CULTURAL INTERPRETATION OF THE EARTH SYSTEM THROUGH INTERVENTION:  
SITE AND NON-SITE IN THE WORK OF ROBERT SMITHSON

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This paper is based on research for ongoing thesis, at the Interdepartmental Program of Postgraduate Studies, 
Architectural Design –Space –Culture, at National Technical University of Athens, under the title “Site and  
Non-site in the work of Robert Smithson: cultural interpretation and construction of space through intervention” supervised by professor V.Ganiatsas, and V.Xenou and N. Laskaris, [to be submitted in March  
28th, 2008.]

Abstract

This paper focuses on the manner in which Robert Smithson’s interventions provide us with a holistic  
approach of the earth system. We will show that Robert Smithson addresses the earth system as an entity  
with its own course and deals with that. Robert Smithson’s objective was the manmade landscape; the built  
environment, which we will refer to in this paper as structure. Robert Smithson explores the cultural  
implications of the relation of the structure with the earth system. He will question the degree of abstraction  
inherited in the relation of structure and the earth system. Robert Smithson sets a model of dualistic  
condition in terms of developing or interpreting a structure; he sets dialectic of Site and Non-site, standing  
for an interaction between physical, raw reality –matter, and abstraction –mind, in terms of interacting with  
manmade landscape. Robert Smithson will claim the site as the new realm of defining art.

Through intervention in landscape Robert Smithson attempts to deal with matter, the physical, raw  
reality. He will incorporate matter in his works, by means of materializing and stabilizing dynamic  
procedures that are subject to time. He discloses the earth system as an entity that functions as a whole, with  
laws and rhythms of its own, that often would not be set under control, (e.g. Entropy). He explores the limits  
of human and artistic intervention on that system, and attempts to expose the physical conditions that abstract  
structures (social or cultural) are often deprived of.

We believe that Robert Smithson’s work questions the way we approach earth system; he is questioning  
the earth system as an object to be examined, measured and controlled. Furthermore, he is questioning the  
degree of abstraction exerted on ways of interacting with the earth system, be it perceiving, functioning or  
modifying.

Key words: interpretation, intervention, site, abstraction, Earthworks

1. Introduction

Robert Smithson was born in Passaic, New Jersey, U.S.A., in 1938, and died in 1973, in a plane crash  
while overlooking one of his works, Amarillo Ramp on a site in Amarillo, Texas. He was an autodidact,  
beginning his involvement with art on occasion of a scholarship to the Art Students League in New York  
City, at the age of sixteen. He traveled a lot throughout United States and visited also Europe; in 1961 he had  
a one-man exhibition of paintings at Galleria George Lester in Rome, Italy. Between 1962 and 1965, Robert  
Smithson withdraws from art scene; it is in 1965 that he re-emerges, more conscious of issues that prevail in  
his work, from then and till his death in 1973. His work involves sculptures, writings, maps, installations on  
earth, large-scale works on earth, and more.

He was one of the compelling presences among artists that in the mid-1960s and early 1970s expressed  
the urge to exit the gallery. The movement that emerged that period in the East Coast of the U.S.A. is  
referred to as Earth Art, Land Art or Environmental Art. The urge to exit the gallery was an attempt to  
redefine the condition of art, as a reaction to the contemporary commercialization of art. The gallery or else  
the museum, as social structures, were accused of depriving the artist of his/her time and reality, by means of  
evaluating solely the art object. In these terms, artists like Michael Heizer, Richard Long, Dennis  
Oppenheim, and other, initiated an artistic practice outside the gallery. Artists created works often in remote  
places; either they developed monumental landscape projects, or they did more ephemeral installations,  
documentation of which was brought back to the gallery.

Robert Smithson’s approach in terms of that movement is rather unique, because he is mainly interested  
in relating the outer field with the inner space of the gallery. Robert Smithson’s intervention in the outer field
aims at questioning tools of art, and by means of that, redefines the condition of art. Robert Smithson will defy the notion of the object, by questioning the degree of abstraction inherited in it.

2. Interpretation in terms of structure: Dialectic of Site and Nonsite

2.1 Abstraction

Robert Smithson explores the restrictions imposed on the artist by abstraction entailed in the process of developing a structure. Abstraction is inevitable in the process of developing or interpreting a structure; it derives from the mental experience entailed in this process. Robert Smithson is interested in the physicality which fails to be encompassed in structure, because of abstraction. He will explore the potentiality of artists’ tools to encompass reality.

In 1966, Robert Smithson with Mel Bochner wrote an article with the title “The Domain of the Great Bear”. The Great Bear stands for the constellation named like that, and the article describes a visit to the Hayden Planetarium in the Museum of Natural History, in New York. Very eloquently, Robert Smithson and Mel Bochner describe the experience of a visit to a non-world, where the universe is explained, presented and exposed, in the condition of a room. Robert Smithson denotes that inside Hayden Planetarium, on the condition of museum, approaching planet Earth in terms of understanding and acquiring information on it, suggests certain kind of artificiality and illusion, which results in losing contact with what Earth really is. Robert Smithson becomes fascinated with the notion of whether something exists or not in terms of manmade developed conditions. Robert Smithson addresses the room, the Hayden Planetarium, as an abstract condition. He will comment on the lack of reality entailed in such a condition, and he will question the visit to the Planetarium as a non-world situation, deprived of physicality and reality.

Robert Smithson denotes that interpretation or development of structure entails abstraction. Development of structure involves a way of the reality mediated by the creator’s mental experience. In 1967, Robert Smithson will develop a series of maps which explore ways of intervening with the earth in terms of abstract consciousness. In his piece Untitled (Antarktis), (Figure 1), Robert Smithson cuts the circular map in rings. He then displaces the central ring; in this way the pole of the earth appears displaced from the center to the periphery. This is an interpretation of Robert Smithson’s in terms of the earth system; the piece depicts his concept of the pole of the earth standing in the periphery. It is a remote place; and the map visualizes this concept. So, Robert Smithson is organizing the map in his own terms; the result is another abstract structure, which entails another order. Robert Smithson denotes that the order that reality would impose, is absent.

Robert Smithson will develop a vital concern over the physicality that abstraction fails to include. He will consider an aspect of reality and expression of physicality, that abstraction fails to encompass, to be the change in time. “Abstraction rules in a void, pretending to be free of time”, he will say in an interview with Alison Sky, in 1973. Robert Smithson explores the potentiality of a model to crystallize and immobilize a procedure that entails time, in a model named Cryosphere, (Figure 2) which he exhibited in Primary Structures Show, in Jewish Museum, in New York City, in 1966. Cryosphere is constructed from cool green steel with twelve mirrored surfaces. It comprises six parts that form the radios of a hexagon. The model offers different views, in relation with the point of view.

In this model Robert Smithson attempts to stabilize the ambiguous flux entailed in ice crystals. The state of ice, Smithson says, incorporates an unstable situation, like water, or air; Smithson attempts to stabilize it somewhere. He explored the structure of the lattice set-up of a crystal, and this is how he comes up with the hexagonal shape. The crystallization and stabilization of dynamic processes will develop to a vital concern of Robert Smithson’s initial works; the crystallization of processes deals with mental experience and physical

Figure 1.Robert Smithson, Untitled (Antarktis), 1967(left)  
Figure 2.Robert Smithson, Cryosphere, 1966 (right)
reality. By means of crystallization Robert Smithson explores ways in which he can set a mental order while dealing with unstable reality.

2.2 Dialectic of Site and Non-site

Expanding his interest in abstract ways of dealing with physicality, Robert Smithson will develop a series of works, done from 1967-1969, which all implicate the outer field. Robert Smithson will go out to remote areas, and he will collect some material that he confronts there. He will place the material he gathered, e.g. stone, sand, rock, inside a container which he constructs. The container’s shape derives from a map that Robert Smithson invents in terms of his experience of the site. (Figure 3) Robert Smithson invents the abstract system (Non-site), which encompasses the raw material from site; that is the reality he meets in terms of his own experience (Site). The abstract system (Non-site) functions as a map that indicates where the raw material was collected (site). In this way, Robert Smithson invents in terms of abstract consciousness a way of encompassing physical, raw reality.

By means of bringing in the gallery the structure that refers to the site, Robert Smithson will establish a relationship between the site and the non-site; this relationship refers to an interaction between the physical, raw reality –*matter*, and abstraction –*mind*, entailed in developing or interpreting a structure. He will call it dialectic of Site and the Non-site. By means of this relationship, Robert Smithson sets the limits in the process of developing or interpreting a structure.

As far as the structure and its relation to the earth system are concerned, this dialectical approach reveals the limits of abstraction. Abstraction suggests the designation of objects. An object would be the structure laid on the terrain, without dealing with what the terrain entails. By means of this dialectical approach, Robert Smithson is questioning the degree of abstraction in the way a structure is related with the earth system; if it deals with the reality of the earth system. The earth system is not just the terrain where one can apply the structure; the earth system entails a kind of physicality that you have to deal with.

He will explore the realm of physical, raw reality in relation with the development or interpretation of structure. He will exit the gallery and will try to find ways of dealing with reality –*matter*, e.g. actual conditions like the contour of the ground or actual light. He will develop a series of works that further explore the physicality of the terrain; he will deal with time, entropy and the dynamic of elements. He will then intervene with outer field, and he will aim at developing a structure which incorporates the physicality –*matter*. Robert Smithson’s artistic practice addresses the earth system as a physical entity; he is exploring his tools in order to deal with the physicality. Moreover, Robert Smithson intervenes with the earth system in a holistic approach; his intervention discloses the earth system as an entity with its own course and order and deals with the physical aspects of the earth system.
3. Cultural interpretation of earth system through intervention: Site and Non-site

3.1 Non-sites: Setting the limits of tools of art

In February 1969, Robert Smithson is invited with other artists to participate in an exhibition titled *Earth Art*, for Andrew Dickson White Museum of Art, in Cornell University of Ithaca, in Ithaca, New York. Under the suggestions of curator Willoughby Sharp, artists are asked to propose a work that derives from the particular site. Robert Smithson presents *Cayuga Salt Mine Project*, which entails work installed both in the museum and outside, in a salt mine, as well as at an itinerary from museum to salt mine.

Robert Smithson places eight mirrors inside the salt mine, eight mirrors in the outside on the way from the museum to the salt mine—*Mirror Trail Ithaca*, and another eight mirrors inside the museum (*Eight Part Piece*), where he poses them onto piles of salt crystals that he collects from the salt mine. This is an alteration of the basic notion of Site/Non-site problematic. The site is the salt mine, and it is a sub-site; an outside (of the gallery) underground site. Robert Smithson brings raw material from the site inside the museum; he constructs rectilinear shapes from mirrors, like a big square, and places the raw material on the side; so that there is a relationship established between those elements.

Robert Smithson’s intervention in this case aims at dealing with actual light instead of paint. Robert Smithson incorporates the physical material of the site, by means of mirror, a rectilinear surface, which gathers and reflects the physical material of the site. The condition of the site is amorphous, with a lack of rectilinear geometry. The tool of the mirror functions as the container that collects the raw material of the site, like in the series of works of Sites/Non-sites. In this way, the reality which is not rectilinear and stable, is being crystallized and stabilized in this container, like in Smithson’s prior model *Cryosphere*.

What Robert Smithson is interested in is the juxtaposition of raw reality and abstract consciousness.

![Figure 4](https://example.com/figure4.jpg)


3.2 Earthprojects: Redefining tools of art

Further exploration of the physicality of the terrain, in terms of what we are not interacting with on the condition of the room, will result in Robert Smithson’s works, that now we can refer to, as studies over particular aspects of site. In these studies, physicality is exposed as the condition that entails time, entropy and dynamic, often contradictory forces. The condition of site, Smithson claims, entails the constitution of space by processes subject to time, rather than autonomous *objects* that are laid on it. So, these studies deal with changing procedures and disclose certain aspects of earth system that Robert Smithson appeals to; the attribute to become the terrain of growing procedures, its constitution by dynamic processes and the fact that it is subject to time, described as entropy.
Robert Smithson exposes in the gallery a model that entails a physical procedure; a sedimentation process. The *Tar Pool and Gravel Pit* (1966) (Figure 5) consists of two square sinks where Robert Smithson places tar and gravel. Tar will deposit as sediment at the bottom of the small square sink, with a very slow process. Robert Smithson develops a vital interest in slow processes, which appear in the reality of the earth system. He claims slow processes to constitute the reality. This model was exposed in the gallery in 1966. It was a model comprised of two sinks that Robert Smithson wanted to construct in large-scale, but he couldn’t at the time. The model deals with raw material that Robert Smithson brings in the gallery; and that raw material is encompassed in a structure that Smithson appeals to as limits. The limits are the sinks, in where the process takes place. Robert Smithson emphasizes the act of containment of physical procedure subject to time, in the sinks. He refers to the sinks as limits; Smithson refers to earth also as limit; in the way that it receives and allows physical procedures to take place.

Robert Smithson explores physicality to be constituted by processes that evolve in time; he will realize some works that deal with actions performed outdoors. Robert Smithson refers to them as “flow pieces”; by means of mechanical ways, e.g. a truck, he will unload material from the peak of a hill, resulting in the material to pour down the slope. In October 1969, Robert Smithson realizes his project *Asphalt Rundown*, in Rome, Italy. (Figure 6) In this piece Robert Smithson deals again with matter, the physical reality, which we are deprived of when in a room. Robert Smithson refers to *Asphalt Rundown* as one of the massive pieces where there’s a kind of lack of rectilinear geometry. The flowing of asphalt down the cliff suggests a situation with inevitable result. As Smithson says, “they’re there; there is no getting away from it. There is a source, and then there is a dynamic that runs through that”. Robert Smithson denotes the physical forces that exist in the realm of physical condition; those physical forces function through gravity and form the final result. The piece is subject to elements, and there is a direction to a state of this “alluvial action” towards an irreversible situation, when the flow cannot go backwards. Robert Smithson explores the notion of entropy; the earth is subject to time, and to a loss of energy.

Indicative of Smithson’s will to expose the contradictory forces that constitute earth is his piece *Partially Buried Woodshed*. (Figure 6) Robert Smithson generates a mechanical process for demolishing an old and ruined woodshed, in Kent, Ohio, in January 1970. Smithson considers the building an afterthought in the environment; the realization of a schema—an abstract structure, rather than a structure that derives from site. By means of exerting the great forces of a raw material Smithson reverses it to a situation back to where it came from. The final result is eloquent of the immeasurable and *surd* effect of earth. In this piece the terrain where the structure is imposed is revealed as the field of collision of forces that constitute its physicality; this physicality cannot be represented through abstract modes of perception.
3.3 Earthworks: Incorporating matter in work of art

Robert Smithson claims that he is interested in great masses of material that are threatened by physical forces. Smithson is directly attached to the physicality of the terrain and the way in which his intervention may deal with that. Robert Smithson’s interventions in landscape aim at dealing with matter, and they disclose the condition of site. Furthermore, Robert Smithson in his interventions in landscape attempts to incorporate physical, raw reality, matter, in his work. He will do that by means of disclosing the invisible aspects of reality that entail time, materializing or stabilizing them in structures.

Robert Smithson intervened in the earth system, taking into account the dynamic forces that constitute earth as an entity. His scope was to materialize those forces, so that he can reveal this aspect of the earth, which he believed remains hidden. Smithson was strongly committed in exposing the physical and material processes that appealed on earth. Dealing with the invisible aspects of earth, Robert Smithson will try to materialize them, and by means of that turn them visible. He is directed at the realization of large-scale projects, with support of curators at that time.

The first work of large scale Robert Smithson tried to build was the Island of Broken Glass, on the Miami Islet, in Vancouver, British Columbia, in December 1969. Finally, it was not completed; Robert Smithson was not given permission to proceed with it. The work came up with strong protest by the ecologists in the area, claiming that the construction material of glass would hurt the wildlife [mostly birds] that inhabited the area. Robert Smithson’s reaction was that his objective was not to protect but rather reveal things as they are. We have here an indication of Smithson’s objective on Earth System.

The Island of Broken Glass was the evolution of works like the Hypothetical Continents (Figure 7), in which Robert Smithson examined the potentiality of reversing things: Smithson constructed the map by real material, and left it on site, in order to send it back to materiality and loss. This is a comment on abstraction of maps, and moreover on the abstraction of notions of cultural and historic myths.

In order to deal with this physicality, Robert Smithson chooses areas that could be addressed as condition of site. Robert Smithson explains that he is interested in devastated areas, which tend to an irreversible situation, kind of low-entropy places. He believes it is there, where space exists more likely on the condition of site; Smithson aims at turning visible those aspects of site that he can explore. As a result, his interventions in actual land derive from what he is coming up into there. Robert Smithson’s intervention in actual land is based on what the site imposes.

In April 1970, Robert Smithson will construct his major and most well-known work Spiral Jetty (Figure 8), in Great Salt Lake, in Utah. He constructed it using crystals from the lake; the jetty is constructed from black rock, salt crystals, earth, and red water (algae). In this case, Robert Smithson deals with a meandering zone; a physical area that is due to constant change. As he says, intervention aims at stabilizing this unstable condition. He will explore the potentiality of structures that could stabilize a changing condition, like he did with the prior model of Cryosphere.

Figure 7. Robert Smithson, The Hypothetical Continent of Cathaysia, 1969, ink drawing (left)
Robert Smithson, Hypothetical Continent in Stone: Cathaysia, Alfred, NY, 1969 (right)
The structure that could stabilize the unstable condition in Great Salt Lake is a spiraling structure. He has already explored this potentiality in a sculpture that he constructed in 1968, called Gyrostasis (Figure 8). Gyrostasis is a three dimensional structure by means of which Robert Smithson claims that he attempts to map procedures that refer to planet Earth. Those gyrating processes are being stabilized in the model called Gyrostasis. Robert Smithson refers to Gyrostasis as a Non-site that point to Spiral Jetty, the large-scale piece in Salt Lake, Utah.

Figure 8. Robert Smithson, Gyrostasis, 1968, (left)
Figure 9. Robert Smithson, Spiral Jetty, Great Salt Lake, Utah, April 1970 (right)

Figure 10. Robert Smithson, Study for Floating island to travel around Manhattan, 1970

4. Conclusion

Robert Smithson’s unique view of the earth system and especially of the manner in which cultural structures impose on earth, intervene with the earth system, and produce notions and proposals for it, I believe is current issue even today, as to what extent is it vital to approach earth system as an object that to be studied and not taking into account its existence [both culturally and physically] as an autonomous entity, a whole, with its own rhythms and laws, and cope with it. This view that Robert Smithson provides us can serve as a principle for addressing the earth system, be it in natural sciences, or managing or designing the earth.

In conclusion, understanding and speculating on Smithson’s tools in terms of sense making of the earth system is important today. Robert Smithson offers even today a unique objective of the earth system, as an entity that may not be under human control. He questions the dominancy of man over nature, in terms of perceiving, functioning, modifying and interacting with the earth system. Moreover, he is exploring man’s potentiality for freedom on condition that he/she approaches the aspects of earth that remain out of control.

References
Pictures in Figures 1, 4, 6, 7, 10 Courtesy of Estate of Robert Smithson, James Cohan gallery, New York.
Pictures in Figures 2, 3, 5, 8, 9 from Flam Jack (Ed.), Robert Smithson: The Collected Writings, Berkeley and Los Angeles, California, University of California Press, 1996

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