

A Study on the Artistic Development of Robert Smithson as Means of Investigating His Conceptualization of a Modern Landscape Aesthetics

Kim, Do-Kyong

SYNWHHA Consulting Co.

로버트 스미슨의 작품에 나타난 近代 景觀美學의 概念化에 관한 연구

김도경

(주)신화컨설팅

ABSTRACT

본 연구는 환경예술운동의 선구자격이며 가장 대표적인 작가로 평가되는 로버트 스미슨의 작품에 대한 연구를 통해 그의 景觀美學의 概念化에 대하여 고찰해 보고자 하였으며, 궁극적으로 본 연구가 환경예술운동이 현대 조경설계에 미친 영향에 대한 기초 연구라는데 본 논문의 의의를 찾고자 한다. 스미슨의 작품이 조경에서 다루는 경관의 여러가지 관점을 다루었으며, 미국을 중심으로 조경설계에서 공간의 시각적 표현을 시도한 몇몇 조경설계가의 작품배경 또한 환경예술로 불리어지는 일련의 작품군과 작가의 주장에 많은 영향을 받았음에도 불구하고 그의 작품이 조경분야에서 연구의 대상으로 활발하게 다루어지지 못한 것도 사실이다.

본 연구에서는 스미슨의 景觀美學의 概念化를 그의 작품을 통해 살펴보았으며, 스미슨의 작품과 조경설계와의 연관성, 그리고 현대 조경설계에 미친 스미슨의 공헌등을 조명해 보았다. 스미슨의 초기작품들은 개발로 인한 환경 및 경관의 남용 혹은 황폐화에 대한 비평적인 관점을 예술적 형태로 묘사한 반면, 후기 작품들에서는 환경 및 경관에 대한 예술적인 조작 (artistic manipulation)에 긍정적인 가치를 부여하고자 한 것이었다. 스미슨의 작품이 현대 조경에 미친 가장 큰 공헌은 무엇보다도 경관 및 환경의 변화에 영향을 미치는 수단으로서 예술을 활용했다는 것일 것이다. 환경예술가들의 주장과 그들의 작품이 현대 조경설계에 구체적으로 어떻게 형상화되었는지에 대한 연구는 앞으로 규명되어야 할 부분이라고 판단된다.

I. Introduction

With few exceptions the great villa gardens and parks of antiquity, the Renaissance, and even the 19th century, have not yet stimulated comparable achievement in the twentieth century. The current estrangement of the art world and the world of design is peculiar given the pronouncements and artistic opportunities in industrial and postindustrial societies.

Beginning in 1966, partly inspired by an interest in Frederick Law Olmsted, Robert Smithson, went out into the vastness of the natural desert and the desperate man-made landscapes of New Jersey and Holland to create his art. These lonely efforts have had a profound effect on a new generation of artists, architects and landscape architects(Walker, 1980).

Robert Smithson was an artist whose ideas and art forms engaged many aspects of the landscape. In studying his works and thoughts, he may be seen in many roles: artist, landscape designer, scientist, sociologist and mythologist. His interests in the landscape were diverse; his subjects included geology, mapping, physical processes, crystallography, landscape space, monumentality and land reclamation. While his early works represented a critique of the problems of working with the landscape as an art form, his late works affirmed the positive value of artistic manipulation of the environment. Smithson's last major works, "Spiral Jetty" and "Broken Circle/ Spiral Hill", embodied the conceptual and formal principles of creating environmental art in the landscape. Though Smithson's career was cut short by his death in a plane crash during construction of the piece "Amarillo Ramp" in 1973, his influence on a generation of artists working with the landscape has been profound.

This study focuses on the artistic development of Robert Smithson as means of investigating his conceptualization of a modern landscape aesthetics.

II. Artistic Development of Robert Smithson

1) Early Works and Influences

Smithson's fascination with the landscape began in his childhood, in rock collecting excursions in the environment around his home in Passaic, New Jersey(Hobbs, 1981: 231). There he became familiar with the geological processes of sedimentation and stratification, which were to have a major influence on the course of his artistic thoughts. These natural processes were to provide him with metaphors for systems of order, while the physical structures they defined would provide models for formal structures of art.

Familiarization with the landscape of New Jersey also included observation of the intervention of man in the landscape. Passaic and surrounding suburbs had a natural landscape that was marked by the processes of industrialization, waste dumps, cheap industrial construction, and mining pits were prominent reminders of the abuse of the landscape. This had a formative influence on Smithson's later interests in land reclamation.

Smithson moved from New Jersey to New York in 1964, and commenced his creative work as an artist. His early work aligned with the work of the New York Minimalist school, exploring formal and philosophical problems of art making. Like the Minimalists Donald Judd and Carl Andre, Smithson was concerned with systems of order and means of perception.

These conceptual problems became the primary concern of this period. Smithson utilized the ordering principles from studies of crystallography as a means of defining structures for his work. Major works from this period (1965-1967) include "Enantiomorphic Chambers"(Fig. 1), "Alogon"(Fig. 2), "Pointless Vanishing Point"(Fig. 3), and "Strata" (Fig. 4). All of these works investigate the abstraction of order to its conceptual basis. In these works, perceptual information is meaningful only as it allows for conceptualization. This notion was the starting point for Smithson's interest in the dialectic between perception and conception, between seen and unseen, known and unknown. This dialectical process was to take many forms in all of Smithson's work, and was of particular relevance to Smithson's development of the notion of "Site/Non-Site" (a pun on 'sight/non-sight').

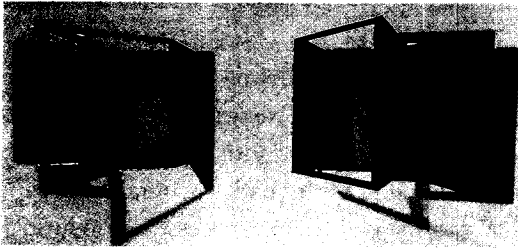


Fig 1. *Enantiomorphic Chambers*, 1965(Hobbs, 1981: 128~129)



Fig 2. *Alogon #1* (as originally installed), 1966; painted stainless steel; 7 units, square surfaces 3, 3½, 4, 4½, 5, 5½, 6", overall 35½ × 73 × 35½" (Hobbs, 1981: 69)

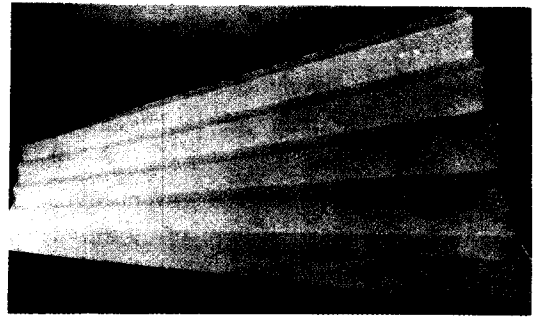


Fig 3. *Pointless Vanishing Point*, 1968(Hobbs, 1981: 99)

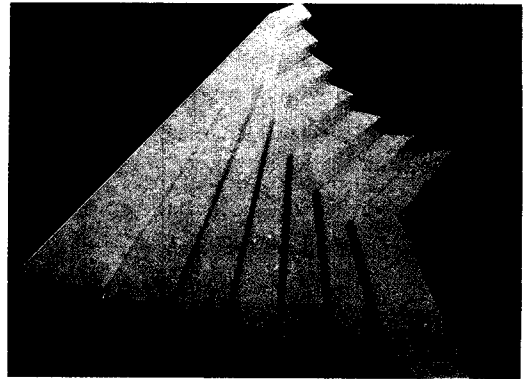


Fig 4. *Leaning Strata*, 1968(Hobbs, 1981: 75)

While developing these gallery works and building a conceptual framework related to their formal problems, Smithson also pursued an interest in the external physical environment. Smithson spoke at the Yale Art Association Symposium "Shaping the Environment: the Artist and the City"(Hobbs, 1981: 75).

Through this symposium Smithson developed an association with the architectural engineering firm of Tippetts, Abbott, McCarthy and Stratton to work on a landscape proposal for the DallasFort Worth Airport(Fig. 5). Smithson was hired as an artist consultant to explore means of knitting the landscape into the general airport plan. Though the project never developed beyond the initial planning stages,

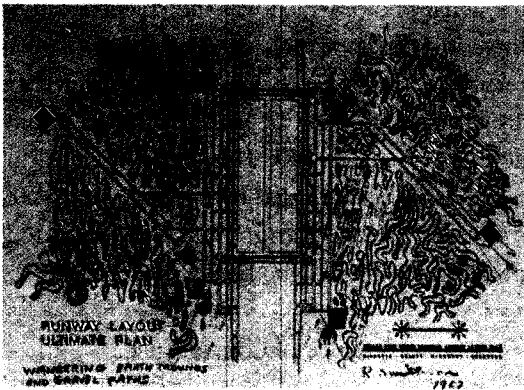


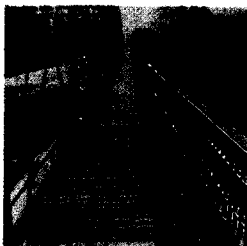
Fig 5. *Dallas-Fort Worth Regional Airport Layout Plan : Wandering Earth Mounds and Gravel Paths*, 1967; blueprint with collage and pencil; 15½ × 11" (Hobbs, 1981: 77)

the project was instrumental in that it connected Smithson with the processes of using maps and aerial photographs as vehicles for assessing information about sites and geographic regions.

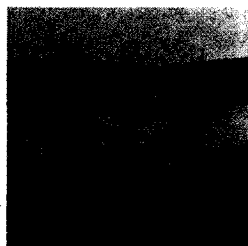
Parrallelling the Dallas-Fort Worth airport project was a return to the exploration of the landscape of Passaic. In 1967 Smithson published a narrative with photographs titled "A Tour of the Monuments of Passaic, New Jersey"(Fig. 6). Using a nineteenth-century travel brochure format as a model, Smithson presented the landscape of Passaic as a series of monuments to twentieth-century industrialization (Hobbs, 1981: 93). Drainage pipes and railroad bridges were elevated to the status of modern monuments. Like his gallery works of the period, this narrative represented a critique, this time of the abuse of the local environment. Again, Smithson identified the range of contradictions without proposing solutions.

2) Site/Nonsite: The Dialectic of Landscape Art

Smithson's experience with the landscape was transferred back into gallery projects in 1968. While the earlier works were involved with an investigation of the dialectics of perception, the work of this period investigated these dialectics in relation to the landscape. An early example was the work "A Nonsite, Pine Barrens, New Jersey"(Fig. 7, 8). The physical structure of this work was a series of containers made of wood in shapes based on abstractions from an aerial photo of the Pine Barrens. The shapes represented an objectification of parallel vectors converging on the site's center. The containers were filled with sand taken from the site, then repositioned in the gallery according to their orientation in the original photo. The



The Bridge Monument Showing Wooden Sidewalks



Monument with Pontoons : The Pumping Derrick

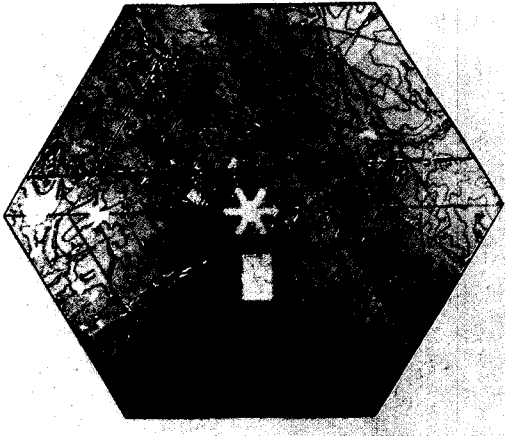


The Great Pipes Monument



The Fountain Mounument : Side View

Fig 6. *A Tour of the Monuments of Passaic, New Jersey*, 1967; Instamatic snapshot by Robert Smithson (Hobbs, 1981: 91~93)



A NONSITE (an indoor earthwork)

31 sub-divisions based on a hexagonal "airfield" in the Woodmansie Quadrangle - New Jersey (Topographic) map. Each sub-division of the Nonsite contains sand from the site shown on the map. Tours between the Nonsite and the site are possible. The red dot on the map is the place where the sand was collected.

Fig 7. *A Nonsite, Pine Barrens, New Jersey, 1968; map Photostat; 12 ½ × 10 ½"* (Hobbs, 1981: 102)

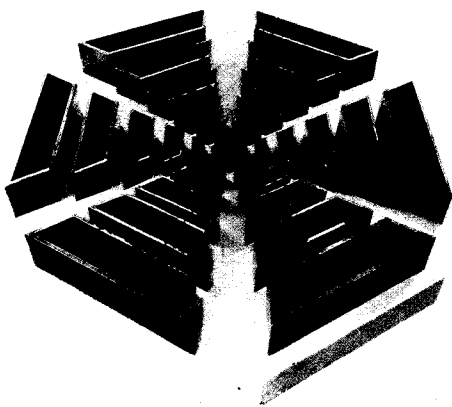


Fig 8. *A Nonsite, Pine Barrens, New Jersey, 1968*(Hobbs, 1981: 103)

conceptual system proposed by this piece established the dialectic of 'Site/Nonsite'. The 'Site' referred to an actual place symbolized by

the aerial photo, which was the place visited by the artist, from which the raw material was removed. The 'Nonsite' was the structure of the art work, a frame for the inclusion of the material taken from the site. The complexity of this relationship was detailed by Smithson in a statement entitled "Range of Convergence" published in 1969 in the book *Land Art*.

Range of Convergence

The range of convergence between Site and Nonsite consists of a course of hazards, a double path made up of signs, photographs and maps that belong to both sides of the dialectic at once. Both sides are present and absent at the same time. The land or ground from the Site is placed in the art (Nonsite) rather than the art placed on the ground. The Nonsite is a container within another container-the room. The plot or yard outside is yet another container. Two-dimensional and three-dimensional things trade places with each other in the range of convergence. Large scale becomes small. Small scale becomes large. A point on a map extends to the size of the land mass. A land mass contracts to a point. Is the Site a reflection of the Nonsite (mirror), or is it the other way around? The rules of this network of signs are discovered as you go along uncertain trails both mental and physical(Holt, 1979: 115).

The 'Site/Nonsites' represented an attempt to reconcile the act of manipulating the landscape through formal means with the desire to maintain the original internal relationships of the landscape. Various forms of cross-referential information reestablished the original relationships of the landscape in the gallery space, yet denied the actual space and order in this process. Clearly, Smithson was struggling with the notion of landscape intervention, while at the same time fascinated with the process of working with the real landscape. The series of 'Site-Nonsites' were the culmination of Smithson's work in the gallery. They accepted the conceptual problems of creating a land-

scape within the structure of gallery space, and utilized these problems as their primary content.

3) "Mirror Displacements" and "Asphalt Rundown": Displacements of the Landscape

Smithson moved into the real landscape following the 'Site/Nonsites'. His work in 1969 focused on a series entitled "Mirror Displacements"(Fig. 9). To create the mirror displacements, Smithson travelled extensively, placing small rectangular mirrors in varying juxtapositions on sites throughout the world. The "Mirror Displacements" represented an inversion of the processes involved in the "Site / Non-Site" series. The "Site/Non-Sites" created frames to bring landscape into the gallery, compressing landscape space into the structural frame of the artwork. The "Mirror Displacements" took a frame (the mirror) and placed it in a real landscape, emphasizing the landscape through

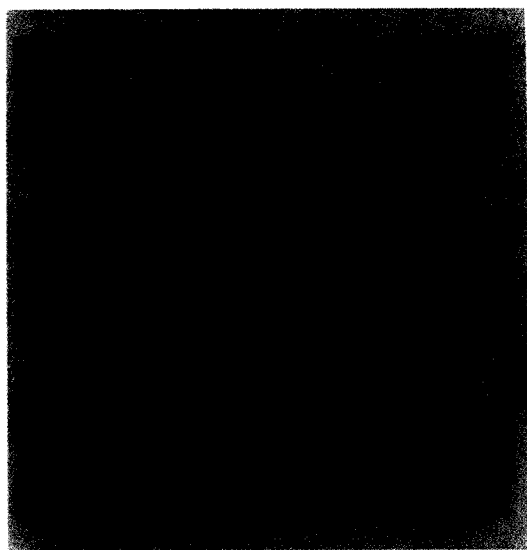


Fig 9. 9 Mirror Displacements from "Incidents of Mirror-Travel in the Yucatan." 1969(Hobbs, 1981: 128~129)

negation. Thus, Smithson was able to manipulate real space by 'removing' the space from the work. Though this was accomplished through the negation of space, it also represented a means of affirmation, the negative/positive dialectic established the presence of form in space. As Smithson wrote:

The mirror in a sense is both the physical mirror and the reflection. Here the site/nonsite becomes encompassed by mirror as a concept—the mirror being a dialectic. The mirror is a displacement, an abstraction reflecting the site in a very physical way(Holt, 1979: 168~170).

The "Mirror Displacements" culminated in a more monumental approach to displacement in the "Glue Pours"(Fig. 10), "Concrete Pours" and "Asphalt Rundown in Rome"(Fig. 11), all of 1969. In "Asphalt Rundown in Rome", Smithson poured one ton of asphalt over a steep eroded gravel hillside, causing the asphalt to cascade over the slope and fill its gullies and crevices. The asphalt defined a record of displacement; it created an artwork based on natural processes(flow) interacting with the skeleton of natural processes (erosion). In this interaction, a dialectical tension similar to that of "Site/Non-Site" was established, although in this instance the site was an actual environmental location, and all the processes were natural physical processes. The 'Rundown' and the 'Pours' were left on the site, to be subject to the forces of erosion themselves, causing a reiteration of the dialogue between the act of intervention and the natural processes of the site. It is also significant that Smithson chose industrial materials such as asphalt, glue and concrete as his media for these pieces. These materials recall "The Monuments of Passaic, New Jersey", and represented an act of catharsis for Smithson. In pouring asphalt in Rome, the 'eternal city', landmark of monumentality, Smithson created a nega-



Fig 10. *Glue Pour*, Vancouver, British Columbia, January 1970 (Hobbs, 1981: 128~129)



Fig 11. *Asphalt Rundown*, Rome, Italy, 1969 (Hobbs, 1981: 128~129)

tion of monumentality. This piece represented the ultimate critique of unnatural intervention, the imposition of man's willfulness on the environment that leads to its contamination or destruction. The relevance of this to Smithson's later obsession with land reclamation through art is striking.

4) Spiral Jetty: The First Earthwork

"Spiral Jetty"(Fig. 12) of 1970-1971 was Smithson's first, and perhaps most well known piece of large-scale environmental art. Made entirely from the natural materials of the site, "Spiral Jetty" became the symbol of a new type of art in the 1970's: the Earthwork. Smithson chose the great Salt Lake in Utah as the site for this piece because its high salinity and its reddish water color (a result of microbacteria) suggested its connection to "primordial beginnings" (Hobbs, 1981: 193). Originally Smithson planned to create an island in the lake. After visiting the site, he designed instead a spiral of earth extending from the shore in a counter-clockwise direction, winding three times to a terminus in the water. In making "Spiral Jetty", 6650 tons of site material were moved by trucks and bulldozers by Smithson and his assistants. The piece consisted of mud, precipitated salt crystals, rock, and water. It was 1500 feet long and fifteen feet wide.

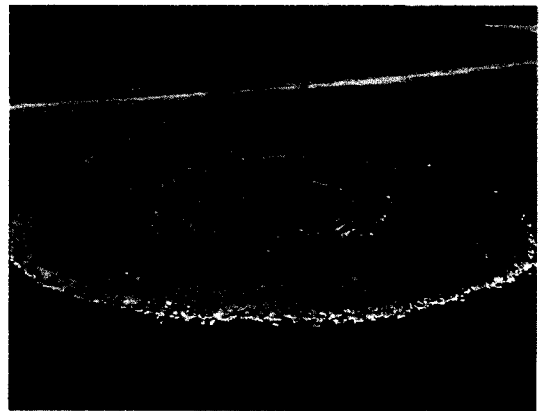


Fig. 12. *Spiral Jetty*, Great Salt Lake, Utah, April 1970 (Hobbs, 1981: 128~129)

Various aspects of "Spiral Jetty" related to earlier investigations of Smithson. It provided a vehicle for the physical manifestation of the

natural processes of sedimentation and crystallization. Like the 'Pours' and 'Rundowns' preceding it, "Spiral Jetty" also created a dialogue with the forces of erosion; built in an environment created through erosion (a salt sedimented lake), the jetty acted as a substrate for further erosion. The interaction of built form and natural processes created a dynamic tension related to the dialectics of "Site/Nonsite".

Though the scale and siting of "Spiral Jetty" suggest a quality of monumentality, the symbolism of the work does not lie in its meaning as a monument. Rather, the spiraling form is a symbol for entropy, which is, in Smithson's words, "evolution in reverse" (Holt, 1979: 168~170). Entropy was a theme which Smithson returned to throughout his work. It referred to the processes by which matter went from a state of greater order to a state of lesser order. The presence of the spiral in the Great Salt Lake (a 'primordial' sea of life) seems to suggest the creation by Smithson of an order which was oriented towards an earlier time, to prehistory: the return of the environment to a more basic order. This may be interpreted as a gesture towards the reestablishment of order in the landscape, and as a reaction in some distant form to the wasteland of Passaic, where natural processes were overcome by the pressures of an industrialized society.

5) "Broken Circle/Spiral Hill": Earthwork as Land Reclamation

"Spiral Jetty" led into a larger and more public work, "Broken Circle(Fig. 13) /Spiral Hill"(Fig. 14) at Emmen, Holland, created by Smithson in 1971. Invited by an international art exhibition program to create a work for a park in Holland, Smithson decided instead to create a piece in an

abandoned quarry slated for reclamation as a recreational site. He referred to the site as "a disrupted situation"(Holt, 1979: 168~170) and "a whole series of broken landscapes"(Holt, 1979: 168~170). The site offered circumstances similar to the Great Salt Lake: inland water in a sedimentary bed surrounded by exposed earth.

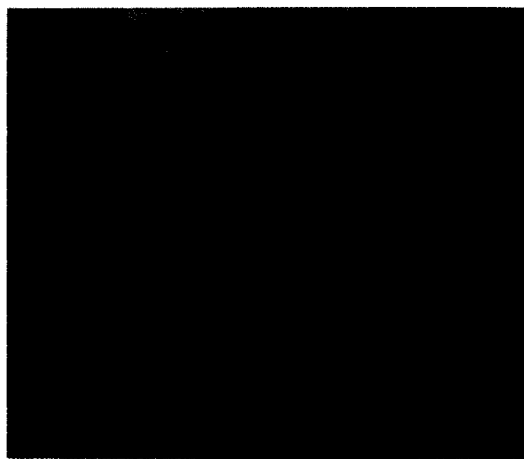


Fig 13. *Broken Circle*, Emmen, Holland, Summer 1971 (Hobbs, 1981: 128~129)



Fig 14. *Spiral Hill*, Emmen, Holland, Summer 1971 (Hobbs, 1981: 128~129)

The site presented "a heterogeneous entropic state" (Hobbs, 1981: 209) which Smithson sought to reinforce through creation of two interrelated earthworks.

"Broken Circle" consisted of a flat semi-circular jetty extending into the quarry water cut by a semi-circular canal. "Spiral Hill" was a hill formed of loose gravel on an adjacent bank with a path spiraling up in a counterclockwise direction. Both works were constructed by bulldozers and dredging equipment using the materials of the site. The two works represented Smithson's continuing investigation of dialectical propositions. Where "Broken Circle" was flat, centrifugal, and surrounded by water, "Spiral Hill" was three-dimensional, centripetal, and surrounded by land. Together, their circular forms defined an internalization of movement, representing inverse symbols of entropy.

Though "Broken Circle/Spiral Hill" was originally commissioned as a temporary outdoor piece, its success as a work of public art led to a vote by the people of Emmen to preserve the work on a permanent basis. The site became a park with the artwork as its focus. This was the first instance of a contemporary earthwork taking on the status of a public landscape. This was all the more significant in that the landscape was created on an abandoned and otherwise unusable site. Yet Smithson's act of reclamation did not obscure the geological characteristics of the site; rather, Smithson created an earthwork which reaffirmed the inherent nature of the site as a particular place with specific characteristics and values. Where Smithson's artistic process had earlier been directed at a critique of form making and landscape intervention, in "Broken Circle/Spiral Hill" Smithson demonstrated a means of creating a meaningful landscape through

art. At the same time, the work at Emmen represented an attempt "to bridge the long-standing boundaries between sculpture and gardening"(Hobbs, 1981: 216). Thus, through the creation of these earthworks, Smithson was involved in an expansion of the domain of landscape architecture.

III. Implications of Robert Smithson's Works on Landscape Design

1) Olmsted and Smithson: the Picturesque Dialectical Landscape

Smithson's connection to landscape architecture became more clearly defined in relationship to the 1972 Whitney Museum of Art exhibition of the work of Frederick Law Olmsted. Smithson compared Olmsted's conversion of "a nineteenth century desert in the center of Manhattan" into Central Park to his own work in the conversion of industrial wasteland into earth art. In an article written by Smithson for *Artforum* in 1973 entitled "Frederick Law Olmsted and the Dialectical Landscape"(Smithson, 1973), Smithson investigated Olmsted's ties to the eighteenth century English conception of gardening, particularly to the ideas of Uvedale Price and William Gilpin. Price described how the effects of time and nature would soften Man's interventions on the landscape, "giving the effect of picturesqueness"(Hobbs, 1981: 217). Of particular relevance to Smithson was Price's identification of quarries and gravel pits as locales capable of becoming picturesque. Smithson's article describes the picturesque as a means of establishing an ongoing dialectic between landscape and man-wrought changes. Smithson wrote "Dialectics of this type are a way of seeing things in a manifold of relations, not as isolated

objects" (Smithson, 1973: 63). Smithson saw Olmsted's work as a historical foundation for creating the picturesque dialectical landscape, and referred to Olmsted as "America's first 'Earthwork Artist'" (Smithson, 1973: 65).

The notion of the picturesque landscape was significant to Smithson's approach to land reclamation. In creating a picturesque landscape, elements of the existing landscape were integrated within a composition to accommodate the variety and the accidental nature of landscape forms. As a framework for Earth Art, the picturesque offered the distinct advantage of directing a viewer's attention to ongoing changes in the landscape. This aesthetics represents a viable means of approaching the problems inherent in large scale land reclamation through environmental art.

2) Land Reclamation Through Environmental Art

Following his success at Emmen, Smithson concentrated his efforts on using Earth Art as a means of major landscape change. Between 1971 and 1973, Smithson contacted over fifty industrial and mining corporations offering his artistic services for solving problems of land reclamation. Smithson urged for "the recycling of natural resources through Earth Art"(Holt, 1979: 220). In a letter to the corporate leaders, Smithson wrote "Art should not be considered as merely a luxury, but should work within the processes of actual production and reclamation"(Hobbs, 1981: 216). Where corporate policy stated that abused land would be reclaimed through the creation of resorts and "images of paradise" (Hobbs, 1981: 217), Smithson proposed the alternative of working with actual materials, natural processes, and the geological history of the site to achieve reclamation.

A letter to the Vice President of Public Relations for Peabody Coal expresses Smithson's approach to reclamation, as well as his determination to make reclamation through art a 'marketable' service. After offering his services to the company at a modest fee, Smithson wrote:

I would also add that Earth Art as a part of the reclamation process would give the landscape a higher economic value in terms of real estate. Waste land is thus converted into something practical and necessary, as well as becoming good to look at. It would provide the company with a public image which would go far beyond any defensive advertising. This is a kind of art that anybody can understand(Hobbs, 1981: 220).

"Spiral Jetty" and "Broken Circle/ Spiral Hill" had assumed the status of sculptural icons. Smithson presented Earth Art as a viable form of public art, which could be invaluable to the public image of a corporation. At the same time, Earth Art could restore the real estate value of a property. Rather than creating precious art objects for the world of the art galleries, Smithson sought to channel his art towards the revitalization of land devastated by industrialization.

In 1973, in the months prior to his death, Smithson submitted numerous proposals for large-scale earthworks on strip mining sites. These proposals drew upon the forms and attitudes developed in "Spiral Jetty" and "Broken Circle/Spiral Hill" and brought them to the scale of environmental site work. Smithson's formal vocabulary included crescents, circles, and concentric rings, all directed at engaging the site in a dynamic tension between order and entropy. The site became a vehicle for the orchestration of form and space according to conceptual principles developed by Smithson through his experience of the landscape. Tragically, Smithson's death prevented the execution of these proposals. Nevertheless,

Smithson's commitment to land reclamation through art and the vision by which he sought to accomplish reclamation inspired a generation of artists, who have continued to work at the interface of art and landscape architecture.

IV. Robert Smithson's Contributions to the Contemporary Landscape Design

The subject matter of the work often plays on contradictions and ambiguities which are intended to remain unresolved. Smithson's aesthetics engages the concept of the dialectic at all levels: process, form, content, and representation. Smithson's writings on his work often make interpretation even more difficult; thoughts become layered upon thoughts, introducing multiple readings and complex conceptual overlaps. Despite these difficulties, Smithson's work and thought have had an influence on the development of art in the landscape, which has in turn influenced attitudes of contemporary landscape design.

Among the artists who have extended Smithson's landscape aesthetics, Nancy Holt (Smithson's wife), Michael Heizer, and James Turrell are notable. Where Smithson broke ground for investigation of issues of art in the landscape, these artists have become established as "environmental artists". Their work spans the range of residential garden design, corporate landscape design, and park design. Their clients range from homeowners to developers to regional planners. They have fulfilled Smithson's expectations of a 'usable' landscape art, while pursuing their individual artistic directions. Nancy Holt has concentrated on the investigation of systems of movement in the landscape.

She has explored celestial movement, electrical and hydraulic flow, and the movement of light across form. Michael Heizer is involved with problems of space making and place making. Two recent works in Cambridge, MA (the Alewife Transportation Station's grounds, and the M.I.T. Center for Visual Studies) explore the use of materials and surface articulation in creation of 'Place'. James Turrell's work involves the perception of light in the environment. His most recent work (a project sponsored by the National Endowment For the Arts) takes on monumental scale in the restructuring of a volcano as a 'Light Park'.

Smithson's influence on contemporary landscape design is perhaps as invasive as it is subtle. His concept of a dialectical approach to landscape intervention, in which elements of the existing landscape (or the history of the landscape) are integrated within a new design, may be seen in the growing concern for landscape preservation and respect for existing site features.

Smithson's development of Earth Art as an artform which investigates the forms and processes of the natural environment has extended the vocabulary and the subject matter of contemporary landscape architecture. Included among the practitioners whose works show an influence of Smithson's aesthetics are Hideo Sasaki, Lawrence Halprin and Peter Walker. Peter Walker, in particular, focuses on aesthetic concerns related to problems of the reduction of information and problems of context, concerns which were addressed by Smithson in the development of his art.

Finally, Smithson's preoccupation with the problem of industrialization of the landscape,

and his use of Earth Art as a means of calling attention to this problems, has carried over into the broader concern of sociologists, environmentalists, planners and landscape architects. Smithson's utilization of art as a means of affecting landscape change through the development of social awareness was perhaps the most significant of all his contributions to the field of landscape architecture.

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