# LAND ART ON THE BORDER BETWEEN TOPOLOGY AND ATOPOLOGY

A THESIS
SUBMITTED TO THE DEPARTMENT OF
GRAPHIC DESIGN AND THE INSTITUTE OF
ECONOMICS AND SOCIAL SCIENCES
OF BİLKENT UNIVERSITY
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS
FOR THE DEGREE OF
MASTER OF FINE ARTS

By Gökçe Gerekli January, 2009

-	
	Assist. Prof. Ercan Sağlam (Principal Advisor)
-	at I have read this thesis and that in my opinion it is fully adequate, and in quality, as a thesis for the degree of Master of Fine Arts.
-	Zafer Aracagök (Co-advisor)
•	at I have read this thesis and that in my opinion it is fully adequate, and in quality, as a thesis for the degree of Master of Fine Arts.
-	Dr. Mehmet Şiray
-	at I have read this thesis and that in my opinion it is fully adequate, and in quality, as a thesis for the degree of Master of Fine Arts.
-	Dr. Aren Emre Kurtgözü
	Approved by the Institute of Fine Arts

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all materials and results that are not original to this work.

Gökçe Gerekli

## **ABSTRACT**

## LAND ART ON THE BORDER BETWEEN TOPOLOGY AND ATOPOLOGY

Gökçe Gerekli M. A. in Graphic Design Supervisors: Assist. Prof. Ercan Sağlam, Zafer Aracagök January, 2009.

The purpose of this study is to discuss the Land Art movement from a topological and atopological perspective. In order to establish an extensive understanding of the matters of topology and atopology, Arkady Plotnitsky's formalization of quasimathematical thinking, which is derived from Jacques Derrida's philosophy, is treated in detail. The artistic stance, Robert Smithson, as a major figure of Land Art movement is analyzed both from the artistic and the theoretical perspectives. Thereafter, an algebraic reading of the Smithsonian conceptualization is executed in order to illuminate the liaison between the Land Art movement and the matters of topology and atopology. Finally, the thesis project, Nonlocalizable Displaced Mirrors depicts the whole attitude, which is taken throughout the study, towards the issue of Land Art on the Border between Topology and Atopology.

KEY WORDS: Land Art, Robert Smithson, Topology, Nonsite, Undecidability.

## ÖZET

## TOPOLOJİ VE ATOPOLOJİNİN SINIRINDA YERYÜZÜ SANATI

Gökçe Gerekli Grafik Tasarım Yüksek Lisans Programı Danışmanlar: Yrd. Doç. Ercan Sağlam, Zafer Aracagök Ocak, 2009.

Bu çalışmanın amacı, Yeryüzü Sanatı akımını, topoloji ve atopoloji dolayımında tartışmaktır. Topoloji ve atopoloji kavramlarını açımlamak için, Arkady Plotnitsky'nin, Jacques Derrida'nın felsefi görüşleri temelinde ortaya koyduğu yarımatematiksel düşünce biçimi, ayrıntılarıyla ele alınmıştır. Yeryüzü sanatının öne çıkan figürlerinden olan Robert Smithson'ın duruşu da, hem sanatsal hem de kuramsal bir perspektifle irdelenmiştir. Daha sonra, Yeryüzü Sanatı ile topoloji ve atopoloji arasındaki ilişkileri açığa kavuşturmak için, Smithson'ın Yeryüzü Sanatını kavramsallaştırış biçimi cebirsel bir düzlemde okunmuştur. Son olarak, "Konumlandırılamayan Yer Değiştiren Aynalar" adlı tez projesiyle, bu çalışma boyunca, Topoloji ve Atopolojinin Sınırında Yeryüzü Sanatı'na dair benimsenen yaklaşım somutlanmıştır.

ANAHTAR KELİMELER: Yeryüzü Sanatı, Robert Smithson, Topoloji, Olmayan-Yer, Karar verilemezlik.

#### **ACKNOWLEDGMENTS**

In the preparation and completion of this thesis, my utmost gratitude is to Zafer Aracagök and Assist. Prof. Ercan Sağlam for their honesty, trust, patience and encouragement, which brought to substance all good ideas buried in my confusion.

Friends, however, were the closest bearers of the load. Behiye, Müge and Sevgi were always there for me. In the long span this work came to encompass, Doğuş and Ayşegül came along with their tenderness, support and energy. Other sharers of the strange universe were, Tuğba, Burcu and Öykü, owing to whose support I could stand up once again every time stumbled. Begüm did witness the hardest time, and her support was invaluable. Also many thanks to Kerem and Ersan, through whose houses door I walked in, with loads of books whenever I wished. My beloved hairdryer, supporting me along long hours of study, was my ultimate source of optimism.

Lastly and mostly, I would like to thank to mum and dad for their love, trust and support from the very beginning of this road. They are the resurrectors of an almost lost hope and motivation.

## TABLE OF CONTENTS

SIGNATURE PAGE	11
ABSTRACT	iv
ÖZET	V
ACKNOWLEDGMENTS	vi
TABLE OF CONTENTS	vi
LIST OF FIGURES	viii
1. INTRODUCTION	1
2. LAND ART: A MOVEMENT IN THE LATE 60s	8
2.1. The Matters of Topology and Atopology	9
2.2. Land Art: Art in an Expanded Field	22
3. SMITHSONIAN APPROACH TO LAND ART	46
4. ALGEBRAIC READING OF A WORK OF ART	77
4.1. Algebraic Reading of the Smithsonian Conception	78
4.2. Thesis Project: Nonlocalizable Displaced Mirrors	87
5. CONCLUSION	98

## REFERENCES

## LIST OF FIGURES

Figure 2.1 Manifold	14
Figure 2.2 Stéphane Mallarmé, Un Coup de Dès	21
Figure 2.3 Double Negative (1969-70), Michael Heizer	31
Figure 2.4 Double Negative (1969-70), Michael Heizer	31
Figure 2.5 Double Negative (1969-70), Michael Heizer	32
Figure 2.6 Double Negative (1969-70), Michael Heizer	32
Figure 2.7 Complex City (1972-76), Michael Heizer	33
Figure 2.8 Complex City (1972-76), Michael Heizer	33
Figure 2.9 Shibboleth (2007), Doris Salcedo	34
Figure 2.10 Grand Canyon, Arizona.	34
Figure 2.11 Identity Stretch (1970-75), Dennis Oppenheim	37
Figure 2.12 Identity Stretch (1970-75), Dennis Oppenheim	37
Figure 2.13 Observatory (1971), Robert Morris	40
Figure 2.14 Observatory (1977), Robert Morris	41
Figure 2.15 Observatory (1977), Robert Morris	41
Figure 2.16 Sun Tunnels (1973-76), Nancy Holt	43
Figure 2.17 Sun Tunnels (1973-76), Nancy Holt	43
Figure 3.1 Asphalt Rundown (1969), Robert Smithson	54
Figure 3.2 Partially Buried Woodshed (1970), Robert Smithson	57
Figure 3.3 Enantiomorphic Chambers (1965), Robert Smithson	59
Figure 3.4 A Nonsite Pine Barrens New Jersey (1968) Robert Smithson	63

Figure 3.5 A Nonsite, Pine Barrens, New Jersey (1968), Robert Smithson	64
Figure 3.6 Eight-Part Piece (Cayuga Salt Project) (1969), Robert Smithson	67
Figure 3.7 9 Mirror Displacement ("Incidents of Mirror-Travel in the Yucatan) (1969), Robert Smithson	70
Figure 3.8 Spiral Jetty (1970), Robert Smithson	73
Figure 3.9 Spiral Jetty (1970), Robert Smithson	74
Figure 4.1 Spiral Jetty (2007), Robert Smithson	85
Figure 4.2 Spiral Jetty (2008), Robert Smithson	85
Figure 4.3 Panoramic view of the site from the southern east (2008)	90
Figure 4.4 Panoramic view of the site from the southern west (2008)	90
Figure 4.5 The effect of nature, "unforeseen flow" on the lake surface, which gree in a noticeable manner (2008)	
Figure 4.6 The effect of nature, "unforeseen flow" on the lake surface, which gree in a noticeable manner (2008)	
Figure 4.7 Nonlocalizable Displaced Mirrors, one mirror (2008)	91
Figure 4.8 Nonlocalizable Displaced Mirrors (2008)	92
Figure 4.9 Nonlocalizable Displaced Mirrors (2008)	92
Figure 4.10 Nonlocalizable Displaced Mirrors (2008)	92
Figure 4.11 Nonlocalizable Displaced Mirrors (2008)	93
Figure 4.12 Nonlocalizable Displaced Mirrors (2008)	93
Figure 4.13 Nonlocalizable Displaced Mirrors (2008)	93
Figure 4.14 Nonlocalizable Displaced Mirrors, one mirror (2008)	94
Figure 4.15 Nonlocalizable Displaced Mirrors (2008)	94
Figure 4.16 Nonlocalizable Displaced Mirrors, one mirror (2008)	95
Figure 4.17 Nonlocalizable Displaced Mirrors, eight mirrors (2008)	95
Figure 4.18 Nonlocalizable Displaced Mirrors (2008)	96
Figure 4.19 Nonlocalizable Displaced Mirrors (2008)	96

Figure 4.20 Nonlocalizable Displaced Mirrors (2008)	96
Figure 4.21 Nonlocalizable Displaced Mirrors (2008)	97
Figure 4.22 Nonlocalizable Displaced Mirrors (2008)	97
Figure 4.23 Nonlocalizable Displaced Mirrors (2008)	97

#### CHAPTER I

#### INTRODUCTION

This study shelters a distinct orientation that specializes a particular involvement in the issues of art and philosophy. The main goal of the study is to actualize an explicit reading of the Land Art movement through the concepts that arise out of the reciprocity between mathematics and philosophy. This intrinsic liaison between mathematics and philosophy is grasped through Arkady Plotnitsky's formalization of reciprocal relation of these fields. The ground for such a relation finds its potential in Arkady Plotnitsky's special involvement in the issues of physics, mathematics and philosophy. Plotnitsky treats in detail the classical theories and conceptualizations related to idiocratic properties of the particular objects or their attitudes, and the relationships between them. In fact, he focuses on these particular characteristics that demonstrate such kind of objects, which are somehow ignored by the classical theories, for instance, the manner in which classical physics isolates certain physical properties of its subject material (Plotnitsky, 2002: 1). Thus, classical mechanics, a branch of classical physics, which compasses the motion of genuine physical objects or aggregate of such objects, might be considered as such a theory. Plotnitsky (2002) stresses that classical mechanics, in principle, accounts "for its objects and their behavior on the basis of physical concepts and abstracted or idealized measurable quantities of material objects corresponding to them, such as the 'position' and

'momentum' of material bodies" (1). The equations of classical mechanics offer knowledge about the past state, and enable to presume the future condition of the systems under examination "at any point once we know it at a given point" (Plotnitsky, 2002: 1). Abstraction or idealization brings into light an approximate information related to the behaviors of the objects and the systems, that is used in current technology and yet, in quantum measurement.

However, it is a certain fact that, by definition, classical physics is generally realist and causal, and thus, the manner in which its analysis and use are processed – combination of mathematical formalization and experimentation – depicts the demonstration of idealized objects, whose causal behaviors are defined by theory (Plotnitsky, 2002: 1-2). Compared to the classical physics, which might be considered deterministic, nonclassical theories of physics denote the non-causal and the non-deterministic features of objects. Thus, Neils Bohr, whose "nonclassical interpretation, complementarity, quantum mechanics" which allow only a description of the effects of "the interaction between these objects and measurement instruments", is an essential figure in nonclassical theorization of physics (Plotnitsky, 2002: 2). In this context, the particular objects of the nonclassical physics might be interpreted as unknowable, unrepresentable, indefinable, untheorizable and, so on by any mediums available within a system. At this juncture, what Plotnitsky (2002) articulates is crucial.

For example, it may not be, and in Bohr's interpretation is not, possible to assign the standard attributes of the objects and motion of classical physics to the ultimate objects of quantum physics. It may no longer even be possible to speak of objects or motions [...] For, in this understanding, only classical theories or, more generally, thinking could allow us such an attribution. Thus, the ultimate object of nonclassical theories are not their objects insofar as one means by the latter anything that can actually be described

by such a theory. The impact of such objects on what the theory can account for is crucial, however, and this impact cannot be described classically, which is what makes a nonclassical description necessary in such cases (3).

Concordantly, quantum mechanics as a part of nonclassical physics envisages the emergence of certain information related to the other data, which are already experimented. Quantum mechanics "predicts but does not describe [...] the appearance of certain observable and measurable effects and of certain configurations of these effects but does not describe the ultimate dynamics of their emergence" (Plotnitsky, 2006: 2). In other words, quantum mechanics only set forth a stratum of data related to the objects that manifest in measuring instruments. Hence, through this formalization, the distinct postulation of the classical physics; "information can be treated like a measurable physical quantity", is questioned. In this regard, compared to the classical epistemology of theories that stands within deterministic and idealist boundaries, the nonclassical epistemology of physics develops its own physical or philosophical concepts in order to project the quantum objects and their interactions with measuring instruments. Thus, the new epistemology of quantum mechanics not only requires the reformalization of already available physical and philosophical concepts, but also invention of the new concepts (Plotnitsky, 2006: 144). In this context, physics and philosophy appears to be two distinct fields that reciprocally operates each other in term of conceptual formalizations. For that matter, Plotnitsky finds potential in that reciprocal interplay, which introduce the presence of quasi-mathematical and quasi-philosophical thinking that generates it ground from nonclassical theories of physics.

Concordantly, the authentic goal of the study is to actualize a particular reading of the Land Art movement through the quasi-mathematical and the quasi-philosophical matters. Hence, this intention might be considered as a parallel reading of a radical movement that inherently generates the suitable backdrop for such an approach. A detailed demonstration of the matters of topology and atopology within the frame of Jacques Derrida's philosophy fully justifies the attempt of realizing such a discrete study. In this regard, the following chapter of the study covers both the demonstration of the Derrida's algebra of the undecidable that shelters the formations of the matters of topology and atopology; and the emergence of the Land Art movement, by the end of 1960s, in the United States of America. In the first sub-part of this chapter, a thorough evaluation of the matters of topology and atopology is established, in order to clarify the critical attitude that is taken into consideration throughout the study. This discussion is effectuated through a detailed projection of Arkady Plotnitsky's quasi-mathematical and quasi-philosophical thinking, which finds its ground on Gilles Deleuze, Felix Guattari and Jacques Derrida's philosophies. At this point, the Derridean vision related to the issues of topology and atopology acquires importance in indicating the kind of reading that is experienced throughout this study. In this connection, Arkady Plotnitsky's contextualization of Derrida's algebra of undecidables, which unfold his conception of topology and atopology, is crucial. Herein, the emphasis is on Derrida's philosophical algebra and hence, the algebra of undecidables that derived from Kurt Gödel's work on the mathematical and scientific part and from Stéphane Mallarmé's on the literary side.

In the pursuit of that discussion which denotes a critical attitude, the second sub-part covers the rise and the development of the Land Art movement that actualizes the

possible ground for such kind of critical attempt. By the end of the 1960s, in the Unites States of America, a handful number of artists had begun to expose their traces on the earth surface by procreating the initial earthworks. These works of art might be taken into consideration as the pioneers in the emanation of a new artistic movement. In order to establish a considerable understanding of such a drastic movement and yet, to realize a connection with quasi-mathematical and quasiphilosophical notions, it is fundamental to depict the historical events, which generate the suitable conditions for the rise of Land Art. In this regard, a detailed specification is established related to what is procreated in the course of this period of time, and of the manner in which Land Art artists' conceptual fashions and artistic performances are emerged. Concurrently, an idiocratic manner of Land Art in annihilating the traditional definitions and the institutionalized art world, as a "counter-art movement", is treated in detail. Because of the topological and atopological frame of the study, the Land Art artists' radical formations against the modernist understanding of the artistic historicity and the limitations built upon the artistic constructions are inquired into.

The third chapter focuses on a particular Land Art artist, Robert Smithson – the one who ought to be considered as a major figure in this artistic movement. The significance of Robert Smithson and his centrality for this study lies in the fact that he artistically develops strong theoretical conceptualizations around his artistic formations. Remarkably genuine in his fashion, Robert Smithson, who unveils a distinct attitude, engenders a complex relationship between Land Art and theoretical discourses. Adopting a reading of that movement through a Smithsonian approach is critical, in terms of his intervention into the subsisting art scene in a radical manner.

Smithson's artistic and theoretical inventions that flourish as a result of his interest on the matters of the entropy and the cosmic disorder develop unique conceptualizations, such as, the reciprocal devotion of the inside and the outside; the dialectic of the site and the nonsite; the displacement and the dislocalization of the artistic formations and the traditional understanding of art; the apprehension of the writing as a unique entity, and so forth. In this sense, the specific focus on Smithsonian approach to Land Art strengthens the theoretical basis of the study on one hand, and offers an efficient ground on which some manner of algebraic reading might be realized, on the other.

The fourth chapter entails a special concern related to the algebraic reading of particular artistic formations and theoretical conceptions. The first sub-part of the chapter focuses on a distinct reading of Robert Smithson's own artistic constructions and theoretical formalizations of Land Art from a topological and atopological perspective. In this sense, an algebraic reading of Smithsonian concepts is embraced in detail within the framework of quasi-mathematical and quasi-philosophical issues. Here, the discussion can be regarded as a reciprocal interplay between Jacques Derrida's quasi-philosophical and quasi-mathematical vision and Robert Smithson's artistic and theoretical conceptualizations. In this sense, the distinct fashion of Smithsonian understanding of Land Art movement is reconsidered through Derrida's algebra of the undecidables that is directly connected to his formation differantial topology. Thereafter, the second sub-chapter encompasses the demonstration of the thesis project, Nonlocalizable Displaced Mirrors. The work is an attempt to execute a personal response to what is effectuated throughout the study. That personal attitude, which unfolds a unique perspective towards the issue of the Land Art on an

undecidable border, combines the artistic practices and the matters of quasimathematical thinking. In this regard, Nonlocalizable Displaced Mirrors unveils an idiocratic experience, which is flourished throughout a stratum of processes.

#### **CHAPTER II**

### LAND ART: A MOVEMENT IN THE LATE 60s

By the end of 1960s, a small number of artists had begun to procreate their artistic works on the barren landscapes of the American West. These artifacts, which have originated far from the context of the institutionalized world of art, are the precursors of the emergence of a new artistic movement. In order to realize an acceptable comprehension of such a rebellious movement, it is significant to understand the historical events, which generate the suitable circumstances for the flourishing of Land Art. However, first and foremost, it is reasonable to discuss the particular frame in which this study is held. Hence, the first sub-chapter covers a thorough evaluation of the matters of topology and atopology, in order to illuminate the particular approach that is taken throughout the study. This discussion is established through a detailed demonstration of Arkady Plotnitsky's quasi- mathematical and quasi-philosophical formations based on Gilles Deleuze, Felix Guattari and Jacques Derrida's philosophies. Thereafter, the discussion serves as a basis for the second sub-chapter where a certain manner of Land Art that breaks down the traditional definitions and institutions of art, as a "counter-art movement", is treated in detail.

## 2.1. The Matters of Topology and Atopology

The matters of topology and atopology are central in this study for elucidating the critical attitude, which is drawn upon through the discussion. The aspiration for such an involvement in the matters of topology and atopology finds its potential on the very ground actualized by Land Art artists' artistic and conceptual formations that stand, every so often, on an ambiguous border. Land Art artists' conceptualization by means of artistic constructions and theoretical discussions provide the potential for such a discrete attitude that is adopted throughout the study. Artists' judgmental fashion towards the issues of art and artwork; their attitude of questioning the limits of art by means of annihilating the substantial acknowledgement of institutionalized art world; their innovative approach of creating earthworks on barren and isolate locations; establish a strata of notion that enables to flourishing of ideas on a backdrop that might be discussed within a topological and atopological frame. Furthermore, Robert Smithson's formation of his own artistic and theoretical conception particularly offers a reading of Land Art movement through the matters of topology and atopology. His emphasis on the theory of entropy, his own fashion of dialectic, which focuses on the relationship between the site and the nonsite, and his own manner of deconstructing Hegelian history of art, establish the possibility of such an intention. In this regard, such an involvement in the in the issues of topology and atopology offers an opportunity to comprehend the Land Art movement within a parallel reading. Hence, in order to engender an efficient demonstration of the notions of topology and atopology, and their role in philosophy, it is plausible to refer to Arkady Plotnitsky's explanations.

In his article "Algebras, Geometries and Topologies of the Fold: Deleuze, Derrida and Quasi-Mathematical Thinking (with Leibniz and Mallarmé)" Arkady Plotnitsky discusses the relationship between mathematics and philosophy by developing a quasi-mathematical and a quasi-philosophical reciprocity. He establishes a connection between mathematical matters and philosophical conceptions, which lies on a sore ground. Plotnitsky (2003) addresses that

A certain mathematical stratum appears to be irreducible in philosophy. Or at least, philosophy appears to contain an irreducible quasi-mathematical stratum, that is, something that philosophically intersects with mathematics but is not mathematical in its disciplinary sense. Conversely, the conceptual richness of mathematics gives it a quasi-philosophical – and even philosophical – stratum (98).

In this regard, he points out the possibility of establishing a liaison between two distinct fields by depicting their cooperative features. Otherwise stated, Plotnitsky stresses the potentiality of a conversion of mathematical conceptions into the philosophical ones, or vice versa. He states that the quasi-mathematical both determines and is determined by that reciprocal relation, which thus also engenders both Deleuze's and Derrida's quasi-mathematics (2003: 98).

At this juncture, before getting involved in the key concepts of this reciprocity, it is worthwhile to mention Deleuze and Guattari's comprehension of philosophy in order to determine the manner in which the term "concept" is understood through this formation. As Plotnitsky (2003) emphasizes, Deleuze and Guattari's understanding of philosophy might be seen "as the creation of new, or even forever new, concepts, or as the case may be, 'neither terms nor concepts', such as those of Derrida, for example, *différance*" (98). In this regard, a philosophical concept is formulated as a stratified structure or a mutli-layered configuration. As a consequence, in this

discussion, the term 'concept' ought to be taken into consideration in that particular sense formalized by Deleuze and Guattari, rather than in any other accepted cognizance.

The key concepts of Plotnitsky includes algebra, geometry, and topology, and yet he considers 'algebra' as the very 'ultimate trope' or tropological formalization, whether "formalizing systems" or "systems of concepts in logic and philosophy, or language" are called into question (2003: 99). In this sense, algebra designates a cluster of distinct formal elements and of associations among them. At this point, Plotnitsky (2003) conceptualizes the notion of algebra as a mathematical field:

There is of course a mathematical field known as 'algebra' [...] Conceptually, however, this algebra, too, can be seen in the general terms just explained. In this sense, one can speak of 'algebra' whether we deal with this type of situation, for example, in mathematical logic [...] or in calculus, both among the areas where Leibniz's contributions were crucial. [...] Leibniz [...] set into operation an immense programme of algebraisation, which extends to, among other things, modern mathematical logic, computer sciences and linguistics (99).

On the other hand, 'geometry' and 'topology' both focus on the matter of space; however, they are differentiated by their distinct mathematical principles. Geometry focuses on measurement, whereas, topology ignores measurement or scale and grasps only with the "structure of the space qua space (*topos*)", and with the genuine shapes or the corpus of figures (Plotnitsky, 2003: 99). For instance, a surface, which is fabricated from a stretchable rubber, might be bent, stretched, twisted and deformed in any manner without being pulled apart. Weeks (1985) points out that, as the surface deforms it might alter in various ways, however, "some aspects of its nature will stay the same, [and] the aspect of a surface's nature which is unaffected by deformation is called the topology of the surface" (28). However, when such a

deformation occurs, the surface's geometry varies immediately, like the curvature, which is one of the crucial aspects of geometrical properties (Weeks, 1985: 28). In this sense, a doughnut surface and a flat torus ('a square or rectangle whose opposite edges are abstractly glued [...] is called a flat two-dimensional torus') shelter the same topological characteristics, however, the geometrical aspects differ in various ways (Weeks, 1985: 13-32).

Herein, the connection established by Plotnitsky trough the manner in which these key tropes relate to Deleuze and Derrida's philosophies acquires importance.

According to his following statement, Plotnitsky (2003) depicts the unique ground of his formation of the mathematical thinking:

Deleuze's 'geometry' or 'topology' and Derrida's 'algebra' can be traced to two different facets of Leibniz's thought, to which one also trace the genealogy of both Reimann's geometrical ideas and Gödel's 'algebra' of mathematical logic. Mallarmé's work, too, links that of Deleuze and Derrida through the Leibnizean figure of the fold [...] The geometry and the topology of the fold make it Deleuze's figure, in turn, a Deleuzean figure and concept. On the other hand, it appears to be the *algebra* of the fold that makes it Mallarmé's and then Derrida's figure (100).

In other words, Deleuze introduces a philosophically geometrical and topological approach towards the fold, although, he offers some algebra. On the other hand, Derrida introduces a philosophically algebraic one, despite the fact that, this algebra does not exclude a certain topology or spatiality. As a consequence, Deleuze's conceptualization and his understanding refer to something more spatial and topological that is counter to Derrida's algebra, which is connected to something that is "neither spatial nor temporal, nor, again, definable by any other terms" (Plotnitsky, 2003: 100). In virtue of this fact, in Deleuze algebra is understood through geometrical and topological formations, however, in Derrida, "topology ultimately

and his discussion of *différance* "would confirm this point, as these concepts relate to the efficacity or [...] efficacities of any conceivable spatiality" (2003: 100).

Comparable efficacities take into consideration all plausible "temporal effects", however, they persist inaccessible to any spatial and temporal terms or concepts, "including those of efficacity or chaos" (Plotnitsky, 2003: 100-101). In this sense, both Deleuze and Derrida's works cannot be analyzed only trough these mathematical terms, and yet these terms seem as if "irreducible" in their works.

What is critical for Deleuze's philosophy is the mathematical notion of "manifold" that interconnects geometry and topology. A manifold is an abstract mathematical space or 'a kind of patchwork of (local) spaces' in which each point has a neighborhood that bears resemblance on an Euclidian space, however, in which the global structure might be more complicated. For instance, a two-dimensional manifold (i.e. a surface) is a space that has the same local topology as a plane, and a three-dimensional manifold is a space, which has the same local topology as an ordinary three-dimensional space (Weeks, 1985: 42). Additional formations are often included in manifolds; the example of such a condition might be the differentiated manifolds on which one can do calculus, the Riemannian manifolds on which distances and angles can be defined, and so forth. These particular characteristics of the Riemannian manifolds offer the possibility of connecting smooth manifolds with algebra by formalizing such a measurement (Plotnitsky, 2003: 101). At this juncture it should be stated that the cruciality of that matter derives from Riemann's invention of the measurement in curved spaces, which points out the significance of the curvature of the space itself.

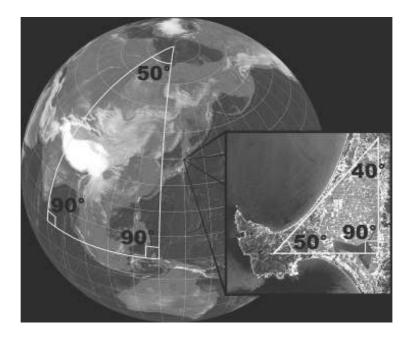


Figure 2. 1
When a triangle is drawn on a sphere, the sum of its angles is not equal to 180°.
Although the sphere is not an Euclidean space, locally Euclidean laws are applicable.
A sphere might be delineated by an agglomeration of two-dimensional maps; accordingly a sphere is a manifold.

The distinct articulation of Plotnitsky (2003) indicates the significance of this matter: "the concept of differential manifold and measurement in curved spaces is germane to the idea of non-Euclidean geometries, one of which, that of positive curvature, was discovered by Riemann"(102). Riemann's notion of manifold brings forward Deleuze's and Deleuze and Guattari's perspectives. In this regard, for Deleuze and Guattari, compared to the metric character, the topological and smooth characters of Riemannian spaces have a major significance (Plotnitsky, 2003: 102). Deleuze and Guattari (1987) by referring to Charles Lautman's definition stress that,

"Riemannian spaces are devoid of any kind of homogeneity. Each is characterized by the form of the expression that defines the square of the distance between two infinitely proximate points ... It follows that two neighboring observers in a Reimann space can locate the points in their immediate vicinity but cannot locate their spaces in relation to each other without a new convention. Each vicinity is therefore like a shred of Euclidean space, but the linkage between one vicinity and the next is not defined and can be effected in an infinite number of ways. Reimann space at its most general thus presents itself as an amorphous collection of pieces that are

juxtaposed but not attached to each other". [...] if we fallow Lautman's fine description, Reimannian space is pure patchwork. It has connections, or tactile relations. It has rhythmic values not found elsewhere, even though they can be translated into a metric space. Heterogeneous, in continuous variation, it is a smooth space, insofar as smooth space is amorphous and not homogeneous (485).

In order to enlighten Deleuze and Guattari's understanding of mathematical model of smooth space, Plotnitsky (2003) demonstrates their concept of manifold in a detailed manner:

The mathematical model of the smooth in Deleuze and Guattari's sense is defined by the topology of the differential manifold, which need not entail a metric but which, in the case of Riemannian metric spaces, is also responsible for the (globally) non-Euclidean character of Reimannian metric and of a corresponding striation. Thus, while every Riemannian space allows for and defines certain striation, this striation irreducibly entails and is an effect of a *nontrivial smooth* space, in contrast to a flat Euclidean space [...] which is *only trivially smooth* [...] Accordingly, a striation defined by a nontrivial Riemannian metric can only be translated into and entails nontrivially smooth space (103).

Consequently, this type of 'geometry' indicates Deleuze's understanding throughout his work, and yet, this kind of geometry denotes the spatial characteristic of his conception. Thus, 'the irreducibly heterogeneous, multifarious character of Deleuzean smooth' which might be considered as a 'Riemannian space' that has a 'multi-mapped' and 'multi-connected' structure, is critical in Deleuze's perspective (Plotnitsky, 2003: 103).

On the other hand, Derrida's differential topology – *topique différantielle* –, which in the long run becomes atopology, is closely connected to algebra. In order to realize an true understanding of Derrida's philosophical algebra, particularly the algebra of the undecidables, it is efficient to refer to Plotnitsky' explanation which might be considered as an introduction to the subject:

There is perhaps no mathematics without reading or writing, in a certain sense especially in the case of algebra, but only in a certain sense, since (leaving aside notational elements without which geometry is inconceivable) the points and the lines of geometry are irreducibly inscriptive. They are written and are writing, the *point* made and implied along many *lines* of Derrida's analysis of *writing*. Leibniz's pointedly algebraic symbolism of calculus, to which he paid a special attention and which we still use, confirms this argument. A graphic (in either sense) example in the present context is his intervention of his symbol  $\int$  for the integral, a stylized Latin 'S', for 'sum', referring to a continuous summation and replacing the Greek  $\sum$  for discrete (if possibly infinite) summations, used in the case of sums of (convergent) infinite series of differential calculus (107).

First and foremost, algebra is designated by 'written' or, 'written-like symbolism', whether 'materially written down' or not. As Plotnitsky (2003) articulates, the following statement points to the finding of Leibniz "which led him to his project of universal characteristic, the ultimate form of philosophical algebra" (108). Plotnitsky (2003) refers to Derrida who mentions:

On the one hand, Leibniz 'divorces' all mathematical writing, all 'algebra', from its connection to *phone* (speech and voice), and theological and onto-theological determinations defined by this connection. On the other hand, even while bypassing *phone*, Leibniz reinstitutes this link at the level of concepts or ideas, whose meaning and/ as organization his, or at least God's, algebra of logical propositions would control. In other words, it would calculate the undecidable. More accurately, it would aim to calculate what would appear as undecidable from Derridean perspective (108).

Undecidability discusses the issues of 'truth' and 'completeness', or 'incompleteness' of a formal system in mathematical logic, and, in Derridean perspective, it realizes an 'analogous' execution in philosophy (Plotnitsky, 1994: 196). Thus, at this point it should be remembered that, Gödel reaches at a mathematical determination, which is constituted of 'undecidable propositions' that might be interpreted as the presence of particular propositions which are neither

provable, nor disprovable as true by mediums available within a distinct system (Plotnitsky, 2003: 108). In order to consolidate his argument, Plotnitsky (1994) refers to Penrose who addresses:

What Gödel showed was that any precise ('formal') mathematical system of axioms and rules of procedure *whatever*, provided that it is broad enough to contain descriptions of simple arithmetical propositions [...] and provide that it is free from contradiction, must contain some statements which are neither provable nor disprovable by means allowed within the system. The truth of such system is thus 'undecidable' by approved procedure. The fact, Gödel was able to show that the very statement of this consistency of axiom system itself, when coded into the form of a suitable arithmetical proposition, must be one such 'undecidable' proposition (196).

As a matter of fact, Gödel's aspiration for such a formation emanates from Leibniz's 'universal characteristics'; "the project of symbolically (algebraically) mapping the propositions of logic or philosophy and the well-formed rules for deriving them" (Plotnitsky, 2003: 108). However, Gödel's propositions are critical in order to depict the unexpected case of certain well-formed denotations about numbers, which might never be located as true or false. Henceforth, Gödel's propositions depict the presence of undecidable characteristics of these so-called well-formed denotations. Furthermore, Gödel's finding annihilates the acknowledgement based on the evidence of mathematical facts as absolute truth or proof, which goes on from the pre-Socratics (Plotnitsky, 2003: 109).

On the other hand, quite before Gödel, through Mallarmé's writing, a quasimathematical attitude has been established. Herein, Plotnitsky (2003) mentions, "Derrida introduces a certain philosophical *version* of undecidability, specifically [...] in *Dissemination*, in the context of, [...] Stéphane Mallarmé's and Philippe Sollers' work (109). In this context, Derrida's positioning of Mallarmé's text

'between philosophy and literature' ought to be considered as one of Derrida's undecidable propositions. Here, Derrida's undecidability is closely connected to Gödel's in terms of not abandoning logic, but, "establishing the limits within which logic would apply, and exploring the areas where one must operate beyond these limits (but never absolutely outside them) (Plotnitsky, 2003: 109).

As Plotnitsky (2003) indicates, the reason of such a formation is obvious:

It is because mathematics is indissociable from and is even made possible by writing, even though, within its disciplinary limits, mathematics can contain certain radical effects of this inscriptive machinery. Derrida explains this inexhaustibility of writing in terms of undecidability immediately upon introducing Gödel's findings. He also explains the radical nature of his quasimathematical undecidability and, they are correlative, the inexhaustibility in question proceeding via Plato and Hegel, with some recasting of Freud added on. This discussion recapitulates the terms of undecidability the nature of his standard operators, for example supplement and dissemination (109-110).

These operators indicate a distinct aspect of Derrida's formulation, or in fact distinct operations that cannot be entitled by a single name or possible groups of names. In this context, Plotnitsky (2003) states that, "This naming is itself subject to the uncontainability, inexhaustibility, dissemination and so forth here in question, which fact is reflected in Derrida's, by definition, interminable network of terms, including those just mentioned" (110). Correlatively, none of these terms might be considered as certainly unavoidable. Furthermore, Plotnitsky (2003) emphasizes the cruciality of the operators that depicts Derrida's philosophical formation of Mallarmé's text:

This structural dispensability is itself part of the difference between Derrida's dissemination or Mallarmé's hymen and Hegelian decidable pluralities [...] and other containable philosophical calculi of the plural. 'Between [entre]' becomes a strategic Mallarméan marker of this situation, although it must be seen as subject to the irreducible possibility of its own suspension as well. These structures themselves form a certain complex quasi-Gödelian undecidable 'algebra' or calculus and to some degree an 'algebra'

of undecidables, insofar as most propositions involving them are undecidable as concerns their truth or falsity (100).

Hence, the utmost location of Mallarmé's text between philosophy and literature, between "Plato (or Hegel) and Mallarmé" seems to be undecidable by the virtue of the fact that "it is the *différance* that defines the in-between [inter] the ultimately irreducible in-between that Mallarmé's text inscribes" (Plotnitsky, 2003: 110). This undecidable would operate the in-between of "philosophy and linguistics, or literature and logic, or literature and mathematics, or philosophy and mathematics" (Plotnitsky, 2003: 110). At this point, referring to Derrida is efficient; in order to illuminate his conceptualization of hymen that brings into light the Derridean understanding of in-between. Derrida (1981) postulates that,

Hymen is first of all a sign of fusion, the consummation of a marriage, the identification of two beings, the confusion between two. Between the two, there is no longer difference but identity. Within this fusion, there is no longer any distance between desire [...] and the fulfillment of presence, between distance and nondistance; there is no longer any difference between desire and satisfaction. It is not only the difference (between desire and fulfillment) that is abolished, but also the difference between difference and nondifference. Nonpresence, the gaping void of desire, and presence, the fullness of enjoyment, amount to the same. By the same token, there is no longer any textual difference between the image and the thing, the empty signifier and the full signified, the imitator and the imitated, etc. [...] It is the difference between the two terms that is no longer functional. [...] What is lifted, is then, is not difference but the different, the differends, the decidable exteriority of differing terms (219-220).

In this regard, Mallarmé's writings are transformed into a decree of writing in Derrida's vision of algebra of undecidables, which is acknowledged through "Mallarmé's textual machinery" (Plotnitsky, 2003: 110). However, it should be comprehended that Derridean algebra might only be obtained through a reading of the "blanks and folds", or in other terms, systems of figures, letters or symbols that

might act as an 'operator' with undecidability adjoint to it. Furthermore, it should be emphasized that, 'algebra' might only be reached by means of inscription. Otherwise stated, algebra does not own any content in the metaphysical or philosophical sense, and hence, it might be "devoid of connection to voice or ultimately any logos" (Plotnitsky, 2003: 111). Consequently, as Plotnitsky (2003) points out, "the most crucial [...] is the quasi-algebraic inscriptive structure or operation of Mallarmé's text or of Derrida's algebra of undecidables" (111). Furthermore, in order to clarify the matter, he continues by giving a fitting example:

Consider the case of 'or', the most essential logical operator, if indeed it is any way simpler than any given prepositional chain (hardly possible in Mallarmé's case). Thus 'or' joins two signifiers O and R, read for example, as zero, zeRO (the opposite of OR), nothing and reality (everything?) or zero and real numbers (collectively designated as R) in mathematics. The OR of Mallarmé's *Or* involves and branches into these elements through the same type of dissemination. 'Or' is the French for gold, but, it can be shown that the English 'or' is part of Mallarmé's disseminating play, often taking place between French and English, their différance and dissemination into each other. [...] It is tempting to see 'or' as a quasi-minimal case of dissemination, which, once it enters, and this entry is not preventable, cannot be stopped. The blank space between O and R is itself not decidable (at least not once for all), as to whether O and R, 'nothing' and 'all', are joint or disjoint. [...] Every 'blank', including every actual blank space, let alone every signifier, may be different; event ultimately must be different each time, physically and conceptually - in a différance, along with dissemination of empty space although certain effects of sameness, which allows us to treat such blank spaces as the same of equivalent, are produced. It is towards the différance of blanks and marks, and their folds, that Mallarmé's text directs our gaze (111).

At this juncture, it is significant that Plotnitsky's statement denotes the actuality of a topology, which relates to algebra. Yet, algebra would not be possible without this "topology of the interplay of symbols and other written marks and blank spaces" (Plotnitsky, 2003: 112). Hence, Mallarmé exerts the impossibility of algebra without topology, which offers graphical possibilities, for the sake of his texts. In this regard,

the particular Mallarméan configuration of "the marks on the page or between the pages" might be regarded as the parts of his fold (Plotnitsky, 2003: 112).

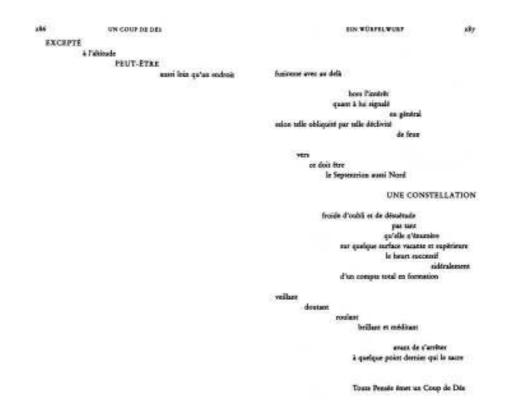


Figure 2. 2 Stéphane Mallarmé, Un Coup de Dès

At this point, Plotnitsky's explanation becomes crucial: "the figure of a printed, marked, fan and its folding and unfolding is an example of this arrangement, or indeed a figure of a more primordial topology of marks and blank spaces" (112). Though, in this context, topology becomes the prerequisite of any kind of writing that is connected to this "folding, unfolding, and refolding" and yet, "their undecidable interplay" (Plotnitsky, 2003: 112). Thus, the issue of interplay might be interpreted as "the interplay of marks and blanks, of algebra and geometry or topology, of visual and verbal" and, so on. However, it ought to be recognized that this interplay is never irreducible to any primal algebra, geometry or topology. Concordantly, according to Plotnitsky (2003) there is:

A complex folding of algebra and geometry, figural and textual, including physical (turning a corner of page), to Mallarmé's textual

practice and even to his algebra, and ultimately to any algebra. The 'exquisite crisis, down to the foundations' – [the crisis of literature] –, which could serve as an exquisite description of the impact of Gödel's findings a few decades later, is the crisis of undecidability in and of literature (113).

Plotnitsky (2003) stresses that, as a consequence of this complex stratum of interplay, "Mallarméan-Derridean hymens", and hence, "the hymen of undecidable philosophy and undecidable literature are brought together" (113). Otherwise stated, this fact denotes the complex algebraic relations, which take into consideration various interplays.

The thorough involvement in the matters of topology and atopology realizes the ground for a critical discussion on the Land Art movement. Consequently, the reading of the forthcoming chapters should be established by keeping in mind this distinct formalization. The second sub-chapter, which covers an evaluation of the various approaches of Land Art artists based on their works, is organized in regard to that particular attitude. Hence, these significant matters of topology and atopology impress the selection of the artist's artistic and theoretical formations. Nevertheless, without imposing any special effort, Land Art movement provides the possible potentiality of such an alternating approach. On the other hand, the understanding of Robert Smithson's conceptualization by means of his artistic formations and writings proves more effective, as a result of a distinct discussion of Land Art through the matters of topology and atopology.

## 2.2. Land Art: Art in an Expanded Field

"Instead of using a paintbrush to make his art, Robert Morris would like to use a bulldozer"

Robert Smithson, 1967

A transition from a paintbrush to a bulldozer depicts the innovation of Land Art, which changes the traditional perception of nature, land or simply the outer open space. Acting as a fundamental ground, Land Art, which is distinctly separate from gardening and landscape architecture, presents a new meaning and a new vision towards art and nature relationship. Compared to the aesthetic concern of classical and neoclassical periods, Land Art brings in to light a new harmonious relationship between art and nature by means of introducing the interaction of these two. Donald Crawford (1983) in his article "Nature and Art: Some Dialectical Relationships" while mentioning the environmental sculptures, describes three distinct forms:

In the first, relatively self-contained natural objects or environments are displayed within a traditional gallery setting: [...] a box of dirt, a patch of grass, an atmospheric chamber. In the second and the third forms, the artist moves entirely outside the gallery to manipulate a natural site, either by modifying or rearranging the natural components, or by constructing a non-functional artifact on the site (50).

What he demonstrates could be considered as a step-by-step evolution of Land Art, which was raised at the beginning of sixties when Abstract Expressionism left off controlling the artistic sphere in the United States. This radical transformation and rejection of traditional understanding and organization of landscape is assisted by the artists who were in contradiction with gallery framework and economical substructure of art scene. Land Art's revelation as an anti-movement compared to the traditional conception and understanding of movement, made a widespread impact on artistic, cultural and social conditions of that decade, 1960s.

Keeping in mind the notion of space as a primal concern so as to foreground its potential power in the matter of arts, artists instead of depicting works in the studio began to work in vast open spaces that were located in the remote deserts of West America. Rather than considering landscape as a model or as a place in which sculptures could be exposed, Land Art artists engaged their works with the land. Irving Sandler (1988), in his book "American Art of 1960s" describes this passage from inside to outside in an explicative manner:

[...] the rigid confines of interior spaces were out of keeping with the spread of amorphous materials. An open, less precious space seemed more appropriate, and artists began to think that more open it was, the more open to the process of nature, the better, and they turned to unbounded deserts, salt flats, and the like using the materials the encountered *in situ*, primarily earth, sand, rock, gravel, to work with (329).

The very initial works of that kind procreated by Michael Heizer, Robert Smithson, Walter De Maria, Dennis Oppenheim and Robert Morris are entitled as earthworks. These earthworks comprise "site-specific sculptural projects" which take advantage of the substance found in nature in order to invent new forms, new models, and new concepts so forth; "programmes" that introduce inorganic objects into the natural spaces with almost same purposes; "time-sensitive individual activities" within the landscape as personal and social involvement into the land (Kastner, 1998: 11). Furthermore, earthworkers composed works which were penetrated into such issues as "the effects of light, weather, and the seasons" on observer's perception of an art work; "its altered physical character owing to the vicissitudes of nature; the essentially horizontal character of the earth and what that demanded of a work in the landscape; and the perception of the scale of artworks in the boundless space of the outdoors" (Beardsley, 1982: 226).

Kastner (1998) emphasizes another significant characteristic of the earthworks by stating that, "The interventions of the Land Artists – working the resources of antiquity with the tools of mechanized modernity, exploring the cool cultural discourse of the city to industrial wastelands or the unacculturated desert – embodied the dissonance of the contemporary age" (11). Within this inharmonious atmosphere of institutionalized art, Land Art artists furnished alternatives to the gallery and museum by working on the open spaces of land. Their attitudes point out a common persuasion that those sculptural – regarding their three-dimensionality – formations would be located outside the institution, in connection with natural spaces. Herein, in order to clarify in which manner Land Art artists deconstructed the traditional notion of museum and gallery, it is reasonable to make reference to Gilles A. Tiberghien (1995) who conjures up the changing conception of art. He indicates that:

Instead of the traditional question, "What is art?" assuming a certainty about art's nature, which has since been disputed, we ask "When is there art?" at the risk of the obvious response: "When there is museum," since the museum is our art space *par excellence*. In a modernist conception of history, largely dependent on Hegel, the museum appears as the moment of exaltation and culmination of art (20).

Land Art artists' attempt was also to determine original variables, which permit a new approach that is not limited within the boundaries of institution. Putting it differently, artists' endeavor of redefining art by deconstructing the apparent characteristics of art scene could be reinterpreted as a will to annihilate the traditional temporization and periodization speculated by modern conceptions. On the other hand, by working with natural substances which are not considered artistic, Land Art artists located themselves a step further compared to the other artist of the 1960s in order to deconstruct the autonomy of art and the consideration of art work as a commodity. At this point, what Michael Heizer puts forward, clearly demonstrates

the artists' attitude towards the work of art: "When you make a sculpture by digging out dirt, you're negating all of these materialist concepts. You change the definition of the material and material usage, and you redefine what an object is. It [new definition] wasn't materialistic, and it was spiritual and mystical and oriented toward the earth" (McGill, 1990: 11). Moreover, the use of organic materials collapsed the aesthetic economy of Modernism in which the amount of pleasure procured by an artwork is determined by its detachment from everyday time and space contexts (Kastner, 1998: 25). The following explanation of Tiberghien (1995) denotes how powerful and impressive was the Land Art artists' manifestation against the museums and the galleries:

The earth – dirt – [...] with its power of provocation (evident simply from the troubling effect of its presence in the middle of a rectilinear room), its considerable and deeply archaic symbolic weight, is that gives Land Art acts their radicalism. The deserts and unpopulated spaces keep the cultural institutions which generate art worlds at a distance. [...] The deserts, the quarries, the abandoned mines, the distant plains, and the mountainous summits give us the sense of a world where art takes on a new meaning, where museums disappear, and humanity eclipsed (21-24).

Therewithal by specifying the discovery of natural sites as a fundamental target, Land Art artists intended to test the "limits of Art" (Tiberghien, 1995: 40). Keeping in mind the desire of displacing the borders of Art, artists realized earthworks with various conceptions and within assorted manners such as, integration, involvement, interruption, and implementation so forth. By working on land, on the very periphery, Land Art artists not only objected the traditional definition and border of art, but also they dislocated the persistent understanding and limit of sculptural conventions. These artworks' physical existence on the land is more inextricably bounded and penetrated compared to the "marketable objects that narcissistically proclaimed their own character" – portable forms of sculpture (Beardsley, 1982:

226). Beardsley's (1989) statement clarifies the strength of the engagement between the works and their sites:

While most of them [earthworks] could have been made in any one of a number of similar palaces, the important point is that the boundaries between them and their settings are not at all clear. These are mot discrete objects, intended for isolated appraisal, but fully engaged elements of their respective environments [...] (7).

In order to clarify the dislocalization of the traditional sculptural conventions and the diversity introduced by Land Art, it is appropriate to focus on Rosalind Krauss's conception of "Sculpture in the Expanded Field". The very fundamental reason of Krauss's (1979) attempt to procreate such a conception is to clarify the demolished contours of sculptural formations caused by the contextual obscurity and heterogeneity – loss of the particularity of site, absence of pedestal, appearance of non-figurative abstract formations, concealment of horizontality and forces of gravity, revelation of negativity or exclusion, withdrawal of function, emergence of referenciality – brought by Modernism and intensified with following movements (32-34). Krauss (1979) indicates that with modernist intentions:

[...] sculpture had become [...] the combination of exclusions. Sculpture, it could be said, had ceased being positivity, and was now the category that resulted from the addition of the notlandscape to the not-architecture. [...] and what began to happen [...] at the end of the 1960s, is that attention began to focus on the outer limits of those terms of exclusion (36-37).

The shift towards the periphery, compared to the traditional sculptural preoccupations, necessitated the emergence of diverse forms and structures, such as "site constructions" – Robert Smithson's *Partially Buried Woodshed*, Robert Morris's *Observatory*; permanent or impermanent site markings – "marked sites" and "impermanent marks" – Robert Smithson's *Spiral Jetty*, Michael Heizer's *Nine Nevada Depressions*, Dennis Oppenheim's *Las Vegas Piece*, Nancy Holt's *Sun* 

Tunnels; "photographic experience of marking" – Richard Long's A Line Made by Walking, Christo's Running Fence, Robert Smithson's Mirror Displacements in Yucatan, so forth (Krauss, 1979: 41-42). Furthermore, the orientation towards the outer fringes brings into light various facts - withdrawal of institution based prepossessions as authenticity and originality; concealment of conceptions as non-localization, decentralization, temporality so on – that eliminate the traditional and modernist obsession of determining both physical and literary self-contained borders of the work of art. This expanded field which embraces Land Art artists' creations is settled within the postmodernist understanding of space that antagonizes the institutionalized logic of space.

The withdrawal of the institutionalized art and the effacement of the privileged characteristic of the museum and gallery changed the limits and the orientation of the art sphere. Hence, the artistic practices was emanating within the wide frame of the expanded field, and the result was as Tiberghien (1995) indicates, "access to art was no longer simply a visit to an exhibition" (63). Herein, it is significant to put forward that the idea of displacement was beyond the physical process of extracting the works of art from the gallery context and putting these so-called sculptures outside. What lies beneath the idea of Land Art compared to the other environmental artifacts, is their quasi-architectural/quasi-sculptural and non-architectural/non-sculptural characteristics. Tiberghien (1995) unfolds this status of Land Art on the border while he explains the "inorganic sculptures" – their undecidable positions between sculpture and architecture:

These works' monumentality, their mass and the tension between their verticality and the laws of gravity, place them in the category of architecture. At the same time, the simplicity of their forms, lacking both anthropomorphic reference and spiritual connections, likens them to minimalist sculptures (65).

Land Art works which extend beyond the edges of their own distinct entities are integrated with and penetrated into their specific sites. These boundless works on the entropic spaces, uncultivated deserts, post-industrial barrens and mountainous places altered the traditional conception of perceptual experiences. Their anti-romantic and anti-idealized consideration of nature and landscape dislocates the ground of subjective perception of artwork. Stating it differently, the subjective interaction with the enclosed object ends and the new mutli-dimensional experience begins with these works that are located on the very undecidable border of sculpture and architecture.

In spite of the fact that the Land Art artists' act of displacement shelters a common goal, their idea behind the site selection varied for each of them, due to their conceptual understandings and artistic expectations. As a consequence, it is essential to clarify Land Art artists' understanding of the notion of both space and place, in order to realize a better perception of their works. Tiberghien (1995) while referring to Thierry de Duve's theorization articulates that the cotemporary sculpture deconstructs the notion of site by putting forward its disappearance (87). What Robert Smithson (1979) mentions in his article "Towards the Development of An Air Terminal Site" brings into light this ambiguous comprehension of the notion of site:

It is important to mentally experience these projects as something distinctive and intelligible. By extracting from a site certain associations that have remained invisible within the old framework of rational language, by dealing directly with the appearance of what Roland Barthes calls "the simulacrum of the object," the aim is to reconstruct a new type of "building" into a whole that engenders new meanings [...] Tony Smith seems conscious of this "simulacrum" when he speaks of an "abandoned airstrip" as an "artificial landspace." He speaks of an absence of function and tradition" (46).

This conception of space reveals the site or the place as a coded system, which conceals itself within the story of the distinct work. In this regard, it is obvious that Land Art artists' concern is not limited within the boundaries of aesthetic preoccupations. Furthermore, the story which lies beneath the Land Art works shelters plenty of concepts as Tiberghien (1995) explains: "the place, or the site, allows something "other" to became visible; in this sense it is a nonplace [...] it is an abandoned situation [...] where the loss of meaning is expressed by a need filled with significations" (90). In this regard, when the work and the site become reciprocally devoted to each other, the work could only be read trough the site and the site could only be comprehended through the work, which conveys it, new meanings (Tiberghien, 1995: 94).

Herein, Michael Heizer's massive work *Double Negative* that totally effaces the frontiers between the site and the work is an impressive example. Instead of being an arrangement that is expanded within the space, with a plane indicating the borders of a closed object, *Double Negative* is constructed by the space itself: it is a negative sculpture; it is a void (Beardsley, 1989: 17). A huge amount of earth excavated with the aids of bulldozers from the both sides of the valley in order to create two horizontal slopes one facing the other. Although the sunken ramps are situated on the opposite sides of the land, an optical connection occurs as a result of the suitable linear alignment of the negative volumes. A huge amount of earth excavated with the aids of bulldozers from the both sides of the valley in order to create two horizontal slopes one facing the other. Although the sunken ramps are situated on the opposite sides of the land, an optical connection occurs as a result of the suitable linear alignment of the negative volumes.

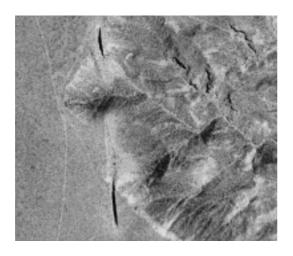




Figure 2.3 and Figure 2.4

Double Negative, 1969-70. 244,800 tonne displacement, rhyolite and sandstone, 475 x 15 x 9 m. Mormon Mesa, Overton, Nevada

Satellite and Aerial Views

Even though an untouched space is located between the ramps, by some means the gap is integrated to the field of the negative sculpture. The work compared to the traditional sculpture is particularly a manifesting one, regarding its formation based on voidness rather than solidness as Heizer emphasizes: "In order to create this sculpture material was removed rather than accumulated [...] There is nothing there, yet it is still sculpture" (Kastner & Wallis, 1998: 54). Otherwise stated, the sculpture is created out of the spaces, which remained behind, as Kimmelman (1999) explains while he describes Heizer's "sculpture in reverse". Tiberghien (1995) indicates, "the work does not belong to any specific site", in other respects, the primal concern of Heizer is not the place in which the work is settled (96). However, he accentuates directly the significance of the work, which gives its identity to the site. Through Double Negative, the matter of size, which is one of Heizer's primal interests, reveals itself by the enormity of the work that contends with the immense dimension of earth itself. Heizer, who mentions, "Sculpture needed to express the character and scale of the great Western landscapes," puts an apparent emphasis on the notions of mass and size (Beardsley, 1989: 13).





Figure 2.5 and Figure 2.6

Double Negative, 1969-70. 244,800 tones displacement, rhyolite and sandstone, 475 x 15 x 9 m. Mormon Mesa, Overton, Nevada

Inside Views

While he explains about his work *Double Negative*, alleges that "not scale, size. Size is real, scale is imagined size. Scale could [...] be an aesthetic measurement whereas size is an actual measurement" (Tiberghien, 1995: 71). According to him, size is appraised through its elements within a close unity, compared to the scale, which is assessed in relation to other objects or subjects in the environment (Tiberghien, 1995: 78). The immense size of the work, which is beyond the human scale, besides the monumentality discusses another significant phenomenon that is also concerned by other artists: decentralization. As Tiberghien (1995) mentions referring to Krauss: "Double Negative [...] is only visible, if one remains at ground level, from one side at a time. The structure forbids a central vision or a centered position and constrains the viewer to the periphery" (48). The work creates such an environmental atmosphere that, even though the observer becomes a so-called vanishing point, he/she cannot orient him/herself as a center. However, compared to *Double Negative*, Heizer's work *Complex City* profoundly focuses on the phenomenon of dislocalization of the subject by size and scale.

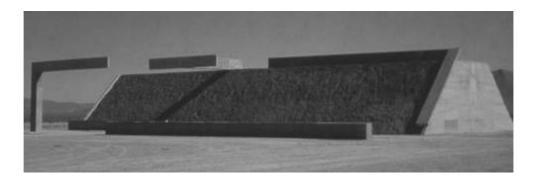


Figure 2.7 Complex City, 1972-76. Concrete, steel, compacted earth, 7 x 366 x 159 m overall Garden Valley, Nevada Aerial View



Figure 2.8
Complex City
Close up View of the Concrete Extensions

Constructed in the barren desert of Nevada, *Complex City* which is comprised of compacted earth and concrete slopes vibrates the spectator's experience of scale within a given space. As a structure closed to the limits of architectural construction, it can be entered and contemplated both from the inside and the outside. Once the observer walks into the complex, he/she stands face to face the immeasurable sculptural constructions, which disrupt the sense of orientation. Tiberghien's (1995) explanations on the *Complex City* bring into light this vague matter of decentralization: "a city, where the visitor, incredulous at first, then stunned, cranes his neck at a forty-five degree angle, his body lightly tensed, without any possible point of reference, seized by a desire to alter his position in an attempt to comprehend the incomprehensible" (73). In such a case, viewer never discovers the

perfect location in order to realize a rational comprehension of the space, although the access ramps towards the center are followed.

Compared to Michael Heizer who apparently puts an emphasis on the phenomenon of size, Robert Smithson accentuates the significance of both size and scale. In contrast to Heizer who mentions the prominence of actual measurement – size, Smithson reveals the importance of artistic measurement – scale. According to him, a work of art is determined by scale, which varies relating to the onlooker's perceptual capacities and hence, he indicates that: "A crack in the wall if viewed in terms of scale, not size, could be called the Grand Canyon" (Tiberghien, 1995: 71).





Figure 2.9 and Figure 2.10

Doris Salcedo, Shibboleth, 2007. Length: 167 m. Great Turbine Hall,
Tate Modern, London (Left)

Grand Canyon, Arizona, Aerial View (Right)

Smithson's argument related to scale resembles in all aspects to Michael Heizer's, who previously claimed that when the artist's main focus is on the notion of scale rather than size, the art works' relation and dependency to the environment should be taken into consideration. Heizer who ignores the narration and imposes the impression of the object based insight, opposes to Smithson who emphasizes a dialectical relationship. Smithson asserts that when one considers size more significant and central than scale, an enclosed frame of certainty is drawn, however,

according to him, scale which is the "matter of interchangeable distances," co-exists with uncertainty that occurs as a consequence of the continuous shift of viewers' position (Tiberghien, 1995: 71). The uncertainty does not occur as a result of the focus on a one large-scaled object; however, the ambiguous status of scale depicts it by introducing a continuous series of spaces. Herein, what Tiberghein (1995) alludes clarifies Smithson's conception of scale and it relation to space: "[...] the space of pure fiction, the space of Lewis Carroll [...] the imaginary realm of *Beyond the Looking-Glass*, where the large becomes small and what is small becomes large, continually and incomprehensible" (77). However, one should recognize that Robert Smithson's conception related to scale is not limited within this explanation. This demonstration could be considered as an introduction to his understanding, which would be depicted, in the following chapter.

Remarkably separate from Michael Heizer who puts an emphasis on the phenomena of massiveness and size of the artwork rather than the site on which it is located, Dennis Oppenheim accentuates the specificity of the use of earth as a primal concern of his works. Oppenheim's preoccupation on the specificity of site and its relation to the work substantially relates to what Miwon Kwon discusses through her article entitled "One Place after Another: Notes on Site Specificity". Closely connected to Oppenheim's understanding of site, Kwon's description considers site as "an actual location, a tangible reality, its identity is composed of a unique combination of constitutive physical elements [...] scale and proportion [...] existing conditions [...] distinctive topographical features (1997: 85). In order to realize an exhaustive comprehension of the site-specific art, Kwon (1997) describes the theoretical and the conceptual facts in an explicit manner:

[...] the uncontaminated and pure idealist space of dominant modernisms was radically displaced by the materiality of the natural landscape [...] space of art no longer perceived as a blank slate [...] but a real place. The art object or event in this context was to be singularly experienced in the here-and-now through the bodily presence of each viewing subject, in a sensorial immediacy of spatial extension and temporal duration [...] rather than instantaneously "perceived" in a visual epiphany by a disembodied eye (86).

Furthermore, the site-specific art by deconstructing the modernist conception of use of space, accomplishes the neo-avant-gardiste will to efface the limitations of the institutionalized boundaries on artwork. An understanding based on the integrated relation between the work of art and its site which brackets out the temporal and spatial boundaries engenders the dematerialization of the object – artwork (Kwon, 1997: 91). A moderate emphasis on the physical relation of the site and the work brings into light the discursive structure of the artwork. Otherwise stated, as Kwon (1997) indicates, this "transformation of the site textualizes spaces and spatializes discourses (95). As a consequence, the artwork that is integral to its site, unfolds the originality of this peculiar place.

Dennis Oppenheim, keeping in mind the potentiality of the site-specificity, is interested in realizing an integrated relation with the site by means of "inscriptions and markings, [rather] than to build objects that resisted time" (Tiberghein, 1995: 96). In other words, for Oppenheim the site of his works acts like a plane ready for inscription on which the conceived elements depict various conceptions (Tiberghein, 1995: 98). Oppenheim, in order to declare his passion to "make an impression in the world", methodically utilized various sorts of marks and traces (Klepac, 1979). Among his site marks, *Identity Stretch*, which is comprised of the enlarged replications of fingerprints, brings into light the core of Oppenheim's conception of

tracing and inscription that is connected to the idea of transfer. The work is composed of two immense overlapping and extended thumbprints, which were inked on an elastic surface and later plotted on a grid plane. The grid plane and thumbprints were transferred to an immense field on which, a spray truck drew the fingerprints' traces in lines of asphalt (Heiss, 1992: 107). In other words, Oppenheim conveys the giant simulacra of his own and his son's thumbprints onto an outdoor site by representing those via the asphalt scars.

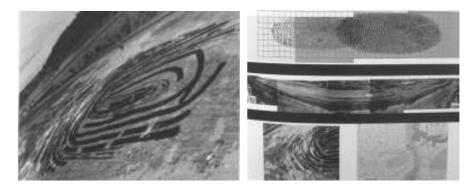


Figure 2.11 and Figure 2.12
Identity Stretch, 1970-75. Ink, thumbprints, elastic, wood, rope, hot tar 91.4 x 304.8 m

Left fingerprint: Erik Oppenheim's right thumb.

Right fingerprint: Dennis Oppenheim's right thumb.

Artpark, Lewiston, New York

Identity Stretch that effectuates a dynamic relationship with the site on which it is settled, brings forward the significant idea of "the pure installation of presence by means of the index" as Rosalind Krauss (1977) mentions in her article "Notes on the Index: Seventies Art in America" (80). According to Klepac, although Oppenheim's transfer of self-presence is a questionable one, his conception of a particular site as a plane for inscription entails various preoccupations. Herein, what Klepac indicated should be emphasized in order to comprehend Oppenheim's idea of the transfer of presence, which is not bounded within the frame of a singular and specific identity. For Oppenheim, the transfer was a way of marking the site, which denotes the preexistence that is beyond the articulation of a known presence.

Herein, as Tiberghien (1995) explains it is inevitably reasonable to predicate that in the site markers of Dennis Oppenheim, "the location takes the place of the object [...] the origin of the idea of viewing stations, 'observatories' constructed by the artists to exhibit the space of the gallery itself" (96). The idea of viewing station is derived from the artist's desire to create places – "small platforms on which a single person could stand to gaze upon the world" – to survey from rather than objects to be beheld (Heiss, 1992: 10). Dennis Oppenheim, via his idea of 'viewing stations' reveals a conceptual connectivity with Robert Morris, who once indicated that: "I'm concerned with spaces that one enters, passes through, literal spaces, not just a line in the distance, but a kind of space that body can occupy and move through" (Tiberghien, 1995: 98). Although, Oppenheim's site markings and viewing stations compared to the Morris's constructed spaces are mostly impermanent and easily dematerialized, both of them shelter a common understanding regarding the essentiality of the site.

Robert Morris, who once indicated that sculpture, must be constructed directly on the bare surface of the earth, affirms the significance of physical features like scale, proportion, form and mass in order to reveal directly the significant relation between the site and the work. Conspicuously similar to Michael Heizer, Morris accentuates the compactness of the used material and its transformation with the contribution of gravity. As Tiberghien (1995) mentions, according to Morris, it is not consequential whether the shapes are exoteric or eccentric; rather "it is the simplicity of the volumes that is important, the fact that they prohibit multifaceted or gradual evaluation that they offer themselves immediately and indisputably as one solid block" (65-66). Actually, this effort in realizing simple forms was an attempt of

creating a reference to the megalithic formations – the pyramids of ancient Egypt or Stonehenge –, which were solid and massive constructions on the mere ground. Robert Morris (1993) in his article "The Present Tense of Space" unveils how engrossing and inspiring were the ancient constructions in order to generate multi-dimensional conceptualizations related to the Land Art works that eventuate on the ambiguous verge of architecture and sculpture:

The buildings as closed object that shuts out space was less adhered to in many examples of Middle and Far Eastern building types. This is especially apparent in uncovered or partially open structures [...] Absent here is the totally enclosing environmental container that houses both objects and human figures [...] the Mayan ball courts, temple platforms, and various observatory-type constructions have the same openness to the sky. Besides a general openness, sharp transitions between the horizontal and vertical planes of floor and wall are often absent [...] One's behavioral response is different [...] The physical act of seeing and experiencing these eccentric structures are fully a function of time [...] Knowledge of their spaces is less visual and more temporal-kinesthetic [...] (193-194).

In fact, Morris's reference to archaic constructions is not limited within the frame of historicity; rather, what inspires him the most is the manner in which time and being was introduced and penetrated within these peculiar spaces. The physical openness and the potential space-oriented perception bring the viewer the opportunity to explore the construction both in spatial and temporal dimensions. In the course of describing *Observatory* Tiberghien (1995) emphasizes that "[it] requires spatial and temporal exploration by the viewer to obtain a coherent mental image of the object" (77). Stated differently, in creating *Observatory*, one of Morris's concerns was to awaken "[...] the experience of an interaction between the perceiving body and the world that fully admits that the terms of this interaction are temporal as well as spatial [...]" (Morris, 1993: 90). Morris's *Observatory*, in 1971, was built for the

exhibition Sonsbeek 71, however, demolished because of its delicateness, and then rebuilt in 1977, in Holland (Tiberghein, 1995: 77).



Figure 2.13
Observatory, 1971. Earth, wood, timber, steel, granite. Diameter: 70 m
Temporary installation in limuiden, Netherlands, for the exhibition *Sonsbeek* 

Observatory is composed of two "dyke-shaped" circles that were concentrically constructed directly on the earth. The inner circle was constituted of earth which was supported by a rounded wooden stockade acting as a retaining wall. The outer circular periphery is composed of three dikes and two channels (Kastner & Willis, 1998: 100). On the west side of the piece, a triangular passage that was carved on the outer ring acts like a gateway, which welcomes the visitors. Beside the triangular doorway, there are three other entrances; the first one which is oriented toward the east, is elongated between the two linear canals that ceased in two steel slabs maintained on a diagonal (Kastner & Willis, 1998: 100). The interval between these slabs indicates the location of the sun at the equinoxes. The other two entrances point out respectively the position of the sunrise on the winter and summer solstices. While describing *Observatory* Robert Morris emphasizes the significance of time in his construction, by demonstrating these openings in an explicative manner:

The plates are set slanting to the east, in such a way that the vizier edges of the plate form an angle of 60°. The first rays of the sun are caught between the plates, on the days of the year when say and night are exactly the same length. The north-eastern marking point is intended for observation of the first rays of the sun on the longest

day (summer solstice); the south-eastern marking point is for observing the rising sun on the shortest day (winter solstice) (Tiberghein, 1995: 81).

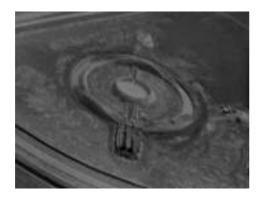




Figure 2.14 and Figure 2.15
Observatory, 1977. Earth, wood, timber, steel, granite.
Diameters: outer ring: 91.2 m, inner ring: 24 m
Oostelijk Flevoland, Netherlands
Aerial view and Close view of inner circle

The work which is composed of direct or indirect interplay of spaces forces observer to realize a continuous movement both inside and outside in order to actualize a comprehensible mental image. Beardsley (1982) while mentioning about Morris's phenomenological interpretation of land art accentuates that according to Morris, "these works [earthworks] could not be fully apprehended at an instant [...] the activity of the viewer was essential to their complete perception and that all the senses [...] were required to achieve this end" (226). As a consequence, via the participation and the existence of the viewer that the piece reveals it self as complete work of art which is explored both in the physical and temporal dimensions. Morris's intention on the interactive comprehension of artwork and his insistence on the participation of the observer assign the recognition of the various measures of time. Beside the viewer's actual time of exploration, by making reference to the Neolithic monuments like Stonehenge, Morris expands the time line towards a remote past of human history. Furthermore, his *Observatory* which points out the sun rays' movements reveals the significance of astronomical time (Beardsley, 1989: 27).

Otherwise stated, via *Observatory*, Robert Morris juxtaposes the present-time of experiencing both with the remote time of history and the periodical time of the astronomical movements.

Besides Robert Morris, in a noteworthy manner, Walter De Maria, Robert Smithson, Dennis Oppenheim, Nancy Holt and some other artists are strongly germane to the relationship between art and time. For instance, according to Smithson, time which is innate in an artwork meanwhile is in fact a part and parcel of the artist – a conception of time that is originated as a result of a dimension in which remote past meets the remote future (Tiberghein, 1995: 131). On the other hand, Nancy Holt who likewise Robert Morris introduces a universal conception of time assumes that a work of art must actualize an intense connection with the spectator who is aware of the space and "order of the universe" (Saad-Cook, 1988: 126). Otherwise stated, Holt flourishes an understanding of work that attempts to preserve and measure time: "When I build them, I think about human scale and [...] people standing in different places. In order to understand and perceive my works one has to walk through them, in and out [...] the works exist in durational time in that respect (Saad-Cook, 1988: 126). Provision of an opportunity to examine the built environment both in spatial and temporal dimension is essential for the realization of a consistent mental representation of the artwork. In consequence, Holt takes advantage of physical lucidity and contingent space-based perception in order to awaken an experience of a mutual dependence between the body, which is in the process of exploration, and the space, which completely commits that, the circumstances of this interactive relation are both spatial and temporal.





Figure 2.16 and Figure 2.17
Sun Tunnels, 1973-76. Concrete.

Length of one diagonal: 26 m Diameters: outside: 3,72 m, inside: 2,44 m
Great Basin Desert, Utah
Aerial view and Inside view

Lying on the desert, which is located on the northwestern corner of Utah, *Sun Tunnels* is one of the Holt's major works that externalize her conception on the integration of space, time and the individual. The work is composed of four massive tunnels, which are reciprocally prolonged on the mere ground of the desert, in order to create an open cross form. The open space surrounded by the pipes receives a cement ring on its center. Each of the pipes has a particular orientation: they are aligned with precise angles of "the rising or setting of the sun on the summer and winter solstices – at sunrise and sunset on the summer and winter solstices and four about ten days before and after, the sun is visible through the pairs of pipes" (Beardsley, 1989: 34). Furthermore, on upper half of the tunnels, holes which are differing in size are located according to distinct star constellations; Draco, Perseus, Columba, and Capricorn (Beardsley, 1989: 34). The size of these particular holes is contingent upon the importance and magnitudes of the selected stars in the constellation. According to Holt, the piece interacts directly with the sun; however, it does not ignore other celestial events:

"The sun being a star, is casting spots of starlight through the star holes, so that when one walks through the tunnels, in effect, one is walking on stars. It's an inversion of the sky/ ground relationship [...] [it's] bringing the sky down to earth" (Saad-Cook, 1988: 127).

Consequently the offered experience through this sophisticated artifact in the desert brings into light "the cosmic dimensions of time" as Tiberghien (1995) articulates by referring Holt who mentions: "Only the 10 miles south [...] are Bonneville Salt Flats [...] where you can actually see the curvature of the earth. Being a part of that kind of landscape [...] evokes a sense of being on this planet, in universal time (147). Tiberghien considers the piece as an intention of furnishing the site with a new meaning and orientation: the site transcends itself by becoming a place where the sense of scale alters via the rise of stellar time and substances (1995: 147).

The above-held discussion is on a handful number of artists, who furnish the emanation of a manifesting movement, that is, Land Art, through extending their project borders towards the remote lands of West America. These artists trigger a drastic transformation originating from the rejection of traditional understanding and organization of art and work of art. Thus and so, Land Art artists, create an artistic and theoretical basis contradicting with the traditional substructure of art scene and common understanding of gallery framework. These artists, via introducing an artistic revolution, execute a widespread impact on artistic, cultural and social conditions of that decade, 1960s. Land Art artists' attitude denotes a common persuasion that artistic formations could be localized outside the boundaries of institutions. In order to break the institutionalized borders artists engender an alternate conception of art by deconstructing the traditional definition of art and notion of museum and gallery. As a consequence, the determination of original variables, which offers a new definition of art not limited within the framework of institution, was needed. Otherwise stated, Land Art artists' endeavor of redesignating art through the deconstruction of the intelligible characteristics of the art scene is a will to annihilate the traditional conceptions speculated by modern formation.

## CHAPTER III

## SMITHSONIAN APPROACH TO LAND ART

The aforementioned discussion on the Land Art outlines the rise and the nascence of a movement. In the pursuit of a detailed specification of what is actualized in the course of this period of time and of the manner in which artists' cognitive approaches and artistic performances are emanated, a new idiocratic approach is introduced – Smithsonian approach to Land Art, which is considered to strengthen the theoretical basis of the discussion. As it is illuminated in the previous chapter, Walter De Maria as the oldest among a handful number of artists is the very first who delineates the principal idea behind the Land Art movement in which Michael Heizer features as the founder (Tiberghein, 1995: 16). Along with Robert Morris, Robert Smithson is the one who defines the commentary and informative characteristics of a written word as being of secondary importance by fusing the text into the artwork (Tiberghein, 1995: 18). Considerably authentic in his attitude, Smithson, who exposes a critical approach, engenders a complex relationship between Land Art and theoretical speculations. Reading Land Art through a Smithsonian approach is crucial, on the account of the fact that the value of the written text that coexists with the tactile reality is emphasized in a radical manner. Hence, the following chapter covers a thorough evaluation of the theoretical and conceptual understanding of Robert Smithson, as well as his object and site based formations. Thus, this

discussion serves as a fundamental basis for the fourth chapter where the algebraic reading of Smithsonian concepts is treated in detail through the quasi-mathematical and quasi-philosophical matters – topology and atopology.

Robert Smithson, who is endorsed as a respectable American artist of the avant-garde of the 1960s and 1970s, still preserves his artistic and theoretical significance by means of various exhibitions and publications. Similar to his fellows, he is deeply involved in the implications and limits of traditional frameworks of the actual art scene by relocating his works into the solitude of the barren lands. Though, as Gary Shapiro (1995) emphasized, Smithson never pictured that his radical conception on the dialectic between the site – 'the place of physical alternation of the land' and the nonsite – 'its parallel in the gallery' could annihilate the existing boundaries (1-2). Furthermore, he is considered as an authentic artist who generated a suitable ground for his own understanding and interpretation of history of art that undermines the persisting modernist vision. At this juncture, what Shapiro accentuates is significant in order to realize a reasonable comprehension of Smithsonian distinction of conceptualizing history:

He is, we might say, a major fault line in the shifting of the ground under our feet that arises from the deflation of modernist visions of social and artistic process from the suspicion that the center is destined to be caught up in a constant circuit of displacements, from acknowledging that the history of art as we know is [...] a minor blip in our dealings with the earth (so that prehistoric has a growing resonance for the contemporary (2).

Thus, according to Smithson the artist is a "site seer" or otherwise stated, the artist is a farsighted being who perceives what lies inside and, by the same token, who is beyond the common limits without depicting an apercu that totalizes new boundaries (Shapiro, 1995: 3). Smithson's definition of the artist as a "site-seer" is closely

connected to the understanding of a place where "the prehistoric meets the posthistoric" (Shapiro, 1995: 4). In order to apperceive what Smithson depicts as an artist and a thinker, first and foremost, his own attitude towards the issue of history, time, place, and order must be unfolded.

Among the Land Art artists such as Michael Heizer, Richard Long or Christo and Jeanne-Claude, Robert Smithson appears to be the one who effectuates the theoretical background of earthworks. Through constructing – nonsites, impermanent installations, plans, and maps – or writing, Smithson declares his severe critique of 'modernist discourse of art history whose hegemony had been almost unquestioned since its Hegelian foundation' (Shapiro, 1995: 21). Like his fellows, by standing against the drastic boundaries of institutionalized art, he furnishes alternatives to museums and galleries. However, via his writings, which could be regarded as the very first postmodernist statements, Smithson accentuates the essentiality of antagonizing the modernist conception of time and classification as well as the acknowledgement of modernist art and its discourse (Shapiro, 1995: 21). In order to illuminate the kind of Smithsonian critique that is generated against the modernist understanding of time and classification, it is reasonable to refer to his article "Entropy and the New Monuments" where he clarifies his conception of time via the notion of "the new monuments". As far as he is concerned, in contrast to traditional monuments that denote a particular time in history, "the new monuments", which are 'the monuments of the industrial wastelands that begin to decay as soon as they arise', indicate a different temporality (Shapiro: 1995, 22). Smithson (1966) determines that:

Instead of causing us to remember the past like the old monuments, the new monuments seem to cause us to forget the future [...] They

are not built for the ages, but rather against the ages. They are involved in a systematic reduction of time down to fractions of seconds, rather than in representing the long spaces of centuries. Both past and future are placed into an objective present. This kind of time has little or no space; it is stationary and without movement, it is going nowhere, it is anti-Newtonian, as well as being instant, and is against the wheels of the time-clock [...] Time as decay or biological evolution is eliminated by many of these artists; this displacement allows the eye to see time as an infinity of surfaces or structures [...] (Holt, 1979: 10).

Herein, although what he demonstrates does appear to be incompatible, it should be underscored that Smithson's definition of what he calls "new monuments" does not fall into boundaries of the modernist statements, which are settled and developed within a progressive comprehension of history. Shapiro (1995) enlightens that matter in a distinctive manner by stating: "Yet within this modernist discourse (in the pages of Artforum) Smithson is at one and the same time identifying and placing a style [...] and also announcing that this particular "movement" is not at all a movement but an antimovement" (26). Compared to other Land Art artists who annihilate the network of modernist art scene by creating an artistic counter-movement, Smithson takes a step further by discussing the subject on the theoretical level. He not only artistically breaks down the traditional conception of history based on successions of periods, but also strengthens his manifestation by developing a theoretical understanding, which is in parallel to postmodernism, without indicating this exact name. Yet, Smithson would not choose to entitle his antimovement as postmodernism in order to prevent the misunderstandings related to the term postmodernism as a successor of modernism. Probably, because of the ambiguity of the matter, Shapiro (1995) explains thoroughly the manner in which the Smithsonian understanding of time and history works, through the following statement:

If "postmodernism" names a particular period, the latest one, the successor of modernism, than it is intelligible only within the

confines of modernism and simply confirms modernism's view of time. Periodization is the very lifeblood of modernism; if there is a postmodern intervention that interrogates the modern in a fundamental way, then it could be called "postperiodization" in order to suggest what is at stake". And attempting to transvalue the concepts of the monument and (not only) art-historical temporality, Smithson is beginning to elaborate a form of postperiodization (26-27).

Herein, it is a certain fact that, Smithson's intention of creating such a conception of antimovement is the result of his interest in matters of entropy and cosmic disorder. Consequently, his critique of the modernist conception of time and history ventures beyond the plausible limits and covers a wide field in which the subject of biological time as a prerequisite is located. The underlying cause of Smithson's preoccupation about the matter of time is clearly derived from his attitude, which is radically opposed to the modern and Hegelian comprehensions of time and history that persist until the 1960s. As an artistic figure, Smithson could be considered as a follower of the European philosophers like Nietzsche who introduces the understanding of time as an eternal recurrence, which could be considered as a counter-modernist conception of time. Shapiro who discusses the conception of time in Smithson explains that although Smithson is not demonstrating his understanding of time as the eternal recurrence, by referring to Bell's construction of time – in his article "Entropy and the New Monuments" – he reveals his interest to this "radical alternative to evolutionary and progressive temporality, whether that temporality is deployed in biology or in art history's construction of canonical succession of styles proceeding meaningfully out of one another" (1995: 27-28). Regarding Smithson, whose speculations are directly connected to the notion of entropy, embracing the notion of time as eternal recurrence is significantly reasonable. Otherwise stated, Smithson involves in two parallel conceptions of time: that of the Second Law of

Thermodynamics, the theory of entropy and that of the eternal recurrence. Herein, Shapiro (1995) enlightens the matter by noting the theory of entropy indicates "temporal happenings" which are interpreted as "forms of turning away of deviation [...] as dispersion or diffusion" (28). Shapiro carries his discussion a step further by borrowing two terms used by Smithson: "dedifferentiation" and "destructuralized". Shapiro (1995) states that:

[...] these conceptions are recurs in eternal recurrence in the particular moment of experience in all specificity, then to think that thought through in a rigorous way is to focus one's attention precisely on the dimension of the differential and differentiating moments - that is, on that which from the standpoint of continuing and stable identities (individual, historical, or social) must appear as entropic (28).

At this juncture, the connections realized by Robert Smithson on the matter of time, entropy and artwork appears to be vague. Nevertheless, before discussing the manner in which Smithsonian approach relate to time is constructed through his works, it is reasonable to understand Smithson's speculation about the artist and his relationship with time, in order to generate a particular comprehension about Smithson's attitude towards the art scene and its always already institutionalized characteristic.

In the last part of his article "A Sedimentation of the mind: Earth Projects", Robert Smithson defines the crucial relationship between the artist and time. According to him, the artwork, which is created through a period of time, preserves the same value as the artist who spends this period of time working on this piece. He emphasizes that, each artist is aware of this ambiguous phenomenon of time, and the ones who construct a clear conception of time will defend themselves against the strong critiques of art scene. However, at the final statement of his article, Smithson clearly

demonstrates this problematic conceptualization that preserves an ambiguity in which an artist could be gravitated:

An artist is enslaved by time, only if the time is controlled by someone or something other than himself. The deeper an artist sinks in to the time stream the more it becomes *oblivion;* because of this, he must remain close to the temporal surfaces. Many would like to forget time altogether, because it conceals the "death principle". Floating in this temporal river are the remnants of art history, yet the "present" cannot support the cultures of Europe, or even the archaic or primitive civilizations; it must instead explore the pre- and post-historic mind; it must go into the places where remote futures meet remote past (Holt, 1979: 91).

Sinking deeply into the time stream would result in assimilating to the history of art and as a result, the artist would find him/herself as a successor of the previous ones. It should be indicated that, this situation would lead the artist to be the part of a narrated history that is constituted of periods in succession. Consequently, this kind of historicity is closely similar to the Hegelian narration, which is exhaustively excluded by Smithson. Once postmodernism is defined as the follower movement after modernism, Smithsonian conception of time would fail as a result of the idea of postmodern as a period. Furthermore, Shapiro (1995) accentuates that the deep involvement into the time stream unveil the aspiration for "going beyond" which would end up with "oblivion" – the realization of "the latest styles that will meet the demands of the critics, the historians, and the art market" – (36). Herein, at a glance, escaping from time could be interpreted as an alternative to the idea of sinking deeply into the time stream and the resulting oblivion criticized by both Smithson and Shapiro. However, once the idea of the escape from time is asserted, although the artist pretends to be apart from the modernist historicity, he/she would fall into another problematic situation. At this point, Shapiro (1995) states that the escape from time "would require not only the repression of art's history but that of the

artist's own sense of his or her own temporal existence (38). In this regard, Smithson's statement related to the value of the artist's time as well as the worth of artwork is absolutely ignored. So, the question of what the time of art is finds its answer in Smithson's particular words: artist must remain close to temporal surfaces.

As previously cited, Smithson states that the "present" can uphold neither the cultures of Europe nor the cultures of archaic or primitive civilizations. For that reason, Smithson realizes a conception of present, which covers both the matters temporality and the notions related to the consciousness throughout that temporality (Shapiro, 1995: 38). Otherwise stated, remaining close to the temporal surfaces would be considered as an attempt "to involve attending to actual, experienced time, rather that to an ideological time that is constructed through the grand narratives of art history" (Shapiro, 1995: 39). This comprehension of time is closely connected to a minimalist conception of time and work, which is noticeably familiar to Smithson. A minimalist work of art, compared to a traditional painting mounted on a gallery wall, establishes a dialectical relation with the viewer; the existence of the artwork is enhanced with the experience of the spectator who passes his/her time by observing the object. Consequently, the artist escapes from the obligation of eternalizing the work of art, by revealing the actual time, which is constituted of the elapsed time of the artists through the working process and the elapsed time of the viewer during the exploration (Shapiro, 1995: 39). The realization of such an understanding of time and artwork is closely similar to Robert Morris and Michael Heizer, whose intentions are to create works that one may pass through rather than contemplate from a distance. However, compared to Morris and Heizer, Smithson's interest is not only on the temporal awareness of the observer who travels over and through the artwork, but

also on the effects of time over the piece. And through this interest, he points out that the conception of temporal surfaces covers the notion of entropic time. By virtue of the fact that Smithson bears upon the notion of the entropic time, the changes that happen as the result of a process or period are the part of the artwork. The very particular works of Smithson, like *Spiral Jetty*, *Partially Buried Woodshed*, *Amarillo Ramp* participates in the disseminative process of entropy under the effects of natural or physical phenomena. Herein, Shapiro (1995) states clearly the manner in which Smithson assimilates the theory of entropy:

Smithson illustrates this last notion with the story of Humpty Dumpty, who once broken cannot be put back together again. Disorganization, so the second law of thermodynamics has it, tends to increase and, the process is irreversible. The surfaces of time are personal, geological, and cosmic; among them the trajectories traced by the art history that was invented in the nineteenth century are minor glitches or blips (39).



Figure 3. 1
Asphalt Rundown, 1969. Asphalt, dimensions variable
Rome
Aerial view

Smithson accentuates the entropic time in such works as *Asphalt Rundown*. In order to realize the piece, a dump truck, which is loaded fully with asphalt, deplenishes that material from a sloppy hillside located in a desolate zone of a gravel and dirt quarry in Rome. As the asphalt begins to flow down through the hillside, it directly penetrates into the existing cracks on the surface of earth. Otherwise stated, the black material fuses into the earth by filling and retracing the washed-out gullies, just like erosion does (Hobbs, 1981: 174). At this juncture, Shapiro (1995) demonstrates two entropic phases of the situation by stating: "The hillside was already eroded, exhibiting a first level of entropy; the asphalt, following in its flow the gullies and fissures wrought by earlier erosion, both highlight the earlier process and overlays it with a second" (41). *Asphalt Rundown* could be considered as an approbation to entropy; the persisting condition of the site under the irreversible effects of entropy and the final situation that reminds the spectators of an incidence of entropy.

The entropic tendency and the multiplicity of temporalities influence Smithson's approach to museums and galleries in a distinctive manner. Herein, Shapiro (1995) mentions Smithsonian interpretation of the museum in order to clarify that peculiar understanding: the earth is demonstrated as a "jumbled museum" and museums are the "storehouses" in which "miscellaneous leavings of the past" are displayed (43). Shapiro (1995) continues his statement by designating that:

In general, he wanted his works to show the effects of time, decay, natural and human change. When he made proposal for earthworks that would occupy former strip mining sites, he emphasized that the work ought not to obliterate the traces of mining but disclose its past while adding new layer to the strata of place (43).

By accepting the influence of time and change over the work, and by supporting the existing layers on which the piece or its happening process is constructed, Smithson

again brings his conceptualization onto the level of temporal surfaces. Thus, he refers back to his statement – [Artist] must instead explore the pre- and post-historic mind; it must go into the places where remote futures meet remote past – which eliminates the conception of an institutionalized art based on an immediate present which is in the long run punctual. In fact, earthworks' concern is related to place or space, "where time is thought to be in question", rather than history and time (Shapiro, 1995: 44). Therefore, Smithson suggests a radical alternative against an appreciation of an art and an art world based on "the present". On that account, he criticizes the large amount of museums, which clearly defines the human addiction to capturing the "present and make it accessible to knowledge" (Shapiro, 1995: 49). However, it should be emphasized that Smithson's expostulations on the museums or even more his constructions of earthworks, and his writings ought to be considered as "oblique or lateral interventions" rather than as an endeavor of generating alternative institutions which would be again digested by museums (Shapiro, 1995: 49). At this point, Shapiro (1995) articulates Smithson's difference through the following statement:

In this sense all of Smithson's activity is strategic rather than principled. That is, he is aware that there is no easy way out of the museum (which he often compares it to a labyrinth) any more than [...] there is any simple escape from metaphysics, for to claim that one is "outside" or "beyond" in these cases is to accept the horizon established by that from which one flees (49).

In this regard, all of Smithson's activity might be considered as a manner of deconstructing the museum and the institutionalized art world as well. Associated with the conception of deconstructing the museum and its culture, Smithson's thought of dislocation and displacement occupies an important place. Thus, from this conception of Smithson arises his understanding of art based on a dialectical relation.

Herein, what he (1973) mentions during his interview with Moria Roth articulates Smithson's way of discovering that dialectical horizon:

[...] I never thought of isolating my objects in any particular way. Gradually, more and more, I have come to see their relationship to the outside world, and finally when I started making the Nonsites, the dialectic became very strong. These Nonsites became maps that pointed to sites in the world outside the gallery, and a dialectical view began to subsume a purist, abstract tendency (Holt, 1979: 197).

His work *Partially Buried Woodshed* might be considered as an artwork, which depicts that dialectic of inside and outside within an entropic condition. The work is constructed on a neglected woodshed – used for depositing dirt, gravel and firewood, – which is located in the Campus Kent State University (Kastner & Wallis, 1998: 99). Under the directions of Smithson, a building contractor dumped twenty truckfuls of soil on the shed, until the central backbone of the roof cracked under the effects of entropic forces.

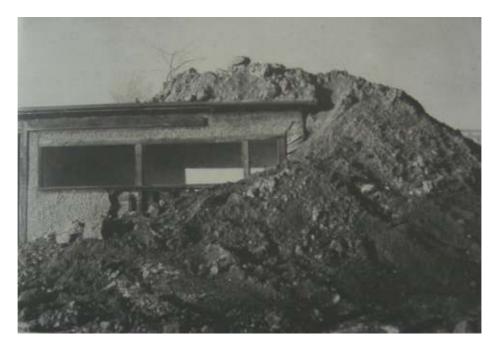


Figure 3. 2
Partially Buried Woodshed, 1970.
Woodshed, 20 truckloads of earth, 300 x 3300 x 1400 cm
Kent, Ohio
Aerial view

According to Kastner and Wallis, the key point about this work is that the collapsed beam directly internalizes the impact of action and gravity and transmits a dialectical dialogue between the inside and outside (1998: 99). On the other hand, the work indicates a significant fact about the phenomenon of mass that is directly connected to architectural formations. As Tiberghein (1995) explains, in particular cases mass alone is not adequate to characterize an architectural construction: "an emphasis on mass can also evoke, to the contrary, an unarchitectural object, a disorganization of the forces that contribute to its elevation, freeing it from the laws of gravity" (67). Nevertheless, what is vital for Smithson is that, *Partially Buried Woodshed* is a symbol of entropy: the process of transformation provoked by the absolute force of inertia and the work that survives under the natural forces.

This extremity of placement and displacement, which finds its roots in the dialectic of inside and outside, is a key issue in Smithson's artistic and theoretical conceptualization. However, before discussing what lies at the core of this matter – site/nonsite dialectic, it is reasonable first of all, to demonstrate the notions of placement and displacement through the phenomenon of decentralization. In his "Donald Judd" article, by means of Judd's understanding, Smithson (1965) focuses on the matter of disappearance by relating it to the uncanny materiality of the Judd objects:

What is outside vanishes to meet the inside, while what is inside vanishes to meet the outside. The concept of anti-matter, overruns and fills everything, making these very definite works verge on the notion of disappearance. The important phenomenon is always the basic lack of substance at the core of the "facts" (Holt, 1979: 23).

What Smithson indicates about Judd's constructions is that, they do not denote a specific beginning or end, but rather create potential "infinite series" which is

constituted of repetitious geometrical and modular elements (Shapiro, 1995: 61). Besides, the significant characteristic of these structures enables them to eliminate their utilitarian qualities: consequently, "the matter becomes antimatter" (Shapiro, 1995: 61). Regardless when an object annihilates its matter and becomes an antimatter by ignoring its foundation, center or just its organization, entropic effects reveal themselves as a consequence. Smithson, in his distinct works like *Untitled* (1963-1964), *Enantiomorphic Chambers* (1965) focuses on the issue of becoming antimatter by means of emptying out the matter or turning it into nothing. In the *Enantiomorphic Chambers* – one of the earliest works –, Smithson embraces that matter by focusing on the notion of sight and vision. (Smithson's interest of realizing such a work, reminds of his statement related to his supposition that the artist ought to be considered as a "site-seer", a farsighted being, a prophet who perceives what lies inside and beyond a site or a place).

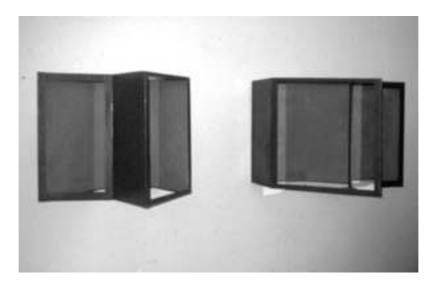


Figure 3. 3
Enantiomorphic Chambers, 1965.
Painted steel (blue & green) mirrors; two chambers.
Location unknown

The chambers are constituted from two separate steel structures, which are fabricated in order to sustain the mirrors that are oriented obliquely. The idea of such a creation

arises out of Smithson's interest in crystallography, though; the term "enantiomorph" means, both, a pair of crystalline composite and their molecular formation composed of mirror-images of each material (Hobbs, 1981: 61). Whenever a spectator locates him/herself in front of the mirrors, he/she could only contemplate the reflections of reflections, and hence, the perception or the vision of the viewer becomes loose or otherwise stated disembodied. In his article "Pointless Vanishing Points" Smithson (1967) demonstrates this ambiguous characteristic of his work through following statement:

An awareness of perspective comes into one's mind when one begins to deal directly with the physiological factors of sight as "a thing-in-itself". [...] all of ones attention must be focused on the *camera obscura* of perception as a physical *thing or object*, and then translated into a three dimensional illusion, so that one is left with a *non-thing* or a *non-object*. [...] In this work, the vanishing point is split, or the center of convergence is excluded, and the two chambers face each other at oblique angles, which in turn causes a set of three reflections in each of the two obliquely placed mirrors [...] this negates any central vanishing point, and takes one physically to the other side of the double mirrors. [...] It is an illusion without illusion (Holt, 1979: 209).

What Smithson depicts in *Enantiomorphic Chambers* is the abstraction of the ability to see by means of eliminating one's own reflection or in other words, dislocalizing the subject. Hereby, he deconstructs the traditional acknowledgement of perspective by disembodying the vanishing point of the visual scene, and hence, he displaces the accepted certainty of the phenomenon of center by means of leaving it into uncertainty. As Shapiro (1995) accentuates: "What Smithson set out to do was to demonstrate that neither of these presumed centers has the solitary independence that perspectivism attributes to it" (67). Moreover, Shapiro expands the subject by interpreting Smithson's statement (1968) in his article "Incidents of Mirror-Travel in the Yucatan": - Why not reconstruct one's inability to see? [...] develop a type of

'anti-vision' or negative seeing" (Holt, 1979: 101) – and emphasized the significance of the reconstruction of one's ability of sight as a consequence of uncertain events revealed by works of art (1995: 69).

Smithson who radically challenges an absolute centered conceptualization of vision, reasonably questions the role of museums and the galleries in the acknowledgement of such a conception, and hence, he accentuates the negative effects of the definite localization and limitation identified through museal culture. In his article "Cultural Confinement" Smithson (1972) assertively mentions that: "Museums like asylums and jails, have wards and cells – in other words, neutral rooms called "galleries". A work of art when placed in a gallery loses its charge and becomes a portable object or surface disengaged from the outside world (Holt, 1979: 132). In this regard, once the artwork is separated from the outside world and neutralized, it is safe and then, is ready to be devoured by the society like other commodities. At this juncture, what Smithson (1972) states is crucial in order to realize an accurate understanding of his approach:

I am speaking of a dialectics that seeks a world outside of cultural confinement. Also I am not interested in artworks that suggest "process" within the metaphysics limits of neutral room. There is no freedom in that kind of behavioral game playing [...] it would be better to disclose the confinement rather than make illusion of freedom (Holt, 1979: 133).

For that matter, one might easily interpret Smithson's involvement in such works like sites and nonsites that evoke a natural dialectic, as a rebellion against the discipline of the centralized institutions of the art world –museums and galleries. Consequently, Smithson's manner of questioning the matter of site, which is effectuated from this dialectical fashion, influences his conception of site/nonsite – "[...] homonyms sight

and non-sight, one functioning in connection with the other, like [...] a transformation of vision" (Tiberghein, 1995: 105). In Smithson's comprehension, site ought to be a place where temporality is no longer a concern; where distinct directions blur and no focal points erect; hence, a place where site becomes anti-site, and yet, it ought to be a place where the entropic time reveals once more its decentralizing effect. In this regard, realizing a comparison between site and nonsite is pointless; instead, the attention should be drawn upon their relationship as Lawrence Alloway states in his article "Sites/ Nonsites: "[...] the relation of Nonsite to Site is also like that of language to the world: it is a signifier and the Site is that which is signified (Hobbs, 1981: 42). Furthermore, in order to clarify his statement, Alloway refers to Smithson (1969), who mentions:

The nonsite exists as a kind of deep three-dimensional abstract map that points to a specific site on the surface of earth. And that's designated by a kind of mapping procedure. And these places are not destinations; they are kind of backwaters or fringe areas (Hobbs, 1981: 42).

Stated in a more distinct and demonstrative manner, nonsite is an artistic location like the museum that refers to the site, which is an anti-artistic place like mines, closed runways, abandoned quarries, and so forth. In other words, sites/ nonsites are composed of two distinct parts: a part of the work is constituted of a container or a series of containers, which shelter rocks or some similar elements from a discrete place or "site"; and the place from which the material is carried out engenders the second part of the work, and hence the impression to get the work as a unified entity is to annihilate any means of simple localization of the artwork, an impression that Smithson criticizes by accentuating the "dialectic between the site and the nonsite" (Shapiro, 1995: 69-72). During a discussion with Dennis Oppenheim and Michael

Heizer, as an answer to the specific question on the concept of non-site, Smithson (1970) indicates that:

There's a central focus point, which is the non-site; the site is the unfocussed fringe where your mind loses its boundaries and a sense of oceanic pervades, as it were. I like the idea of quiet catastrophes taking place.... The interesting thing about the site is that, unlike the non-site, it throws you out to the fringes. In other words, there's nothing to grasp onto except the cinders and there's no way of focusing on a particular place. One might even say that the place has absconded or been lost. This is a map that will take you somewhere, but when you get there you won't really know where you are. In a sense the non-site is the center of the system, and the site itself is the fringe or the edge. [...] The site is a place where a piece should be but isn't (Holt, 1979: 176-177).

In this regard, the site might be interpreted as a place on which the art work would be located but actually would not, and yet, that piece is settled in a gallery room, which is away from everything else except from its limitations and boundaries. On the other hand, the different spatial characteristic of site and nonsite reveals their different conceptual qualities. Site which is located in some place on the outer coordinates has open limits and accentuates the multiplicity with in an indeterminate certainty; on the other side, nonsite that is located in a particular place with inner coordinates, which actually denotes no place, has closed limits and articulates the limitations through a determinate uncertainty (Hobbs, 1982: 43).

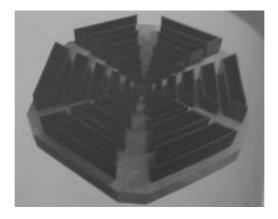


Figure 3. 4
A Nonsite, Pine Barrens, New Jersey, 1968. Aluminum, sand.
Collection Dwan Gallery

Herein, in order to generate an accurate understanding of that dialectic, it is reasonable to examine the very first nonsite of Smithson: *A Nonsite, Pine Barrens, New Jersey*. Smithson's nonsite is composed of thirty-one containers, which rotates around a central axis. These separate aluminum containers store sand from the original site. Moreover, a map of Pine Barrens on which the hexagonal shapes are drawn, accompanies the nonsite that is located in a gallery. While describing Pine Barrens, Smithson (1970) mentions that, a state of equilibrium and tranquility has dominated the place, which is disconnected from the surrounding environment because of the pine trees, and yet, he continues by stating that:

There was a hexagon airfield there which lent itself very well to the application of certain crystalline structures [...] a crystal can be mapped out [...] Initially I went to the Pine Barrens to set up a system of outdoor pavements but in the process I became interested in the abstract aspects of mapping [...] so you might say my non-site was a three-dimensional map of the site (Holt, 1979: 172).

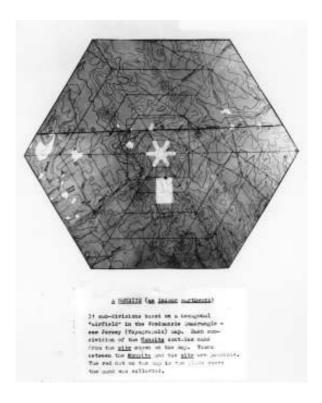


Figure 3. 5 A Nonsite, Pine Barrens, New Jersey, 1968. Map Photostat, Collection Dwan Gallery

Compared to minimalists who simply reversed the traditional designation of value, Smithson gets involved in a drastic activity by questioning the "variability" and the "volatility" of those values (Shapiro, 1995: 80). In this sense, Smithson's intervention might be considered as a deconstructivist operation, which is similar to the manner in which Derrida deconstructs traditional concepts. Traditional philosophy is contingent upon a broad system of binary oppositions such as, the logos and pathos, the soul and the body, the self and the other, the good and the evil, the inside and the outside, the memory and the oblivion, the speech and the writing, and so forth. Furthermore, as Shapiro (1995) accentuates, "The main line of the tradition insists on giving a positive value (valorizing) the first item in each of these pairs (the mental, the real, the soul, etc) and so constructs a systematic network of reinforcing concepts" (80). Consequently, Smithson through his focus on the play between the site and the nonsite establishes a close connection with Derrida, who rejects the binary matrix, which is structured related to the opposition signifier/signified. Herein, Shapiro (1995) clarifies that connection by stating that:

Like Derrida, Smithson practices a kind of double rhetoric or double gesture here. On the one hand, he sometimes speaks as if it would be possible to transcend the traditional oppositions (as when he says that his early work with cartouches freed him from anthropomorphism); on the other, he tends to acknowledge that these concepts are so deeply rooted that it will be a sufficient achievement to have illuminated their structure and the variability of that structure (as when he says that "the room reminds us of the limitations of our condition). This double gesture both acknowledges the ineluctable boundaries of artistic work and the necessity, if impossible, project of deforming them (81).

On the other hand, what interests Smithson in this dialectics is not "a higher synthesis" or "an attained totality", but instead the notion of "play" or "movement" that deteriorates the binary oppositions (Shapiro, 1995: 83). During his interview with Gianni Pettena, Smithson demonstrates (1972) his conceptualization of

dialectics in order to clarify the relationship between the site and nonsite and as well as the center and the circumference:

The notions of centrality give people a security and certainty because it's also a place where most people gather. But they tend to forget the fringes. I have a dialectic between the center and the outer circumferences. You really can't get rid of this notion of centrality nor can you get rid of the fringes and they both sort of feed on each other. It's a kind of interesting to bring the fringes into the centrality and the centrality out to the fringes. I developed that somewhat with the non-sites where would go out to a fringe area and send back the raw material to New York City, which is a kind of center (Holt, 1979: 188).

Smithson, while conceptualizing his artistic process that is influenced by the matters of "difference" and "decentering", he frequently refers to Anton Ehrenzweig's conception of "dedifferentiation", which is in fact establishing a manner of comprehending and emphasizing the "process of artistic perception and production as entertaining and playing with differences that associates it with the chaotic and entropic" (Shapiro, 1995: 88). Dedifferentiation annihilates the conventionally inscribed differences in order to flourish a mutli-dimensional network of differences. Consequently, through the concept of dedifferentiation that Smithson clarifies his conception of entropy and dialectics as well, without falling into the implications of Hegelian philosophy. In his article "A Sedimentation of the Mind: Earth Projects", Smithson (1968) illuminates the manner in which Ehrenzweig's conception of dedifferentiation is useful for his own formation:

"This drive [Tony Smith's "car drive"] was a revealing experience. The road and much of the landscape was artificial, and yet it couldn't be called a work of art" (*Talking with Tony Smith* by Samuel Wagstraff Jr., *Artforum*, December 1966). He is talking about a sensation, not the finished work of art; this doesn't imply that he is anti-art. Smith is describing the state of his mind in the "primary process" of making contact with matter. This process is called by Anton Ehrenzweig "dedifferentiation" and it involves a suspended question regarding "limitlessness" (Freud notion of oceanic) [...] Michael Fried's shock at Smith's experiences shows

that the critic's sense of limit cannot risk the rhythm of dedifferentiation that swings between "oceanic" fragmentation and strong determinants [...] Most critics cannot endure the suspension of what Ehrenzweig calls the "self and non-self". They are apt to dismiss Malevich's *Non Objective World* as poetic debris, or only refer to the "abyss" as a rational metaphor "within narrow bounds" [...] The bins or containers of my *Non-sites* gather in the fragments that are experienced in the physical abyss of raw matter (Holt, 1979: 84-85)

In this statement, Smithson not only articulates an "analogy" between Ehrenzweig's conceptions of "self and non-self", and his own formation of site/nonsite dialectic, but he also he accentuates another significant matter to which he is deeply attracted: abyss. The notion of abyss includes neither a ground nor a foundation, and yet, the sensation of vertigo resulted by the fear of abyss is the sign of the possibility of an ultimate lack of ground in things (Shapiro, 1995: 91). According to Smithson, abyss is "what is there where we would expected the center", and hence, as Shapiro (1995) accentuates, "it is the experience of encountering a void where we anticipate some definite content that is uncanny" (91). For Smithson, abyss might blossom anywhere, and the task of a work of art is neither to dazzle this matter, nor to jump directly into it, but, to point or depict its existence.



Figure 3. 6
Eight-Part Piece (Cayuga Salt Mine Project), 1969. Rock salt, mirror Collection of Statens Museum for Kunst (Villads Villadsen)

In his *Cayuga Salt Mine Project*, Smithson juxtaposes his conception of site/nonsite and his concern on the matter of abyss. Smithson's initial plans for its site/nonsite, which is realized with Cayuga Rock Salt Company, was to use photographs rather than mirrors. According to Smithson, firstly, the interior of the mine should be photographed, and after, these images should be located on the ground of the mine from which they originate, and then the place with the photographs should be pictured again (Hobbs, 1918: 132). Finally, the two sets of photographs and the material, which is taken from the site, should be exhibited in the gallery as the nonsite. However, the mind-blurring idea of the use of doubled pictures enforced Smithson to change his formation to using mirrors instead of photographs. According to Hobbs (1981), the use of mirrors furnishes the opportunity to realize the "continuity throughout the different phases of the project and they had the advantages over photographs of maintaining their reflective function even in the gallery, thus giving them the piece an episodic and immediate aspect" (132).

After installing the site/nonsite, Smithson decides to extend the dialectic relation between the mine and the gallery, and establishes a "crisscross" configuration of the former dialectic. A number of mirrors are set up in the mine. On the other hand, Smithson places a series of mirrors in the gallery room, which are installed on the rock salt taken from the mine. The connection of the mine and the gallery is established through eight mirrors — mirror trail, which are settled on the material carried from the site. Moreover, he realizes a "sub-site"; the surface of the land under which the Cayuga Crushed Rock Company's quarry is settled, and a sub-nonsite is set up on the basement of the White Art Museum, which is composed of a mirror supported with fossilized rock that are taken from the Sub-Site.

According to Shapiro (1995), the mine, which is located half a mile underground might be considered as the abyss, as "the failure or absence of a ground" (90). Hence, Smithson's intention of establishing such a connection between the mine and the abyss depicts his conception of the relationship between the site and the nonsite as an abyss. At this juncture, in order to illuminate this ambiguous connection, referring to what Smithson (1969) mentions in the "Fragments of a Conversation" is reasonable:

The route to the site is very indeterminate. It is important because it's an abyss between the abstraction and the site; a kind of oblivion. You could go there on a highway, but a highway to the site is really an abstraction because you don't really have a contact with the earth. A trail is more of a physical thing. These are all variables; indeterminate elements which will attempt to determine the route from the museum to the mine. I'll designate points on a line and stabilize the chaos between two points. Like steppingstones. If I take somebody one a tour of the site, I just show them where I removed things. Not didactic but dialectic (Holt, 1979: 169)

The manner of questioning the relationship between the inside and the outside by means of mirrors is carried a step further in Smithson's 9 Mirrors Displacements, "Incidents of Mirror-Travel in Yucatan". As the title depicts clearly, the project is composed of a series of mirror displacements, which Smithson establishes throughout his travel of Yucatan peninsula. Besides Smithson's article – "Incidents of Mirror-Travel in Yucatan" – that might be considered as a diary of his travel, the actual work is composed of a series of photographs, which is taken in nine different locations. Through mapping a physical journey, Smithson transforms the natural environment by means of the reflective surfaces of twelve mirrors that he carries with him along the travel. These mirrors are installed in nine different locations and organized in nine different arrangements in the natural environment, and Smithson has photographed them.



Figure 3. 7

9 Mirror Displacements ("Incidents of Mirror-Travel in the Yucatan"), 1969.

First Mirror Displacement, Second Mirror Displacement, Third Mirror Displacement,

Fourth Mirror Displacement, Fifth Mirror Displacement, Sixth Mirror Displacement,

Seventh Mirror Displacement, Eighth Mirror Displacement, Ninth Mirror

Displacement

Courtesy of the John Weber Gallery, New York

One of the focuses of the work is directed on the matters of time and memory: the existence of mirrors only for a short while, and the persistence of the photographs are like the "timeless traces of memory" (Kastner & Wallis, 1998: 94). Otherwise stated, mirrors are temporarily placed on different sites, and hence they do not reside there. As Shapiro (1995) shows forth, "[mirrors] reflect an image from another place than the one they occupy", and since there exists several arrangements, "the mirrors are themselves constantly displaced and never come to rest"; as a result, they become "displaced displacers" (98).

On the other hand, a mirror not only visually retraces the dialectic of site/nonsite, but also, realizes a critical attitude by means of annihilating the "representation on its surface (Tiberghein, 1995: 213). Furthermore, Smithson's article acts as a mirror of his artistic formation, and in this sense, the action of writing becomes a reflection derived from the complexity of art. As Hobbs (1981) articulates: "The mirror displacement, the supposed art works, disappear and their documentation, in its heightened form, becomes the work of art" (152).

Nevertheless, Smithson is aware of the inevitability of avoiding the centralization in an ultimate manner, and thus, one is never able to annihilate the limits in a complete way. However, providing a series of displacement might be an interruption, which aims to provide decentralization. Even so, Smithson establishes a radical intervention by means of depicting the displacement of the written word by the mirror displacements (Shapiro, 1995: 104). In this sense, Smithson's (1968) two distinct statements are crucial:

[...] The reflections abolished the supports, and now words abolish the reflections. The unnameable tonalities of blue what were once square tide pools of sky have vanished in to the camera and now rest in the cemetery of the printed page – *Ancore in Arcadia morte* (Holt, 1979: 97).

\*\*

One must remember that writing on art replaces presence by absence by substituting the abstraction of language for the real thing. There was a friction between the mirrors and the tree, now there is a fiction between the language and memory. A memory of reflections becomes an absence of absence (Holt, 1997: 100).

In the long run, Smithson's writing, photographs and mirror displacements, emphasize the dimension of absence and loss, and yet, persist as memory traces of an immediate presence (Shapiro, 1995: 101).

Smithson's one of his major works, which is focused on the matter of decentralization and loss, is the *Spiral Jetty*. Yet, Spiral Jetty might to be considered as another "play of absences and presence" and the apex of the dialectic of site/nonsite (Shapiro, 1995: 212). Smithson (1972) describes in his article "The Spiral Jetty", the very moment of his experience of the site that reveals an undifferentiated situation through his following statement, and yet, from this deliberating experience, the idea of such a work is emanated:

As I looked at the site, it reverberated out to the horizons only to suggest an immobile cyclone while flickering light made the entire landscape appear to quake. A dormant earthquake spread into the fluttering stillness, in to spinning sensation without movement [...] No ideas, no concepts, no systems, no structures, no abstraction could hold themselves in the actuality of that evidence. My dialectics of site and nonsite whirled into a indeterminate state, where solid and liquid lost themselves in each other [...] No sense of wondering about classifications and categories, they were none (Holt, 1979: 111)

The making process of the *Spiral Jetty* expands over 292 truck-hours, 625 manhours, in order to transport 6,783 tons of earth (Kastner & Wallis, 1998: 58). The basalt and earth is excavated via dump trucks, directly from the site at the beginning of the jetty, so as to fill up the place in form of a gigantesque jetty. In the beginning, Smithson plans to realize an island on the lake, however, his experience and acknowledgement of the site changes his conception. The concept of a spiraling form is not only derived from the ancient usage of the site as mine oil, but also the local topographical conditions and the belief of a mythic whirlpool at the center of the lake influence Smithson's decision. Furthermore, the spiral articulates the circular composition of salt crystals, which covers the rocks, as Smithson (1972) mentions: "Each cubic salt crystal echoes in the Spiral Jetty [...] [It] could be considered one layer with the spiraling crystal lattice, magnified trillions of times (112).



Figure 3. 8
Spiral Jetty, 1970. Rocks, earth, salt crystals, water.
6,783 tones earth, length: 1.450 m, diameter: 450 cm
Great Salt Lake, Utah
Areal view

One of the radical concepts that are discussed via the *Spiral Jetty* is the matter of scale in which Smithson is deeply involved. According to him, the scale of its artwork is prone to oscillate depending on where the observers chose to locate themselves, and thus, he (1972) accentuates that "scale depends on one's capacity to be conscious of the actualities of perception. When one refuses to release scale from size, one is left with an object or language that appears to be certain" (Holt, 1979: 112). In this regard, Smithson who nourishes the conception of scale, which operates by uncertainty, ultimately contradicts the one who refuses the distinction between the size and scale. Furthermore, in order to enlighten the uncertain experiences of scale, he (1972) addresses that "to be in the scale of the Spiral Jetty is to be out of it. One eye level, the tail leads one into a undifferentiated state of matter" (Holt, 1979: 112).



Figure 3. 9
Spiral Jetty, 1970. Rocks, earth, salt crystals, water.
6,783 tones earth, length: 1.450 m, diameter: 450 cm
Great Salt Lake, Utah
The view of site from the leading path towards the center of spiral

Another drastic cognizance is erected through the mutli-structured formation of the work that brings into light an agglomerated conceptualization of Smithson. In addition to the uncertain – this uncertainty will be discussed in the forthcoming explanations – physical existence of the *Spiral Jetty*, Smithson's work includes an essay – as it is mentioned –, photographs and a short movie, which might be considered like the nonsite, as Tiberghein (1995) puts forward (110). This alternating kind of documentation is beneficial in terms of eliminating the disadvantages resulted from the inaccessibility of the work. First and foremost, it is difficult to reach to work because of the physical conditions of the site in which jetty is located. On the other hand, just after two years of its construction, jetty submerges to water and exists there over three decades until its reappearance in 1999. Consequently, throughout this long period of time, the work could be observed only by means of the written and visual documents as Shapiro (1995) emphasizes when he mentions "the

fact that the work [is] available to us only through media (7). At this juncture, it is significant to denote what Shapiro (1995) addresses:

There is no primary, authentic object (the spiral) to which the film and the essay are merely ancillary. One could say either that there are three distinguishable but interrelated works that bear that name or that there is one work existing simultaneously in a number of modes (7).

Smithson's intention while constructing his anti-monument, writing his article or making his movie, should be never considered an attempt of engendering an original and pure artistic piece. Rather, he's aim is to show up the entropic process, which leads disorder or decentralization that bears some disconnections. On that account, the *Spiral Jetty* is located on a desolate place under the effects of natural phenomena; for that matter, from the very beginning of the movie, a series of disconnected images come in sight and establishes a decentralized effect that is enhanced with the frames taken from a turning helicopter. Yet, his article is also localizing itself beyond a written text that only demonstrates the process of a work of art by means of constructing various conceptions and formations. It is an ultimate fact that, through this stratum, Smithson just denotes his radical concerns as an artist, a writer or thinker.

The above-held discussion is on Robert Smithson, who is a major figure as an artist and a theoretician in the Land Art movement. Smithson through his radical conceptions triggers a drastic interruption, originating from his interests on the theory of entropy and the notion of dialectic. Likewise his fellows, he stands against the traditional understanding and organization of the institutionalized art world. However, Smithson developed his own understanding and critic of the art world by means of deconstructing the existing acknowledgements, rather than just bracketing

out like most of the artist of that decade does. Thus and so, he creates an artistic and theoretical ground contradicting with the modernist understanding and philosophy of art. Via introducing an artistic and theoretical intervention, Smithson executes a widespread impact on the artistic, cultural and social conditions of that decade. Yet, the traces of what he realized throughout a short life span – he died at the age of thirty-five as a result of a plane crash – still preserve their significance by various means. It is a certain fact that, Smithson's visual or written formations are closely connected to postmodernist creations and statements. For that reason, an attempt of reading Smithsonian conceptualization and theorization from a postmodernist view is actually possible.

### CHAPTER IV

## ALGEBRAIC READING OF A WORK OF ART

The aforementioned discussions primarily focus on the matters of topology and atopology. In the wake of a detailed demonstration of these quasi-mathematical and quasi-philosophical terms trough a Derridean perspective, the rise of a movement in the late 1960s is unfolded. In the pursuit of what is executed in the course of this period of time and of manner in which artists' conceptual approaches and artistic formations emerge; an adequate specification of Smithsonian approach to Land Art is actualized. As illuminated in both of the chapters, earthworks, which are executed far from the institutionalized art world, vocalize a noticeable rebellion against the modernist acknowledgements of art and the history of art. In order to establish a critical reading of Robert Smithson's own understanding and conceptualization, following out a thorough examination of postmodern matters is an appropriate course to take. Hence, in the first sub-chapter a certain manner of algebraic reading of Smithsonian conceptualization is achieved. Thereafter, the second sub-chapter covers the documentation of the thesis project, the *Nonlocalizable Displaced Mirrors*, where the demonstration of an artistic response towards the Land Art movement, as well as, the matter of topology and atopology is established.

# 4.1. Algebraic Reading of Smithsonian Conception

The aspiration for denoting Robert Smithson as the major figure of such a discussion finds its possibility on the peculiar ground that he establishes as an artist, a thinker and a writer. Smithson's distinct conceptualizations and, in some cases theorizations — which are demonstrated in the previous chapter — provide a suitable ground for a different reading. At this point, the attempt of establishing a reading of Smithsonian conceptualization of art, history of art, as well as, of the artist, time and space through Derridean algebra of undecidables, appears to be vague. However, Smithson's understanding, especially his attitude reflected in his writings, depicts a possible connection, which is formalized between his artistic and theoretical formations and Derrida's philosophical conceptions. On the other hand, it is a certain fact that, such an intention implies a number of difficulties, and on that account it should be recognized that this attempt does not delineates certain facts, but points to their possibilities.

First and foremost, Smithson's own fashion of artistic and theoretical conceptualizations, severely criticize the modernist acknowledgement of the history of art and its unquestioned dominance since its Hegelian formation. As it is mentioned in the previous chapter, similar to his fellows, Robert Smithson engenders alternating solutions to the museums and the galleries by bearing against the rigid boundaries of institutionalized art. However, he effectuates his own distinct manner, while questioning the limitations of the restricting characteristics of the institutions, Smithson does not only focus on the matter of the art work and its displacement, but he also finds his own manner of deconstructing the always and already apprehended form of historicity founded on periodization and succession. Smithson, who

articulates his own attitude towards the issue of time and classification, criticizes the modernist conception of time by creating an understanding of time which both fuses past and future into an actuality that is located in an objective present. This conceptualization of the matter of time displaces the Hegelian formation and yet, offers a perception of time "as an infinity of surfaces or structures" (Holt, 1979: 10). In this respect, Smithson depicts the possibility of the emergence of an antimovement that annihilates the traditional conception of periodization-based history. As it is particularly emphasized in the previous chapter, although Smithson's theorization brings forth a movement, which is actually parallel to postmodernism, he does not intend to entitle his invention as postmodernism in order to prevent the repetition of the same mistake of falling into the borders of periodization. Smithson's construction of this particular understanding of time is influenced by his interest in the matters of entropy and cosmic disorder. In this sense, his counter-modernist conception of time as an eternal recurrence is closely connected to the notion of entropy. Smithson's speculations related to his conception of entropic time denotes temporal happenings that might be interpreted as "forms of turning away of deviation [...] as dispersion or diffusion" (Shapiro, 1995: 28). Consequently, Smithson's formation of his understanding based on the matter of time reveals a conception of present that focuses on the actual and the experienced time rather than on a postulated comprehension of time, which subsists for a long time.

On the other hand, Smithson's aspiration for the entropic tendency and the multiplicity of temporalities – artist's time at work, works that are located in entropic time and conditions, spectator time during experiencing and so forth, influence his approach to museums and galleries in a distinctive manner. He criticizes the large

amount of museums that enable people to capture the present and to make it available to knowledge. However, it should be accentuated that Smithson's statements on the museums, and, moreover, his artistic formations as earthworks, ephemeral installations, sites and nonsites, and his texts ought to be taken into consideration as lateral interventions rather than permanent matters gain not to fall into the existing boundaries. Herein, it is reasonable to refer again to what Shapiro (1995) mentions:

In this sense all of Smithson's activity is strategic rather than principled. That is, he is aware that there is mo easy way out of the museum (which he often compares it to a labyrinth) any more than (as Heidegger and Derrida shows) there is any simple escape from metaphysics, for to claim that one is "outside" or "beyond" in these cases it to accept the horizon established by that from which one flees (49).

In this regard, Smithson's activity might be interpreted as a way of deconstructing the museum and the apparent world of art, which is bounded within the institutionalized frame. Smithson's attitude is parallel to Derrida's formalization of algebra of undecidability that is closely connected to Gödel's in terms of not abandoning the logic, but, generating the limits within which logic would be plausible, and discover the places where one must transact beyond these limits, but "never absolutely outside them" (Plotnitsky, 2003: 109). On that account, it is considerable to establish a connection between the Smithsonian manner of deconstructing the museums and Derridean discourse on the inside and the outside. In order to clarify Derrida's strategies, Shapiro (1995) refers to Derrida's two distinct expostulations:

To attempt en exit and a deconstruction without changing terrain, by repeating what is implicit in the founding concepts and the original problematic, by using against the edifice the instruments or stones available in the house, that is equally in language. Here one risks ceaselessly confirming, consolidating, relifting (*relever*), at an

always more certain depth, that which one alledgedly deconstruct. The continuous process of making explicit, moving towards an opening, risks sinking into the autism of the closure (54).

\*\*

To decide to change the terrain, in a discontinuous and irruptive fashion, by brutally placing oneself outside, and by affirming an absolute break and difference. Without mentioning all the other form of trompe-l'oeil perspective in which such a displacement can be caught, thereby inhabiting more naively and more strictly than ever inside one declares one has deserted, the simple practice of language ceaselessly reinstates the new terrain on the oldest ground (55).

The one who applies the first strategy creates the potential ground, which would carry the risk of "sinking into the autism of the closure" that might be easily connected to the institutionalized activities within distinct foundations. In a noticeable manner, this strategy is reminiscent of Smithson's statement related to the artist who sinks deeply into the time stream. Similar to Derridean understanding, the Smithson's critique of that kind of artist is close to the risk of standing connected to the Hegelian narration and modernist institutions. On the other hand, the second strategy engenders the problematic of artists who escape directly outside or beyond the institutionalized art world. In this regard, although they transfer their artistic formations into the isolate locations of the earth, they are still attached to the traditional art world by means of documentations that are carried to the art world. However, Robert Smithson denotes an alternating solution against these two problematic strategies, by introducing his conception of dislocation and displacement. Otherwise stated, his own fashion based on the dialectic of outside and inside flourishes a drastic response.

The extremity of placement and displacement, which ascertains its foundation in the dialectic of the inside and the outside, is a key point in Smithson's artistic and

theoretical inventions. Furthermore, as previously stated, the notions of placement and displacement are closely connected to Smithson's involvement in the phenomenon of decentralization. At this juncture, Smithson's Enantiomorphic Chambers might be considered as a significant example that demonstrates the issue of decentralization through the matter of disappearance. *Enantiomorphic Chambers*, which focuses on the disembodiment process of one's own sight, engenders an atopologic situation. The perception of an object or a subject by means of threedimensional illusion is transformed into a non-object or a non-subject. In this sense, the work flourishes a situation that might be read through a Derridean understanding of topology even because; Enantiomorphic Chambers unfolds the enigmatic aspect of space. The ambiguous dislocalization and displacement of the object or the subject offers one to ask two particular Derridean questions: "where does it take place?" and "does it take place?" (Wigley, 1993: 178). In this context, Smithson who annihilates the notion of center through introducing displacement and dislocalization unfolds an atopologic and a nonlocalizable matter that is present and absent within the same temporality. Thus, Smithson pushes the centrality of vision and sight to the periphery and brings the periphery into the centrality, by depicting the undecidable interplay of presence and absence.

On the other hand, it is reasonable to mention again Smithson's understanding of site in order to establish a proper interpretation of his conceptualization. Smithsonian site ought to be a place where temporality is no longer a problem; where distinct directions fuse into each other and no focal points erect; hence, a place where site becomes anti-site, and yet, it ought to be a place where the entropic time unfolds once more its dislocalizing and decentralizing effect. In this sense, establishing a

comparison between the site and the nonsite is nonsensical; instead the emphasis ought to be drawn upon their reciprocal interplay. On that account, supplement and hymen that takes place within the multiplicity of Derrida's undecidable propositions might be the relevant "terms" for indicating the interplay of inside and outside. At this juncture, Wigley's demonstration of these terms by constantly citing Derrida is help full:

In each of Derrida's readings, such a return to the repressed that uncannily resists the law of the house, the form of resistance that is actually the possibility of that law, the law that is only a law inasmuch as it places, calls into question whether anything "takes place" in a particular space and even whether the space itself takes place. When Derrida speaks of the uncanniness of undecidability in "The Double Session", for example, he is speaking of the way the hymen doesn't take place inasmuch as its spacing subverts space: "between the inside and the outside ... located between present acts that don't take place. What takes place is only the *entre*, the place. the spacing, which is nothing". In each essay, it is a question of such a nonplace that complicates the structure of the events that supposedly take place. [...] Any parasitic supplement, as Of Grammatology puts it, always "adds only to replace. It intervenes or insinuates itself in-the-place-of ... takes-(the)-place" such that, in the end [...] it has not taken place. The critical question asked at some point by each of Derrida's essays – "Does it take place?" – is always effectively answered "no and yes". Taking place, like place becomes an institutional effect, a representation sustained by systemic repression. In unpicking the mechanism of that repression, deconstructive discourse exposes the fragility of this effect. [...] Derrida everywhere looks for a certain "elsewhere", a "non-site", "non-place", or "atopos" (1993, 183-184).

In this regard, it is plausible to realizing such a liaison between Derridean vision of place and Smithson's dialectic of the site and the nonsite inasmuch as, their reciprocal interplay which is previously depicted, finds a plausible place in Derrida's conceptualization. Smithson's writings that coexist with his artistic practices might also be read through a Derridean understanding of supplement. Concurrently, Smithson's particular aspiration for indicating the significance of the written document as a sole issue might be re-embraced through a Derridean perspective.

Herein, in order to illuminate the discussion it is efficient to refer to Smithson (1972) who denotes the significance of his writings during an interview with Paul Cummings:

Do you find it augments your work? Or is it separate from it? [and receive the answer] Well, it comes out of my sensibility – it comes out of my own observation. It sore of parallels my actual art involvement – the two coincide; one informs the other (Holt, 1979: 139).

Immediately after that explanation of Smithson, referring to the possible connection that Shapiro (1995) establishes between Smithson's formation and Derrida's understanding of supplement is necessary:

This exchange seems to cover the gamut of possibilities while keeping them all in play. Cummings's question neatly illustrates what Derrida calls the logic of the supplement. Assuming that the "work" is what is primary, writing may be conceived as a supplement, which adds something to it ("augments") or, since it is a supplement, something that is other than the work, and that will, after all, be "separate from it" (155).

Although, Smithson's answers point out a close reciprocal relationship – the two coincide; one informs the other -, reading Smithson's texts through the logic of supplement is plausible and appropriate in this context.

Once and for all, Smithson's *Spiral Jetty*, which shelters a multi-layered formation, denotes a stratum of Smithsonian conceptualization. The work brings into light Smithson's dialectic of the site and the nonsite; the interplay of the site and the antisite; the ambiguous uncertainty of the matter of displacement. It might be described by means of decentralized and nonlocalizable operations, rather than by means of a graspable entity. From that particular perspective, the *Spiral Jetty* offers a ground that is suitable for establishing an algebraic reading of Smithson's conceptualization.

As stressed previously, through the *Spiral Jetty*, Smithson consenters on the issues of decentralization and loss.



Figure 4. 1 Reappearance of Spiral Jetty, 2007 Great Salt Lake, Utah



Figure 4. 2 Spiral Jetty, 2 February 2008 Great Salt Lake, Utah

In this regard, the work might be considered as an interplay of absences and presences; and as the peak point of the dialectic of the site and the nonsite. Herein, it is noteworthy to once more refer to Smithson, who demonstrates the very moment of his experience of the site that unfolds a series of undifferentiated circumstances:

As we traveled, the valley spread into an uncanny immensity [...] the roads on the map became a net of dashes, while in the far distance the Salt Lake existed as an interrupted silver band. Hills took on the appearance of melting solids, and glowed under amber light. [...] Sandy slopes turned into viscous masses of perception. [...] About one mile north of the oil seeps I selected my site. Irregular beds of limestone dip gently eastward, massive deposits of black basalt are broken over the peninsula, giving the region a shattered appearance. [...] As I looked at the site, it reverberated out to the horizons only to suggest an immobile cyclone while flickering light made the entire landscape appear to quake. A dormant earthquake spread into the fluttering stillness, in to spinning sensation without movement [...] No ideas, no concepts, no systems, no structures, no abstraction could hold themselves in the actuality of that evidence. My dialectics of site and nonsite whirled into a indeterminate state, where solid and liquid lost themselves in each other [...] No sense of wondering about classifications and categories, they were none (Holt, 1979: 111)

The manner in which, the site is perceived and comprehended by Smithson, is adequate, in order to construct a liaison between the work and the undecidable operators. The *Spiral Jetty*, which subsists over three decades, still exists within its undecidable position. Under the entropic conditions, it designates Smithsonian conceptualizations – the dialectic of the site/ sight and the nonsite/ nonsight; the interplay of absences and presence; the displacement of the center and the periphery, and so forth – from an atopologic perspective. Furthermore, in this sense, the *Spiral Jetty*, which is the imperceptible trace of Smithsonian attitude, might be understood as the very reason of such an attempt of realizing a particular reading.

# 4.2. Thesis Project: Nonlocalizable Displaced Mirrors

The afore-mentioned discussions on the Land Art, which erects as a radical movement; on Robert Smithson as a particular figure who establishes alternating artistic and theoretical responses; on the quasi-philosophical and quasi-mathematical concepts of topology and atopology; and on the algebraic reading of Smithson's conceptualizations and theoretical formations have both being a background and a conglomerate of information for the artistic project presented in this part. In this regard, this project might be seen as an attempt to establish a personal response to what is actualized through this period of time. That personal response, which depicts a distinctive perspective, combines the matter of the artwork and the issues of quasi-mathematical and quasi-philosophical formalizations.

Nonlocalizable Displaced Mirrors is performed on the lake, which is located between the Main and the East Campus of Bilkent University. The site might be considered as a conserved and almost a desolate place, because of the surrounding hills. The hazardous natural characteristics of the lake limit the number of the actual visitors of the site and transform it into a barren location. As a consequence, the site becomes a perfect place for the kind of experience that requires the dominance of natural phenomena. The work might be considered as a process, which examines the journey of nine mirrors on the lake's surface. The journey of the mirrors on the water surface begins from the northern shore of the lake and ends on the southern shore. Nine mirrors, – actually eight; one still stands on the northern part of the lake – traveled unrestrainedly on the lake surface with the flow of water. Their particular journey is documented by means of photographs. However, it ought to be articulated that, this journey of mirrors is realized at nightfall. The reason of the assigned time

interval as the nightfall lies beneath the conceptualization of the work.

*Nonlocalizable Displaced Mirrors* denotes the land art, which is somewhere on the border between topology and atopology. As a consequence, the work designates a radical attitude, which shelters alternating concepts and critiques.

Nonlocalizable Displaced Mirrors focuses on the chaotic characteristics of the celestial events, and questions the means that attempt to stabilize this flux. It is an accurate fact that, celestial elements like stars and their constellations bring forward different discussions. Nonlocalizable Displaced Mirrors especially concentrates on the matter of the representation of constellations and of stars by means of sky-charts. It is a certain fact that, celestial events shelter a chaotic and a disorganized situation. There exists a continuous motion or in some cases anti-motion which again triggers an alternating motion – supernovas, dead stars, black holes etc. In other terms, sky subsists within the alternating conditions that are unpredictable and unstable. However, the aspiration for mapping the celestial objects somehow ignores these facts, and as a result, brings forward a representation of the unrepresentable, nonlocalizable, and unknowable. Hence, there is a crucial fact that, the celestial objects, which are observed in this present time, are the reflections, the illusions or the traces of the sky, which existed long long time ago. This ambiguous situation is the result of the massive distances and thus, light years, which exist between the earth and its surrounding universe. The light that emerges from a source point covers astronomical distances through an immense period of time, until it reaches to sight. Consequently, one is uncertain whether the source objects; a star or a constellation, still exist or not. This situation provides the formation of certain atopologic conditions, which are disregarded in terms of localization and stabilization by means

of mapping. In this regard, *Nonlocalizable Displaced Mirrors* might be considered as an attempt to deconstruct the mediums, which endeavor to represent and yet localize the nonlocalizable, the chaotic and the atopologic. Otherwise stated, the work brings forth the significance of these distinct characteristics of the celestial objects, in terms of annihilating this strict manner of representation through sky-charts.

In this context, the mirror as a medium has a major role besides the water surface and the natural flux, which carries away the objects within an undecidable and unpredictable manner. At this juncture, it is noticeable to recognize Robert Smithson's conception related to mirrors; "The mirrors are only temporarily set up the various sites; they do not belong here [...] they reflect an image from another place than the one they occupy" (Shapiro, 1995: 98). In this regard, the nine mirrors, which are temporarily and immediately located at various points on the surface of the lake, reflect alternating images simultaneously. Hence, they almost change their places at every instant, in other words, they are always and already displaced, and they never take a rest. In this sense, they become undecidable displaced displacers. Thus, the interplay between being simultaneously displaced and displacer provides the emergence of two distinct deconstructivist manner. First and foremost, the displaced reflections annihilate the strict characteristics of scientific maps or sky charts. On the other hand, the nonlocalizable situation of the mirrors themselves, accentuates the atopologic condition of the reflections and what is reflected. Furthermore, one is not able to see what is reflected on the mirrors and the medium itself is lost within the environment as a result of natural conditions.

As consequence, the work itself becomes an experience of the Land Art on the border between topology and atopology. In this context, the *Nonlocalizable*Displaced Mirrors entails the undecidable interplay of topology and algebra in Derrida's sense – the interplay of mirrors and blank surface of the lake, the interplay of celestial elements and universe, and so forth.

On the other hand, the work acts similarly to Smithson's particular works that only exist by means of written documents. *Nonlocalizable Displaced Mirrors* is only available through written and visual media. Except for the few ones who actually experienced the process of realization, the work subsists between the words and the images. In this connection, this written document ought to be considered as a part of the artwork, rather than an informative and explicative text next to an original artwork.

## **Visual Documentations:**



Figure 4. 3 Panoramic view of the site from southeast, 2008



Figure 4. 4 Panoramic view of the site from southwest, 2008





Figure 4. 5 and Figure 4. 6
The effect of nature, "unforeseen flow" on the lake surface, which grows in a noticeable manner, 2008

Early evening

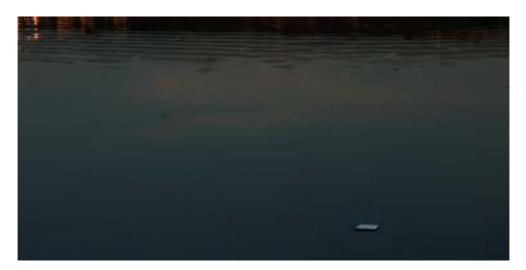


Figure 4. 7 Nonlocalizable Displaced Mirrors, 2008, one mirror, 20 x 20 cm Test shot at early evening

Following photographs are taken in succession.







Figure 4. 8, Figure 4. 9 and Figure 4. 10
Nonlocalizable Displaced Mirrors, 2008, each 20 x 20 cm
The movement of the mirrors is completely perceptible
Test shot at early evening







Figure 4. 11, Figure 4. 12 and Figure 4. 13
Nonlocalizable Displaced Mirrors, 2008, each 20 x 20 cm
Departure of the mirrors from the northern shore, some already become imperceptible
Project shot at nightfall



Figure 4. 14
Nonlocalizable Displaced Mirrors, 2008, one mirror, 20 x 20 cm
One mirror that stays behind, still floats on the northern shore of the lake
Project shot at nightfall

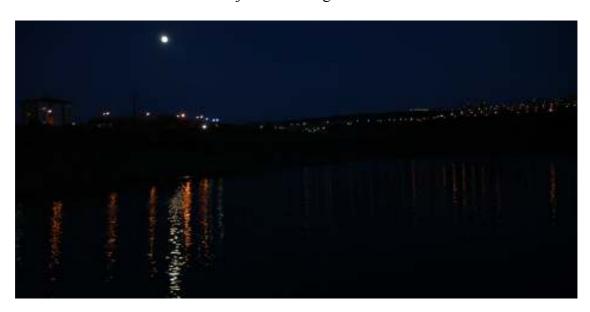


Figure 4. 15
Nonlocalizable Displaced Mirrors, 2008, 20 x 20 cm
An aerial view from the southern shore
The reflection of the rising full moon is apparent on the lake surface
Project shot at nightfall

Figure 4. 14 depicts some immediate alternations related to the work. While the photograph was taken eight mirrors were somewhere on their way towards the southern shore. However, it is a certain fact that picturing them was impossible because of the natural conditions. Though, the interruption of the nature offered different possibilities on the level of conceptualization, and thus, for an instant, the work itself became something, which is imperceptible, unrepresentable, and yet, atopologic in terms of being present and absent at the same time.



Figure 4. 16
Nonlocalizable Displaced Mirrors, 2008, one mirror, 20 x 20 cm
First mirror's appearance on the southern shore
It is located on the reflection of the full moon
Project shot at nightfall



Figure 4. 17
Nonlocalizable Displaced Mirrors, 2008, eight mirrors, each 20 x 20 cm
Mirrors' appearance on the southern shore at the end of journey that
endures one and half-hour.
Project shot at nightfall







Figure 4. 18, Figure 4. 19 and Figure 4. 20 Nonlocalizable Displaced Mirrors, 2008, each 20 x 20 cm Mirrors that reach to the southern shore Project shot at nightfall



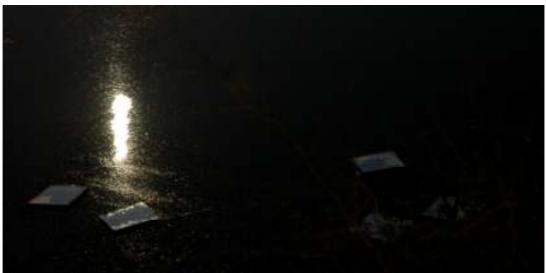




Figure 4. 21, Figure 4. 22 and Figure 4. 23
Nonlocalizable Displaced Mirrors, 2008 each 20 x 20 cm
Mirrors that reach to the southern shore
Project shot at nightfall

# CHAPTER V

### **CONCLUSION**

This study embraces a discrete orientation that particularizes a distinct involvement in the matters of art and philosophy. The main purpose of the study is to assess a parallel reading of the Land Art movement through the quasi-mathematical and the quasi-philosophical issues. A detailed illustration of the matters of topology and atopology within the framework of Jacques Derrida's philosophy that is analyzed by Arkady Plotnitsky fully legitimizes the intention of establishing such a particular study. In this context, first and foremost, a comprehensive demonstration of the Derridean algebra of the undecidables, which encapsulates the formalizations of the matters of topology and atopology, is established, in order to enlighten the crucial fashion that is taken into consideration throughout the study. This discussion is emerged through an exhaustive projection of Arkady Plotnitsky's quasi-mathematical and quasi-philosophical thinking that cogitates its basis on Gilles Deleuze, Felix Guattari, and Jacques Derrida's visions. Here, Derridean attitude towards the matters of topology and atopology acquire significance in pointing out the kind of reading, which is experienced throughout the study.

In the wake of that discussion which unfolds a critical approach, the rise and the development of the Land Art movement that entails the possible backdrop for such

kind of critical attempt, is comprehensively demonstrated. Hence, in order to establish an eligible understanding of such a radical movement, and to execute a liaison with the quasi-mathematical and quasi-philosophical issues, the historical and the artistic events are unfolded. In this sense, a noticeable specification is effectuated related to what is procreated in the course of this period of time, and of the manner in which Land Art artist's conceptual formations and artistic practices are emerged. Concurrently, a certain manner of Land Art in antagonizing the modernist definitions and the institutionalized art world, as an anti-movement, is grasped in detail. In virtue of the fact that, the study entails a topological and an atopological framework, the Land Art artist's drastic interventions of the traditional understanding of the artistic historicity and the limitations constructed upon the artistic formations are comprehensibly questioned.

The importance of Robert Smithson and his centrality for this study lies in the fact that, he artistically engenders strong theoretical formalizations around his artistic constructions. Smithson, who defines a genuine approach, establishes a comprehensive relationship between the Land Art movement and theoretical conceptualizations. Adopting a reading of Land Art movement through Smithson's fashion presents a major significance in order to enhance Land Art connection to the matters of topology and atopology. Therewithal, involving in a particular concern related to the algebraic reading of certain artistic practices and theoretical understandings is favorable. In this regard, an algebraic reading of Smithsonian concepts and particular works is treated in detailed within the framework of Derrida's formalization of the algebra of undecidables. This attempt can be comprehended as denoting various levels of interplays between Robert Smithson's

artistic and theoretical formations and Jacques Derrida's quasi-mathematical and quasi-philosophical notions. Finally, through the thesis project, which is entitled as the Nonlocalizable Displaced Mirrors, the demonstration of an artistic practice is covered. That unique personal practice, which unveils a distinct vision towards the issue of the Land Art on the border between topology and atopology, integrates the artistic experiences and the notions of quasi-mathematical thinking. In this regard, Nonlocalizable Displaced Mirrors unfolds a particular experience that is engendered throughout a long process of study. In virtue of this fact, the significance of such kind of experience is central for this study, in order to generate an efficient understanding of Land Art as a radical movement that offers the potential ground for a particular reading.

### REREFENCES

- Alloway, Lawrence. 1969. "Sites/Nonsites," *Robert Smithson: Sculpture*. London: Cornell University Press, 41-46
- Beardsley, John. 1982. "Traditional Aspects of New Land Art," *Art Journal* 42(3): 226-232. <a href="http://links.jstor.org/sici?sici=00043249%28198223%2942%3A3%3C226%3ATAONLA%3E2.0.CO%3B2-V">http://links.jstor.org/sici?sici=00043249%28198223%2942%3A3%3C226%3ATAONLA%3E2.0.CO%3B2-V</a>
- ----. 1989. Earthwork and Beyond. Nancy Grubb, ed. New York: Cross River Press.
- Crawford, Donald. 1983. "Nature and Art: Some Dialectical Relationships," *The Journal of Aesthetics and Art Criticism* 42(1): 49-58. <a href="http://links.jstor.org/sici?sici=00218529%28198323%2942%3A1%3C49%3ANAASDR%3E2.0.CO%3B2-F">http://links.jstor.org/sici?sici=00218529%28198323%2942%3A1%3C49%3ANAASDR%3E2.0.CO%3B2-F</a>
- Deleuze, Gilles, and Felix Guattari. 1987. *A Thousand Plateaus Capitalism and Schizophrenia*. Brian Massumi, trans. Minneapolis: University of Minnesota Press.
- Derrida, Jacques. 1981. *Dissemination*. Barbara Johnson, trans. New York: Continuum.
- Heiss, Alanna. 1992. *Dennis Oppenheim selected works 1967-90*. New York: P. S. 1 Museum, Harry N. Abrams.
- Hobbs, Robert. 1981. Robert Smithson: Sculpture. London: Cornell University Press
- Kastner, Jeffrey. 1998. "Preface," *Land and Environmental Art*. New York: Phaidon: 11-17
- Kastner, Jeffrey, and Brian Wallis. 1998. *Land and Environmental Art* (1<sup>st</sup> ed.). New York: Phaidon.
- Kimmelman, Micheal. 1999. "Art/Architecture; A Sculptor's Colossus of the Desert," *New York Times*.
  <a href="http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=all>"http://query.nytimes.com/gst/fullpage.html?res=9C00E2DE1E3EF931A25751C1A96F958260&sec=&spon=&pagewanted=allogoopen=allogoopen=allogoopen=allogoopen=allogoopen=allogoopen=allogoopen=allogoopen=
- ----. 2003. "The Dia Generation," *New York Times* <a href="http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A35757C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A3575767C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpage.html?res=9B05E3DF1339F935A3575767C0A9659C8B63&sec=&spon=&pagewanted=all>">http://query.nytimes.com/gst/fullpagewanted=all>">http://query.nytimes.com/gst/fullpagewanted=all>">http://query

- Klepac, Walter. 1979. "Conjectural Imagining: Dennis Oppenheim," *Vanguard* 8(8) <a href="http://www.ccca.ca/c/writing/k/klepac/klep002t.html">http://www.ccca.ca/c/writing/k/klepac/klep002t.html</a>>
- Krauss, Rosalind. 1977. "Notes on the Index: Seventies Art in America Author(s)," *October* 3: 68-81 < http://www.jstor.org/stable/778437>
- ----. 1979. "Sculpture in the Expanded Field," *October* 8: 30-44 <a href="http://links.jstor.org/sici?sici=01622870%28197921%298%3C30%3ASITEF%3E2.0.CO%3B2-Y">http://links.jstor.org/sici?sici=01622870%28197921%298%3C30%3ASITEF%3E2.0.CO%3B2-Y</a>
- Kwon, Miwon. 1997. "One Place after Another: Notes on Site Specificity Author(s)," *October* 80: 85-110 < http://www.jstor.org/stable/778809>
- McGill, Douglas C. 1990. *Micheal Heizer: Effigy Tumuli*. Anne Yarowsky, Eric Himmel, eds. New York: Harry N. Abrams.
- Morris, Robert. 1993. *Continuous Project Altered Daily*. Cambridge, Massachusetts, London: The MIT Press
- Plotnitsky, Arkady. 1994. *Complementarity: Anti-Epistemology After Bohr and Derrida*. London: Duke University Press
- ----. 2002. The Knowable and the Unknowable: Modern Science, Nonclassical Thought, and the "Two Cultures". Michigan: University of Michigan Press.
- -----. 2003. "Algebras, Geometries, and Topologies of The Fold:
  Deleuze, Derrida, and Quasi-Mathematical Thinking, with Leibniz and
  Mallarmé." Paul Patton, John Protevi, eds. *Between Deleuze and Derrida*.
  New York: Continuum, 98-119
- ----. 2006. *Reading Bohr: Physics and Philosophy*. Alwyn Van Der Merwe, ed. Indiana: Springer.
- Saad-Cook, Janet. 1988. "Touching the Sky: Artworks Using Natural Phenomena, Earth, Sky and Connections to Astronomy," *Leonardo* 21(2): 123-134 <a href="http://links.jstor.org/sici?sici=0024094X%281988%2921%3A2%3C123%3ATTSAUN%3E2.0.CO%3B2-G">http://links.jstor.org/sici?sici=0024094X%281988%2921%3A2%3C123%3ATTSAUN%3E2.0.CO%3B2-G</a>
- Sandler, Irving. 1988. American Art of 1960s. New York: Harper&Row.
- Shapiro, Gary. 1995. *Earthwards Robert Smithson and Art after Babel*. Berkeley, Los Angeles, London: University of California.
- Smithson, Robert. 1965. "Donald Judd." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 21-23
- ----. 1966. "Entropy and the New Monuments." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 9-18

- ----. 1967. "Pointless Vanishing Points." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 208-209
- ----. 1968. "A Sedimentation of the Mind: Earth Projects." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 82-91
- ----. 1968. "Incidence of Mirror-Travel in the Yucatan." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 94-103
- ----. 1969. "Fragments of a Conversation." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 168-170
- ----. 1970. "Discussions with Heizer, Oppenheim, Smithson." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 171-178
- ----. 1972. "Cultural Confinement." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 132-136
- ----. 1972. "Conversation in Salt Lake City." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 186-188
- ----. 1972. "The Spiral Jetty." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 109-118
- ----. 1972. "Interview with Robert Smithson for the Achieves of American Art/Smithsonian Institute." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 137-156
- ----. 1973. "Robert Smithson on Duchamp, Interview with Moria Roth." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 197-199
- ----. 1979. "Towards the Development of an Air Terminal Site." Nancy Holt, ed. *The Writings of Robert Smithson*. New York: New York University Press, 41-47
- Tiberghien, Gilles A. 1995. *Land Art*. Caroline Green, trans. New York: Princeton Architectural Press.
- Weeks, Jeffrey R. 1985. The Shape of Space. New York: Marcel Dekker, inc.
- Wigley, Mark. 1993. The Architecture of Deconstruction. New York: MIT Press.