a few department stores. Since I was in no real hurry and wanted a break from work I decided to go to one of three department stores. Wal-mart was already out of the question. I would drive a ridiculous, smoke-belching dragon a few blocks to school, but I would not support a place that replaced small businesses with minimum wage hegemony. That is part of my own hypocrisy. So that leaves K-mart or Target. I live closer to K-mart. That is about the only thing enticing about the store. The lighting is oppressive and the employees appear to be despondent zombies. Also, there is a strong, acrid, candy-like smell to the place that leaves you feeling queasy and dehydrated. More importantly, shopping at K-mart leaves you feeling as though

TARGET TARGET

Upon arrival, the parking lot looks massive. It looks as if there are more parking spots than allowed occupancy for the store. I am thankful because I like to park the truck far from the door because it takes up so much space and is difficult to maneuver. The store exterior, sporting the soothing, safe and convenient palate of khaki and red with the unmistakable bull's eye logo, should be my first warning that my experience here will be comfortably predictable. Having been to the store before, I am quite familiar with its layout. In fact all Targets have the same floor plan to promote a consistent experience. This coupled with my short-sighted determination saves me from succumbing to the Gruen Transfer; "the moment when a destination buyer, with a specific purchase in mind, is transformed in to an impulse shopper, a crucial point immediately visible in the shift from a determined stride to an erratic and meandering gait."² I am faced with an initial choice, which route to the automotive section? Being in the rear of the store there is no direct path. I must either travel through the women's clothing department, conveniently located directly (again by choice) in front the entry, or venture through cleaning supplies and small, knick-knacky household goods. I opt for the women's clothing route for it is the route of familiarity and also knowing that I will make a loop after getting the wiper blades and I want to look at different things that I do not need. The automotive section is very small (only two, very short aisles). It is mostly cosmetic goods, floor mats, polish, air fresheners, and a few wiper blades. They are all the same price so I go for Optimum over Weather Guard. I continue my loop, watching the khaki and red uniformed employees stock (more stuff) the shelves with an amazing array of consumer choices.

“To shop is American: to forgo consumption, unpatriotic.”³

All of what I see, while on my circuit are products of planned obsolescence. Each item has been designed for the dump. Some things like packaging and food products are waiting to be bought and thrown away. But in the end all of it goes. The blender - produced in China with a short shelf-life - whose design and style will soon no longer gives us the cool and temporary sense of identity, and that flat-pak book shelf sourced from pre-cut rainforest wood and coated in petroleum based sealant are both going to the dump. Electronics are quick to become obsolete. iPods and cell phones change so quickly that it is difficult to keep up with their so-called progress. Nothing here can really be repaired, retooled, or upgraded. The system is conveniently and comfortably set up so that we the consumers (at what point did we cease being people?) can blindly, numbly and ignorantly keep the cycle alive. The reason to go to the big box stores over a smaller, locally owned business is the opportunity to over consume.

As a member of this society or culture one must choose, through a variety of congruous and disparate means to be conscious, to see patterns larger than purchase, use, discard, repeat, and to begin to see all of the incredibly thin veils, illusions and masks that keep something like planned obsolescence going. There is also perceived obsolescence designed into the system. Perceived obsolescence is when we throw away useful or functioning things because the look of the item has changed. The way we demonstrate our value in this system is through consumption, and if one hasn't bought the latest fashionable item, then that individual has no value. It is also embarrassing for that person. Trendy fashion is the most obvious example of this because you are wearing your consumption, and it can be painfully obvious when someone hasn't bought into the latest, must-have garment. Retail analyst Victor Lebow summed it up articulately in 1955, “Our enormously productive economy... demands that we make consumption our way of life, that we convert the buying and use of

goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption... We need things consumed, burned up, worn out, replaced, and discarded at an ever increasing rate.⁷⁴ This is our lifestyle...at least if we choose to ignore the signs around us and succumb to the short-term comfort and convenience.



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CONCEALED/ REVEALED

There are many realities evident to different people at different times. Some may see right through the consumption and waste cycle and choose a lifestyle with a smaller ecological footprint. While others may only see the one that demands we rapidly scrape the earth for precious elements to support our habits. This relationship, of an invisible reality supporting the visible can be seen from the eyes of a street skateboarder. Street skating, using the built, urban environment as both playground and means of self-expression transforms the city, public space. It is, or was, an underground, street culture that uses and sees the world in a completely different way. The set of stairs one person uses to ascend into a corporate building downtown is an obstacle to overcome for the skater. The one time when these realities mesh is when property owners install devices on or around their buildings to prevent skating. Those knobs on a handrail or marble bench are not there to instill a sense of rhythm or for decoration, but to stop the skateboarder. The world of the street skater is an invisible space, residue space, has power to transform the consumption-cycle mindset. When in the urban terrain the skater is in contact with homeless people, derelict parts of the city and he or she is willing to go to any part of the city in search for more skateable landscapes. There are no hidden zones or regions. Skaters use public space, free space, as grounds for community, gathering and self-expression.⁵ Through this medium skaters have dissolved the screen that separates these realities and have created their own reality, their own story.



6

MYTH

I suddenly feel overwhelmed by the totality of what I had not previously seen. What I mistook for reality; was total myth. I will quickly offer two definitions, of which there are many, of the word myth. These two definitions will define what I will be referring to as myth throughout this narrative. They are both stories. One is “a widespread but untrue or erroneous story, a widely held misconception, or a misrepresentation of the truth.”⁶ This we will call *limitation*. Many of the stories told within our culture fall under this definition. For example, it is a common myth that landfills are in a state of decomposition and that the garbage therein is in an active state of rot. The modern landfill, however, is essentially a sealed tomb; designed to keep as much run-off, seepage, and leakage inside its lined walls. After only a few years even anaerobic decomposition ceases.⁷ The other definition to which we will refer is essentially the opposite of myth-as-untruth. “Myths are the instruments by which we continually struggle to make our experience tangible to ourselves. A myth is a large, controlling image that gives philosophical meaning to the facts of ordinary life; that is, which has organizing value for experience. . . . Myth is fundamental, the dramatic representation of our deepest intellectual life, of a primary awareness of man in the universe, capable of many configurations, upon which all particular opinions and attitudes depend.”⁸ Or as Joseph Campbell put it, “Myths are clues to the spiritual potentialities of human life”⁸ they are the “experience of life.”⁹ This we will call *potential*.

Limitation has many faces. For one, it is the façade at which I am looking, here in this Target. Every product I see has had a life or lives before it came here. They began as earth, were altered in some significant way, marketed, shipped, etc. and are now available for purchase. It is difficult to feel the humid jungle air while using a bamboo cutting board from Vietnam. It is a myth that your identity as a person is connected to acquiring certain material objects. Even though we refer to a person's monetary accumulations as how much he or she is worth, owning Nike basketball shoes, a sleekly-lined modern sofa, or a Toyota Prius is not an indication of who we really are. However, "designed" products at Target have become symbols of social status for the middle class or aspiring middle class. "Consumption hierarchies, in which commodities define life-styles, now furnish indications of status more visible than the economic relationships of class proportions. Status is easy to read, since the necessary information has already been nationally distributed through advertising."¹⁰

An absurd myth that presents itself to me here is that the economy, our economy, exists within the political boundaries of the U.S. This belief denies much invisibility, such as, outsourcing, globalization, immigrant labor and even the notion of political space. The reality is that our economy, the U.S. economy, is predicated on a rapid cycle of material consumption and waste. It exists on the blood of indigenous, non-industrialized people and the decimation of the natural world. The only way to make all the stuff we buy so affordable is to externalize the costs. Who pays the costs? The residents of third world and working class members of our own country that mine, produce, fabricate, assemble and ship the products we use. They pay with their health, their air, their water, having to pay for their own health insurance, and they pay by having no choice but to work these harmful jobs.¹¹ Capitalism reduces the city, our experiences, the environment to repetitive gestures and standardized spaces measured not by their beauty, value or uniqueness, but by their ability to be produced and exchanged with amounts of money.¹² The most fascinating myth represented by *limitation* that is now evident is that all of this, the store, the goods, the economy, our non-nomadic lifestyle¹³ is totally dependent upon

the thriving operation of the landfill. “Everything that constitutes a normal life in modern society emphasizes the importance of stability and order as protection against the vagaries of such an unsettled and apparently chaotic life. Across a spectrum of social life that encompasses everything from political rights to product consumption, our physical stability becomes a condition of life in contemporary urban societies (things like voting, banking, and credit consumerism, all become difficult, perhaps impossible, if one seems to be unsettled or homeless).”¹⁴ It is the functioning, operating landfill that facilitates settlement, which facilitates production, consumption and garbage.





8

TRASH

I somehow make it out of Target with only the wiper blades and quickly leave before I buy something I really don't need. After replacing the wipers, I can get back to school. I first take the old, cracked blades to the trash bin that is behind my house in the alley. Looking down the alley I can see all of the bins that my neighbors use. Tucked between old skis, make-shift compost bins and last summer's weeds are the blue, city owned trash bins. I wonder what is in each one of those. As I put in my garbage I realize that no one can see into these bins without opening the lid and peering in, while running the risk of getting caught looking through someone else's waste, and looking at another person's garbage is seen as a violation; a wrong doing. These opaque containers hide for us what we are ashamed of and what we wish to conceal. They contain the shadow of commodity production and consumption. We, as a culture, do not want to face the truth about our patterns of consumption or the byproduct (garbage, ecocide, inequality). Those that do mention it or try to raise the general consciousness are accused of being socialist, communist, or against American freedoms.

“Is it any surprise that garbage may be largely inconsequential to most of us? That garbage points us to the primacy of a subjective declaration of uselessness is well illustrated – paradoxically – by the unseen and unimagined uses it may be put to, as for example, the source of dirt on some previously private life. We are blinded to the enduring

reality of garbage by the fact that we subjectively determine the properties of the objects that constitute garbage in a separate experiential sphere (in the consummation of desire). But once the limits the consumer unwittingly places on the object are 'removed', the finite and temporal nature of the object is also destroyed. It is then that the threat of garbage becomes real in a particularly modern way because, if unsorted, it simply gets in the way. Garbage contradicts a principal idea of modernity in that it questions the belief that we control our lives, and that we banish our own past in a positive statement of self-determination."¹⁵

"Somehow our unwanted stuff keeps disappearing. It moves away from us in pieces...in a process that is as constant as it is invisible."¹⁶

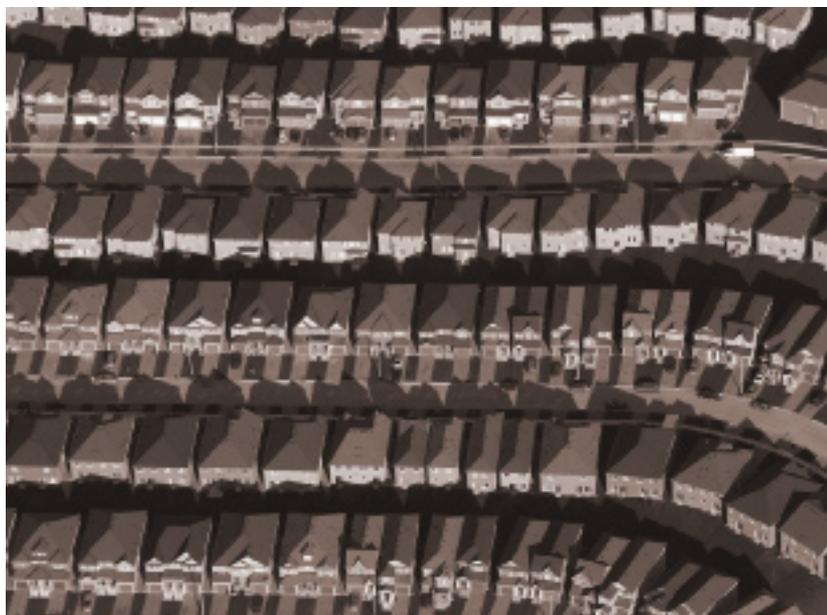
Wishing to see what happens to my trash after I place it in the bin; I wake up early one cold Thursday morning, make a pot of coffee and wait for the garbage truck to roll down the alley. The truck, a.k.a. packer, rumbles down the alley and stops at each bin to collect its contents. The driver, using a hydraulic fork to lift and empty the container, doesn't even have to get out of the rig. It is really evident now that the garbage or waste is the "concealed residue of our making."¹⁷ The garbage collector comes before any reasonable person has woken. The bins are opaque. This whole other side of our culture is hidden to everyone, but the most astute observer or someone that cares; but who does? It is also apparent that the presence of trash is not eliminated by the various forms of waste management. In the neighborhood of Trastevere in Rome, Italy the trash bins are large, open containers placed periodically along major routes. These bins, which are free to use, frequently overflow onto the street and emit an incredibly acrid scent. They do, however, reflect very directly what the residents of each block are throwing away. Nothing is neatly tucked away in an alley or lidded bin. In the U.S. we like our garbage hidden; taken away to some spot of land on the outskirts of town and buried.

A project that speaks to this notion of sweeping the dark, trashy bits of our lives under the rug is Mierle Laderman Ukeles's piece called *The Social Mirror*. For this project Ukele took a twelve-ton, 28 foot long, New York City Sanitation truck and covered the exterior with mirrored glass panels. The reflecting truck is a metaphor for the interrelationship between "us" whose images get caught in the mirror and "those" who collect our garbage.¹⁸ It is also a metaphor for the fact that the landfill is our collective creation.

"Trash constitutes a world of its own, complex and symmetrical to the world of merchandise. A world that, behind the mirror in which consumer civilization loves to admire itself and create it own self-awareness restores our understanding of the truer nature of the products that populate our everyday lives."¹⁹

If all of this garbage (including the wiper blades), the residue of consumer culture, goes to the landfill, then what kind of space is the landfill? It houses the leftovers and residue of a culture that is founded on the rapid production of such things, yet is in denial or oblivion to them. "Trash (and even more so the landfill) is a direct documentation, minute and incontrovertible, of the habits and forms of behavior of those who produced it, aside from the beliefs and perceptions that they have of themselves."²⁰

It is a reflective space; mirroring the selective nature of individual memory. Not just reflecting the gaps in logic or hypocritical actions, but the physicality of human action.



HETEROTOPIA

By now the wiper blades have been dumped from the packer truck into the mix at the landfill. What kind of space is the landfill? There are many interpretations and descriptions. For some people it is an invisible space. Once they place their garbage in the bin it is in effect gone. For others the landfill is a space of death and decay; a place burial ground for our detritus. Yet, for some it embodies an almost mythic status as the place to see all of these unwanted items in one place. Going on a dump run is just an excuse to see what else is there.

Utopia is a term that can describe the ideal; be it society, state of mind or space. Utopias have a “general relation of direct or inverted analogy with the real space of society.”²¹ The landfill is a space of near utopian qualities. As was mentioned, for some it simply does not exist, it is the ideal space that takes care of what I no longer want. Also, it is the space of indiscriminating virtue. The landfill accepts one’s garbage without judgment, prejudice or seeing limitation. It has transcended the limitations of duality, good/bad, beautiful/ugly, high/low, and is a sanctuary for the hidden world behind our material one. The landfill is a space that exists between reality and fiction, between utopia and heterotopia. Michel Foucault, in his article “Of Other Spaces”, describes spaces that “exist and that are formed in the very founding of society – which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other sites that can be found in a culture, are simultaneously represented, contested, and inverted.”²² He refers to these spaces as heterotopias, which he also characterizes as “a sort of simultaneously mythic and real contestation

of the space in which we live.”²³ The landfill is also a heterotopia. Foucault outlines six principles of a heterotopia that may help explain this concept. Initially, **“there is probably not a single culture in the world that fails to constitute heterotopias.”**²⁴ All cultures produce waste. All cultures have dumps. Archaeologists have created a science out of deciphering ancient trash, or middens, and have found them in every culture studied.²⁵ Landfills are ubiquitous heterotopias maybe more so than any other space. Foucault argues that cemeteries are the ultimate heterotopia, but not all cultures bury their dead. However, all cultures do create waste and the need to contain it (nomadic cultures withstanding). “These artifacts serve as markers—increasingly frequent and informative markers. Human beings are mere place-holders in time, like zeros in a long number; their garbage seems to have more staying power and a power to inform across millennia.”²⁶

Secondly, **“a society, as its history unfolds, can make an existing heterotopia function in a very different fashion.”**²⁷ Landfills can be re-envisioned, re-purposed as sites of great possibility, at least of a metaphysical, intuitive nature. By recognizing these sites as spaces of indiscriminating virtue, we can use them as teaching devices of how to live. In Brian Walker’s translation of Lao Tzu’s Hua Hu Ching, we are advised that the “way to cleanse oneself of these contaminations (anger, resistance, self-absorption, et al), and that is to practice virtue. What is meant by this? To practice virtue is to selflessly offer assistance to others, giving without limitation one’s time, abilities, and possessions in service, whenever and wherever needed, without prejudice concerning the identity of those in need. If your willingness to give blessings is limited, so also is your ability to receive them.”²⁸ This awareness and practice of indiscriminating virtue can help us reduce our ravenous consumption of the natural world.

Next, **“the heterotopia is capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible.”**²⁹ The

Bozeman landfill is a place of many, seemingly incompatible juxtapositions. For example, it is simultaneously both a private and public space. The landfill is a public dumping grounds but the objects placed therein are initially private. It is a site where very private, even secretive possessions mingle to become public, and where solitary individuality dissolves into a congealed mass of undistinguishable elements, and become private yet again. It is a space of both violation and virtue. It is a violated space due to its nature as both a highly altered natural environment, as well as, the dangerous, toxic and unknown makeup of the materials that comprise its being. However, it is also a space of virtue. It is home to a diverse array of fauna, such as, mule and white-tailed deer, red fox, badger, coyote, sandhill crane, and several species of birds-of-prey. It is also a place of total, indiscriminating acceptance. "People who visit landfills are struck by their suggestion of death, but the landfill is also a place of resurrection: gulls and other wildlife live well off food scraps, and human scavengers, if they are allowed in, give new life to objects carelessly tossed."³⁰ It houses elements of waste (shame) without judgment and offers itself as a mirror for us to see the consequences of our cultural and social actions. "No wonder we prefer opaque garbage bags. And no wonder that recycling bags, which flaunt our virtue, are often translucent."³¹ It veils and contains what we don't want to exist in our reality but also perpetuates, by its hidden nature, the failure to see anything real. "Our private worlds consist essentially of two realities-mental reality, which encompasses beliefs, attitudes and ideas, and material reality, which is the picture embodied in the physical record."³² The disparity between what we think is in a landfill and what is actually there is quite striking. "It is a rare person in whom mental and material realities completely coincide. Indeed, for the most part, the pair exists in a state of tension, if not open conflict."³³ For example, The Garbologists at the University of Arizona polled participants in a Garbage Project study asking them what they thought was in the landfill.³⁴ The garbologists also asked families that volunteered their garbage for dissection, how much meat, alcohol and a few other select food items that they consumed. They found a consistent disparity between the actual (remember these families were allowing the Garbage Project to sift through

their trash) amount of these products used vs. what the families reported.³⁵ Low-income families over reported their meat consumption, while high-income families under reported, and everyone under reported alcohol consumption. However, patterns of evidence do not always coincide with patterns of behavior. For instance, *National Geographic* magazine and the kind of magazine known in the trade as “men’s sophisticates” (magazines like *Playboy* and *Penthouse*) almost never show up in household garbage. There is no physical evidence, in the garbage, of either type of magazine. The *National Geographic* is typically collected and kept on the shelf, in many cases until death. The men’s sophisticates, however, don’t get thrown away at home because people, out of embarrassment, thrown them away in nondomestic garbage cans.³⁶ When mental and physical realities do not reflect each other, as is often the case, we have seemingly incompatible “sites” juxtaposing in one place and garbage then represents not physical fact but mythology.

The fourth principle is that “**heterotopias are most often linked to slices in time.**”³⁷ “If our garbage...is destined to hold a key to the past, then surely it already holds a key to the present.”³⁸ The landfill is a space where time is accumulated for a given period. It is then stored, with minimal decomposition or settling, indefinitely. “Well-designed and managed landfills seem to be far more apt to preserve their contents for posterity than to transform them into humus of mulch.”³⁹ The creation of the landfill can be visualized as a long, multi-threaded ribbon. Our garbage is driven to the sanitary landfill and deposited in an astonishingly large, terraced pile along with the products of other packer trucks. This detritus is then pushed into position with a giant front-end loader, packed down with a toothed-roller and buried under a minimum of 6 inches of earth, “recycled” glass, or other fill material. The ribbon is the connection between our personal waste production, mixed with others’, and layered with fill dirt from another part of the site in a zigzag style. The landfill essentially chronicles most of our activity and processes. We can excavate any portion of the landfill and see slices in time, often denoted via phone books or newspapers laid down like geologic strata.⁴⁰ The sanitary landfill becomes a sort of archive of all the forms,

tastes, ideas, and broken desires of a society for a given time that “is itself outside of time and inaccessible to its ravages.”⁴¹ Yet, on the other hand, it is the land that time forgot; out of sight, out of mind.

Fifth, **“heterotopias always presuppose a system of opening and closing that both isolates them and makes them penetrable.”**⁴² Heterotopias are not “freely accessible like a public place.”⁴³ The entry for most goods is allowed but generally for a very short, specific time (barring those who work there). When we visit the landfill or even when our unwanted stuff goes there it enters at a very specific time period, and that time period is quickly covered over with fill to make room, much like a selective gate, for the next penetrable opening. The landfill is almost devoid of human interaction, yet it is comprised of the remainders of human activity. All of our ceaseless motion is slowed down to an almost imperceptible pace here.

Lastly, **“they have a function in relation to all the space that remains.”**⁴⁴ Wallace Stegner recalls the town dumps as having “contained relics of every individual who had ever lived there, and of every phase of the town’s history.”⁴⁵ The landfill has a relationship to everyone that has lived in Bozeman, visited or left anything behind since 1967. This process of material consumption to landfill burial is something we are all an active part of. Each individual in each society, regardless of race, economic standing or religious beliefs, at his or her own pace is building those amazing, terraced mesas of unwanted belongings. It is the “other space”, a collection of “other” memories, truths, and realities. Is the role of the landfill to create the space of illusion that exposes every real space?

Defining the landfill as a heterotopia allows us to see it in both mythic and real contexts. Mythic, in the sense that it is the invisible backbone of modernity; its function allows the grid, the functionalist system, to thrive. Form always connected to function has devalued or even demolished beauty, and we have become a throw away society because we can no longer see the beauty. Myth

allows us to see the landfill as a complex space whose denial may be the underlying foundation for current *limitation* and simultaneously having extreme power of becoming a site of *potential*. By utilizing the juxtaposing beauty, decay and embodied presence of Bozeman the landfill can help us tell a new story; one that gives “clues to the spiritual potentialities of human life.”⁴⁶



10



11



12



13

LANDFILL

“All the stuff in this pile was here for the same reason: it was broken, it had failed, it had become obsolete, someone was tired of it, no one could find another use for it.”⁴⁷

I decide to visit the landfill to complete the journey of my used windshield wiper blades. Will I be able to find them or any trash that is or once was mine? Will I recognize the tip of my old vacuum cleaner poking out of “the tragic face of consumerism”⁴⁸ like a half-buried body?

A few landfill terms.⁴⁹

1. **Liner**- The liner is typically a combination of barriers and liquid collection layers. The composite system that is widely used is a primary barrier of HDPE, high density polyethylene, with a secondary barrier of bentonite clay.
2. **Cell**- The cell, or storage unit, is actually a series of cells. The series of cells are layers of garbage from a given day, while the cell also refers to the entire mound of garbage.
3. **Leachate**- Leachate is all of the moisture and liquid in the waste that settles down through the layers of cells. It is either mitigated on site, like a sewage treatment plant, or piped to the local sewage treatment plant.
4. **Gas Extraction System**- New cells are required by the EPA to have a working gas extraction system in place. This system siphons all of the methane produced by anaerobic bacteria out of the cells. This gas is then either burned off or directed into an additional system to reclaim the energy.

5. **Fill-** Fill is the layer of sand, soil or crushed, recycled glass that is layered upon each day's new cell. This layer is compacted over the garbage and essentially segregates each day's trash from the next, and prevents pests and animals from getting into the trash. This layer must be a minimum of 6" deep.
6. **Cover or Cap-** The cover seals the top of the landfill once it is full. The cover is another layered system comprised of a 40 mil polyethylene cap, a minimum 2 foot layer of compacted soil and a lid of erosion-resistant vegetation.

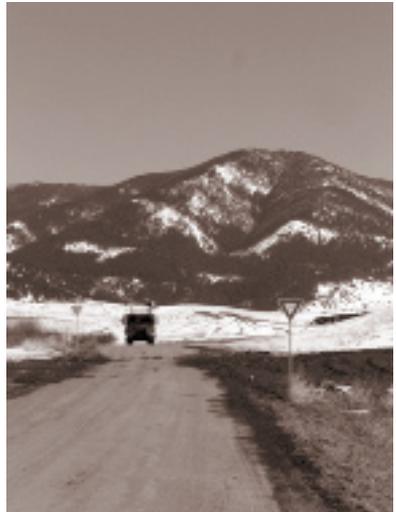
Nestled below the Bozeman Bench, an alluvial shelf created from soil liquefaction during millennia of earthquakes, it is an amalgamation of micro environments. A live creek bisects the site running east to west. Small valleys reside between man-made hills and a few roads follow these depressions. It is generally a quiet space. A few trucks are lumbering about, tilling and pushing garbage around on the active cell and grinding up the short, steep hill to it. But it is mostly the wind, the birds (crows, ravens, starlings, gulls) and occasional airport traffic that I hear. The McIlhattan family sold the land to the city in the late 1960's and it opened for use sometime around 1970. The first cell, an unlined, fairly unstable mound, is approximately 25 acres in area and about 45 feet deep. This cell, on the east side of the site was in use until 1994. Having tested elevated levels of several toxic chemicals, the EPA required that the city implement some sort of mitigation system, monitoring wells, and methane gas extracting lines. The leachate from this cell seeps directly into the water table existing a few feet below its bottom. To pay for this, the city opted to open a new cell just to the west on the site. This cell is approximately 15.3 acres and over 45 feet deep. Cell 2 is a lined, engineered mound of stabilized waste. There is also a now closed class IV cell that was used to bury demolition and construction waste. All of the existing cells will be closing in June of 2008 and must be monitored for settling, leakage and methane gas levels for a minimum of 30 years from the closing date.

The Bozeman Landfill is on the edge of town. It literally resides on the city limit boundary, separating urban from countryside, but also on the edge of

our society creating a fence line between humanity and the natural world. It has a radiant heart of acceptance and serenity. There is a light there in the late afternoon in spring. It is a dusty, golden light that always reminds me of driving alone into the sun through small Colorado towns like Paonia, Gunnison or Hayden. There is a feeling that the next moment is teetering on total joy or despair and depression, and the surroundings, high, alpine peaks with small steep-walled valleys, radiate possibility. The landfill is composed of scaled down versions of these peaks and valleys, and the immediate awareness of growth and decay heightens these feelings. A persistent herd of white-tailed deer munch grass up on a small bench on the northeast end of the site. Their presence is a reminder that this place, this man-made pile of garbage is very much alive.



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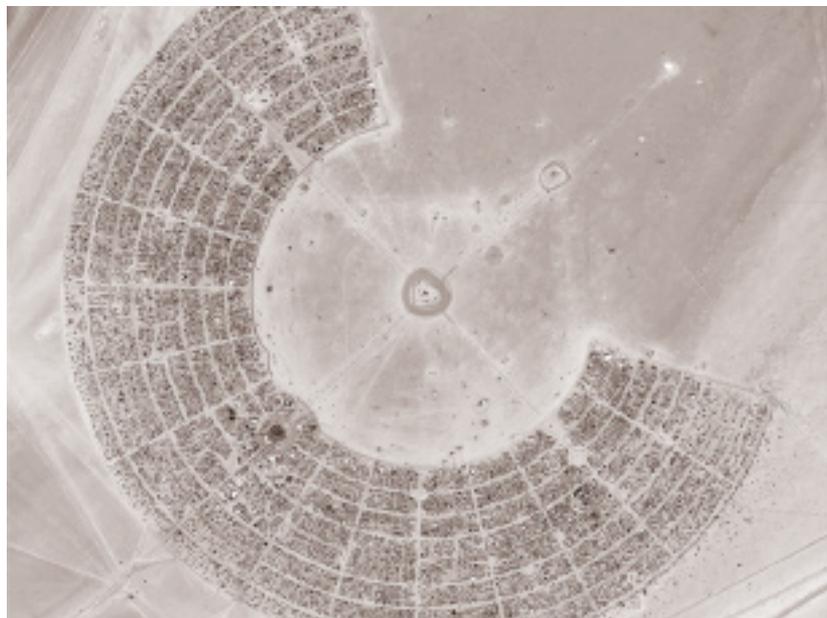
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PRECEDENCE

1. *Fresh Kills Lifescape* (Staten Island, New York: 2001-2005)

_Field Operations: James Corner

_Field Operation's winning design for the Fresh Kills landfill is "a long-term strategy based on natural processes and plant life cycles to rehabilitate the severely degraded land."⁵⁰ This project entails a park design and master plan for the creation of new habitat, new activity areas and circulation. Fresh Kills was the landfill for New York City from 1948-2001 and could be regarded as the largest man-made structure on Earth.⁵¹ With this in mind, this design seems like a very thin cosmetic veneer laid over a massive, oozing monument to a great city's waste. Field Operations missed the mark with a design concept which "entails an extensive new framework plan for the creation of habitat, new activity areas, and circulation systems" and includes "a major new roadway with signature bridges." This project does not speak about either the garbage in the landfill nor the people who put it there.

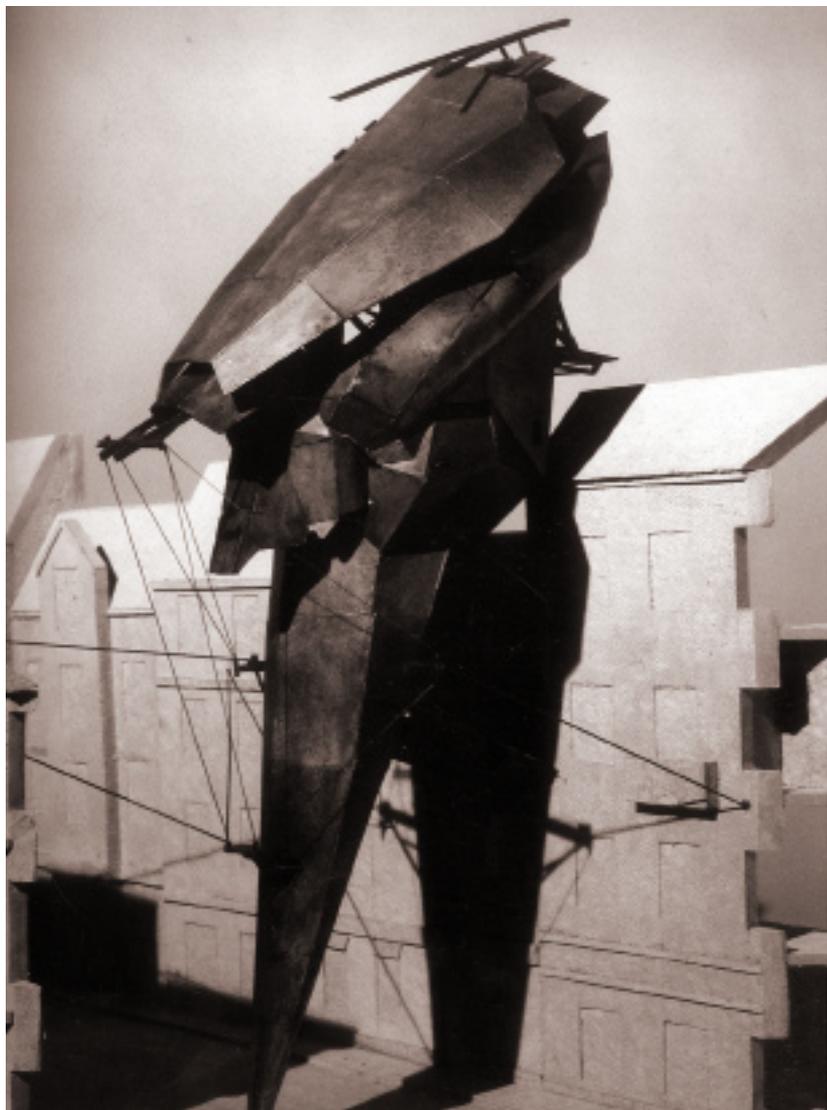


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2. *BURNING MAN* (Black Rock Desert, Nevada: 1986-Present)

_Larry Harvey (Founder)

_Burning Man is an experiment in community, radical self-expression, radical self-reliance, and art as the center of community.⁵² This event is an annual eight-day convergence that transforms the desolate Black Rock Desert in northwest Nevada into a bustling city of over 45,000 people, many of whom create art especially for the event. Each year a theme is chosen; in 2006 it was hope and fear. This theme dictates the design of “The Man”, a large symbolic effigy, as well as, greatly affects the designs that participants employ in their art. At Burning Man there are no rules (save the rules that serve to protect the health, safety, and experience of the community at large)⁵³, but there are 10 principles; radical inclusion, gifting, decommodification, radical self-reliance, radical self-expression, communal effort, civic responsibility, leave no trace, participation, and immediacy. For this thesis we will focus only on two of these very important principles. The first is decommodification. This axiom states that no cash transactions are permitted. By decommodifying the event, organizers have protected the culture of the occasion by mitigating commercial motives that substitute consumption for participation.⁵⁴ The next principle is immediacy. The planners of Burning Man have sought to “overcome barriers that stand between us and a recognition of our inner selves, the reality of those around us, participation in society, and contact with a natural world exceeding human powers.”⁵⁵



3. Zagreb Free-Zone (Zagreb, Croatia: 1991)

_Lebbeus Woods

_The Zagreb Free-Zone is a series of “mobile units of habitation”⁵⁶ joined via an electronic web of instrumentation. This “freespace”, designed without a clearly defined purpose, would facilitate a “networking of autonomous individuals, free of monumentalized institutions of culture.”⁵⁷ Having only their participation and performance as authority, individuals would become increasingly aware that via play is the modus operandi. These spaces facilitate “play on the broad field of an individual’s knowledge and experiences, a type of free interaction – a dialogue – with one’s self that is in fact the beginning of all communication and community.”⁵⁸



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PROJECT

Program

Eternal Flame	24' x 48'
Bridge	300' x 7.5'
Lookout tower	154 square feet
Warming Hut	600 square feet
Composting Toilet	222 square feet
White Cube	2500 square feet

The aim of this project is to expose the visitor to a variety of constructed experiences that constitute a metaphorical journey of our potential relationship with ourselves, the natural world and waste. The project consists of a large-scale, regenerative site plan and six built experiences. These experiences have been designed to be experienced as both a linear journey, as well as, individually.



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PROJECT SITE

The first priority with regards to large-scale site development was to immediately introduce a cycle of regeneration, defined as the process of being born again. The site design consist of dividing the site along topography bands into three zones; regenerative, nature, and culture. The regenerative zones consist of large areas of planted sunflowers. These tall, beautiful flowers will naturally begin to draw up toxins from the contaminated soil, create a new layer of top soil through their own annual decay and introduce a very observable cyclical event to the site. This last action is a critical introduction to the site as its existence can connect one to several scales of cyclical change. On one level the sunflowers' heads follow the daily movement of the sun, turning each day from east to west, but they also demonstrate on an annual scale the cycle of birth to death. This can be seen in direct contrast to the very linear nature of a sanitary landfill. The compacted, buried trash entombed therein is not connected to a cyclical event, but by relating it to a cyclical process on the ground level; we can see its very inherent disassociation with the natural world.

The second move is to plant several bands of deciduous, woody flora along ten foot bands of topography. The primary goal of this move is to create more edge-condition between these woody corridors and the regenerative and cultural zones. Most life on this planet exists in what I am calling the edge condition. For example, coral reefs are situated in precise zones where deep water meets land, wildlife in the Northern Rockies typically travel and graze where meadow and forest meet and any fly-fisher in the area will tell you that fish also reside in the edge condition or seam between fast and slow water. Another purpose

behind the construction of these nature bands is to create a situation where the visitors can interact with the natural world. For far too long a driving principle in the Western world is that we are disconnected observers of the natural world and that it is there for our use. This mindset has led us to a time where rampant degradation of the natural world is much more commonplace than preservation, and this degradation has led to the waste in which the landfill is constructed. These woody corridors are also connected to woody corridors that stretch from the Bridger Mountains down to the East Gallatin River. By providing safe passage between these two areas of habitat, the fauna present will have an opportunity to move with much less stress.

The next site move is getting people to the site. The easiest way to do this is to designate the area a park. Furthermore, the trails within the site are connected to existing and proposed trails that are in immediate proximity to the landfill. The trails that surround the Cherry River recreation area will now be connected to the new Snowfill Park and proposed trails that would lead to the many trailheads along the west side of the Bridger Mountains. By tapping into a trail system that is already in use, there will be an opportunity to subversively harness visitors who would be traveling along or through the site without knowing its importance.





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PROJECT ETERNAL FLAME

Upon arrival at the park, there will be a dominant, prescriptive path in which to travel through the site. The very first marker on the site has the task of conveying three things to the visitor. One is that this is much more than a park and in fact it is a landfill. Next it must act as an entry gate to the trail, and finally, it provides a cleansing experience that is crucial to the onset of any journey of metaphysical importance.

This entry gate is comprised of two tall walls that the visitor must walk between. These walls, constructed of gabion baskets filled with compacted plastic, are 24 feet high. At the same time that one enters between these large walls the ground turns into a steel grate that spans a seemingly deep void. This void, a black painted, concrete vault, houses a ribbon of eternal flame. This flame, which burns the methane produced within the landfill, is the eternal flame of consumption. As long as we are consuming the natural world in this way and at this pace, there will be an eternal flame burning. More importantly, however, this eternal flame event, this experience of walking over fire is an act of purification. Fire, symbolically and literally, has always been an element of purification and transition, and no matter how subtly it cleanses, this flame will allow the visitor to experience the park with a clear, open mind, a mindset of awareness and potential.



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PROJECT BRIDGE

After one exits the eternal flame there is a few hundred yards of trail in which to contemplate the surroundings. There is a nature zone of trees to the right and down to the left is a regenerative zone with Bozeman in the distance. The participant turns a corner and is presented with the bridge. The purpose of this bridge is to begin to connect the two adjacent mounds and relate them as both being mountains of garbage. The mound to the east, cell 1, was constructed from 1967-1997 and is approximately 43 million cubic feet of compacted waste. Cell 2, to the west and across a small valley was constructed from 1997-2008 and is also approximately 43 million cubic feet. The experience of the bridge is one of compressing time. The bridge's width begins at 10 feet and over the course of 300 feet narrows to 5'. Furthermore, as the bridge narrows, the plank-ing underfoot diminishes in depth. The first board is a wide 3' plank and as one travels west each board shrinks approximately 99% so that the final board is a mere ¼". This narrowing and shrinking relate to the mound that each visitor is walking toward and by the end of the bridge walk the visitor's pace and rhythm will have sped up in conjunction with the design of the bridge. The participant will also get a glimpse of the other built experiences up the valley to the north. Also, the bridge spans one of the nature bands, so this experience remains in the mindset of detachment from nature as it hovers over the aspens, just out of reach.



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PROJECT LOOKOUT TOWER

As the visitor is sped up and spit out of the bridge the trail slows back down and winds twice around the new mound over the course of 1.5 miles. This contrasting slow down will again provide the participant an opportunity for reflection of the past two experiences while soaking up the concentric views of Bozeman, valley, Bridgers, etc. This new mound has been separated from the site by a thin, limestone plinth. This two foot wide, flat plane wraps around the base of the mound and simply denotes its vertical beginning. Also, the mound is covered in meticulously mown Kentucky bluegrass. This non-native, water hungry, petroleum-needing plant reinforces even more the disconnection from the natural world. The top of the mound is completely flat. Within this unnatural flatness resides a cylindrical, concrete lookout tower/meditation chamber. This tower is placed in the center of a long, thin pool of water. On axis with the western boundary of Bozeman and Saddle Peak, this pool is lined with black granite which gives the water a dark, oily presence. Another steel grate spans the pool and connects the grass with the chamber. When walking over the pool to the tower door, one looks down and sees a dark, viscous reflection of one's self. This opportunity for reflection, after having circumambulated the grassy mound, should cause pause in the visitor's thought. This tower, which is programmatically a restroom, has only one window. This portal is 1.5 – 3 feet above the ground and can be looked out when sitting on the toilet. This very forced aperture connects the viewer, who is atop the acme of Bozeman's trash pile to the town that constructed it. Every person down there has contributed to its being. If the viewer is using the tower programmatically, there is a connection drawn between one's persons waste to the waste underfoot. Furthermore, this pit

toilet extends fifty feet down slicing through the landfill to the earth below, and in section resembles one of the symbols used by those who promote a dominance and disconnection with the natural world, the cross.



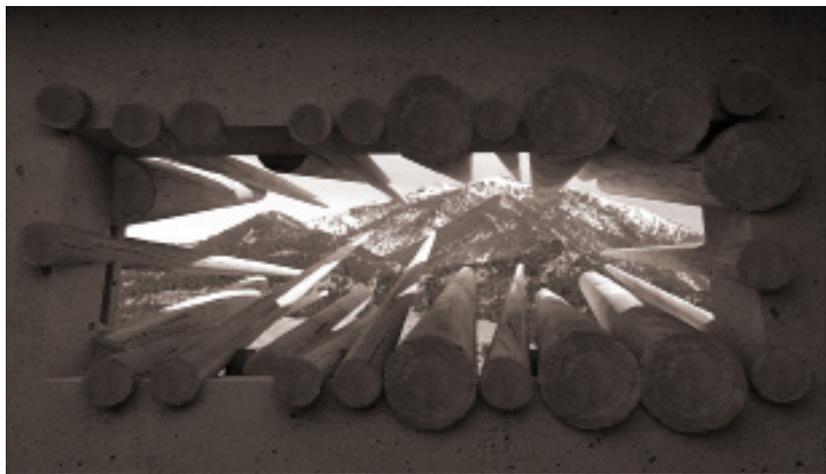
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PROJECT WARMING HUT

After descending the mound to the northeast, one find a very familiar, if not iconic, form. This is the shape of home that every child in the Western world draws with its single window, large door and ubiquitous chimney. This symbol represents family, safety, home, and security (for those lucky enough to have any of those). It also, represents this very stagnant view of our position on the world. This symbol and form has been duplicated many times over in suburbs across the globe. Programmatically, this space is a warming hut for the adjacent sledding hill and park. The interior, covered in firebrick, is essentially a large stove. A long bench is provided for several small fires or the whole structure can be loaded up with wood and old pallets and be lit aflame. This second introduction of fire also carries with it the symbology of ritual purification and cleansing. The warming hut can provide a literal house cleaning where one can purify those old beliefs and myths associated with limitation. Furthermore, as this form has been remade in the form of suburbia, one can essentially burn the American Dream, that by now standardized monoculture of consumption, privatization and ecological genocide. By burning the American Dream one is empowered to retell the story, the myth of potential. The last feature of the warming hut is that the rear wall is one if the woody nature bands. This reinforces the fact that no matter what myth, lifestyle or belief system we adhere to, nature is always there waiting for our reintegration.



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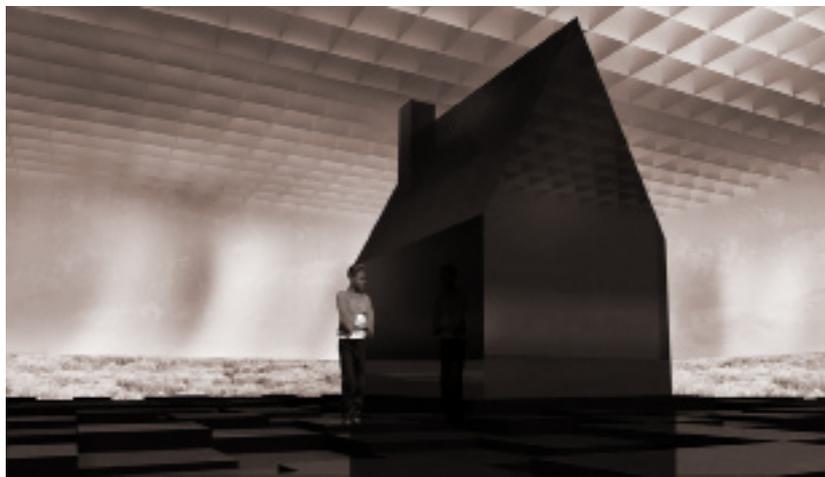
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PROJECT COMPOSTING TOILET

Adjacent to the warming hut is a long shallow trough of wildflowers. This three foot deep trench is also on axis with Saddle Peak. As one walks along the trench a small wood slat-covered structure comes into view. This boxy form rests in a side branch of the flower trench and is entered by walking a steel grate that has become a familiar connective element. This small 11 foot cube is a second meditation chamber, and though it is programmatically also a restroom, this one is experienced through the lens of potential. This restroom houses a composting toilet. The act of turning one's shit into a beautiful, public field of flowers is very empowering. Moreover, as one is resting inside on the toilet seat there is this time a very explosive view of Saddle Peak. While a visitor is using the toilet with a myth-altering view of this amazing peak, he or she has one last cleansing opportunity in that the sink is located under a series of small penetrations that provide brief glimpses of the new mound while washing one's hands.



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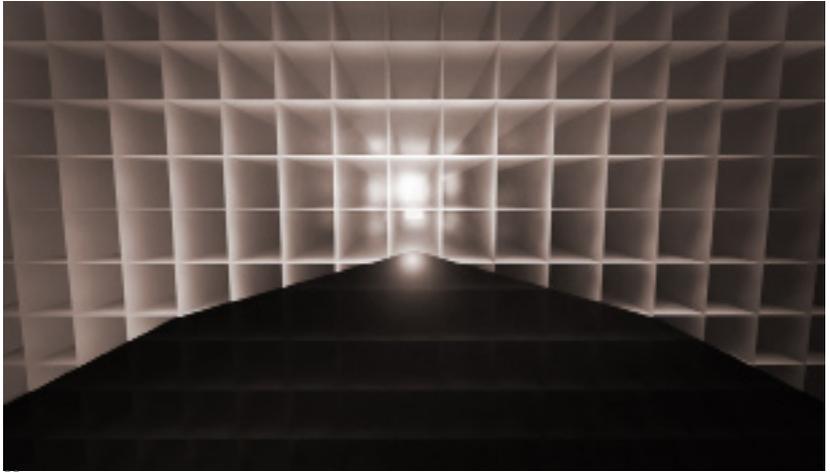


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PROJECT WHITE CUBE

The path then leads through the valley that each participant crossed over on the bridge at the onset of the journey. Overhead one sees a scrim of cables that span the valley at the height of the new mound. This screen of cables is holding a large white cube made of long, 52 foot lengths of silk curtains. This cube 50' x 50' x 55' serves a few functions. One it relates the volume of trash in the landfill to a human scale. Each adult in America, on average, produces 220 cubic feet of compacted garbage a year. This is represented on the ground as 625 2' x 2' black granite stones. The stones vary in height by a few inches requiring the participant to look down at his or her feet while traversing the space. When one finds a stone worthy of pause his or her vision is drawn up to a grid of low hanging curtains. Each individual stone is matched by a tunnel of cloth that extend to the top of the cube this 2' x 2' x 55' equals the 220 cubic feet. At the top of each curtain grid one will see an abstracted square of sky. For one last time, nature will be taken out of context so that it acquires new meaning. Sky becomes a 2 dimensional image that sparks a chord within the viewer that nature, a.k.a. the sky, cannot be contained in a box and that even that square of sky is a fleeting vision. In the center of this space is one last view of the iconic house form. This form is clad in the same black granite as the stones to offer one last dark reflection along this journey. This form is the volume of trash produced annually by a family of four, 660 cubic feet. Within the cube there are 625 individual scale blocks. The entire white cube at 137,500 cubic feet represents 1/625 of the volume of the landfill itself. These volumes are relating to each other in accord to these statistics, but statistics are relative in themselves. That is why the whole structure is an ethereal mass. The curtains will be continually moving in

the ever changing winds. This reminds us that again nature, even human nature, cannot be pinned down to numbers and out of context relationships. Lastly, this white cube, the form often associated with Modernism, acts as the veil that the myth of limitation has portrayed; this veil that has caused the illusion of separation from the natural world and that has hidden the contents and processes of the landfill. I feel that it is a much more effect agent of change to expose the veil than to expose what has been hidden behind. Then we as both a collective and individually can begin to see the world through the eyes of appreciation, gratitude and beautiful potential.



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