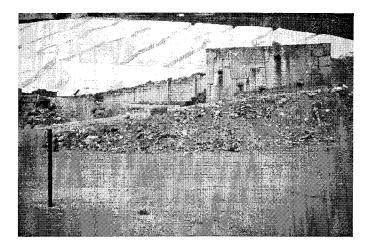
Landscape, Technology and Practice

HEATHER WOOFTER Virginia Polytechnic Institute

"We put up buildings that are stillborn, remnants which will never have been anything but remnants (our age no longer produces ruins or relics, only wastes and residues). Here again, history is taking a fantastic step backwards by building the ruins of the future, the ruins of an apparatus which continues to grow like a virtual waste product. One can imagine entire towns put together not from the wastes of what has already served a purpose and therefore retained some trace of its previous usage, but of things that were waste from the outset"



Given the recent discussions regarding architecture's relationship to both the computer and landscape as a generator of architectural ideas, I find it worthwhile to contemplate the issues of advancements of technology and ecology as each is often considered (with debate) the undoing, or ending, of the other. As we consider these worlds, I would like to parallel these thoughts with ruins – ruins covered by the landscape and subsequently revealed, and ruins consciously constructed as monuments to a society. In reference to the question of technology, landscape and practice, there are separate issues between the idea of the garden, our pursuit of technology and a practice that operates in today's complex relationship to both.

In particular, this paper questions technology and landscape as they enter into a symbiotic relationship. This study seeks inherent properties of each in order to consider in a culture of waste, the architectural design qualities of enduring presence.

According to Gasset there are three categories of technology throughout history: technology of chance, technology of craftsmen and technology of the technician.2 Technology of chance relates to primitive man, who essentially stumbled upon his inventions. In other words, the inventions were not a result of a deliberate search, but rather found through discovery. Rubbing two sticks together and discovering a spark - which then results in fire, for example. Technology of the craftsman took place when the craftsman became aware of technology as an independent entity. The tools became an extension and a complement of man, assisting in the creation of a person's conceived ideas. It should be mentioned that this act included a plan of activity and then a method or procedure to execute the plan. This is referred to as mechane - in the Greek definition of the word, "a constructed thing whether material or immaterial."3 Also interesting to note, is the definition of techne - "the study or science of an art." Techne in Greek language closely relates to episteme (or knowledge) and poesis (poetic art). Socrates made the distinction between technology and the technician – technology being an entity in itself. This difference becomes important when considering the essence of what we mean by the term "technology." The third category to consider is the technology of the technician. In the writing of Heidegger, this method equates with the separation of the mechanical arts from the fine arts and the arts of the mind.

Consider the parallels between Gasset and Heidegger's definitions of technology. For Gasset, the technology of the technician implies a key link to process. He argues that we guarantee advancements in technology because the discovery of these ideas occurs as a process of analysis. A scientist or an engineer studies, decomposes and analyses a condition that then leads to a further discovery. The discovery, though, unlike technology of the craftsman, is not part of a plan. I am not inventing technology to solve a problem; instead, the technology is a

given expectation and a separate entity. "It is neither magical inspiration nor pure chance, but method, a pre-established systematic way of thinking, conscious of its own foundations."5 Perhaps we can relate this meaning to Heidegger's definition before moving on to the implications. His text on the subject makes the assertion that technology has nothing to do with the technical. Leo Marx, in writing on the essence of technology, says this: "In Heidegger's view technology is merely one manifestation of a larger, not easily characterized tendency, process or mode of thought - a serial unfolding or revealing which he calls 'gestell' or enframing." Enframing is not the same as revealing. Revealing somehow called together the notions of techne, episteme and poesis. "What we now feel to be dangerous, threatening, even monstrous about technology is in fact not technology per se; the threat does not come in the first instance from the potentially lethal machines and apparatus of technology, but from the rule of enframing, which threatens to sweep man away into ordering as the supposed single way of revealing, and so thrusts man into the danger of the surrender of his free essence."7 Innovation and technology relies on the concept of history as a path of progress. Technology that dominates nature, controls its processes and resources for human use, and in American culture, controlling nature as a second friendly environment. Enframing becomes the basis for history that guarantees technological advances.

This idea of progress changes with each culture, but for purposes of discussion, we may define progress as improving the well being of human life. We produce those items not found in nature and we reform nature to adapt the environment to the society (not the other way around). "Since present day man, as soon as he opens his eyes to life, finds himself surrounded by a superabundance of technical objects and procedures forming an artificial environment of such compactness that primordial nature is behind it, he will tend to believe that all these things are there in the same way as nature itself is there."8 Technological advancements arguably relieve us from struggles against our natural environment and place us in an ordered system. Consider this system as the result of a sequence of research and discoveries and therefore unaware of its destination. Research of this kind, technology of the technician, exists in engineered systems as well as theoretical discourse. Vesely in his lecture Architecture and Ethics and the Age of Fragmentation states, "the tendency to express the richness of life through transparent, clearly defined functions is a result of a change in which the traditional understanding of creativity, based on the creative imitation of praxis and poetic knowledge was replaced by the imitation of rationally formulated standards and theoretical knowledge. This led to a degeneration of practice into technique and to a general impoverishment of culture."9

How does this meaning of technology as both progress and systematic method influence our understanding of landscape, and further, how does it affect the choices we make in defining our architectural design process? First, nature. Let's take a step back in time to consider ruins from Mexico that speak of inherent connections between landscape and ideas of progress-specifically: Monte Alban, Tonina and Coba. Monte-Alban is the site of a Zapotec Indian ruin. It is a place where the ancient Indians reshaped the mountain, reforming their environment. The earth of the escalating elevation becomes a floor. There is a basic understanding between the relationships of earth and floor. The leveling of the mountain displayed the Indians abilities to confront nature and create the garden for holy activities. The temples themselves seemingly carve territory from the original mountain. In this way, the Indians were also closest to the sky with advanced understanding of the stars and their movements over periods of time. The layout of the platform thus confronted the inherent properties of nature. even though there was an attempt to redefine and shape the landscape. In this manner, the culture reorganizes itself and measures daily activities in parallel with the known world order. Today there is a balance between excavated sites, somehow restored in form, and those sites taken over by the environment. You see mounds in the distance and start to read the ground plane not as a text of ritual specifics, as it was intended, but instead, as marks of form and locations from which to view the sky, look over a cliff, experience the scalar re-creation of the mountain between two stone temples. Placement and form reveal hints of cultural rituals, but has presence beyond their specifics. As the tourism industry grows in Mexico, they are excavating sites as money slowly allows. This is a beautiful time to visit a ruin - as there is a sense of discovery. The balance between nature's displacement of stones and the recovery of the refinement of edges of temple stairs implies a balance this is perhaps more true than their full disclosure.

The painters of the late nineteenth century portrayed the American frontier as a place of unspoiled beauty. Nature here represents freedom, space and discovery. Thus, these images somehow speak of independence and American ideals that shape democracy. Nature is uncontrolled - the garden is a place to be explored, settled, but somehow still available. The American Indian fits in Thomas Moran's Cliffs of Green River, as his society traditionally believed in the earth as a place of inhabitance but not ownership. In contrast, when we look at the work of artist Meg Webster, her rendition of the environment springs from a similar concern that we are destroying our earth. Yet, in the name of restoring, she is creating a miniature ecosystem set within boundaries.10 This reminds me of the writing of Jean Baudrillard, where the environment that we are promoting as the antithesis of technology, and a new definition of progress, becomes something of a transparent object. By this, I mean that we are defining nature as something of the technological and not accounting for the essential property of nature - limitless. "Beneath a frenzy for ecological conservation which is really more to do with nostalgia and remorse, a wholly different tendency has already won out, the sacrificing of the species to boundless experimentation."11 Baudrillard references the Biosphere 2 project as an experiment that failed because we

tried to fully contain and imitate nature without addressing nature's inherent property of non-containment. It is something that relies on viruses and insects - not only the ecosystems we find comfortable. If we speak of nature as limitless, the desert as landscape and weather's storm fronts are images that come to mind. They both imply a sense of movement and shifting of locations. Yet still, in our current relationship with the meaning of technology, these places transform. The fact that the Biosphere 2 project was located in the desert perhaps relates to the ideal of a tableau-rosa where in as much as possible, we are placing a self-contained environment on a surface that we deem as uninhabitable. The desert and the storm are both examples of the balances in our environment of extreme conditions. Yet, we control water for the purposes of industry and to prevent flooding of built towns. Throughout history there are examples of man's ability to use technology to extract, control, and draw upon the resources of nature. The photographs of Richard Misrach of the desert salt flats record our interventions in barren places.12 Ironically, this is the also the same location where a party of pioneers with the intent of crossing the Sierra Nevada Mountains, were stopped and severely reduced in number when a blizzard on the edge of this desert took their lives. Now, in comparison, this is the site of high-speed salt flat races. His photographs record the effects of these events on the landscape. When we see the tracks of vehicles it marks the passing of a vehicle on historically in-passable terrain, and recalls our changing interventions in nature. Finally, consider the Baudrillard image of an American cowboy in the desert drive-in with cactus and cars watching an image frozen by the picture plane of an astronomer weightless around the moon. Another time and place of technology of wonderment viewed from an uninhabitable habited landscape, which already is speaking of ruin with the missing panel below the screen. Time, certainly non-linear, and landscape are the dominant subjects while individuals are icons (cowboy-object) or personalities defined by the cars they drive.

While technology and environment bind themselves closer, and theoretical discourse reflects on this course, the practice of architecture pursues these discussions. Increasingly, innovative design processes gain significance in the determination of form. This is not to speak against innovation, or against new ways of conceiving space, but perhaps we need to question the processes that we embrace, or the idea that method alone somehow defines the objects that we find. Perhaps there is literary and historical reference for this type of attitude that is current, but Architecture is an art form that does more than follow the scientific advances and possibilities that the technician is surely able to discover. It is also bound to permanent conditions.

From Rafael Moneo's Kenzo Tange Lecture: "A building formally was built to last forever or, at least, we certainly did not expect it to disappear. But today things have changed. Although we resist regarding our architecture this way, it is far removed

from traditional architecture despite our professed respect for history. We probably unconsciously know that architecture is not going to last as long as it used to. But we reject such ideas, even though the real situation affects architecture and marks it with the flavor of the ephemeral. If architecture is ephemeral it can be immediate." Is

The Kursaal Auditorium in San Sabastian Spain speaks of the position established by Moneo in his lecture from the same period because in addition to making connections to the idea of ruin and buildings of permanence, this project employs many building assemblies that we consider innovative today. Yet, the process that shaped the design is much more than a simplification, gesture or reduction of technique. When discussing the balance between technology, landscape and practice, the Kursaal enters discussion with issues of fragmentation, material formalism, metaphorical gestures, historical site references and cultural typologies in order to arrive at what he calls an architectural aim. Theory and architectural education are critical to understanding the criteria that shape the realization of a building, but do not predetermine form. Moneo reforms the landscape to create an urban edge, and contain a cultural event.

Consider a few specifics:

- the visual tension of a geographical two volume mark on the city and the coastline
- the sequencing of views as one moves through the building at the interior and along the exterior platform,
- the response to topography on scales of the street, the beach, the promenade
- the compactness of the volumes and the manipulations of height as one enters from the street and opens to a space of light and full height,
- the presence of the stone ground plane contains a variety of program elements yet speaks of rocks and protection from the shifting of the sand,
- the many materials mark direct events; a material may be used for immaterial qualities and ones of direct correspondence,
- the translucent skin connects to metaphors of humidity, water, traveling under the sea,
- the illuminated skin transcends surface and material issues alone.
- the purposeful mark of being inside although there are openings to the sea, the stone platform, and the city, ultimately the visitor is contained with glimpses outside,

- the in-between spaces with their dynamic geometry formed between the skin and interior of the auditorium cubes.
- the baroque-like stairs that occupy this area to create moments for social events,
- the structure of steel girders supports a skin that resonates with multiple associations beyond structural clarity,
- a building that is solid by day and translucent and weightless at night, (carefully designed with mock walls testing the appearance of the glass in this often rainy location.)

As one critic wrote of his work, "Moneo reacts to new directions, but beneath the surface holds to longer range positions. He is suspicious of 'minimalist' strategies of design for he feels that these may oversimplify a problem and so exclude possible dimensions of meaning. There is a passionate need to penetrate beyond the surface, to reveal the mechanisms of architectural conception, to enter the layers of ambiguity which link a building to its society, but which also separate it, allowing it to have a sort of autonomous life as a work of architecture. A new building is bound to destroy even as it creates, but in the process it may reveal something of the latent, sometimes contradictory, forces at work: it may even bring these forces into a tense resolution."14

As a point of comparison to a building process, consider a landscape designed as a place of ruin that attempts to restore a demolished town through remnants and theater events. An earthquake destroyed the old town of Gibellina, Sicily. The earthquake that created these ruins stopped right before the graveyard outside of town. For this reason, the town decided to preserve the site by hiring an artist. Burri, to memorialize the town. The streets and blocks filled with concrete mark a town that was lost in a project called Cretto-meaning fissure, or crack. Ruins of streets follow indentations of concrete with floors and walls 1.6 m high. The slope of the town leads to a mountaintop where ruins of walls, boats, styrofoam faces the size of bodies, and coat racks sit. Old walls are in ruins and new pieces of walls create lines. An amphitheater with scaffolding and stage sit on the backdrop of ruins (broken plates, tiles, twisted rebar, and grass growing inside the pieces of houses and on sculptures.) The cracks in the walls and the fissures of erosion recall Burri's abstract paintings that speak of surface diversity and material on canvas. In this case, though, the surfaces and divisions pronounce themselves through the making of a piece that resembles a grave marking, a labyrinth, or traces of an old Roman road. He somehow creates wholeness with both found remnants and constructed ones. From Vasely, speaking on fragments: "In too many cases, fragments are used purely as formal devices or only as a source of experimental possibilities, which may produce interesting solutions but not necessarily a meaningful work. But how can we judge what is a

meaningful work? Meaning depends on the continuity of communicative movement between individual elements and their relation to the pre-existing latent world."15 The fragments are memories and pieces that speak both of the history of the place and the idea of theater-a re-enactment of sorts. In addition, the fissures in the concrete allow grass to grow through the forms creating a balance between the white surface of the ground, the divisions within its construction, and the evidence of ground erosion surrounding the site. Its also interesting to go and visit the new town of Gibellina built in the 1980s, which is the location of many progressive sculptures and pieces of architecture. I have visited this site twice with about 10 years between. For me, it is interesting to look at the architecture located in the new town built 18 km from this site. We see constructions that have already degraded and been abandoned to ruin, but from their style we can place them as contemporary. The form of the ruin bears striking resemblance to those projects today that may be categorized as frozen method.

In closing, images by artist Mark Tansey: one of a man cleansing all objects in sight, and another of a pile of carvings of stone statues made to represent mankind through different eras in a material that maintains permanence. The faces of history arrange to form a pyramid, and we must consider which ones history remembers. One conceived desire for permanence is to mark one's place in time. Another, to construct spaces that live beyond the memory of a person to shape a beginning for the next generation. These images start to reflect on the purity of nature and nature as a construct of human intervention. This connection between our interpretation of our environment (theoretical) and culture seems critical when discussing the influence of architectural design process on practice. If one assumes that we are active in a time of the technological and artificial, concerns may raise regarding the role of pre-established method form-making. In other words, the discourse today centered on technology and artificial environments may be interpreted as direct representations of process, thus severing (or lessening) connections to materials and construction. This observation exists in the realm of Heidegger's assertion that the processes of technology enframes, as opposed to reveals.

NOTES

- ¹ Jean Baudrillard, "Maleficent Ecology" in The Illusion of the End, translated by Chis Turner, (Stanford: Stanford University Press, 1994), 79.
- ² Jose Ortega y Gasset, "Thoughts on Technology" in Philosophy and Technology, C. Mitcham, R. Mackay eds., 1983, 307.
- ³ Stuart Berg Flexner, ed., The Random House Dictionary of the English Language Second Edition Unabridged, (NY: Random House, 1987)
- ⁴ Stuart Berg Flexner, ed., The Random House Dictionary of the English Language Second Edition Unabridged, (NY: Random House, 1987)
- ⁵ Jose Ortega y Gasset, "Thoughts on Technology" in Philosophy and Technology, C. Mitcham, R. Mackay eds., 1983, 313.

- ⁶ Leo Marx, "On Heidegger's Conception of Technology and its Historical Validity," in Massachusetts Review: In Search of America, Vol.25, No.4, 640.
- 7 Leo Marx, "On Heidegger's Conception of Technology' and its Historical Validity," in Massachusetts Review: In Search of America, Vol.25, No.4, 642.
- ³ Jose Ortega y Gasset, "Thoughts on Technology" in *Philosophy and Technology*, C. Mitcham, R. Mackay eds., 1983, 311.
- ⁹ Vesely, Dalibor, "Architecture and Ethics in the Age of Fragmentation," unpublished lecture, 3.
- ¹⁰ John Beardsley, "Meg Webster," in Visions of America: Landscape as Metaphor in the Late Twentieth Century, Mildred Friedman, ed., (The Denver Art Museum and Columbus Museum of Art. 1994).
- ¹¹ Jean Baudrillard, "Maleficent Ecology" in *The Illusion of the End*, translated by Chis Turner, (Stanford: Stanford University Press, 1994), 83-84.
- ¹² Richard Misrach, "Desert Canto XV The Salt Flats," in Visions of America: Landscape as Metaphor in the Late Twentieth Century, Mildred Friedman, ed., (The Denver Art Museum and Columbus Museum of Art. 1994), 300.
- ¹³ Rafael Moneo, "The Solitude of Buildings," in Kenzo Tange Lecture (Harvard University: Graduate School of Design, 1985)
- ¹⁴ William J Curtis, "Rafael Moneo The Structure of Intentions" in El Croquis Rafael Moneo, 1995-2000, Richard Levene, Fernando Marquez Cecilia, eds., Croquis no. 98, 29.
- ¹⁵ Vesely, Dalibor, "Architecture and Ethics in the Age of Fragmentation," unpublished lecture.13.