

Université de Montréal

LAND ART: LAYERS OF MEMORY  
THE USE OF PREHISTORIC REFERENCES IN LAND ART

par

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THE USE OF ELECTRONIC INSTRUMENTS IN LAND ART

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THESIS

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THE USE OF PREHISTORIC REFERENCES IN LAND ART

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## SUMMARY

This thesis is about Land Art and its connection to prehistory. Land Art is an art form that originated in the latter 1960s and is characterized by three dimensional artworks created outside. Among its common features are large size, the use of natural materials, remote locations, and frequent impermanence. We will refer to its manifestations as earthworks when they are made of earth and landworks when they are made of any other natural or man-made medium.

The artworks' presence outside stems from the Land artists' goal to get out of the traditional art establishment of museums and galleries. Landworks are immobile and cannot be brought indoors, which eliminates the options of exhibitions; therefore the most common means of their dissemination is through photography. A related factor is the need to travel to the landworks' locations for those who wish to see them. By making a synthesis between trips to ancient sites and landworks, we will observe how Land Art recreates the touristic dimension of travelling.

Art critics note that some landworks resemble the Nazca lines in Peru; megalithic remains spread throughout Europe, the Middle East, Japan, and Africa; and the Adena and Hopewell mounds in the mideastern United States, while others are astronomically aligned. While most focus on formal similarities in their analyses, our intention is to discover and explain why Land artists choose to make references to prehistoric sites, as we feel that these sites offer more than what is visible in form.

Our hypothesis is based on Simon Schama's view of the landscape described in his book *Landscape and Memory*. Schama explains that humans have transformed nature into landscapes by the addition of memory on the land, distinguishing between the United States and Europe regarding this concept. Every part of Europe has been transformed by culture, creating deep layers of memory. The United States is a newer land, and has vast regions of untouched land with shallow layers of memory in comparison.



Instead of conforming to the trend of traditional art history that designates a causality between a preceding manifestation and an 'influenced' one, we decided to make a synthesis between Schama's view, that there can be no landscape without history, and Land Art. Opting for a different approach will enable us to find new meaning to the artists' use of ancient references. We propose that landworks are the artists' effort of transforming the land in order to add layers of memory onto it, thereby creating landscapes. We will attempt to illustrate how landworks that carry references to the past achieve this most effectively, since they already have a mnemonic dimension within them.

We will establish four paradigms of references to the past (mentioned above) for the forms of ancient sites that artists use most frequently. By incorporating an ancient reference to their work, artists transform nature into a landscape, encouraging viewers to make associations between the artworks and whatever paradigm they are related to. Our methodology combines discussion of the artworks themselves, the artists and their discourses, the art critics' analyses of Land Art, as well as our own observations drawn from actual contact with ancient and modern sites.

We will also test our hypothesis on a broader scale. The landworks' presence outside is perceived as both an ecologically friendly gesture by artists as well as a revival of ancient attitudes towards nature. We will refute these perceptions by demonstrating that Land Art is less about nature than culture.

We conclude with another touristic dimension of Land Art. The similarity in structures of both ancient and modern sites typically causes behaviours that are common to all visitors. By encouraging people to interact with their works physically, artists further augment the effect of memory. Aside from the viewers' memory of the experience itself, the artists create landscapes by making places loaded with memory for people to experience much they would at an archaeological site.

**RESUME**

Cette thèse porte sur les liens du *Land Art* et de la préhistoire. Le *Land Art* est une forme d'art qui date de la fin des années soixante et qui est toujours pratiquée aujourd'hui. Il consiste en œuvres de trois dimensions situées à l'extérieur, souvent dans des endroits difficiles d'accès. Nous nous sommes intéressés spécialement par l'œuvre de Walter De Maria, Michael Heizer, Nancy Holt, Robert Morris, Robert Smithson, parmi d'autres artistes. On l'a désignée de plusieurs façons, mais nous nous y référerons ici ou comme *Land Art*, ou comme *earthworks* quand il s'agit d'œuvres faites de terre exclusivement, ou comme *landworks* quand d'autres matériaux que la terre, ceux-ci pouvant être naturels ou artificiels, ont été utilisés.

Nous commençons par rappeler quelques faits à propos du *Land Art*. Le désir des artistes d'échapper aux contraintes de l'environnement de la galerie commerciale et du musée les a amené à explorer des sites extérieurs pour leurs travaux. Ils dénoncèrent un certain nombre de conventions liées à ces milieux traditionnels et définirent une nouvelle approche de leurs œuvres.

Travaillant à l'extérieur, les artistes prirent de nouvelles libertés tant sur le plan de la forme, que de la diffusion, voire même de la mise marché et de la perception de leurs œuvres. En construisant des œuvres souvent éphémères, de grande échelle et immobiles, les artistes ont voulu éviter la commercialisation et l'accès facile aux œuvres.

La plupart des gens connaissent ces œuvres par des photographies, étant donné que les longs voyages dans des lieux difficilement accessibles en découragent plusieurs. Mais certains font l'effort nécessaire. Nous nous sommes donc intéressés à cette dimension touristique du *Land Art*. Les motivations d'une visite sur un site de *Land Art* et sur un site archéologique sont semblables. Dans l'un et l'autre cas, il faut distinguer entre les voyages faits pour des raisons primaires, secondaires, ou en

passant. La distance parcourue, les difficultés liées à son repérage et les objectifs des visiteurs sont autant de facteurs dont il faut tenir compte dans l'évaluation du genre de voyages.

Prenant acte ensuite que la critique (comme John Beardsley, Elizabeth Jaeger, Lucy Lippard, Gilles Tiberghien, et Kirk Varnedoe) a remarqué que certains *landworks* ressemblent tantôt aux lignes de Nazca, tantôt à des sites mégalithiques, tantôt au tumuli des cultures Adena et Hopewell, alors que d'autres sont astronomiquement alignés, mais qu'en même temps qu'elle ne s'est pas beaucoup interrogé sur la signification de ces ressemblances, nous nous sommes proposé de dépasser le niveau des seules comparaisons formelles et l'explication par la nostalgie pour les formes anciennes.

Il fallait tout d'abord établir dans quelle mesure les artistes de *Land Art* étaient informés des sites anciens. On note alors que certains aspects des sites anciens ont attiré leur attention plus que d'autres, en particulier leurs dimensions colossales et leur simplicité formelle. Une comparaison systématique entre les *landworks* et les sites anciens fait clairement apparaître cette parenté de structure et de matériaux. La critique n'a pas manqué de faire des sites anciens les sources d'inspiration des artistes modernes, ce que les artistes eux-mêmes ont parfois confirmé. Mais il nous a semblé qu'il fallait dépasser ce niveau des comparaisons purement formelles et de la reconnaissance avouée des sources pour percer la véritable intention des artistes de *Land Art*. Après tout, à trop insister sur ces dérivations, on risque de ne pas saisir la véritable originalité des œuvres modernes. Les *landworks* ne sont pas des répétitions pures et simples des œuvres anciennes. En réalité les artistes utilisent les sites anciens plutôt comme des références que des sources d'inspiration. Loin de vouloir dissimuler leurs sources, ils tiennent à ce que le spectateur fasse lui-même ce genre de référence et s'en sont souvent ouverts sans problème aux critiques.

Nous soutenons donc que l'originalité principale des *landworks* vient précisément de ces références explicites au passé. Il ne s'agit donc pas ici d'œuvres simplement inspirées d'œuvres dites « primitives » et transformant leurs sources dans un langage formel contemporain comme chez Gauguin ou Picasso, mais d'œuvres cherchant à faire des références explicites avec les œuvres du passé. Il nous semble que c'est en cela que consiste leur plus grande originalité.

À cause de la simplicité des formes des œuvres anciennes et du *Land Art* on a rapproché les unes et les autres du Minimalisme. Mais cette référence au Minimalisme nous paraît passer à côté d'une dimension importante du *Land Art*. L'œuvre Minimaliste est essentiellement dépourvue de dimensions symboliques et se veut fermée sur elle-même. Elle est réductionniste, l'artiste éliminant de l'œuvre tous les aspects qui n'en feraient pas une pure forme. Aussi loin de faire du *Land Art* une simple extension du Minimalisme et malgré la commun intérêt pour la simplicité des formes, nous sommes persuadé que le *Land Art* n'a pas abondé dans le sens de ce formalisme, mais s'y est opposé.

Le *Land Art* a réouvert les portes à la signification. Déjà en faisant référence aux œuvres du passé, elles-mêmes riches de signification, même si ces significations nous échappent souvent, on peut soupçonner que les artistes de *Land Art* n'étaient pas hostiles au symbolisme.

Aussi bien notre hypothèse de départ s'est inspiré du livre de Simon Schama, *Landscape and Memory*. Schama explique en effet qu'il n'y a pas de paysage sans mémoire. Laissée à elle-même la nature est sans signification. Transformée par l'homme, elle se charge de mémoire et se met à faire sens pour nous. Il est intéressant de ce point de vue, comme le fait Schama, de comparer la perception du paysage en Europe et aux États-Unis. En Europe, la culture a laissé partout son empreinte sur le paysage, accumulant couche après couche de mémoire. L'Amérique est une terre plus neuve, moins marquée qu'en Europe par cette présence

transformante de l'homme et par conséquent portant des traces plus fugitives de sa présence.

Dès qu'on applique ces vues de Schama à notre corpus, il apparaît que l'intention principale des artistes de *Land Art* a été de transformer la terre en « paysage », précisément en y faisant des références au passé, créant de toute pièce pour ainsi dire ces couches mnésiques dans la nature. Comme il n'y a pas de paysage sans histoire, nous avons tenté d'établir comment le *Land Art* a créé des paysages en faisant des références au passé.

Il nous a semblé qu'il suffisait de faire appel à quatre paradigmes ou références au passé pour bien démontrer ce fait. Ces paradigmes sont les alignements astronomiques, les lignes de la Nazca, les sites mégalithiques et les tumuli des cultures Adena et Hopewell. Ils nous permettent de regrouper assez d'exemples de *landworks* pour bien marquer chaque fois, l'intention des artistes en faisant ces références.

Notre premier paradigme est tiré des connaissances astronomiques des Anciens. Quelques *landworks* (Nancy Holt, Robert Morris) sont en effet alignés astronomiquement. Nous analysons la perception qu'a eu la critique de ces alignements. À la fin des années soixante, font leur apparition de nouvelles théories sur les connaissances astronomiques des Anciens, notamment celles de Gerard Hawkins ou de Fred Hoyle à propos de Stonehenge. Ces théories eurent une grande diffusion à l'époque et il ne fait pas de doute qu'elles ont intéressé certains artistes de *Land Art*.

En alignant astronomiquement certaines de leurs œuvres, les artistes de *Land Art* ouvrent au spectateur moderne pour ainsi dire une fenêtre sur le passé. Ils lui font faire aujourd'hui une expérience analogue à celle de leurs prédécesseurs. La dimension mnésique vient de l'association spontanée que le spectateur moderne fait de l'expérience du *landwork* avec ce qu'il sait des anciens alignements. Il peut même arriver que la ressemblance avec les anciens sites soient moins frappantes dans certains cas, étant donné que des préoccupations d'espace, de lumière et de temps interviennent aussi dans l'élaboration de l'œuvre. C'est la

volonté d'inclure des alignements astronomiques qui est importante.

Les autres paradigmes que nous avons examinés sont les lignes de Nazca, les sites mégalithiques et les tumuli des cultures Adena et Hopewell. Chaque fois nous avons suivi la même démarche. Nous commençons par faire la revue des opinions de la critique sur le sujet et de marquer sur quoi nous nous accordons avec elle et sur quoi nous différons. Il nous semble en particulier qu'en faisant des rapprochements avec des « sources » possibles des *landworks*, elle n'a pas su marquer la différence des intentions et des fonctions entre les sites anciens et les sites modernes. Le paradigme des lignes de Nazca est spécialement révélateur de ce point de vue. Les théories récentes sur leurs fonctions nous font comprendre combien loin des intentions des artistes de *Land Art* étaient ces anciennes structures.

Notre but principal cependant est de montrer comment, dans le cas de chaque paradigme, la référence à des œuvres anciennes spécifiques a joué le rôle d'une sorte de couche de mémoire ajoutée au site et a contribué à sa transformation en « paysage », au sens où Schama entend ce mot. Le site transformé en paysage par le *landwork* devient pour le spectateur un opérateur de mémoire.

Nous avons ensuite mis à l'épreuve notre thèse en portant notre réflexions sur un terrain différent. La présence des *landworks* sur des sites extérieurs a suggéré à certains que le *Land Art* visait la nature. Les critiques y ont vu l'expression d'une sorte de nostalgie pour un ancien ordre de choses, où l'homme vivait en harmonie avec la nature. Il nous fallait confronter cette opinion, puisque nous voulions maintenir que le *Land Art* a plus à voir avec la culture qu'avec la nature. Il ne nous semble pas en effet que le *Land Art* tend à idéaliser le passé, mais il cherche à transcender la nature, en en prenant possession et en la transformant en site culturellement signifiant.

Nous paraît spécialement un contresens, l'idée du *Land Art* comme écologiquement orienté, comme si son intention était de rapprocher le spectateur de la nature. On insiste sur le fait que les artistes de *Land Art* s'en tiennent à des matériaux naturels, qu'ils nous rendent conscients des cycles de la nature, qu'ils nous obligent à visiter des sites lointains et des endroits spectaculaires, que bien souvent leur caractère éphémère semble indiquer un grand respect de la nature, et qu'enfin certains d'entre eux consistent à recycler des endroits pollués en parc public. Les critiques parlent donc d'un « retour à la nature » ; ils y voient un « revival » suggérant du même coup des affinités non seulement formelles mais conceptuelles avec le passé. Nous ne croyons pas que ces vues romantiques ou sublimes s'appliquent ici. Si les artistes de *Land Art* avaient eu ces intentions, ils n'auraient pas transformé les sites comme ils l'ont fait ni avec les moyens qu'ils ont employé. Aussi bien leur intention est toute autre. Il s'agit de culture plus que de nature, d'imposer au site une signification culturelle, non d'en faire un lieu « *ecologically friendly* ».

Nous concluons par une réflexion sur ce que le comportement des spectateurs sur les sites archéologiques et sur les sites de *Land Art*. Nous nous en tenons évidemment qu'aux comportements observables actuellement. Certes il serait passionnant de savoir comment les anciens utilisateurs des sites préhistoriques se comportaient, mais dans la plupart des cas cela nous échappe complètement. Est observable cependant, le comportement des touristes d'aujourd'hui. Nous nous sommes demandé si les comportements des touristes visiteurs de sites anciens ou de *landworks* se ressemblaient et en quoi.

Il est remarquable que la structure même des sites semble dicter les comportements des visiteurs qu'il s'agisse de sites archéologiques ou de *landworks*. Elle leur impose des démarches particulières que l'on voit adopter les uns après les autres par chaque visiteur.

Mais il est clair en même temps qu'en encourageant les visiteurs à interagir avec leurs œuvres, les artistes de *Land Art* les amènent concrètement dans le champ de la mémoire du passé. Non seulement l'expérience de la visite d'un *earthwork* ou d'un *landwork* risque de laisser un souvenir impérissable dans l'esprit du visiteur, mais la référence au passé qu'il inclut nécessairement, d'autant plus fortement aux Etats-Unis où les traces de la présence de l'homme sont plus rares et moins profondes, ajoute une dimension proprement historique à cette mémoire du site. L'effet n'est pas si éloigné finalement de celui que crée la visite d'un site archéologique. Sur ce genre de site aussi, le visiteur évoque la mémoire du passé, allant parfois jusqu'à s'imaginer le comportement des anciens à cet endroit même.

Le *Land Art* aussi crée semblable prise de conscience, un peu par les mêmes moyens, c'est-à-dire en imposant des démarches spécifiques aux spectateurs. Mais cette prise de conscience d'un passé du site est aussi une prise de conscience culturelle, filtrée par la culture, par la mémoire, et comme telle, complètement moderne.



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Figure 104. Robert Morris, *Observatory*, 1977.  
Figure 105. Dolmen, Gamla, Golan Heights, Israel.  
Figure 106. Dolmen, Brittany, France.  
Figure 107. Dolmen, Brittany, France.  
Figure 108. Nancy Holt, *Sun Tunnels*, 1973-76.

To Francois



**PREFACE***Sun Tunnels*

I had planned to travel alone, but a friend and co-worker, Stacey, indicated an interest to join me, as the prospects of a week-end in the desert appealed to her as much as to myself. And I was secretly relieved, because though I had been a confident lone traveler on many occasions before, this was unknown territory and I was grateful for the company, especially for the night that I had intended to spend alone in the desert.

The first part of the adventure entailed getting to Utah from Montreal. For most people, this should not prove to be traumatic, but for the stand-by passengers that we were (having the good fortune of working for an airline and thus benefiting from cheaper travel rates), it caused some difficulty. We got to Chicago easily, but were unable to get on the leg to Salt Lake City as the flight was full. We were forced to spend the day roaming Chicago aimlessly waiting for the next flight, which we knew was also full. Luckily, the stand-by gods were with us this time, and we boarded the flight.

Upon landing, we rented a car, spent the night in town, and headed for the desert the next day. The scenery on the way to *Sun Tunnels* was spectacular. The sparkling crystals in the shallow water of the Abeville Salt Flats, the convoy of mountains, the coyote, antelope, and fox sightings, all made us as thrilled as two city girls hungry for nature would be.

The setting for this artwork is true American wilderness. The desert is stark and the tunnels provide the only substantial thing for the eye to focus upon except for mountains in the far distance. There is a bed of low scrub brush growing on the crackled dry earth, but it is non-imposing.

When we reached the tunnels, we were surprised to discover that we were not alone. It had not occurred to me that there would be other people willing to travel to the middle of the desert to see the sun rise and set in the tunnels. Part of the appeal of this experience, for both Stacey and myself, was to be alone in nature. So while disappointed at the idea of having to share our experience with strangers, I was pleased that I had the opportunity to ask people what had inspired them to make the trip to see this artwork at this particular time. Their answers would provide ideal research material for my thesis.

We watched the sun set in the exact center of two of the tunnels with twenty-three other people and some dogs. When the fleeting event was over, some people left while others set out for their tents. Stacey and I decided to sleep in one of the tunnels where we spent a rather freezing night.

Waking up in one of the tunnels is a unique experience. You are enclosed in a large concrete tunnel, the wind is howling, you are disoriented, cold, and feel very, very secluded. It is the epitome of 'being in the middle of nowhere'. Montello, the

nearest town, is thirty-three kilometers away. Had there been no other people around, the effect of solitude would probably have been intensified.

I couldn't help thinking that this is how our predecessors lived. And the fact that we were watching the sunrise through the tunnels during the summer solstice further compounded my association with the past. It reminded me of the numerous theories that I had read regarding megaliths, the Nazca lines, and other ancient sites that are said to be aligned astronomically.

There were about thirty-five people present in the morning. We watched the sun rise through two different tunnels, and once again, when the event was over, many people left. We spent most of the day inside tunnels looking at views of the desert through their openings. We were like territorial lizards, aware that if we vacated a tunnel, someone would claim it as theirs until they chose to leave it. We ended up occupying each of the four tunnels throughout the day, thereby benefiting from the views that each separate one framed.

We relaxed and took in the desert beauty and tranquility. We listened to birds, looked at insects, watched mini sandstorms in the distance lifting dry little shrubs and twirling them in the air. We spoke to people, napped, and went for walks.

New groups of people arrived in the evening to watch the sunset. After pitching their tents, they congregated in front of the tunnels that were going to frame the alignment, chattering excitedly while waiting for the sun to set. The sky had a pinkish hue with clouds dancing to the sun's melody. Everyone watched the alignment in silent harmony, while those with cameras photographed the event to record it. Finally, the sun descended through the tunnels again.

We drove back to Salt Lake City in the dark, sad to leave the tunnels, the desert, and sad to miss the visual splendor surrounding us. Visiting *Sun Tunnels* had been a wonderful experience, a perfect fusion of nature and art appreciation.

Seeing this landwork made by American artist Nancy Holt between 1973-76 (fig. 1), and being familiar with others, leads to inevitable questions about the similarities between them and ancient sites. What led Holt and other artists whose names are linked to this art form called Land Art, to align some of their works astronomically and make others that share formal affinities with ancient sites?

INTRODUCTION: LAND ART

## Introduction: Land Art

At the end of the nineteen-sixties and the beginning of the seventies, one finds more and more references to archaeological sites a propos contemporary works of art. It is manifestations of Land Art, with its most obvious characteristics being exterior locations in often remote areas and the frequent use of natural materials that inspire comparisons with the past.

Among the prehistoric remains that landworks are most often compared to are megalithic structures (such as stone circles, dolmens, and menhirs) found throughout Europe and parts of the Middle East and Asia, the Hopewell and Adena mounds scattered in the mid-eastern United States, and the Nazca lines in Peru.

As an art form that emerged during an influx of various artistic trends (including Minimalism, Pop Art, and others) in the latter 1960s, Land Art is a form of modern sculpture that has introduced new concepts and visual material to art. It evolved through various stages internationally and continues to be produced today.

Land Art is such a versatile art form that it is difficult to define its constituents. It is not a movement or a school. There are no leaders or manifestos. Artists that make Land Art are involved with other types of art as well.

There is also no specific label to designate this art form; rather, artists and critics use an array of terms. Land Art has been classified under *arte povera* (Germano Celant, 1969), *impossible art* (Thomas M. Messer and David L. Shirey, 1969), *post-studio art* (Carl Andre, 1970), *landscape sculpture* (Grady Clay, 1971), *earthworks and landworks* (Dave Hickey, 1971), *antiform* and *dematerialization of art* (Lucy Lippard, 1973), *environmental art* (Catherine Howett, 1977), and other expressions. Those most frequently used are *earthworks* and *land art*, the labels of earth and land referring to the ground as a medium for artistic creation.

American artist Robert Smithson is credited with the term *earthworks*. In 1967, he bought a science-fiction paperback called *Earthworks* by Brian W. Aldiss (published in 1967).<sup>1</sup> In proposals to Tippetts-Abbett-McCarthy-Stratton, Architects and Engineers (for his unmaterialized project at the Dallas-Fort Worth Regional Airport), he used the term for the first time.<sup>2</sup> 'Earthworks' were thus anticipated in Smithson's 1967 Dallas-Fort Worth airport proposals, in his 1967 *Tar Pool and Gravel Pit* model, in his narrative essay "The Monuments of Passaic," and in map drawings.<sup>3</sup>

Artist Bill Vazan's suggestion to make a distinction between earthworks and landworks is appropriate: "Earthworks and landworks are two different things. Earthwork means working with earth, and landwork means any kind of possibilities, which includes earthworks, and such things as snow."<sup>4</sup>

For the purpose of consistency in this thesis, the labels that refer to the artists' use of the earth and its components as sculptural mediums are most appropriate. Therefore 'Land Art', which is broad enough to incorporate works that use mediums other than earth, will refer to the art form. The term 'earthworks' will designate artworks made of earth only. 'Landworks' can include earthworks, but also encompasses works made out of materials other than earth, such as rocks, snow, sand, leaves, wood, sticks, seaweed, and any other natural materials including a combination of

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<sup>1</sup> Robert Smithson, "A Tour of the Monuments of Passaic, New Jersey," *The Writings of Robert Smithson*, ed. Nancy Holt (New York: New York University Press, 1979), 52.

<sup>2</sup> Robert Smithson, "Aerial Art," *Writings*, ed. Nancy Holt, 92.

<sup>3</sup> Robert Hobbs, "Introduction," *Robert Smithson: Sculpture*, ed. Robert Hobbs (Ithaca and London: Cornell University Press, 1981), 14.

<sup>4</sup> Bill Vazan, interview by author, tape recording, Montreal, 4 March 1997.

such items. The term landworks also designates works made of out of man-made materials such as concrete.

The first exhibition documenting this art form was entitled *Earthworks*, taking place at the Dwan Gallery in New York, in October 1968. The artists presented were Carl Andre, Herbert Bayer, Walter De Maria, Michael Heizer, Stephen Kaltenbach, Sol LeWitt, Robert Morris, Claes Oldenberg, Dennis Oppenheim, and Smithson.

Among these artists, Andre, Bayer, Kaltenbach, Lewitt, and Oldenberg are not typically considered land artists. Oldenberg made installations at the time. Bayer is a landscape architect while the others are Minimalists; however, the natural materials of the works they presented relate to Land Art.

In November, art critic Peter Hutchinson reacted to this show, and upon mentioning proposals by the artists presented, he made reference to ancient sites: "Artists today are turning in this direction [he referred to artists transforming the landscape], taking their cues from meteoric craters and volcanic pits as well as dams, burial mounds, aqueducts, fortifications and moats, to build works that change the surface of the earth . . . Others bring to mind Indian burial mounds or those vast earth workings in Illinois and in South America, which are best seen from the air, and which some people think are evidence of prehistoric or perhaps extraterrestrial civilizations."<sup>5</sup>

Hutchinson saw similarities between works at this exhibition and natural phenomena, as well as Indian mounds and the Nazca lines. His suggestion that these ancient remains might be related to extraterrestrial beings is farfetched but indicates that he was familiar with Erich Von Daniken's famous book *Chariots of the Gods*.<sup>6</sup> This bestseller, in which ancient sites are said to be

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<sup>5</sup> Peter Hutchinson, "Earth in Upheaval. Earth Works and Landscapes," *Artsmagazine* 43 (November 1968): 19, 21.

<sup>6</sup> Erich Von Daniken, *Chariots of the Gods* (New York: Bantam, 1971).

constructed for the use of extraterrestrials, has an enormous impact on its readers whether they agree with Von Daniken's theories or not. The most popular belief that it proposes is that the Nazca lines were made to be viewed from the air. This is an idea that affects art critics that compare landworks to the Nazca lines, mentioning the necessary aerial view for both the ancient and modern works.

Hutchinson's comment about artists whose 'works that change the surface of the earth' is important. Landworks, by their very presence in the land, transform the environment in which they are placed.

The second major exhibit, entitled *Earth Art*, took place four months later at the Andrew Dickson White Museum of Art between February and March of 1969. Within the first few months of these group shows, other articles that mention a correlation between modern art and ancient sites began to appear. This approach continued throughout the evolution of Land Art, even if most publications focus on other aspects of Land Art, mentioning the affinities with ancient sites in passing. Conversely, some critics are preoccupied with this subject. There are entire books dedicated to parallels between modern art and prehistory.<sup>7</sup> There are also articles that analyze the similarities in more detail.<sup>8</sup>

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<sup>7</sup> Lucy Lippard, *Overlay. Contemporary Art and the Art of Prehistory* (New York: Pantheon Books, 1983); Elizabeth Jaeger, *Neolithic Stone Circles in Conjunction with Contemporary Art in the Landscape* (New York: Vantage Press, 1984); Douglas C. McGill and Michael Heizer, *Michael Heizer. Effigy Tumuli. The Reemergence of Ancient Mound Building* (New York: Harry N. Abrams, Inc, Publishers, 1990); Maureen Korp, *Sacred Art of the Earth. Ancient and Contemporary Earthworks* (New York: Continuum, 1997).

<sup>8</sup> Adam Gopnik, "Basic Stuff: Robert Smithson, Science, and Primitivism," *Arts Magazine* 58 (March 1983): 74-80; Bette Spektorov, "The Impact of Megalithic Landscapes on Contemporary Art," *Studio International* 196 (April/May, 1983): 6-9; Kirk Varnedoe, "Contemporary Primitivism," *Primitivism in Art of the 20th Century*, ed. William Rubin (New York: Museum of Modern Art,

By taking inventory of statements made by critics regarding the affinities, we find various explanations for the use of ancient sites as references. The comparisons can be classified according to remarks based on form and/or concept.

Most critics rely on consideration of form and note that some Land Art has formal similarities with megalithic remains, the Hopewell and Adena mounds, and the Nazca lines, as well as other ancient sites. Statements are frequent about the artists' interest in formal aspects of ancient sites such as size, shapes, materials, the frequent need for an aerial view, and effects of presence and grandeur.<sup>9</sup> Sometimes critics cite specific examples of affinities and complete their text with juxtapositions of illustrations of landworks next to ones of ancient sites to reinforce their declarations. Certainly, the formal affinities between landworks and ancient sites are noticeable and it is understandable that critics mention them repeatedly.

Fewer critics venture beyond the formal reasons that artists are attracted to ancient forms; those that do tend to associate conceptual parallels to a renewed interest in primitivism.<sup>10</sup> So, aside from being attracted to the formal characteristics of prehistoric remains, artists are said to be enticed by the context through which these forms emerged. Within this category, we see

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1984), 661-685.

<sup>9</sup> David Bourdon, "Walter De Maria: The Singular Experience," *Art International* 12 (Christmas 1968): 72; Roy Bongartz, "It's Called Earth Art - And Boulderdash," *The New York Times Magazine*, 1 February 1970, 16, 22; Mark Rosenthal, "Some Attitudes of Earth Art: From Competition to Adoration," *Art in the Land. A Critical Anthology of Environmental Art*, ed. Alan Sonfist (New York: E.P. Dutton Inc, 1983), 64; Gilles A. Tiberghien, *Land Art*, trans. Caroline Green (New York: Princeton Architectural Press), 14, 225.

<sup>10</sup> Yve-Alain Bois, "La Pensée Sauvage," *Art in America* 73 (April 1985): 182-183; Vardenoe, 666-7.



allusions to an attraction to spiritualism.<sup>11</sup> The suggestion that artists are nostalgic about ancient times is also a focus.<sup>12</sup>

The terminology used to link landworks with ancient sites tends to repeat itself. Among the terms and phrases used are: 'parallel', 'kinship', 'sources and inspiration', 'model', 'brings forth associations from the past', 'source', 'calling to mind', 'recall', 'looks very much like', 'support comparison', 'referred to', and 'draw their references'.<sup>13</sup> It is understandable that these terms should recur; there are not endless numbers of synonyms for expressions of similitude. Meanwhile, the discourse of influence is usually avoided.

Sometimes critics are not specific about *how* landworks and ancient sites resemble one another, making their claims but leaving readers guessing about what aspects they are referring to. Other

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<sup>11</sup> Gregoire Muller, "Michael Heizer," *Arts Magazine* 44 (December 1969 - January 1970): 45; Virginia Gunter, *Earth Air Fire Water: Elements of Art* (Boston: Museum of Fine Arts, 1971), 7.

<sup>12</sup> Catherine Howett, "New Directions in Environmental Art," *Landscape Architecture* 67 (January 1977): 41, 44; Lippard, *Overlay*, 4; Alexandra Noble, "Introduction: The Placing of Prehistory," *From Art to Archaeology*, Christopher Chippindale et al., (London: South Bank Center, 1991), 7.

<sup>13</sup> Muller, 45; Gunther, *Earth Air Fire Water*, 7; Willoughby Sharp, "Towards an Understanding of Earth Art," *Earth Art*, ed. Nita Jager (Ithaca, New York: Andrew Dickson White Museum of Art, Cornell University, 1973), n.p.; Edward F. Fry, *Robert Morris/Projects* (Pennsylvania: Institute of Contemporary Art, University of Pennsylvania, 1974), n.p.; Edward F. Fry, *Robert Morris: The Grand Rapids Project* (Grand Rapids, Michigan: Grand Rapids Art Museum, 1975), n.p.; John Beardsley, *Probing the Earth. Contemporary Land Projects* (Washington: Smithsonian Institution Press, 1977), 16-18; Andreas Vowinckel, *Nature-Sculpture* (Stuttgart: Wurttembergischer Kunstverein, 1981), 34; Craig Adcock, "The Big Bad: A Critical Comparison of Mount Rushmore and Modern Earthworks," *Arts Magazine* 57 (April 1983): 106; Spektorov, 61; Mark Rosenthal, "Some Attitudes of Earth Art," *Art in the Land*, ed. Alan Sonfist, 64; Varnedoe, 666; Tiberghien, 14.

times they link between the modern and ancient but omit examples. The distinctions and terms used can be vague and imprecise.

At any rate, comparisons and the identification of artists' sources are prolific in the literature on Land Art. Every article seems to have at least one sentence on the subject of affinities, if not more, and the next thirty pages of this thesis could be dedicated to bringing forth examples. But it seems pointless to do so here (many such examples will be used in subsequent chapters). Considering the amount of these types of analyses, we can comfortably claim that this perspective on the subject of affinities has been exhausted.

### **Landscape and Memory**

So we find ourselves trying to decide what to do with the critics' comparisons and with the fact that as of 1968, Land artists create works that remind us of the Nazca lines, megalithic remains, or Indian mounds. It seems the critics have said everything there is to say. What more can we say about the subject of affinities?

Simon Schama's book *Landscape and Memory* offers a fresh approach to the subject.<sup>14</sup> His analysis and definition of landscape opens up new horizons: "Before it can ever be a repose for the senses, landscape is the work of the mind. Its scenery is built up as much from strata of memory as from layers of rock."<sup>15</sup>

According to Schama, there can be no landscape without memory. He makes a clear distinction between the United States and Europe regarding this concept. Almost every piece of land in Europe has been transformed by culture. Many forests, gardens, fountains, buildings, including representations of each of these by artists,

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<sup>14</sup> Simon Schama, *Landscape and Memory* (Toronto: Vintage Canada, 1996).

<sup>15</sup> *Ibid.*, 6-7.

are loaded with history and thus with a memory. His book is full of descriptions of such landscapes with details about the myths associated to their meaning. Unlike Europe, Asia, and Africa where the layers of memory are so deep that much of the land has been transformed by humans, the United States is relatively new and void of such deep layers, unless we take the Amerindian presence into consideration.

In a comparison between European and American river navigation and 'fluvial myth' that also carries the 'freight of history', Schama illustrates his point: "More typically, the Hudson Valley painters [American] had to navigate carefully between the savagery of 'wild' scenery and the mechanical clutter of the industrial river. But while European painters could superimpose the garment of history over the smokestack rivers, using 'picturesque' sites that were old in associations but new in their construction (like the new London Bridge and the Gothic Revival house of Parliament), their American counterparts had nothing to work with but a prospect of a happy future."<sup>16</sup>

To further elucidate this claim, Schama describes a painting by American artist Thomas Cole called *View from Mount Holyoke, Northampton, Massachusetts, after a Thunderstorm (The Oxbow)*, 1836, on which Cole 'impressed a particularly American stamp on the scene': "Diagonally separated, the primitive, storm-ravaged wilderness (the past) is transformed across the river into neatly cleared fields, overhung with skies of celestial-blue clarity (the future). . . . Though Cole has included details of a rowboat and a sailboat, this river is not really going anywhere. And likewise the balance between settlement and pastoral innocence, between cultivation and wilderness, has been magically frozen at a moment of perfect equilibrium."<sup>17</sup>

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<sup>16</sup> Ibid., 364.

<sup>17</sup> Ibid., 365-367.

Schama explains the need to make industry and enterprise an undisturbing presence in what he calls the 'American Arcadia'. Indeed, wherever land is transformed in the United States, it has been done so by industry. Americans cannot superimpose the 'garment of history' onto their landscapes since they hardly have any. The deepest layer of history they have is Amerindian, which is not even their own.

A place that has been transformed according to Schama's hypothesis in the United States is Gutzon Borglum's sculptures of the four presidents on Mount Rushmore: "To make over a mountain into the form of a human head is, perhaps, the ultimate colonization of nature by culture, the alteration of landscape to manscape."<sup>18</sup>

Can we not suggest that this is what Land Art is all about? Is it not about creating a landscape? The more we read Schama, the more his view seems pertinent to Land Art. A synthesis between his view and what we know of the similarities between landworks and ancient sites is tempting. It is what will be attempted here.

Land Art can be seen as an effort to give meaning to the landscape. The United States is full of raw, untamed chaotic nature with little history. By making art with a reference to the past, which is what landworks that contain affinities to ancient sites do, artists create a landscape by putting memory onto it, much like Borglum did at Mount Rushmore National Monument. Creating landworks is the artists' way of adding layers of memory onto the land, thereby adding a cultural imprint onto savage nature, and transforming nature into culture.

### **Artists' Testimonies**

The subject of affinities that makes a recurrence in art historical literature suggests that artists have knowledge of the

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<sup>18</sup> Ibid., 396.

ancient sites whose forms they emulate. If so, to what extent are they familiar with them and the theories associated with their functions and meanings, and how did they learn about them? And most importantly, does this information affect their artwork?

Knowledge can either be gained through direct contact with ancient sites achieved by visiting them, or indirect contact acquired by reading about them. Both are in fact related since travelling is often inspired by literature. Either way, both could explain the artists' attraction to formal features of prehistoric remains.

We know that some artists had direct contact with ancient sites. Carl Andre, Michael Heizer, Nancy Holt, Richard Long, Robert Morris, James Pierce, Robert Smithson, Bill Vazan, and others actually visited some of the ancient sites.

The combination of living in England and Long's medium of walking in the countryside puts him in contact with numerous megalithic earthworks and land drawings (also outside England). He is the first artist to acknowledge their effect on his art.

In February of 1969, at a symposium coinciding with the first museum exhibition on Land Art, Thomas W. Leavitt asked a panel of artists (the participants were Hans Haacke, Neil Jenney, Long, Oppenheim, Smithson, and Gunther Uecker): "I wonder if any of the earth artists know about ancient constructions that were done by Incas in Peru, Indians in Mexico - stick figures and other things."<sup>19</sup>

Long's response linked him clearly with megaliths: "England is covered with huge mounds and converted hills and probably you know Stonehenge, although that is one of the least impressive of all the things."<sup>20</sup> When asked if this affected his work, whether it

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<sup>19</sup> Thomas W. Leavitt, moderator, "Symposium," *Earth Art*, ed. Nita Jager, n.p.

<sup>20</sup> Richard Long, "Symposium," moderator Thomas W. Leavitt, *Earth Art*, ed. Nita Jager, n.p.

interested him, Long paused and answered yes. His response begins and continues a trend whereby artists make no effort to hide their awareness of archaeological sites and the potential effects that this knowledge may have on their art.

Heizer is unique among the artists by having had considerable contact with Mayan, Aztec, Toltec, Olmec, Inca, and Egyptian remains during his adolescence when he accompanied his father, renowned archaeologist Robert Heizer, on expeditions. He once said that the excavations and monuments that he encountered had little importance to him until he started to make monumental landworks himself; only then did he come to understand them.<sup>21</sup>

In 1971, Heizer made a list (including photographs, labelled by name and date of construction) of vertical cliff sculptures, cave sculptures, and massive land sculptures. Included were earthworks such as the Serpent Mound at Adams County, Ohio; the megalithic alignments at Carnac, in Brittany; the Nazca lines in Peru; and the land drawing of a horse in Essex, England.<sup>22</sup>

Vazan is also unique in regards to the extent of his interest in prehistory. He is aware (and was at the time he began producing landworks) of the theories pertaining to prehistoric remains. He has a collection of eighteenth and nineteenth century books on Indian mounds, as well as contemporary research. He has read Gerald Hawkins' astronomical theory about Stonehenge and Alexander Thom's astronomical and mathematical treatises about megalithic sites in general.

Vazan has travelled extensively for many years (and continues to do so) seeking out archaeological sites. In North America, he has seen numerous geoglyphs and engraved stones, Chaco Canyon in

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<sup>21</sup> Gilles A. Tiberghien, "Sculptures Inorganiques. Land Art et Architecture," *Les Cahiers du Musée National d'Art Moderne* (Printemps 1992): 105.

<sup>22</sup> Julia Brown, ed., *Michael Heizer Sculpture in Reverse* (Los Angeles: The Museum of Contemporary Art, 1984), 68-69.

New Mexico, some of the Adena and Hopewell mounds such as the serpent mound, Mound City, Marietta, Siep, and the Medicine Wheel in Saskatchewan.

In Europe he has visited obscure and famous sites, including Stonehenge, Avebury, Land's end, the Cerne Abbas Giant, the White Horse of Uffington, Callanish, Maes Howe, Newgrange, Carnac, the Dordogne Valley (Lascaux), and ancient burial sites in Sicily and Denmark. In Israel, he has seen Rujum El Hiri.

Aside from satisfying the fascination that Vazan has with all these remains, they are also specific sources for his artwork; he has done photoworks or landworks at all the archaeological sites that he visited.<sup>23</sup> It seems probable that an awareness of astronomical theories at ancient sites affected Vazan and other artists' decisions to include alignments in their landworks.

Long, Vazan, and Morris visited the Nazca lines in 1972, 1974, and 1975 respectively, and all met Maria Reiche, the astronomer who has researched the lines for decades.<sup>24</sup>

Smithson and Holt travelled (they were married to each other) to Devonshire in England and visited Stonehenge and little-known sites in 1969.<sup>25</sup> Both were interested in prehistory. They went to Moab in the southeastern part of Utah and the red canyons of Colorado River, where they saw Indian petroglyphs and rock art works. Of these, Smithson told Gregoire Muller: "Unlike the Nazca lines they are very intimate. They were pecked into the canyon

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<sup>23</sup> Vazan, interview by author.

<sup>24</sup> Anne Seymour and Hamish Fulton, *Richard Long. Walking in Circles* (New York: Braziller, Inc, 1991), 241; Vazan, interview by author; Robert Morris, "Aligned With Nazca," *Artforum* 14 (October 1975).

<sup>25</sup> Robert Hobbs, "The Works," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 171.

walls in places near the ground level. It was exciting to hunt for them among secluded rocks."<sup>26</sup>

We are told that the Serpent Mound was a popular place to visit for contemporary artists.<sup>27</sup> Lucy Lippard tells us that Smithson was aware of the Great Serpent Mound and that "he liked Mesa Verde, where art and necessity appeared as one, or ambiguous prehistoric sites in Europe and America where time had blurred or destroyed the boundaries between human-made and natural, order and disorder."<sup>28</sup>

Holt has continued to be attracted to ancient sites and archaeoastronomy.<sup>29</sup> Referring to her work *Sky Mound*, she wrote: "The feeling of awe I frequently feel standing on top of the landfill is similar to the wonder I experienced on the huge American Indian mounds in Miamisburg, Ohio and in the Cahokia site along the Mississippi River in Illinois. Both kinds of human-made mounds were built to meet vital social necessities, but here the similarity ends. Landfills result, of course, from the essential need to rid ourselves of the used-up, cast-off materials of our culture, while American Indian mounds derived from deep spiritual, social, and ritualistic needs."<sup>30</sup>

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<sup>26</sup> Robert Smithson, "...The Earth, Subject to Cataclysm is a Cruel Master," interview by Gregoire Muller, *Writings*, ed. Nancy Holt, 180.

<sup>27</sup> Ruth K. Meyer, "A Meeting Place of Humanistic Experience," *Nature-Sculpture*, Andreas Vowinkel et al., 24.

<sup>28</sup> Lucy Lippard, "Breaking Circles: The Politics of Prehistory," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 38.

<sup>29</sup> Nancy Holt, telephone interview with author, tape recording, Montreal/Finland, 15 July 1997.

<sup>30</sup> Nancy Holt, *Sculpting With the Environment. A Natural Dialogue*, ed. Baile Oakes (New York: Van Nostrand Reinhold, 1995): 61.



In 1954, Andre sailed to England and saw Stonehenge and its adjacent works. Stonehenge became one of the pivotal things that affected his sensibility: "And Stonehenge itself was a tremendous impact, a tremendous influence."<sup>31</sup>

Pierce attributes his choice of technique that he calls 'earth-working', as a response to the 'stored energy' of Neolithic earthworks that he saw during a trip to England in 1971.<sup>32</sup>

Sometimes, the titles that artists choose for their works allude to prehistoric sites. Morris's *Observatory* and Heizer's *Effigy Tumuli Sculptures* each refer, by virtue of their terminology, to megalithic sites and Indian effigy mounds respectively. The allusions of both are indirect as neither Morris nor Heizer specifies to which observatory or effigy they are referring. Yet their form indicates which among the ancient sites is their counterpart. The circular formation and use of mounds at Morris's work make reference to megalithic stone circles and henges, while Heizer's mound-like structures pay homage to the Indian mounds of the Hopewell and Adena cultures.

Others signify their source more bluntly and refer to specific ancient sites. Though interior pieces and thus not landworks, Long's *A Line the Length of a Straight Walk From the Bottom to the Top of Silbury Hill*, Vazan's *Megalithic Hover*, and Michelle Stuart's *Nazca Lines Star Chart* are among such titles that allude directly to specific prehistoric sites. *Megalithic Hover* may appear general in its designation, but the photographs that Vazan depicts are specific, including Callanish, Stonehenge, and Avebury, all megalithic stone circles.

Even this short overview attests to some of the artists' awareness of these ancient sites. It would be interesting to note

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<sup>31</sup> Carl Andre, "Interview with Carl Andre," *Avalanche* 1 (Fall 1970): 20.

<sup>32</sup> Michael Charlesworth, "Deep Down to the Secret Source of All," *A Cajun Chapbook*. *New Arcadian Journal* (1992): 128.

whether there is a difference in the production of artists that are familiar with ancient sites and those that are not. Is it specifically artists that do know about them that create works with references to the past?

We cannot establish with certainty whether all the Land artists are as knowledgeable as those mentioned above, though we assume that a general knowledge of at least Stonehenge was probable due to an enormous amount of publicity about this megalithic site during the beginning of Land Art. But in fact, whether aware or not, it is evident that some artists make conscious choices to make references while others do not, most likely coinciding with their different approaches rather than knowledge.

#### **The Originality Issue**

To conclude that Land Art could not help but be influenced by the artists' knowledge of ancient sites seems obvious, and many critics have done so. They speak of sources, models, parallels, and other terms, as we mentioned earlier.

Muller writes in connection to Heizer: "This is a dialogue, if one might borrow the term, of religion, a parallel to that of Indian civilizations which drew giant symbolic motifs in the landscapes (Heizer directly refers to it with Dye painting), or to that of menhirs and dolmens."<sup>33</sup> John Beardsley also uses the word 'parallel': "Land projects also have parallels in the much more distant past, in prehistoric structures of earth and stone ancient constructions of Western and pre-Columbian civilizations."<sup>34</sup> In the context of juxtaposing one of Morris's landworks with an ancient

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<sup>33</sup> Muller, 45.

<sup>34</sup> Beardsley, *Probing the Earth*, 16.

source, Edward Fry writes: "Through Morris's model that we recognize as prehistoric."<sup>35</sup>

A few critics dare venture into territory of the abhorred word of 'influence'. Bette Spektorov is blunt: "There is no doubt of the powerful influence that prehistoric sites have had on contemporary art."<sup>36</sup> Gilles Tiberghien is no less direct: "The relationship of the Land artists to the primitive arts is primarily plastic. The size and mass of primitive works strongly influenced them, more through their brutality than their formal vocabulary."<sup>37</sup>

Sure enough, the word 'influence' is usually avoided, but the pleasure that art historians and critics have in making so many comparisons with the ancient sites is obvious. The debunking activity of the critics is a way to avoid the issue of Land Art's real originality.

From what we have seen, we can conclude that Land artists know about the ancient forms of art that their works seem to emulate. Consequently, critics have occasionally determined that they are not original. For example, Hermann Kern is convinced of a lack of originality in Land Art, and sees a problem in the use of formal characteristics that are derived from ancient sites. He admits that traditional symbols are understood immediately, "But they tread within the domain of anonymous, generalized visual language, and the question of authorship and personal merit - so important in the contemporary art scene - is raised to no greater extent than in the case of a folk song or a fairy tale."<sup>38</sup>

Kern feels that in order to be considered a 'good' artist, one must be innovative, and he fails to see any new tendencies in Land

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<sup>35</sup> Fry, *Robert Morris/ Projects*, n.p.

<sup>36</sup> *Ibid.*, 9.

<sup>37</sup> Tiberghien, *Land Art*, 225.

<sup>38</sup> Hermann Kern, "Labyrinths: Tradition and Contemporary Work," *Artforum* 19 (May 1981): 60.

Art. He further complains about modern renditions of labyrinths which are a recurring form that is also revived from prehistory: "Some works show at first glance that they are nothing but reproductions or, at best, expanded older works."<sup>39</sup> Kern accuses artists of copying their sources directly, though at least he concedes that some are 'expanded' versions.

But even when critics make an effort to assess how precisely land art is 'modern', 'original', or 'new', they seem embarrassed by these references to the past.

Diane Waldman is eager to establish the unique qualities of Heizer's landwork *Circular Planar Displacement*, 1970: "This drawing alludes to primitive land drawings; the precise regularity of the circles, however, and the over-all configuration are Heizer's invention."<sup>40</sup> Waldman gives Heizer the benefit of innovation, noting his effort to distinguish the work from that of his 'source'. But there is more than formal distinction to Heizer's originality.

Jean-Marc Poinot tries a well balanced approach in which affinities with Minimalism and ancient works are correctly appreciated: "Si le vocabulaire formel de Smithson ou de De Maria semble au premier coup d'oeil une transposition des formes unitaires de l'art minimal à la dimension de l'espace naturel, il se différencie totalement d'un art formaliste et spéculatif par ses affinités avec les vestiges incompris et inexplicés des civilisations primitives."<sup>41</sup>

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<sup>39</sup> Ibid., 65.

<sup>40</sup> Diane Waldman, "Holes Without History," *Art News* 70 (May 1971): 67.

<sup>41</sup> Jean-Marc Poinot, "Sculpture/Nature," *Parachute* 12 (Autumn 1978): 15.

We agree with Poinot. The reference to the past here is enough to distinguish landworks from Minimalism. But is it its only function? Is it the only reason that artists used these references?

Beardsley seems so ill at ease with the subject of affinities that he wants to stress that landworks with references to prehistory are not as common as critics imply: "Yet few contemporary land projects are deliberately archaizing."<sup>42</sup> For him, this aspect is only one of the elements of Land Art: "It was not the principal intention of any of these artists deliberately to evoke a particular historical tradition, or to utilize forms that were obviously based on historical antecedents."<sup>43</sup> Perhaps, but then why did they use these forms and make references to the past in their discourse?

One feels a certain uneasiness on the part of these critics when they deal with the problem of the affinities with ancient works. One suspects that this comes from their art historical formation. Landworks must have seemed bizarre to them at first. Moreover, few critics actually visit landworks, so they make their comparisons very broadly. By using ancient examples as models for landworks, critics find a reference point from which to better understand the modern works and make them exist as sculptures that they can deal with.

Art historians must determine the driving force behind specific art forms and define their sources; there is always the issue of causality and the notion of influence, designating one art form or artist as the influential factor for a later manifestation. Therefore, pursuing the fact that prehistoric remains are an important source for Land artists and studying the

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<sup>42</sup> Beardsley, *Probing the Earth*, 18.

<sup>43</sup> John Beardsley, "James Pierce and the Picturesque Landscape," *Art International* 23 (December 1979): 14.

formal and conceptual analogies between their works and their sources are valid and essential strategies.

However, it cannot be the only approach possible. Besides the fact that it has been done by critics already, the artists do not conceal their sources so the hunt to find derivations seems senseless. Clearly, there is more to it than that.

Rosalind Krauss offers a plausible explanation for the art historical approach to connect landworks with ancient manifestations:

The new is made comfortable by being made familiar, since it is seen as having gradually evolved from the forms of the past. . . . The historian/critic simply performed a more extended slight-of-hands and began to construct his genealogies out of the data of millennia rather than decades. Stonehenge, the Nazca lines, the Toltec ballcourts, Indian burial mounds - anything at all could be hauled into court to bear witness to this work's connection to history and thereby to legitimize its status as sculpture. Of course Stonehenge and the Toltec ballcourts were just exactly *not* sculpture, and so their role as historicist precedent becomes somewhat suspect in this particular demonstration. But never mind.<sup>44</sup>

Krauss is among the rare examples of an art historian that criticizes previous critics. She feels that by using a universal category to authenticate the connection between some modern art and the sites that she mentions, the term 'sculpture' is obscured.

As Krauss suggests, using something familiar with which to base one's perceptions of a foreign thing can ease the discomfort with the unfamiliar. Considering the revolutionary traits exhibited in this new art form, it is not surprising that critics feel the need to claim that they look like something else, in this case, works of the ancient past. By connecting landworks with a prior source, critics may feel that they are justifying their status as

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<sup>44</sup> Rosalind Krauss, "Sculpture in the Expanded Field," *October* 8 (Spring 1979): 31, 33.

art. However, as Krauss points out, they are relating them to objects that are not sculpture.

But as much as we can understand the need to give a status to Land Art by comparing it to prestigious ancient models, we are not completely convinced by the fact that the parallels with precisely these ancient works could do so as well as, for instance, with comparisons of the great gardens of the past (at the Castle of Versailles or the landscape architecture of Frederick Law Olmsted), or with other monumental propositions (Mount Rushmore) of the recent past. The fact that Land Art has references to megaliths, to Indian mounds, and to the Nazca lines makes it more akin to archaeological sites than to sculpture, and this reference to the past seems to us essential, even more than its homologation in the realm of art.

We already alluded briefly to the terminology that critics use to describe the affinities. We must decide what discourse to use to define the similarities between the ancient and modern works that we will examine. Could it be that artists are simply copying their predecessors? Are they influenced by the ancient forms? Is it inspiration? Do artists borrow formal features or do they copy directly? Are the landworks citations? Or could they be intentional references? Are they similarities willed by the artists, searched by them for a purpose that could have escaped the critics? Meanwhile, we also have to wonder what the artists think of all the associations that people make between their work and ancient sites.

If the problem is to clarify the intention of the artists, the most direct means to answer these questions is to listen to what they have to say on the subject. As we have seen, many have clearly indicated their familiarity with ancient sites. Artists mention the association of their work with ancient works in their writings and interviews, and admit to being affected by their

impact. In fact, their statements could be one of the sources used by critics to make their associations.

A baffling aspect about the artists whose work we are referring to is that they do not seem to mind the comparisons of their work with ancient predecessors and make no effort to hide their sources. Not only is the relation with the past not shunned, it is often affirmed. And of course critics, who are always fond of finding 'influences', are very pleased to have their ideas confirmed by the artists' statements.

It is unusual that artists are not disturbed by the association of their art with a source. Typically, the connotation of being influenced by another art form or artist can be perceived as derogatory and demeaning among those striving for originality. Artists usually resent the art historians' attempts to associate their works with an earlier source, thereby implying that they are 'influenced' and that their art is less original. But in the case of Land Art that has affinities with ancient sites, rather than fight for the concept of their originality, artists admit to having ancient sources and occasionally make the associations themselves.

While driving in Nevada with critic Douglas Davies to see his landwork *Displaced/Replaced Mass*, Heizer admits: "I'm going backward. I like to attach myself to the past."<sup>45</sup> This would normally be a paradoxical statement. Artists might be uncomfortable to make this claim as it insinuates a lack of originality, as if they require using someone else's conceptions.

Heizer makes a similar comment about his landwork called *Complex One/City*: "What if an artist is so confused by his society that he reflects other cultures in his work?"<sup>46</sup> Though he

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<sup>45</sup> Douglas Davies, "The Earth Mover," *Newsweek*, 18 November 1974, 113.

<sup>46</sup> Michael Heizer, "Earthworks. Statements by Michael Heizer," *Michael Heizer* (Otterlo: Museum Folkwang Essen. Rijksmuseum Kroller-Muller, 1979), 36.



does not specify which cultures he is referring to, we can assume that Heizer means the Maya since this landwork has sources in Mayan architecture.

Despite the numerous associations that people might make, artists appear to be unconcerned with the concept of originality. Statements of admission to ancient sources made by Heizer and other artists that we shall see reveal a confidence in their position, and indicate that there is more to their work than novelty and similarities to sites of the past.

Of course some artists will not admit to their sources. They may respond to inquiries by indicating an interest in nature and/or a desire to escape from the museum and gallery establishment. This type of response corresponds to the general expectation of the artists' claim of originality.

Smithson justified his approach to ancient sources: "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 pasts."<sup>47</sup>

Smithson suggested a blending of the remote past, the present, and the distant future. Could it be that by mixing all these layers together, his landworks have the capacity to add many layers of memory onto the land?

Long also defends himself from potential criticism: "I think there are fantastic universal connections but I think you always have to be true to yourself and even though I'm in these places with incredibly long cultural histories I'm still making contemporary art. My meanings reside now. My art is a contemporary

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<sup>47</sup> Robert Smithson, "A Sedimentation of the Mind: Earth Projects," *Artforum* 7 (September 1968): 50.

parallel with all these other cultures, just one more layer in history."<sup>48</sup>

By adding 'one more layer in history', Long seems to conform to Schama's view. Landworks with 'universal connections' can transform the environment and add layers of memory onto the land, thereby creating landscapes.

Craig Adcock counteracts Kern's reproach that we quoted above. He feels that by expressing an 'old insight in a new way', artists persuade people to look at their art. He states: "The best Earth Artists also said something old by reviving certain aspects of the sublime and the Neolithic. But they said it in a new way. They acceded to the avant-garde imperative."<sup>49</sup> Indeed, artists revive the prehistoric remains in a distinctly modern adaptation. When juxtaposed with ancient sites, landworks do not persuade the viewer of antiquity. Nor is that the artists' intention.

Any definition of the originality of Land Art that does not integrate the affinities with the past seems to us incomplete. If they are rejected as 'influences', it seems to us that it is the concept of 'influence' that has to be revised.

Sometimes the formal references are so obvious that attributing to such works a source of influence is void of revelation. Moreover, artists knew too much about the ancients to be merely influenced. For example, an artist such as Heizer, whose father was an archaeologist, had enough information to use his knowledge more profoundly than a simple formal reiteration. The artists' knowledge enabled them to take the 'influence' one step further, elevating it to a level of reference.

Therefore, a new concept of influence must be used, more akin to the type of relation that artists have with the ancient

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<sup>48</sup> Nick Stewart, "Richard Long. Lines of Thought. Conversation with Nick Stewart," *Circa* (November/December 1984): 12.

<sup>49</sup> Adcock, 107.

sites. We believe that the term *reference* would be a more suitable term to designate what the artists do with their sources. Perhaps the modernist idea of 'originality' is fading away and being replaced by a new taste for quotations, repetition, and iteration.

In this context, when we refer to influence, we mean a causal link between a work and its model. For example, Ingres was influenced by a Roman copy of a fresco from Herculaneum when he painted the pose in *Portrait de Madame de Moitissier*, though of course, he tried to hide the resemblance and make it less obvious.<sup>50</sup> An influence can also be unconscious, demonstrated when an artist denies to have been influenced by a specific work of art. Jean Dubuffet's well-known resentment against comparisons of his work with children's art could illustrate this point.<sup>51</sup> A reference is made when an artist makes an explicit analogy to a previous work of art, for example as an homage to another artist, in which similarities between the work and its model are deliberate, conscious and overt.

We would like to make it evident that there is another intention to the landworks' affinities with prehistoric forms. Rather than being influenced, artists make references to ancient remains. And we propose that it is *because* of these references, the very idea of using them, that landworks are original.

### **Primitivism**

A related question that comes to mind is what aspects of prehistory inspired Land artists' notions of form. What could have instigated the presentation of prehistoric forms by modern artists?

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<sup>50</sup> Norman Bryson, *Tradition and Desire. From David to Delacroix* (Cambridge: Cambridge University Press, 1984), 2-3.

<sup>51</sup> Jean Dubuffet, *Prospectus et Tous Écrits Suivants*, vol. 2, letter from Jean Dubuffet to Alfred Pohl, 22 May 1962 (Paris: Gallimard, 1967), 419-420.

Could the renewed interest in primitive forms and evidence from the past during the 1960s have had an impact on artists?

The impact of archaisms and so called 'primitive' art on modern art is a well known phenomena and was extensively covered by an exhibition at the Museum of Modern Art in New York in 1984, curated by William Rubin.<sup>52</sup> What is so remarkable about the references in Land Art is the nature of the archaeological data that is alluded to, and the admission of the 'influences' by artists.

Rather than the previous appeal that antiquarian objects had on artists earlier in the century, the new attraction was for monumental structures of the past. Artists like Paul Gauguin and Pablo Picasso were said to have been inspired earlier in the century by aesthetic values of the art forms from non-western cultures in Oceania, Africa, and the Americas that they saw in ethnological and cultural history museums. So instead of critics making comparisons with a mask, a fetish, or other museum pieces as done with artworks by Gauguin and Picasso, Land Art was compared with ancient sites.

Since there was another 'revival' of primitivism during the emergence of Land Art, different values with which to approach primitive art could have been influential. During the 1960s and 70s, the book store, more than the curio shop, became these artists' contact with tribal cultures.<sup>53</sup>

Franz Boas's book *Primitive Art* was a classic, originally published in 1927 but reprinted in 1955.<sup>54</sup> Its new publisher, Dover, was dedicated to making books very accessible and popular.

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<sup>52</sup> William Rubin, ed., *'Primitivism' in Art of the 20<sup>th</sup> Century Art. Affinity of the Tribal and Modern* (New York: Museum of Modern Art, 1984).

<sup>53</sup> Varnedoe, 661-662.

<sup>54</sup> Franz Boas, *Primitive Art* (New York: Dover Publications, Inc., 1955).

Boas made a comprehensive analysis of primitive art, concluding that the fundamental characteristics of art were rhythm, symmetry, and emphasis of form.

Boas's approach could have been particularly relevant for modern artists and especially Land artists. By insisting on formal aspects in 'primitive art' instead of more content-oriented aspects (mythological or sociological), Boas was making ancient and tribal works of art suddenly appealing to modern artists.

As Meyer Schapiro has shown in his 1937 essay "Nature of Abstract Art," this formal approach has, "made possible the appreciation of many kinds of old art and the arts of distant peoples - primitive, historic, colonial, Asiatic and African, as well as European - arts which had not been accessible in spirit because it was thought that true art had to show a degree of conformity to nature and a mastery of representation which had developed for the most part in the west."<sup>55</sup> One could speak of a new fraternity with artists from the rest of the world, all meeting in the language of form.

Claude Lévi-Strauss' *The Savage Mind* was another significant classic.<sup>56</sup> Rather than depicting a romantic view of the primitive mind, his form of structural anthropology made western culture no more advanced than, just different from and in some ways inferior to, that of tribal societies. Lévi-Strauss did not present the primitive mind as ruled by magic and hallucinations; rather, it was logical and comparable to scientific thought.

The attraction to primitive models was not limited to visual artists; it spread throughout all creative fields, including dance, music, and literature. The latter 1960s also hosted the foundation

<sup>55</sup> Meyer Schapiro, *Modern Art 19<sup>th</sup> & 20<sup>th</sup> Centuries. Selected Papers* (New York: George Braziller, 1978), 215.

<sup>56</sup> Claude Lévi-Strauss, *The Savage Mind* (Chicago: The University of Chicago Press, 1962).

of the ethnopoetics movement established by Jerome Rothenberg. In 1968, he published a collection of poetry from Africa, America, Asia, Europe and Oceania, entitled *Technicians of the Sacred*.<sup>57</sup>

Even if one could say that these texts were decontextualized from their original meaning, already by presenting them as 'poems' and making them accessible to the modern Occidental reader in translations, they were nevertheless revealing a sense of the animistic view of the poets' world, accentuated by many recurring themes running through various categories.

Singing, dancing, chanting, feasting were alluded to throughout the poems. On the human level, the human body, birth, death, sex, and procreation were paramount. There was constant mention of the sky and its components, including the sun, moon, stars, constellations, and milky way. There were states of nature such as dawn, twilight, wind, thunder, lightning, darkness, light, clouds, rain, and mist. The sea, rivers, caves, flowers, and various animals composed some of the different features of nature. Shamans, chiefs, spirits, gods, and goddesses were also mentioned. Upon reading, it became obvious that the world of these poets was alive, emotional, and very much connected to nature.

In his preface, Rothenberg explained that this kind of animistic world had much to offer to western society and noted that indeed, industrial societies were in admiration of these kinds of works:

The old 'primitive' models in particular - of small and integrated, stateless and classless societies - reflect a concern over the last two centuries with new communalistic and anti-authoritarian forms of social life and with alternatives to the environmental disasters accompanying an increasingly abstract relation to what was once a living universe. Our belief in this regard is that a re-viewing of 'primitive' ideas of the 'sacred' represents an attempt - by poets and others - to preserve and enhance primary human values against a

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<sup>57</sup> Jerome Rothenberg, ed., *Technicians of the Sacred* (Berkeley: University of California Press, 1968, 1985).

mindless mechanization that has run past any uses it may once have had.<sup>58</sup>

Ethnopoetics referred to a redefinition of poetry in terms of cultural specifics with an emphasis on alternative cultures that the west labelled 'pagan', 'tribal', 'oral', or 'ethnic'.<sup>59</sup> When the industrial west discovered and plundered 'new' and 'old' worlds, a countermovement came forth: "Cultures described as 'primitive' and 'savage' - a stage below 'barbarian' - were simultaneously the models for political and social experiments, religious and visionary revivals, and forms of art and poetry so different from European norms as to seem revolutionary from a later Western perspective."<sup>60</sup>

Where poetry was concerned, 'primitive' meant complex to Rothenberg. Poems were part of a social and religious system in which the presence of myths and locales revealed a fullness of living and a tradition-bound culture. Similarly, despite the lack of proof, it is possible that to Land artists, the prehistoric 'primitive' is also complex and thus, an appealing reference.

Another literary source that could have affected artists was the Beat Poets. Through their writings during the 1950s, poets such as Jack Kerouac, Gary Snyder, and Allen Ginsberg laid the foundations for those who wished to diverge from the cultural and artistic mainstream in America. Despite a common concern for an individual identity, they ventured to renew contact with the primitive world and myth, opting for alternative lifestyles, religion and writing techniques.

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<sup>58</sup> Jerome Rothenberg, "Pre-Face," *Symposium of the Whole. A Range of Discourse Towards an Ethnopoetics*, eds. Jerome Rothenberg and Diane Rothenberg (Berkeley: University of California Press, 1983), xii.

<sup>59</sup> *Ibid.*, xi.

<sup>60</sup> *Ibid.*

### **The Purpose of Ancient References**

The foremost question that comes to mind regarding the subject of affinities is what is the intention behind using formal aspects from ancient sites? Why do artists use ancient references? What could the Nazca lines, megalithic remains, and Hopewell and Adena mounds offer them?

Considering the presence of formal and possible conceptual parallels between landworks and ancient sites, one must speculate that artists find positive aspects to emulate in prehistoric remains. Indeed, there are formal aspects in ancient sites that could appeal to the formalist tendencies of modern art. Simply shaped monumental works made outside out of natural materials are inspirational precursors for modern ideals.

The simplicity of forms and designs exhibited through spirals, straight lines, circles, and other geometric and abstract formations recurring in the Nazca lines, the Hopewell and Adena mounds, and in megalithic remains can be perceived like bare 'imagery'. The love of the primitive is the result of many factors and not just the study of primitive designs, but the artists' selection of such 'subject matter' reveals some of their ideological notions of the primitive. These simple forms reiterated in landworks might provide a universal language that viewers can understand, though they may interpret them differently.

The sculptural materials in landworks are also reminiscent of ancient sites. Moreover, as structures that are visually imposing, the large scale of some ancient precedents could be another factor that artists are affected by. Is this because large structures transform the landscape more effectively? The concept of walking around or within landworks is an integral part of Land Art as a means of becoming more conscious of the surroundings. Landworks can be experienced in their totality only from various viewpoints and are meant to be physically entered into and experienced as a place.



There are also formal innovations in Land Art that cannot be ignored. Why do artists make their works so large, and why, after such effort, do they make some of them impermanent?

Land Art is often connected to Minimalism. Minimal Art relates to forms which are simplified shapes with no frills, hence minimal. The rejection of art objects as unique and precious entities results in a reduction of objects to their basic components, thereby creating simple forms. Artists wish to make their art objective by presenting raw, geometric forms with no interpretation on their part. Forms are calculated and nothing is left to chance. If there is a relation of Land Art to Minimalism, is it the simple forms of prehistory that appeal to Minimalist tendencies?

We must determine whether the interest in prehistory is restricted to form or are there conceptual aspects about ancient sites that appeal to artists as well? Then there is the issue of nostalgia which critics are fond of. Is it true that artists are responding to a need to reconnect with the distant past as proposed? Is that why they use natural materials? Is it associated to nostalgia for their predecessors that used similar materials?

There are also logistical problems associated to this art form that we must address. Why do artists make art that is so difficult to see? Why do they work outside, and why make their art in such remote locations? Do they care whether people will bother to make the trip to see their art? Meanwhile, what is the effect of these works on the land? We cannot ignore the contradictions in the artists' discourses related to ecology and the extreme variety of opinions related to this subject.

We know artists are familiar with ancient remains. We propose to label their efforts as references rather than influences. And it is possible that the renewed interest in primitivism during the 1960s instigated the decisions to use ancient references in Land Art. But these are all things that have been said by critics before us, as we will demonstrate in subsequent chapters. The manner in

which we propose to renew the subject is to project Schama's perception of the landscape on Land Art. That is how we believe that we can answer the foremost question, namely why artists use these references, and contribute to a better understanding of this modern art form.

### **Resolving the Issues**

This thesis will concentrate on Land Art's connection with the past. But rather than continue the art historical trend of finding artists' sources and making comparisons, we will try to determine the artists' intention in reverting back to prehistory for formal inspiration.

What motivates artists to revert thousands of years back in time to find suitable 'subject matter' and form? If the goal of artists is to add a layer of memory onto the land, how do they achieve it?

The manner in which we propose to answer these questions is to start, not from a review of the principle contributors of Land Art or a description of some typical examples, with the risk of neglecting some important ones, but rather to establish at the outset four paradigms of references to the past. They seem to us to be the most frequent references to the past that one can find in Land Art. There may be others, but for the sake of our demonstration, these four paradigms seem sufficient.

We will then regroup different examples of landworks according to the four following paradigms, namely astronomical alignments in ancient sites, the Nazca lines, megaliths, and the Hopewell and Adena mounds. These are the paradigms that serve as references for the artists. By analyzing each paradigm separately, we will set out to discover what the artists' purpose and intention is in using these ancient sites as references.

We will begin by supplying a factual chapter on Land Art. Data will include the construction, dissemination, exhibition, and other

aspects of this art form. This will provide an understanding of the types of logistical undertakings necessary to make landworks. Land artists are rejecting the establishment of museums and galleries and abolishing the commodity status of the art object. Some of the more revolutionary formal characteristics of Land Art will also be defined. Even if we do not want to delve too deeply into issues of fact as it will lead us away from the actual thesis, we feel that it is important to situate the reader in the proper context of this art form. This first chapter will be purely descriptive, as will the next.

There is an aspect about landworks that can be related to ancient sites that is generally ignored by critics. Due to the landworks' presence outside in sometimes inconvenient locations, people that wish to see them must travel. To examine this issue about Land Art, we will dedicate the second chapter to the subject of trips, and determine how ancient sites and landworks are perceived and visited by today's artists and the public in general. This will reveal the relation of the onlooker to landworks in a more social context. We will refer to Dean MacCannell's analysis on tourism in this section.<sup>61</sup>

Then we will proceed to the core of the thesis by examining our paradigms. Each will form a separate chapter in which we will describe the ancient sites that pertain to that particular paradigm along with landworks that make reference to it. Each chapter will include the critics' perceptions of the affinities with an analysis of their comparisons, statements of possible intention and juxtapositions, as well as those of the artists' discourses on the subject.

The paradigm of astronomy will include descriptions of landworks that are astronomically aligned and a section on the

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<sup>61</sup> Dean MacCannell, *The Tourist. A New Theory of the Leisure Class* (New York: Schocken Books, 1976).

critics' analyses that will reveal how they interpret the alignments.

Then, by presenting some of the more popularized literary sources from the 1960s and 70s pertaining to astronomy in ancient sites, it will be possible to hypothesize whether these theories affected artists. The aim is to define the common sources that might have influenced their knowledge of the newest breakthroughs about the ancient sites we are examining.

By taking into account current theories about prehistoric remains, we can look for correlations between the trends in archaeology and parallel them to the formal and conceptual efforts of Land artists. It would not be so astonishing that the artists incorporated whatever concepts were popular at the time into their works. While we cannot always prove that they read these sources, we can determine an awareness of the new theories according to the artists' statements.

This chapter is intended to determine whether and how artists are affected by current theories about ancient astronomy, and to clarify how aligning artworks to astronomical events enhances their works.

The next chapters on the paradigms of the Nazca lines, megaliths, and the Indian mounds will also examine landworks parallel to their ancient counterparts. In these, we also intend to review the comparisons made by both critics and artists about the works presented.

But in fact, these comparisons are problematic. One suspects fundamental differences of intention between the modern and ancient works. The perceived links between the products of such diverse cultures separated by vast time differences expressed in millennia are unlikely, and they negate the more nuanced options of conceptual similarities. Their functions and meanings are basically *different*, and for some reason, critics avoid these

dissimilarities. It seems to us that nothing can be gained by this levelling of intentions.

In order to comment on the critics' perceptions about ancient sites, we must know about them; when not informed about the possible functions of an ancient site, it is difficult to use it as an object of comparison. The case of the Nazca lines will be used to prove just how *different* the ancient sites are from the modern ones. By analyzing the various theories pertaining to the functions of the ancient ground drawings, we can illustrate how superficial the subject of affinities between the ancient and modern really is when they are based on speculation.

We will finish with a broader issue to test our hypothesis on other grounds. The landworks' presence outside brings forth the subject of nature which is a major issue that must be contended with. We will examine the reason for making art outside and having nature as part of the subject matter. While this topic is pertinent to all Land Art, the focus will remain on artists and landworks with affinities to ancient sites.

This chapter will examine some of the ecological issues in Land Art. It will also deal with the topic of nostalgia that is mentioned throughout the literature. Critics attribute the choice of making associations with the past as artists complying with the current tendency toward nostalgia about ancient peoples and causing observers to think about the past.

We will conclude with what people do at landworks, which, like trips, is another aspect that can be related to ancient sites that is overlooked by critics. There is also a touristic dimension to the viewers' behaviours that will elucidate how the connections between the ancient and modern are made in the onlooker's mind.

By examining the visitors' behaviours observed at sites, both ancient and modern, we can verify if the mnemonic dimension that we suspect in Land Art plays a role in their attraction to modern

tourism, and see how far the works themselves can convey their meaning to visitors.

The originality of our data is that it is obtained from a combination of sources. Our methodology includes discussion of the artworks themselves, the artists and their discourses, the art critics' analyses of Land Art, as well as our own observations drawn from visiting ancient and modern sites.

### **The Artists**

There are many artists associated to Land Art, including those that started making landworks in the latter 1960s and those that still produce it today.<sup>62</sup> The decision about which artists to use in our analysis is almost predetermined; the need to explore the connection with the past gives us a criterion for which artists to choose. Since this thesis is not dealing with Land Art as a limited category but rather on its relation to prehistory, especially American Land Art, we will use several artists as major cases to illustrate the hypothesis to include those with an awareness of the past whose works include a memory dimension.

The criteria for which artists and landworks to include in this analysis will be limited by the artists' testimonies themselves as well as the art critics' analyses of their works. Artists whose works are mentioned by critics in relation to ancient sites will determine our subjects. Artists that mention an interest in ancient sites are obvious subject matter; with their verbal and/or written declarations, they establish a clear relationship with structures of the past. These parameters will limit and focus our discussion to artists and works that have an intentional association to prehistory by virtue of their efforts, or are perceived as having a link by the critics.

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<sup>62</sup> For an example of how prolific Land Art has become, see Liliana Albertazzi, *Differentes Natures. Vision de l'Art Contemporain* (Paris: Lindau, 1993).

As we saw before, those included by virtue of these standards are the American pioneers including Walter De Maria, Michael Heizer, Richard Long (British), Robert Morris, and Robert Smithson. Those that began their production slightly later will also be included, such as Carl Andre, Alice Aycock, Richard Fleischner, Nancy Holt, James Pierce, Charles Ross, Michelle Stuart, and James Turrell, and Bill Vazan (Canadian).

This justifies the elimination of artists like Christo, for example, who are also affiliated with Land Art but are less relevant to the parallels with prehistory. Artists that make landworks occasionally, such as Jan Dibbets, Hans Haacke, and Gunther Uecker, do not mention any interest in prehistory, nor are their works related to prehistory by critics. Others whose repertoire is more frequently characterized by landworks yet with no links to prehistory are also omitted.

The exclusion of artists and landworks that do fit within our parameters is not intended to reflect on the works' quality or belittle the pertinent production of the past twenty years. Rather than make a general overview of all artists and landworks that relate to prehistory, a select number of artists and examples of their work will be sufficient to demonstrate our thesis.

Finally, we would like to add that the actual sighting of the works we are dealing with seems important to us. Travelling to see both ancient sites and landworks also offers the benefit of having direct contact with sites, thereby gaining a better understanding of their form and concept. Field work to both modern and ancient sites also provides specific details about the people and factors that motivate them to visit a site.

Landworks visited are Morris's *Observatory*, Smithson's *Spiral Hill* and *Broken Circle*, Pierce's *Garden of History*, and Holt's *Sun Tunnels*.

Countries visited to see ancient sites are England, France, Holland, Israel and Ireland. In England, ancient sites visited

include Stonehenge, Avebury and its adjacent sites, and Stanton Drew. In Brittany, France, a total of 54 sites were visited, including Carnac, La Roche aux Féés, and Le Vieux Moulin. In Holland, the big dolmen in Borger, and two dolmens in Emmen were seen. In Israel, sites visited are Rujum El Hiri, the tank Dolmens in the Galilee, and the Gamla Dolmens in the Golan. In Ireland, Drombeg Stone Circle, Poul nabrone Dolmen, and Newgrange were visited.

### **Conclusion**

Our main thesis is to suggest that the primary purpose of landworks with affinities to the past is that they give a cultural sense to nature. Nature in Europe has often been converted into gardens, parks, and other man-made, history-laden formations. By making landworks, artists put culture into the land. They transform nature, create distinguishable features other than the typical American urban or untamed landscapes, and evoke a past.

Furthermore, what we want to prove is that landworks with references to the past create landscapes by adding a layer of memory onto the land. As Schama claims, there is no landscape without memory. Could landworks loaded with ancient references be the artists' way of adding a layer of history onto the land?



GENERAL CONTEXT OF LANDWORKS

## General Context of Landworks

Land Art appeared in the United States in an era of struggle for civil rights and a widespread demand for freedom. The Vietnam war was still on. Man had walked on the moon. It was the time of Pop Art, Op Art, Minimalism, Process Art, and Conceptualism. Fads included micro mini-skirts, vinyl boots, drugs, and psychedelia. The immediacy of everything, all new and exciting, was overwhelming. There was a bustle of movement with the pace of time on fast forward. Urban development, cars, aeroplanes, freeways, highrises, televisions, radios, billboards, noise, pollution, people were constantly bombarded by huge man-made gestures, surrounded by the folly of progress.

Michael Heizer explains his reasons for making Land Art: "The work I'm doing out in the deserts *has* to be done, and *somebody* has got to do it. Where in hell are all the artists? I mean, we live in an age of obligation. We live in an age of the 747 aircraft, the moon rocket - objects that are constructed by man that range from the most minuscule complex electronic dial to airplanes that have wings weighing 45 tons on them. So, you must make a certain type of art."<sup>1</sup>

Clearly, Heizer reacted to his context: "I started making this stuff in the middle of the Vietnam war. It looked like the world was coming to an end, at least for me. That's why I went out in the desert and started making things in dirt."<sup>2</sup> Working with dirt in the desert might have satisfied a basic need to deal with the instability of Heizer's surroundings. While other artists may not have been motivated by the same thoughts as Heizer, they shared the same situation and reacted according to their individual inclinations.

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<sup>1</sup> John Gruen, "Michael Heizer: 'You Might Say I'm in the Construction Business'," *Artnews* 76 (December 1977): 98.

<sup>2</sup> McGill and Heizer, 11.

This chapter will focus on the logistics of the production, reception, dissemination, and effects of Land Art. We will mention many artworks in passing, reserving detailed descriptions for subsequent chapters.

### **Land Art: Communal Versus Individual Motivations**

There is an opposition related to the creation of landworks that is dependant on the artists' choices and/or the type of construction entailed. Some artists prefer to work alone, such as Richard Long, while for their more grandiose efforts, artists are more likely to recruit workers. Some works require months or years of planning, from drawing plans, executing them in three dimensional models, site selection and legal matters, to funding (for land, labour, and materials); they require the involvement and cooperation of many people who are not normally involved in the arts whatsoever.

Robert Smithson's *Spiral Jetty*, 1970, is an example of such a work. It is a huge spiral platform made of rocks in the Great Salt Lake near Rozel Point in Utah (fig. 2). Considering its location on a lake in the middle of the desert, it is not surprising that it entailed a huge effort.

Numerous landworks could not have materialized if it had not been for the collaboration of certain intermediaries forming alliances with artists. Locals told artists of specific sites and construction companies made concrete, dug trenches, and operated heavy machinery. Astronomers measured the desired alignments while contractors, civic officials, truck drivers, and core drillers all became part of the projects. There was thus an elaborate division of tasks involved in the creation of Land Art. Many artists hired people to help them execute their works, from simple labourers, such as Bill Vazan's task force of eight Peruvians that helped him make his ground drawings in Peru, to more specialized roles.

A total of 43 people, including Nancy Holt, worked on *Sun Tunnels*: "By the time *Sun Tunnels* was finished, I had spent one

year in Utah and had worked with 2 engineers, 1 astrophysicist, 1 astronomer, 1 surveyor and his assistant, 1 road grader, 2 dump truck operators, 1 carpenter, 3 ditch diggers, 1 concrete mixing truck operator, 1 concrete foreman, 10 concrete pipe company workers, 2 core drillers, 4 truck drivers, 1 crane operator, 1 rigger, 2 cameramen, 2 soundmen, 1 helicopter pilot, and 4 photography lab workers."<sup>3</sup>

Smithson had difficulty in finding contractors that were willing to attempt his project in the Great Salt Lake for *Spiral Jetty*. A number of contractors declined his proposal because they were not willing to risk moving heavy equipment in shallow lake water. The technical obstacles were accepted as a challenge by Bob Phillips who worked for Jack B. Parsons Asphalt Incorporated. Robert Hobbs informs us that: "In the making of *Spiral Jetty*, 6,650 tons of material were moved, and 292 truck-hours (taking up to 30 to 60 minutes per load) and 625 man-hours (adding up to more than 10 tons of material per hour) were expended in moving it."<sup>4</sup>

Journalist Mark Saal describes the mediation entailed to create *Spiral Jetty*:

As far as art collaborations go, this one looked to be a sort of 'Mona Lisa' meets 'Dogs Playing Poker'.

On the one hand, you had Robert Smithson and Nancy Holt, two New York City artists who could write stuff like, 'I was slipping out of myself again, dissolving into a unicellular beginning, trying to locate the nucleus at the end of a spiral', with straight faces.

On the other hand, there were guys like Bob Phillips and Grant Busenbark, construction workers from their hard hats to their steel-toed boots, guys who think the only good artist is a dead one - preferably one who's been dead since the 16th century.

So when Robert Smithson had this idea for an art project in the Great Salt Lake, one that would require construction workers wielding heavy machinery, the collaboration-from-hell was born. Smithson provided the

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<sup>3</sup> Nancy Holt, "Sun Tunnels," *Artforum* 15 (April 1977): 34.

<sup>4</sup> Robert Hobbs, "The Works," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 191.

inspiration. Busenbark, Phillips and a few others supplied the perspiration.<sup>5</sup>

While Smithson conceived the piece, there were technical aspects that he needed help with. Phillips was proud when he realized that he had helped create an important artwork, but "the thing I was most impressed with, rather than it being a big art piece, is that we were able to build it without sinking in the mud."<sup>6</sup>

An account of the hired help becoming more involved than what they were employed to do is that of Sid Feck, the truck driver that quarried and dumped some of the rock at Smithson's *Amarillo Ramp* in Amarillo, Texas.<sup>7</sup> He told Holt: "When I ripped this rock I noticed there were different veins of it that were different colors, and I tried to mix 'em as I put them on the ramp. Even when I got 'em out of my stockpile, I mixed them up for you just a little to kinda change the color, not to make one solid color on either side. . . . The rest of the lake is three or four different shades of yellow, really, and I think it sets off beautiful, don't you?"<sup>8</sup> Feck was concerned with aesthetics, something Smithson would not have bothered with, but he would have appreciated the driver's involvement.

A myriad of steps are often undertaken to create landworks; there are bureaucratic difficulties to contend with, such as leasing or purchasing land. Funding is required and budgets need to be abided by.

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<sup>5</sup> Mark Saal, "The Spiral Jetty," *Ogden (Utah), Standard-Examiner. Horizons*, 23 June 1996, 6D.

<sup>6</sup> Ibid.

<sup>7</sup> Smithson never saw this work completed, as he was killed in a plane crash while photographing and surveying the site. *Amarillo Ramp* was made posthumously by his wife, Nancy Holt, and some of his friends in 1973.

<sup>8</sup> Nancy Holt and Liza Bear, "Robert Smithson's Amarillo Ramp," *Avalanche* 7-8 (Summer/Fall 1973): 20.

The availability of resources has always affected the outcome of artworks. Using the expertise and technical skill of others has resulted in some grandiose landworks, allowing artists to expand their formal options and pursue massive projects. The only constraint is the dependence on funding, which affects the amount of such projects to be made. While Smithson was extremely productive in his proposals, bureaucratic obstacles hindered him and only five of his landworks materialized. In contrast, James Pierce was able to avoid legal matters; he made the *Garden of History* between 1970-1983 on land that he owns, working alone or sometimes recruiting his sons for help.

There is a sharp distinction between artists such as Long and Andy Goldsworthy (both British), and Smithson, Heizer, and Holt. For their more grandiose projects, the latter are dependant on financing and the cooperation of many intermediaries, while Long and Goldsworthy are relatively independent.

Long does not require vast amounts of money to construct his landworks, nor does he need to purchase or lease the land on which he makes them. The most expensive aspect of his production is probably the acquisition of plane tickets and whatever other means of transportation he chooses with which to get to his destinations. He differentiates himself from American artists: "I still feel that the American Land artists' work is very different from my philosophy about life and art. I'm not a political person but to me something like American Land Art is completely capitalist art, because you can't be that type of artist unless you have a million pounds or you own the land. It's about possession. I think my work is much more about freedom to be light on my feet and to leave invisible art or, to leave traces."<sup>9</sup>

Long does not depend on anyone except perhaps pilots and flight crew to get him to his destination. Once there, he camps, walks, and works in solitude. There is no communal effort within

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<sup>9</sup> Long, "Lines of Thought", interview by Nick Stewart, 10.

his work, the artistic process being a personal event: "It is never a performance. It is usually a very private, quiet activity. I am happy to make it in solitude. I think that is part of the energy I like in my work in that I have the opportunity to make art in amazing, beautiful landscapes which are very strong and powerful. Somehow part of the power and energy comes from being alone in that place."<sup>10</sup>

Since his experience in the landscape is solitary, Long belongs to the romantic tradition of the lone innovator. Asked if he wishes for a more social form and context for his work, to be more directly involved with people, he responds negatively.<sup>11</sup> Nevertheless, Long photographs his work and does exhibit in galleries.

Due to his independence, stemming from both the lack of intermediary involvement or financial constraints, Long's artistic output is vast. He has been able to produce many landworks throughout the continents, as both his smaller-scale and larger works are less time-consuming to create. They take minutes, hours, or days versus the months or years entailed for the creation of the more imposing projects of American artists. The freedom to make numerous landworks does limit the grandeur of his projects; they tend to be more humble than some of his contemporaries.

Among others, Goldsworthy shares the self-sufficiency with Long. The use of available, thus free materials accessible on site, and the humility and/or frequent impermanence of many landworks allows for a lack of bureaucratic inconveniences. Land is not affected by these works; they are either taken apart by the artist after being made and photographed, or they are left to decompose.

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<sup>10</sup> Richard Long, "An Interview with Richard Long by Richard Cork," interview by Richard Cork, *Richard Long. Walking in Circles*, Anne Seymour and Hamish Fulton (New York: George Braziller, 1991), 248.

<sup>11</sup> Long, "Lines of Thought," interview by Nick Stewart, 10.

This aspect side steps the legal issues that often restrain the projects of others.

### **Communal Versus Individual Functions**

Certain factors about Land Art challenged established conventions of the art world. Artists took art out of the studio, museum, and gallery, and put it in the landscape. They abandoned the confines of traditional exhibition spaces and extended their creative forces beyond convenient limits. In place of white walls, they chose open-air sites with the indeterminate features of the environment functioning as backgrounds.

It looked like artists were rejecting accepted rules and denouncing regular conventions, but their intentions were not necessarily to make an artistic revolution. They were interested in breaking away from museums and creating large artworks outside. Whatever negative effect their art had on traditional means of dissemination was less an intention than a by-product, an effect of their work's locations and formal characteristics.

Exterior locations allowed artists unprecedented formal liberties, since they were not restricted by the usual constraints imposed by the distribution system. After creating their landworks, there was no need for transportation to interior exhibition space, whether it be a museum, gallery, or home, which enabled them to make anything they wanted. Options were limitless; they could create landworks out of negative space or fuse their works into the landscape. They could make works as large and as ephemeral as they wished. Meanwhile, these formal features restricted the works' mobility and further perpetuated their confrontational availability.

So the apparent rejection of the gallery and museum establishments manifested itself on a number of interconnected levels. Whether due to transience, massive size or their incorporation into the landscape, landworks could not be moved. Since they could not be gathered and displayed for viewing within



interior settings, landworks could not be exhibited nor could they be bought by collectors. Subsequently, viewers could not benefit from convenient viewing. Thus artists put obstacles on both viewers and collectors, forcing them to accept art on new terms.

Thomas Messer called it 'impossible art', indicating his perception of the artists' confrontational approach to traditional art: "An absurd and ever more unmanageable size. . . . which continues to exceed every attempt at accommodation. . . . extreme fragility of objects evidently possessed of a death wish. . . . totally useless to all but those who would accept it for its own sake."<sup>12</sup> He argued that it denied the channels between artist and viewer and the intermediary machinery consisting of dealers, critics, and museums, thereby threatening the art establishment.

Allan Krapow called Dennis Oppenheim and Heizer 'un-artists' and 'non-art's advocates' who chose consistently to 'operate outside the pale of art establishments'.<sup>13</sup> By negating their status as artists and implying that they were confronting tradition, Krapow gave them an almost militant stance. However, this was not their intention.

It may have appeared as though Land artists were purposely placing limitations on their viewers and hindering any appreciation of their art, as if they were making this art for themselves, unconcerned whether other people saw it. Heizer defended himself against such allegations: "I was never out to destroy the gallery system or the aesthetic object."<sup>14</sup> He further explained: "The position of art as malleable barter-exchange item falters as the cumulative economic structure gluts. The museums

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<sup>12</sup> Thomas M. Messer, "Impossible Art - Why Is It?," *Art in America* 57 (May/June 1969): 31.

<sup>13</sup> Allan Kaprow, "The Education of the Un-Artist, Part 1," *Art News* 69 (February 1971): 28.

<sup>14</sup> Davies, 113.

and collections are stuffed, the floors are sagging, but the real space still exists."<sup>15</sup> Rather than stuffing museums with more objects, Heizer made landworks in his version of 'real space', which was frequently the desert.

Some critics saw this extension as inevitable: "When everything has found its way into the museum, the place of art will have to be outside it."<sup>16</sup> Harold Rosenberg insinuated that high art had reached its limits and that the only way to be innovative was to make art outside. While the result of exterior art was indeed a progression, there were other ways that artists could have contributed original art.

As we will see in the next chapter, there is an unusual dichotomy about the accessibility of Land Art. One's initial perception is that sites are extremely inaccessible; often located in the middle of nowhere, difficult to find, and approachable only by dirt roads, their locations hamper even the most ambitious viewers. Conversely, due to its placement outside, Land Art is completely accessible to anyone that wishes to see it or chances upon it.

Quotes by Gregoire Muller and Robert Morris exemplify this contradiction well. Of Walter De Maria and Heizer's work, Muller feels that: "In both cases, the layman and the specialist become equals when they view the piece, and no cultural background can help the experience of the piece. Because of this, De Maria's and Heizer's art is, despite its remoteness, essentially a popular one."<sup>17</sup>

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<sup>15</sup> Michael Heizer, "The Art of Michael Heizer," *Artforum* 8 (December 1969): 34.

<sup>16</sup> Harold Rosenberg, *On the De-Definition of Art* (New York: Macmillan Publishing Co. Inc., 1972), 238.

<sup>17</sup> Gregoire Muller, *The New Avant-Garde. Issues for the Arts of the Seventies* (New York: Praeger Publishers, 1972), 27.

Yet Morris maintains that: "It would not be accurate to designate privately funded early works of Smithson or Heizer or De Maria in remote places of the desert as public art. The only public access to such work is photographic."<sup>18</sup>

It might seem that they have opposing views but they are actually alluding to two different things: Muller is referring to the appreciation of landworks while Morris refers to their accessibility. Both make valid points. Landworks by Smithson, De Maria, and Heizer are public in the sense that they are available to people. However, as Morris points out, most people only see their works through photographs.

Despite its 'theoretical' availability, Land Art remains an essentially lonely art form that is seen by very few people. The fact that people usually see Land Art individually or in very small groups underscores the singular interaction between the piece and the observer.

The most common sensation that viewers have at landworks is of being in isolation. People that seek out this art form are aware that they will most likely be alone at the site, and are willing to experience sensations of solitude.

The general lack of awareness and interest in Land Art and the remote setting of many landworks virtually guarantees an isolation factor; unless escorted by travel companions, one is almost assured of being alone. In written accounts of trips to landworks, the presence of other people visiting simultaneously is rarely noted.<sup>19</sup> Thus the encounter and interaction with Land Art is usually a personal experience, and whatever actions that are performed are done alone. The sense of isolation is instilled by works due to remoteness, design, or both.

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<sup>18</sup> Robert Morris, "Robert Morris Keynote Address," *Earthworks: Land Reclamation as Sculpture* (Seattle: Seattle Art Museum, 1979), 11.

<sup>19</sup> The author did encounter two Dutch visitors at Morris's *Observatory* in October, 1994, and three others in March, 1996.

De Maria instructs viewers to visit his pieces alone: "Isolation is the essence of Land Art."<sup>20</sup> By suggesting that people view his pieces alone, he insinuates that viewers should be completely focussed on what they see, feel, and think.

Lawrence Alloway acknowledges that: "Solitude characterizes the *Spiral Jetty* and the *Double Negative* and *Las Vegas Piece*. Although the works are big, they are in no sense social. They are best experienced singly by spectators; only in that way can there be a proper acknowledgement of the sense of being alone that these works induce."<sup>21</sup>

Following De Maria and Alloway's advice guarantees an intimate encounter between the viewer with the art and its surroundings, leading to subjective impressions and thought patterns unhindered by the presence and influence of other people.

Kenneth Baker describes the sensation that isolation perpetuates for him at De Maria's work in the desert near Quemado, in New Mexico: "The most vivid sensation one has on arriving at the *Lightning Field* is of having left the world behind."<sup>22</sup>

Baker describes passing over a boundary into a 'different' world at *The Lightning Field*. Being alone tends to induce the kind of feeling that he has. Eileen Thalenberg's description of her experience at Tim Whiten's *Morada* exemplifies a similar experience, especially when enclosed by a landwork's form:

The banks of earth on either side of the walkway guide me and gradually become walls eliminating everything from peripheral vision. My eyes begin to focus on the destination. Then I begin to notice that all external sounds have been shut out: traffic, seagulls, human voices. At some point along the path I

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<sup>20</sup> Walter De Maria, "The *Lightning Field*," *Artforum* 18 (April 1980): 58.

<sup>21</sup> Lawrence Alloway, "Site Inspection," *Artforum* 15 (October 1976): 51.

<sup>22</sup> Kenneth Baker, *Minimalism. Art of Circumstance* (New York: Abbeville Press, Inc., 1988), 127.

feel that a transformation is taking place. In the absence of outward distractions I am forced to shift my focus inward. I become aware of the sounds I am making, my breath; I am conscious of each of my senses. As I go deeper into the earth I seem to go deeper inside myself. In the chamber it is cool and absolutely silent. I feel at peace, in a sacred place, a place of meditation . . . . I feel as though I am emerging from the bowels of the earth and participating in an ancient ceremony. It has been an intensely private and personal experience.<sup>23</sup>

While a landwork is not intended to be 'a sacred place', Thalenberg's narrative is descriptive of a passage from one 'world' to another. Her account is also particular to landworks that are meant to be penetrated and thus enclose the viewer. By entering the space of a landwork, even if not as confining as the chamber at *Morada*, one is contained within its silent structure; a lone viewer's seclusion compounds the effect of isolation. However, *Morada* is not as secluded as Thalenberg makes us think; it was part of an exhibition called *Artpark* in Lewiston, New York, in 1976.

To John Coplans, the location of Smithson's *Amarillo Ramp* "is a terribly lonely place, cut off and remote, conveying the feeling of being completely shunned by man."<sup>24</sup> *Amarillo Ramp*, like *Spiral Jetty* or *Sun Tunnels*, is completely secluded, which compounds the feeling of loneliness and focusses the viewer's attention on the landwork and its surroundings exclusively.

Artists know that few people will actually see their landworks, and that the few who do will most likely be alone or with a few friends.

Long considers the presence of many people at landworks negatively: "Somehow part of the power and the energy comes from being alone in that place. The simplicity and feeling of being alone is actually part of the work. So it would be quite

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<sup>23</sup> Eileen Thalenberg, "Site Work - Some Sculpture at Artpark 1977," *Artscanada* 34 (October/November 1977): 19.

<sup>24</sup> John Coplans, "Robert Smithson and the 'Amarillo Ramp'," *Artforum* 12 (April 1974): 42.

inappropriate to have a load of people visiting it at a particular site and that would change the whole nature of the place."<sup>25</sup>

James Turrell feels that the largest number of visitors that *Roden Crater* could handle would be three per day. The artists' choice of location (unless fulfilling a commission) and their statements make it evident that landworks are not meant to be overrun with people. Holt selects her sites so they will "have a kind of meditative space. Even in the middle of a city or on a campus, I find the right place that is somewhat removed."<sup>26</sup>

By 1976, De Maria estimated that between 40-50 people had seen *Las Vegas Piece* in eight years, and 20-30 people for his *First Lightning Field* (his first, smaller version of this landwork, near Flagstaff, Arizona, was made in 1974).<sup>27</sup> If his figures are correct, the few that did visit his works were definitely overwhelmed by a sense of solitude in the vastness of the desert terrain. At De Maria's present *The Lightning Field*, made between 1974-77, the amount of visitors is controlled and limited to six people per day.

The more remote the area, the less likely that many people will visit landworks. And while their structures are designed with the viewers' participation in mind and their large scale suggests otherwise, artists do not necessarily expect nor desire large groups of people to visit them simultaneously.

The 'communal' aspects of Land Art have nothing to do with the artists' intentions and are simply a by-product of their art's placement outside. Artists and critics may insinuate communal

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<sup>25</sup> Richard Long, "An Interview with Richard Long by Richard Cork," interview by Richard Cork, *Walking in Circles*, Seymour and Fulton, 248.

<sup>26</sup> Ted Castle, "Nancy Holt, Siteseer," *Art in America* 70 (March 1982): 87.

<sup>27</sup> Alloway, "Site Inspection," 55.

objectives, but considering the remoteness and frequent impermanence of landworks, their statements are uncorroborated.

John Beardsley feels that there is a growing conviction among artists that art belongs outside, that there is a desire for a new, less specialized and more local audience: "They seem addressed to curious local citizenry, or, more important, to anyone with a special empathy for any of the different landscapes engaged by the works."<sup>28</sup> 'Curious locals' are among Land Art's viewers as Beardsley suggests, but they are probably not large enough in number nor sufficiently appreciative to warrant the creation of landworks.

Nancy Foote claims that: "Art in the landscape decentralizes art consciousness; awareness flows from the cities to the rest of the country. . . . Art is again among everyone, not isolated, and very much a part of our surroundings."<sup>29</sup>

It is true that because art is no longer exclusive to traditional art-viewing locations in cities, the option of art appreciation is available to everyone.<sup>30</sup> Due to its newly 'unlimited accessibility', Land Art draws unconventional viewers. This means that people that might never bother to visit a museum, either from lack of access, desire, or awareness, might be confronted with monumental works of art in unusual locations.

So farmers till their land around Morris's *Observatory* in Holland, and the bus driver and passengers of bus #154 that commute between Lelystad and Emmeloord several times each day see the

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<sup>28</sup> Beardsley, *Probing the Earth*, 26.

<sup>29</sup> Nancy Foote, "Situation Esthetics. Impermanence Art and the Seventies Audience," *Artforum* 18 (January 1980): 26.

<sup>30</sup> Land Art still has elitist aspects that it cannot escape. Its dissemination is directed to the few who read about Land Art in books, magazines, and newspaper articles, or those who visit galleries and museums that do have 'exhibitions'. Another elitist feature is the fact that few people can afford the expense needed to travel to see landworks.

landwork as they pass it along the road. And between 1973-76, the retired railroad workers living in Lucin, Utah (which is now uninhabited), were able to watch Holt's *Sun Tunnels* materialize near their home.

Some art worlds begin with the development of new audiences; the work produced may not be so different from work in similar genres, but it attracts a new audience.<sup>31</sup> As such, Land Art also complies by having unusual viewers constituting part of the art world, and this is a factor that appears to attract some artists.

Holt said of her late husband: "Bob always was interested in making work which would make a difference to people outside the art-cult."<sup>32</sup> Smithson wanted people to visit *Spiral Hill* and *Broken Circle*, and concerned himself with structural elements that were meant to accommodate and support larger groups of people.<sup>33</sup>

Smithson, who thought of his works as collaborative art, loved the idea of *Spiral Jetty* workers bringing their families to the site for picnics.<sup>34</sup> In fact, Smithson's assistants were like his works' first viewers.<sup>35</sup>

Long is attracted to the fact that non-typical art viewers see his works: "It is not true to think that my landscape sculptures are never seen. They are often seen by local people in the country, occasionally as I make them, or discovered by chance by people who might not recognize them as art but who would nevertheless see

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<sup>31</sup> Howard S. Becker, *Art Worlds* (Berkeley: University of California Press, 1982), 311-312.

<sup>32</sup> Alex Gildzen, "'Partially Buried Woodshed': A Robert Smithson Log," *Arts Magazine* 52 (May 1978): 120.

<sup>33</sup> Smithson wrote this in letters to Sjouke Jilstra. Sjouke Jilstra, telephone interview by author, Emmen, 27 October 1994.

<sup>34</sup> Lucy Lippard, "Breaking Circles: The Politics of Prehistory," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 33.

<sup>35</sup> Lise Lamarche, "Saisir l'art excentrique. Notes vagabondes Sur un Lieu Dit Land Art," unpublished source from author, 5.



them. I am sort of interested in all the different contexts that work can be put into the world and then also received back by different people in different circumstances."<sup>36</sup>

But how many viewers does this really constitute? People who chance upon landworks are few, and those that choose to really *look* at them when they do are even fewer.

Some landworks provide visually stimulating surroundings that offer protective shelter to people who gather and participate in private activities. Reports of local youth gathering at landworks have been noted, but whatever activities they engage in may have nothing to do with their awareness of the artistic merit of the work.

Alice Aycock speaks of her first wooden *Maze*, 1972, on Gibney Farm near New Kingston, Pennsylvania: "I had expected that no one would ever go to it. However, it seemed to have a psychological atmosphere that attracted kids from a nearby town, who would drink, smoke grass, and engage in their 'ritualized' social activities."<sup>37</sup> Of his *Garden of History* in Hinkley, Maine, James Pierce mentions: "Local teenagers have obviously ritualized the place, conducting various rites of passage, and vandalizing the more fragile pieces."<sup>38</sup>

Aside from landworks deemed as 'hangouts', those incorporated into parks and other public spaces may also attract groups of people by being focal points in an urban jungle that serve the community as potential places of communal gatherings. As landmarks, they provide areas where people can gather to partake in shared

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<sup>36</sup> Richard Long, "An interview with Richard Long by Richard Cork," interview by Richard Cork, *Walking in Circles*, Seymour and Fulton, 248.

<sup>37</sup> Janet Kardon, "Janet Kardon Interviews some Modern Maze-Makers," *Art International* 20 (April/May 1976): 65-66.

<sup>38</sup> James Pierce, letter to author, Bristol, England, 17 October 1994.

activities such as picnicking or playing while having the choice of enjoying the art, the surroundings, or both.

However, meetings that might take place at landworks are usually incidental, and whatever behaviours are performed on a communal level are circumstantial. There are a few exceptions to this principle. Organized groups provide small gatherings in which everyone shares an interest and whatever behaviours people partake in during such situations are communal. Some landworks have an especially public character during certain events; those that are made for exhibitions are viewed by groups of people simultaneously as are those that contain an astronomical alignment. For example, there were at least twenty five people present during the summer solstice on 21 June 1997 at Holt's *Sun Tunnels*.

Though gatherings at landworks are not part of the artists' goal when constructing their art (despite the fact that some works are constructed to be durable and capable of holding large groups of people) and some may even find such groupings inappropriate, there is an occasional communal interest in landworks.

### **The Reception of Land Art**

As solitary as landworks are, there is also a thriving art world in which artists, critics, bureaucrats, and viewers take part communally. Their purpose is to greet, appreciate, exhibit, and contend with this elusive art form.

Landworks are not a typical commodity that can be sold by dealers to collectors, yet artists need funding to purchase or lease land and they have to pay technical crews or whatever assistants they hire for labour. Some of the more grandiose landworks require huge amounts of money to be made.

Howard Junker recognizes the need for a solution caused by the impossibility of owning landworks: "Without a marketable art work, the earth workers are hoping that new concepts of art patronage

will be developed."<sup>39</sup> Smithson described a possible solution concerning his works *Spiral Jetty* and *Broken Circle*: "The Jetty and the Broken Circle really aren't collectibles. They're supported through the cooperation of different groups that have no commodity fetish."<sup>40</sup>

The existence of these two works is dependant on the support of people that were not even involved in their creation. Smithson's *Broken Circle* and *Spiral Hill* were constructed with the collaboration of Sjouke Jilstra, a geographer and head of the cultural center in Emmen, Holland. These landworks were supposed to be part of a temporary installation, originally built for the *Sonsbeek* exhibition of outdoor sculpture in 1971. The people of Emmen liked them so much that they voted to preserve them as a park and provide funds for their maintenance.

The same situation applies to Morris's *Observatory* that has also survived due to local support. The first version of this landwork in Velsen, Holland, was also made in 1971 for the *Sonsbeek* exhibition, but it was dismantled after the show's closure. It was reconstructed in 1977 at its present location between Lelystad and Dronten, in Flevoland. Few landworks have the luxury of maintenance aside from those commissioned as land reclamation products or as parks, both of which are taken care of by authorities that upkeep them.

Land Art requires unusual patrons; it is difficult to find financing for ambitious projects. This art is not a typical investment; it is not gratifying in terms of materialistic ownership. Patrons are unable to own the work they are funding in the literal sense of buying an object and taking it home for their personal pleasure of viewing.

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<sup>39</sup> Howard Junker, "The New Sculpture. Getting Down to the Nitty Gritty," *Saturday Evening Post*, 2 November 1968, 45.

<sup>40</sup> Robert Smithson, "Conversation with Robert Smithson on April 22nd 1972," interview by Bruce Kurtz, *The Writings of Robert Smithson*, ed. Nancy Holt, 203.

Since artists are not selling ownership of objects, the only means that collectors can become associated to this art form is to finance their endeavours. Therefore, wealthy individuals contract artists to produce works. They do not dictate what should be produced as in the past; they are silent patrons that support the artists without getting involved.

Such private patrons are very rare. Collectors like Robert Scull, who had acquired a large collection of Pop Art during the earlier 1960s, sold much of his collection to purchase sites for Land Art. Heizer spoke highly of him: "Bob Scull means a lot to me. He made my work interesting, because I had an audience with this guy. He liked the stuff I was doing. Back in 1969, he came out to the desert and looked at it, and flipped out. He gave me money. But it was strictly business. I mean, he bought stuff and he commissioned things. . . . He's one of the few people who is really into it. He knows what's going on. . . . He's one of the few pros on the scene."<sup>41</sup>

In 1968, Scull commissioned Heizer to make his *Nine Nevada Depressions*. Due to his financial involvement, he was able to watch their construction and theoretically owned them, though they all deteriorated several months after creation. Another reward was the pleasure of knowing that particular works exist or once existed because of his financial patronage.

Another solution to the difficulty of financing is to accept commissions to make works in places that are publically owned; these take the form of public art and land reclamation projects (the latter serve society by beautifying plots of land that have been damaged and abandoned by industries). Though it is not our intention to discuss either in detail, they are relevant in this context to reveal how artists find their own distribution systems.

Though it might have seemed that landworks were unlike traditional art forms that relied on museums and galleries for

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<sup>41</sup> Gruen, 98.

exposure, they also depended on them. Baker made a valid point when she noted that: "It is ironic that such works, originally motivated partly by the desire to find a way of making art outside the art world's gallery and museum system, end up largely dependant on that system's mechanisms for dissemination."<sup>42</sup> The need to raise money to finance their endeavours motivated artists to establish a relationship with galleries and museums; thus, they were not completely free of traditional forms of distribution.

Though it was not possible to exhibit actual landworks, drawings, sketches, and photographs of materialized landworks or project proposals, as well as interior works were made accessible, bridging the gap between landworks and the establishment. These objects reinstated the commercial aspect of art by making a commodity available to the art-buying public. So, despite the non-marketable value of Land Art and the negation of materialistic urges, artists did accommodate certain impulses of the art world.

Some artists made interior works consisting of site fragments brought indoors and rearranged. Smithson made his series *Sites/Nonsites*, and Long made (and still makes) interior 'landworks' out of matter that they removed from exterior sites.<sup>43</sup> These installations offered another solution to the inaccessibility of landworks by giving gallery and museum goers the opportunity to view 'landworks' indoors, with the option of buying them.

There were two galleries in New York associated with Land Art that represented some of the artists, the John Weber Gallery and the Dwan Gallery. Aside from showing interior works and photographs, they could also support the construction of landworks

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<sup>42</sup> Elizabeth Baker, "Artworks on the Land," *Art in America* 69 (January/February 1976): 93.

<sup>43</sup> Unless people happen to encounter Long on one of his walks and witness his creations in process or see them shortly after they are made, Long's interior works are the only ones that viewers can actually see. Those in the landscape are either dismantled or left to be erased by the elements.

without actually exhibiting them. By helping to finance works, galleries and art institutions were labelled avant-garde and gained exposure, benefiting from the association with a famous artwork even if it was not in their midst.

It was the Dwan Gallery, whose patron and manager was Virginia Dwan, that hosted the first gallery show in October of 1968 called *Earthworks* that we mentioned earlier.<sup>44</sup> Dwan was a vital patron of Land Art. Aside from presenting the first exhibition and numerous subsequent shows in her gallery, she raised the \$27,000 needed to buy the square mile of land for Heizer's *Double Negative* as well as the land for De Maria's *Las Vegas Piece*, both done in 1968.<sup>45</sup> She commissioned Heizer's *Circular Displacement Drawings* of 1970. She was also involved in supporting Smithson's *Spiral Jetty* in cooperation with the Ace Gallery as well as De Maria's *First Lightning Field*.

The Dia Art Foundation owns a number of works, both interior and exterior, by De Maria. His *The Lightning Field* is the only landwork that is run by an organization, accounting for its more unusual regulations. It charges a fee, requires advanced bookings, and limits access, somewhat recreating the museum approach.

Museums also became involved with landworks, some of which were made on museum land. Becker asked us to:

Suppose earthworks become an important art form. Museum personnel, whose evaluations of museum-collectible art have had important consequences for the careers of artists and art movements, will lose the power to choose which works will be displayed. No one needs their museums to display such works. Everyone involved in museum-collectible art (collectors, museum curators, galleries, dealers, and artists) loses something. Since every art world creates value by the agreement of its members as to what is valuable. . . . when someone successfully creates a new world which

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<sup>44</sup> The Dwan Gallery closed in 1971.

<sup>45</sup> *Double Negative* was supposed to be sold to a European collector, but due to financial bickering, Heizer cancelled the deal.

defines the mastery of other conventions as the mark of artistic value, all the participants in the old world who cannot make a place in the new one lose out.<sup>46</sup>

Certainly, people had to adapt to the new conventions of Land Art if they wished to stay in the art world's game, playing the sometimes inconvenient rules according to artists' demands.

Thomas B. Leavitt proposed the kind of response necessary to allow for the birth of a new art form, suggesting that it would be conceivable "that a new kind of museum, a true 'museum without walls,' would come into being."<sup>47</sup> He noted that Land Art had profound implications for the future of art and museums. Younger artists renounced the construction of art objects in favour of creating an art experience related to the broad physical environment. Museums that wished to support contemporary artists had to back such projects rather than acquire art objects. If they wanted to exhibit actual works, they had to provide adequate exterior exhibition space and cooperate with artists in the construction of landworks on their land.

The first museum exhibit, entitled *Earth Art*, took place in 1969 between February and March at the Andrew Dickson White Museum of Art in New York. It featured actual landworks outside as did the next major exhibit, *Earth Air Fire Water: Elements of Art*, at the Museum of Fine Arts in Boston, in 1971.

The only way to exhibit actual works was if they were created specifically for a show and made on museum grounds. There were other outdoor exhibitions that displayed exterior works. Among these were *Sonsbeek* in Holland, 1971, *Monumenta* in Newport, Rhode Island, 1974, *Artpark* in Lewiston, New York, 1976, *Documenta* in Kassel, Germany, 1977, *Probing the Earth* at the Hirshhorn Museum and Sculpture Garden in 1977, *Earthworks: Land Reclamation as*

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<sup>46</sup> Becker, 306-307.

<sup>47</sup> Thomas W. Leavitt, "Foreward," *Earth Art*, ed. Nita Jager, n.p.

*Sculpture*, in Seattle, Washington, 1979, and the *Nature-Sculpture* show in Stuttgart, in 1981.

Landworks created as part of an exhibition tended to be temporary, dismantled after the exhibit's closure (though there were exceptions such as at *Sonsbeek*, which was mentioned earlier). Such exhibitions provided the rare viewing of Land Art and educated the public about this art form, as did those that simply displayed photographs and interior works.

But aside from the chance that people got to see actual works, the most common way of solving the problem of inaccessible art was through photography. Foote found it paradoxical that an art form that tried to veer away from the establishment was somehow still dependant on it for its dissemination: "It's ironic that an art whose generating impulse was the urge to break away from the collectible object (and hence the gallery/collector/art book/syndrome) might, through an obsession with the extent and quality of its documentation, have come a full circle."<sup>48</sup>

### **Photography as Dissemination**

Photography plays a vital role in the dissemination of Land Art due to a combination of interconnected factors, all stemming from the inaccessibility of landworks. Therefore, Land Art is forced to rely on photography for its exposure to the public, and its dissemination is mainly achieved through visual documentation in newspapers, magazines, books, and a few films. Long accepts photographs for what they are: "They make accessible to a large public things they won't see themselves or art that may disappear."<sup>49</sup>

The factors hindering actual viewing limit the number of people that actually see Land Art. Since people cannot

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<sup>48</sup> Nancy Foote, "The Anti-Photographers," *Artforum* 15 (September 1976): 54.

<sup>49</sup> Long, "Lines of Thought," interview by Nick Stewart, 12.



familiarize themselves with landworks in the traditional manner of visiting a museum or gallery, photographs are the only means with which most people can become aware of their existence and identify their form. Therefore looking at photographs substitutes actual viewing.

Referring to Heizer's *Double Negative*, Rosenberg notes: "It might, as we are told, have taken two cranes, one loader, four transports, four cement trucks, and a sixty-eight-ton mass of granite to carry out one of Heizer's boulder-moving enterprises in Nevada, yet the result is essentially art for the book - that is, for photographs with captions - since once the rock has come to rest, visual interest in it depends on the cameraman's angle shots, his choice of distance, and the artist's explanation of his project."<sup>50</sup>

Rosenberg's comment presents an interesting concept. Why do artists go to the trouble of creating these expensive, time-consuming projects if really, the only way that most people will know about them is through photographs? Apparently, this type of viewing satisfies Heizer and others who make remote and inaccessible works.

The fact that artists photograph their works also answers the question about whether they care if people see them. If artists are creating landworks only for their own benefit and the pleasure of making them, they would make no attempt to share them with others. They would not pursue fame, would not agree to participate in exhibitions that publicize their art, and would certainly not allow photographs to adorn pages of books, newspapers, and magazines.

Unfortunately, there are negative aspects to photographs of Land Art. Visual documentation is incapable of yielding all the information about the work and its space. Photographs are void of the dynamics of nature. They cannot reproduce three dimensions or the effect of experiencing a landwork physically. Viewers must

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<sup>50</sup> Rosenberg, 34.

imagine the sensations that the images animate, as they cannot grasp their true size or the feelings they evoke. So Land Art loses part of its substance when seen through a secondary image. It is best appreciated when experienced through actual physical interaction; only that way can a precise definition of form emerge.

Carl Andre goes as far as claiming that photographs hinder art appreciation:

The photograph is a lie. I'm afraid we get a great deal of our exposure to art through magazines and through slides and I think this is dreadful, this is anti-art because art is a direct experience with something in the world and photography is just a rumour, a kind of pornography of art. . . . All they're good for is an aid to the memory. If you've seen the piece you can be reminded of it, or a photograph can be used in some sense as documentation. But I think photographs just deceive when they are used to convey an impression of the work which a person has not seen.<sup>51</sup>

Andre's criticism also applies to any place or object outside. Unless each landwork could be depicted through a series of photographs shot at space intervals 360 degrees around so that each of their formal aspects could be seen, including their surroundings from all angles, viewers cannot get a complete image of the works. It would also be necessary to provide the same series shot at different times of the day, during various weather conditions, and during different seasons. Only after viewing such series of photographs could viewers get a 'sense' of the landworks and the places that harbour them. Of course this is an unrealistic option, so viewers must compromise with single images.

Another aspect that photographs cannot replicate is the sense of monumentality that characterizes some works like Heizer's *Double Negative* or Morris's *Observatory*. Including a person within the landworks would be beneficial as it could help people gauge their size. Though dimensions often accompany illustrations, it is

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<sup>51</sup> Andre, "Carl Andre," 24-25.

difficult to imagine an idea of scale without a separate feature to compare it to.

A further problem with photographs is that they are dependant on the photographer's choice of angles and decision about subject matter, namely what part of the landwork to photograph. A photographer's subjective preference about the work's best features may hinder the viewer's accurate knowledge of its form and setting. Alloway suspects that there are discrepancies between sites and their documentation, that some photographs of works are embalmed in single images. He notes that Smithson's *Amarillo Ramp*, 1973, in Amarillo, Texas, is usually photographed when the creek is dammed up, when in fact, half of it belongs in water (fig. 3, fig. 4).<sup>52</sup> Similarly, *Spiral Jetty* is usually seen above water in photographs, yet it would be appropriate to depict it covered in water as well, as it is frequently submerged since 1972.

Despite the problems stemming from the potential inaccuracy of photographs and their inability to portray all aspects of a landwork, they provide the dominant form of information about what these works look like. Most viewers are satisfied with photographs, due, among other reasons, to the difficulty in going to see the actual works.

Photography is also used to mark the landworks' existence. Impermanent works rely on photography to document and preserve their form by providing a visual memory. Some landworks exist for so short a time before they deteriorate, that without a photograph, there would be no record of their brief tangibility. Thus the impermanent is made permanent through photography.

Edward Hall explains that humans are not passive recipients of external stimuli.<sup>53</sup> He instructs his readers to consider a mountain

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<sup>52</sup> Alloway, "Site Inspection," 49.

<sup>53</sup> Edward T. Hall, "Art, Space, and the Human Experience," *Arts of the Environment*, ed. Gyorgy Kepes (New York: George Braziller, 1972), 57.

initially viewed from a distance, and to note how it becomes a very different mountain after it has been climbed repeatedly, and then viewed from the same spot where it was first seen.

Similarly, consider any art work when viewed through an image; it assumes very different characteristics and qualities when seen first-hand. The same holds true for appreciation of the surroundings; photographs may depict the environments that surround landworks but they cannot stimulate the sensations that actually being there would. That is why some people travel to see actual works, which along with trips to ancient sites, will be the subject of our next chapter.

TRIPS

## Modern Trips

While critics document their trips to landworks, the connection between the need to travel in order to see either ancient or modern sites is not made explicitly. But the association is always there. Similar parameters exist between trips to both; the factors that instigate the trip, the goals, and the actions are basically the same.

There are varying degrees of trips to sites according to visitor intentions, to site location and availability, and subsequently, to difficulty in reaching the site. We propose to introduce a way to classify trips, specifically to designate the visit to ancient and modern sites. Primary, secondary, and casual are the classifications that will be used to describe the intensity of a visitor's desire to see the site, distance travelled, and the effort of displacement (indirectly related to a site's location).

The participant's intentions are easily classified: the higher one's intent to see a site, the more primary the trip. Therefore, one who travels specifically to see a site or incorporates the visit as an essential part of a trip is defined as a primary visitor. The term primary designates a conscious decision to visit a site and a subsequent displacement to see it. The trip for one who chooses a destination according to site tends to be meaningful to the visitor, and the event of reaching the destination can have a special significance. All elements related to the trip are planned to create the most pleasurable experience possible.

Tourists or locals that discover the existence of a possible day-trip and make a conscious decision to visit a site are secondary visitors. These trips constitute intentional visits that are not the sole intention of travel.

For example, if one travels from Amsterdam to Lelystad specifically to see Robert Morris's *Observatory*, the twenty five minute train-ride, fifteen minute bus ride, and walk from the bus stop constitutes a primary trip. If one is already in Lelystad looking for something to do and visits the landwork, it is a secondary trip. Similarly, if one is in London and chooses to visit

Stonehenge, one is a primary visitor. If one is already nearby sightseeing and incorporates Stonehenge as part of the itinerary, one becomes a secondary visitor.

A casual trip occurs when a visitor comes across a site unintentionally, for example, if they are part of an organized tour. If visiting the site is not premeditated, and one's presence is circumstantial, the visit is casual. Due to its unusual locations, people sometimes encounter sites whether interested in art or archaeology or not, thereby becoming casual visitors.

Aside from visitor objectives and intent, other elements affect the nature of a trip. The effort entailed relative to distance travelled to reach a destination, and the difficulty in finding a site both elevate a trip's rank.

The location of a site, and consequently, its availability, is thus related to the nature of a trip. Those in remote areas dictate the most primary type of trip, requiring the most effort of displacement and instigating the most challenges. Works such as Michael Heizer's *Double Negative* or Robert Smithson's *Spiral Jetty*, both in the middle of the American desert, enforce primary trips by virtue of their inaccessibility and the fact that there are no other attractions in the vicinity. The farther one is displaced, the more steadfast the action becomes.

Sites located in cities or relatively close to places of habitation require either primary or secondary trips. If considering distance travelled, for citizens of a city or people living nearby, only a secondary trip is required. These sites are more conveniently located and generally easier to find as distinguishable features such as road signs, numbered buildings, and even civilians guide travellers on their route.

For the residents of Emmen, in Holland, going to see Smithson's *Broken Circle* and *Spiral Hill* is easy. Located in a quarry close to the town center, people can cycle, drive, or even walk to the landworks. Yet for people living outside Holland, a primary trip is required. Emmen must be reached from one of the

larger Dutch cities that is the port of entry (unless driving), such as Amsterdam or Rotterdam. The trip entails renting a car and driving a few hours, taking a bus, or taking a two and a half hour train-ride (from Amsterdam) with connections. Whether people have travelled to Holland specifically to see the landworks is irrelevant; the mere choice of going to Emmen makes this a primary visit since the decision and effort is paramount.<sup>1</sup>

Regardless of how they get to the general region of a site, whether by a primary or secondary trip, those that must search for their destination are more determined than those who find the site easily. Thus the degree of difficulty in finding a site is also related to these subdivisions; the more energy expended, the more primary a trip.

An obvious, yet crucial aspect that must be taken into account when considering modern trips is the ease with which people can travel. Modern means of transportation make long distance travelling feasible. Considering the easy access to different parts of the world, geographical barriers are no longer obstacles, barring financial constraints.

#### **Present-Day trips to Neolithic Archaeological Sites**

Dean MacCannell suggests that tourists visit ancient sites in order to reinforce their own feelings about living in a modern society, while comparing themselves to their predecessors: "Modern international mass tourism produces in the minds of the tourist juxtapositions of elements from historically separated cultures and thereby speeds up the differentiation and modernization of middle-class consciousness."<sup>2</sup> He explains that people look everywhere for their authenticity to see if they can find it reflected in the simplicity, poverty, chastity, or purity of others.

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<sup>1</sup> These landworks are popular with both locals and international visitors. Jilstra, interview by author.

<sup>2</sup> Dean MacCannell, *The Tourist. A New Theory of the Leisure Class* (New York: Schocken Books, 1976), 27.



MacCannell also claims that: "The concern of moderns for 'naturalness', their nostalgia and their search for authenticity are not merely casual and somewhat decadent, though harmless, attachments to the souvenirs of destroyed cultures and dead epochs. They are also components of the conquering spirit of modernity - the grounds of its unifying consciousness."<sup>3</sup>

MacCannell provides reasons for the tourists' interest in ancient sites. Visiting such places can indeed instigate a longing for cultures and times long gone. By seeing ancient sites, people may simultaneously admire the simplicity of these past epochs, and feel better about themselves and the state that they have achieved. However, this reasoning does not pertain to all tourists. Seeing ancient manifestations may not provoke the kind of vanity that MacCannell proposes; rather the experience may lead to humbling thoughts. Certainly during the 1960s, the trend was towards admiring the ancients and their ways rather than feeling superior to them.

We can make inferences about modern trips to ancient sites and the purpose they fulfill by analyzing the potential interests of visitors. It is possible to determine their purpose by asking people directly what their objectives are and by conducting visitor profiles at sites that have monitored access.

Unless done for professional purposes (photography, archaeology, etc), the most popular reason for visiting the ancient sites that form our paradigms is the fascination that tourists have about them due to their large size, the inconclusive theories about their functions, the apparent difficulty in making them, and the interest that people have about their predecessors. Since the famous speculations by Gerald Hawkins and Erich Von Daniken about Stonehenge and the Nazca lines were sensationalized by the media in the mid-sixties and early seventies, people are drawn towards seeing them.

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<sup>3</sup> Ibid., 2-3.

This interest is extended in time and scope as tourists are attracted to megalithic sites in general, while the Nazca lines continue to lure tourists. The Hopewell and Adena mounds are also appealing as ancient manifestations veiled in mystery. Curiosity compels people to see ancient sites and attracts tourists all over the world.

The most popular touristic destinations that form part of the Land artists' list of ancient references are those that have attained international stature such as Stonehenge (England), Newgrange (Ireland), Callanish (Scotland), Carnac (France), the Nazca lines (Peru), and the Adena and Hopewell mounds (the United States).

Table 1 depicts how many people visited each of these sites in 1993; the high numbers indicate the public's interest in these places (tabulations have probably increased since then as sites become more accessible and organized). Data was obtained from organizations that manage the sites and monitor access through an entrance fee.

**Table 1. Visitor Numbers to Archaeological Sites in 1993<sup>4</sup>**

Stonehenge	672, 056	a*
Newgrange	139, 741	b*
Carnac Alignments	44, 789	c*
Callanish	35-40,000	d*
Nazca lines	41,072	e*
Adena Serpent Mound	40,000	f*
Hopewell Mounds	33,832	g*

Stonehenge, in Wiltshire, England, is the most renowned megalithic site in the world, given World Heritage Site status by UNESCO in 1984 (fig. 5). This circle of standing stones is considered one of the wonders of Britain, and has attracted more

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<sup>4</sup> Sources

a\*: Exact number: provided by English Heritage. Clews Everard, General Manager of Stonehenge, letter to author, Amesbury, Wiltshire, 7 June 1995. Actually, it is estimated that an additional 150,000 people visit Stonehenge each year without going through the turnstile by viewing it from the road.

b\*: Exact number: provided by The Office of Public Works, Ireland. Claire Tuffy, letter to author, Dublin, 29 September 1994.

c\*: Estimate: this number pertains to attendance to the Museum of Prehistory in Carnac. Anne-Elizabeth Riskine, curator, Carnac, letter to the author, 11 May 1995. As an explanatory supplement to the alignments and tumuli, it is likely that most people visiting the museum take the time to visit the archaeological sites of the region. Thus this is a low estimate; surely some people that visit the alignments and tumuli do not visit the museum.

d\*: Estimate: provided by Historic Scotland. Noel Fojut, Principal Inspector of Ancient Monuments, letter to author, Edinburgh, 9 June 1995. Access to the site was free, thus unmonitored until the visitor center opened in July 1995.

e\*: Approximate number: Statistics of Accommodation in the Province of Nazca and Palpa. Ibeth Acuna Escobar, Promotion Chief of Foptur (Fondo de Promocion Turistica del Peru), letter to author, Lima, 30 June 1995.

f\*: Approximate number: provided by the Serpent Mound brochure.

g\*: Exact number: provided by the Hopewell Culture National Historic Park. Robert Peterson, Park Ranger, letter to author, Chillicothe, Ohio, 9 August 1994.

than 600,000 visitors per year for the last decade. Stonehenge has also aroused astonishment from visitors throughout the centuries.<sup>5</sup>

The incredibly high attendance of visitors to Stonehenge may be accounted for by a combination of factors, including its fame and proximity to London. Since it is accessible by public transportation, is frequently included in tours of the region, and is a short drive away from London (approximately one hundred kilometers), Stonehenge is a convenient site to see. London is one of the world's most popular cities to visit; among the millions of tourists that visit it each year, hundreds of thousands choose to see Stonehenge. In 1992-93, it was listed as one of the top ten most-visited sites in England.

Stonehenge is presently managed by English Heritage, an organization that cares for over 350 historic buildings and ancient monuments in England. Surrounded by a wire fence, the site is complete with a cafeteria, souvenir shop, toilets, organized parking area, a tunnel built under the road that connects the entrance with the site, and even an admission charge. These facilities are not unique to Stonehenge; the most famous sites all share these helpful and profitable amenities.

In 1991, a visitor survey was conducted and showed that 57% of visitors came from abroad. Most were North Americans, Europeans, and Japanese. Most people spend an average of forty minutes at the site.<sup>6</sup>

Newgrange is also an extremely popular site (fig. 6). It is located in the Boyne Valley in County Meath, Ireland, and is managed by The Office of Public Works. Considered one of the finest examples of a decorated passage grave, it has an indisputable

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<sup>5</sup> For a detailed account on the history of Stonehenge and the first visitors that travelled to see it, see Christopher Chippindale, *Stonehenge Complete* (New York: Thames and Hudson, Inc., 1983, 1994).

<sup>6</sup> Everard, letter to author.

astronomical alignment during the winter solstice.<sup>7</sup> The number of visitors per year has steadily increased since the first tabulations, from 30,437 in 1969 to 139,741 in 1993.<sup>8</sup> The site has been fully reconstructed, and the interior is illuminated to allow easy access and ideal viewing conditions of the engravings.

The tourist's experience at Newgrange is designed to be as comfortable and educational as possible. Much expense and care has been put into the visitors' center. Aside from the spacious restaurant and shop, there is a museum that explains the history of the area and megaliths in general (the bones found inside Newgrange are in the Natural History Museum in Dublin).

Unlike most sites where the object of interest is located at the visitors' center (if there is one, which of course, most do not have), Newgrange is not immediately visible (though there is a hint of what people will see, as the visitors' center is round like the ancient mound). In fact, the only way to visit Newgrange is by a guided tour, and the only way to get to the site is by shuttle from the center.

Upon entry into the visitor's center, people are greeted by an attendant inquiring about which tour they wish to take (tours of fifteen people or more must be pre-booked in advance). The options are Newgrange alone or both Newgrange and Knowth, another passage grave in the nearby vicinity.<sup>9</sup> The average length of the visit to Newgrange is one hour, and two hours for the combined Newgrange and Knowth tour.

Upon making their selection, people are booked onto a tour and told to arrive at the bus embarkation point twenty minutes before scheduled departure. During the drive (which takes approximately

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<sup>7</sup> Michael J. O'Kelley, *Newgrange. Archaeology, Art and Legend* (London: Thames & Hudson, 1982), 124.

<sup>8</sup> Tuffy, letter to author.

<sup>9</sup> There are over fifty sites in the Boyne Valley, though they are on private property and closed to the public. Among these, Dowth is another passage grave.

ten minutes), the driver talks about Newgrange and other sites in the area. Once they arrive, people are assigned to a guide who gives a lecture about Newgrange.

The process is a smoothly run operation. While the guide is lecturing, another group is touring inside the grave. By the time a guide has finished (approximately fifteen minutes), the previous group has left the mound, allowing for the new group to enter. If a group is large, it is divided into two. The guide takes people into the mound while the others wait outside for their turn, during which time they are free to roam around. Once inside, the guide points out the engravings and provides further explanations. The grand finale takes place when the lights are turned off and there is a simulated winter solstice sunrise. As people exit the mound, a new group congregates around a different guide that will provide the same kind of experience.

It is impossible to leave Newgrange without learning everything that is known about it, unless one consciously chooses not to listen to both the driver and the guide. Newgrange and Knowth provide for a highly organized experience, facilitating the visit for some and limiting for the more adventurous and independent types.

Access to the stone circle of Callanish on the Isle of Lewis in Scotland was free until a new visitor center near the site was opened in July 1995, providing information, tea and toilets, and parking (fig. 7). The visitors' attraction to Callanish can be divided as 90% general tourism, 5% serious archaeological interest, and 5% spiritual, mystical, or artistic motives. Most people visiting Lewis will see Callanish, as it is on the itinerary of all organized tours, even if not archaeologically or spiritually inclined. They spend only a few minutes at the site due to timetables of coaches and frequent inclement weather.<sup>10</sup>

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<sup>10</sup> Fojut, letter to author.

As single megalithic manifestations, Stonehenge, Newgrange, and Callanish are all sites that can be experienced within one day, within the span of one hour for most people. All are located in rural areas; the sparsity of hotels indicates the lack of need for accommodating large numbers of people overnight (though Bed and Breakfasts abound).

Carnac designates a town in the Gulf of Morbihan in Brittany, France, that is renowned for the Menec and Kermario alignments (fig. 8, fig. 9). When considering its popularity as a site, an aspect that must be taken into account is that during the summer, tourists come primarily for the beach. Carnac is a bustling seaside resort equipped with tourist information offices and numerous hotels and restaurants, as are the other towns nearby such as Locmariaquer and Trinité-Sur-Mer, both housing megalithic remains as well.

Much of commercial Carnac and the rest of Brittany is basically closed during the winter, which limits hotel availability and restaurant options. In Carnac, the Tumulus of St-Michel and the shop at the Kermario alignments are closed during the winter, as are the combined sites of Le Grand Menhir Brisé (also called Er Grah), La Table des Marchands, both in Locmariaquer, and Gavrinis, the elaborately engraved burial chamber on an island nearby. The lack of tourists during the low season explains these closures.

Structurally, it is impossible to enclose the sites in Carnac; they are too numerous, scattered, and incorporated within the town. Thus the lack of an entrance fee hinders precise tabulations of visitor numbers. The highest concentration of sites are off the Route des Alignements which leads into Route de Kerlescan. They include the alignments of Menec, Kermario, Kerlescan and Petit Menec, the Kercado tumulus (a burial chamber), the Quadrilatère (a square of standing stones), the Géant du Manio (a huge menhir), the menhir of Krirfol, and the dolmen and cromlech of Kerlescan (fig. 10, fig. 11). There are sixteen other sites within a six kilometer radius.

A minimum number of visitors can be obtained by tabulating entrance numbers at the Museum of Prehistory in the town center and the Archéoscope, an audiovisual show (in French, English and German) facing the Menec alignments.<sup>11</sup> Both provide background information about the sites, therefore it is likely that most people that see the exhibits visit some of the alignments, menhirs, and dolmens. Despite the accurate visitor numbers to these establishments per year, only a minimum number of visitors to the sites can be deduced, since not all visitors go to the museum and/or the Archéoscope, nor is it known which sites they do visit.

The tumuli closer to Carnac's center, St-Michèl and Kercado, do charge an entrance fee during the tourist season (between April 1-October 30), and can thus provide accurate numbers of visitors during the summer. Visitors during the winter are unaccounted for as both sites have no attendants at the entrance. While people can visit Kercado year-round, the chamber at St-Michèl is closed between November through March. Since they are secondary to the alignments in fame, it is likely that those who visit them see the alignments as well (especially Kercado, which is located at a junction near them).

By virtue of the sites' organization, it would appear that the Menec and Kermario alignments are the most frequented. Parking lots large enough to accommodate hundreds of cars adjoin these sites, they each have a viewing platform, a shop and toilets can be used at the junction of Kermario, and hotels and creperies are dispersed along the road. This is not surprising; these are the most famous and spectacular alignments, displaying row upon row of perfectly aligned menhirs, stretching over a distance of three and a half kilometers.

Many sites in Brittany are arranged to accommodate the visitor's convenience, from signs on roads to illuminated burial chambers. Other sites are obviously less frequented. Le

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<sup>11</sup> Numbers are not available from the Archéoscope.



Quadrilatère and the adjacent Géant du Manio, both in Carnac near the alignments, are marked by a small sign off the road leading to a non-paved parking lot with room for about eight cars. From there, a path leads to a fork, each direction leading to other paths that lead to other paths; one may not necessarily find the sites.

The same formula applies throughout Brittany. From the scarcity of clear signs to a lack of guidance after the initial indication, it can be assumed that most tourists do not come to Brittany for the smaller archaeological sites. People walk through woods, drive through picturesque villages, interact with locals to ask for directions, but do not always find the site. Many are isolated, and the usual lack of organization at most megalithic sites further compounds the effect of inaccessibility. Some are small and dispersed, while others occur in clusters. Either way, only the more spectacular and famous sites are well marked and thus easily to find.

The megalithic tradition was widespread, made evident by sites expanding throughout Europe, Africa, the Middle East, the Far East and in Asia. Thus, for visitors today, seeing all the manifestations of the megalithic culture would entail a life-long mission.

#### Nazca Lines and Indian Mounds

Unlike megalithic sites, the Nazca lines and Hopewell and Adena mounds are products of localized communities. They are spread out but do not venture far beyond their centers.

The Nazca lines are a single manifestation, possibly built over successive periods (fig. 12). The area that they cover, though large, is concentrated in one area of the desert in Peru. From Lima, one must travel 460 kilometers, approximately six hours by car.

Tourists, both local and foreign, are attracted to the site by extensive advertising. FOPTUR (Fondo de Promocion Turistica del

Peru) is the organization that promotes the site with advertising on television, and with pamphlets and posters.

The organization which manages the site is 'Asociacion Maria Reiche'. It is guided by the concerns of Maria Reiche, who has devoted her life to the study of the lines. Museum Maria Reiche, in Ingenio near Nazca, offers tourists information about the lines and displays local archaeological finds. Since the area has become a National Reserve, one is forbidden to walk or drive on the lines, though there is an observation tower from which to view them (with plans for more to be constructed).<sup>12</sup> A popular way to see the lines is from the air.

There are numerous North American mounds scattered throughout the mideastern United States, so a thorough tour would entail extensive travelling. However, several distinct sites have been organized and provide convenient access. Among these, the Hopewell Culture National Park and the Serpent Mound are the most well-known.

The Serpent Mound in Adams County, Ohio, displaying an effigy in the shape of a serpent said to be built by the Adena Indians, is maintained by the Ohio Historical Society (fig. 13). It features a museum, souvenir shop, and refreshments.

The Hopewell Culture National Historical Park (also called Mound City Group) in Chillicothe, Ohio, preserves one of the greatest concentrations of Hopewell Indian burial mounds (fig. 14). The sites are incorporated within a national park cared for by the National Park Service (associated with the United States Department of the Interior). The park provides amenities and a picnic area, while food, campgrounds and lodging are available nearby. A visitor center has educational exhibits, sells books, and supplies a staff member to answer questions. An observation deck on the roof provides a view of Mound City and a taped introductory message. An

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<sup>12</sup> Escobar, letter to author.

adjacent museum displays artefacts that archaeologists have excavated from the cemetery (artwork, tools and weapons).

Tables 2 and 3 contain statistical data pertaining to the types of people that visit the Hopewell Culture National Historical Park and their purpose of seeing it. The information provided indicates that most people visiting the sites are adults accompanied by family members. Most people stay for no longer than one day, while a small percent sleep in the area.

**Table 2. Visitation Analysis by Selected Categories of Users at Hopewell Culture National Historical Park<sup>13</sup>**

<p>1. Breakdown by age:            20% children, 0-12 years            13% teenagers, 13-17 years            55% adults            12% senior citizens, 62+ years</p>
<p>2. Breakdown by affiliates:            14% alone            15% peer group            19% organized tour            29% nuclear family            12% extended family            5% multiple family            4% partial family            2% other</p>
<p>3. Breakdown by destination-duration of stay:            85% home-based, day-users            15% through-users</p>

**Table 3. Visitation Analysis by Site and Activity Selection**

<p>1. Breakdown by area and facilities used:            15% incidental to park's primary resources            70% based on park's primary resources            15% dependent on park's primary resources</p>
<p>2. Breakdown by Interpretation and Visitor Services:            61% use information-orientation and/or non-personal services only            30% attend personally conducted or presented activities            1% non-program users</p>

<sup>13</sup> Peterson, letter to author.

The general impression is that most people are interested in the mounds and archaeology, since many travel to several other mound sites in Ohio as well. Most people use the educational facilities about the mounds. Another group of visitors stop out of curiosity. Some visit to enjoy nature, and others are attracted to the park for spiritual reasons. Therefore, visitor numbers to the park are indefinite in terms of trips to the mounds, as they represent people that travel to the national park as a nature reserve, an archaeological site, or both.

All the sites mentioned above have become organized tourist centers. They feature informational centres and amenities that encourage people to stay longer. These sites share a higher concentration of visitors during the summer months (except for Nazca); it is most likely that visitors will plan to visit a site to coincide with good weather.

#### **Tourism and Archaeological Sites**

As internationally renowned places, the sites described above have attained a high status within the minds of tourists, and are highly desirable places to visit. Some ancient sites such as Stonehenge have achieved similar standards and level of attraction as the Statue of Liberty or the *Mona Lisa*.

MacCannell states: "The actual act of communion between tourist and attraction is less important than the *image* or the *idea* of society that the collective act generates."<sup>14</sup> Modern international sightseeing possesses its own moral structure, and the collective states that certain sights 'must be seen': "If one goes to Europe, one 'must see' Paris; if one goes to Paris, one 'must see' Notre Dame, the Eiffel Tower, the Louvre; if one goes to the Louvre, one 'must see' the Venus de Milo and, of course, the

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<sup>14</sup> MacCannell, 14-15.

Mona Lisa. There are quite literally millions of tourists who have spent their savings to make the pilgrimage to see these sights."<sup>15</sup>

MacCannell's implication, that the status of travelling and sight-seeing is more important than the act itself is probably true for many tourists, and surely compels trips to ancient sites and other renowned places. As such, one must question the tourists' motives. Do they visit them because they feel obliged to fulfill the 'correctness' of going to famous sites? Certainly, travelling and seeing famous places elevates a person's rank among the collective and is a desirable honour. Though there is the sincere category that travels for the sheer sake of pleasure rather than to boast of their achievements. For these tourists, trips are instigated by a true interest in the destinations of their choice.

Another aspect that may lure tourists to ancient sites is the belief that they offer an educational experience. Just as the popularity of museums can partially be explained by the knowledge that they extend, ancient sites satisfy the same kind of yearning.

MacCannell brings forth a concept that he labels 'sight sacralization' to designate when a site is marked off from similar objects as worthy of preservation.<sup>16</sup> He calls the first phase the 'naming phase', during which a site is designated as an attraction. The second phase is the 'framing and elevation phase'. Elevation entails putting the object on display, while framing is putting an official boundary around the object for protection and enhancement.

He defines the third phase as 'enshrinement', occurring when the framing material that has been used, has itself entered the first stage of sacralization (marking). The phase of 'mechanical reproduction', specifically photographs, set tourists in motion to find the true object. The final phase is 'social reproduction', when groups, cities, and regions name themselves after famous attractions.

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<sup>15</sup> Ibid., 42-43.

<sup>16</sup> Ibid., 44-45.

The designation of sight sacralization is useful to describe the consequences of fame upon an object or place. However, the limitation of these classifications is that not all objects or places that go through sight sacralization pass through each phase that MacCannell describes.

A site with the stature of Stonehenge can be said to have gone through most of the phases. The naming phase occurred when Stonehenge was given World Heritage status. The framing and elevation phase ensued when Stonehenge was marked off as a worthy place to visit. An entrance fee was charged, a souvenir shop was opened, access to the site was made through an underground tunnel (featuring explanations about Stonehenge along the walls), and the site itself was roped off in 1978 for its protection. The phase of enshrinement does not apply to Stonehenge, as it stands alone, without the framing of another site.

Of course, Stonehenge has had an extensive mechanical reproduction phase in paintings, photography, and souvenir memorabilia such as cups and keychains. The phase of social reproduction does not apply to Stonehenge, unless one incorporates the artistic attempts to reproduce it into this category, such as J.M.W. Turner's *Stonehenge at Daybreak* done in 1816, or John Constable's painting of Stonehenge done in 1836.

All the sites described above have gone through some of the stages of sight sacralization. The general population may not have necessarily heard of them all, but due to an efficient dissemination of information and the mass production of their images, people need not be archaeology students to know of them.

Sight sacralization can also apply to some of the more famous landworks, and can be considered a link between ancient sites and art. The naming phase occurs when a landwork is endowed with recognition. Framing and elevation are a by-product of the public's awareness of the art form, deeming it worthy of protection and instigating a desire to see the work. As with Stonehenge, enshrinement is not applicable.

Mechanical reproduction is the most crucial phase for landworks, as photographs give them life. It is actually the first phase that either modern or ancient sites go through, and they are entirely dependant upon it for their recognition and evolution through the other phases. Without this phase, most people would not be aware of the landworks' existence.

### **Trips to Land Art**

Unlike ancient sites, there are not many landworks to visit. In fact, many no longer exist, whether due to the impermanence of materials used and subsequent erosion, or their destruction. This aspect eliminates the need of making a trip since there is nothing left to see. Works that are permanent installations offer viewers the option of travelling to see them, while those that contain astronomical alignments may inspire people to coordinate their visit with celestial happenings.

The fact that landworks are not accessible in typical art-spaces necessitates a trip if one wishes to see them (of course trips are needed to visit museums as well, though their nature is different than visiting works outside). Depending on one's point of departure, presumably where one lives, a viewer may travel long distances in inhospitable surroundings to see landworks.

Works in remote and inaccessible locations with no signs of human presence in their vicinity are the least available and require the most primary type of trip. Nancy Holt's *Sun Tunnels*, Smithson's *Spiral Jetty*, Heizer's *Double Negative*, all in southwestern American deserts, are such works. *The Lightning Field* is also remote, though it requires a different kind of primary trip, which will be demonstrated later. When they still existed, Walter De Maria's *Las Vegas Piece* and Heizer's *Nine Nevada Depressions* also required primary trips.

Relative to their point of departure, visitors must first get to the general area of the work, be it the nearest town, city, or other distinguishable place, by using the appropriate means of

transportation. Then, they must locate the work, sometimes a task that is not as easy to accomplish as assumed.

The trip to *Sun Tunnels* entails a primary trip on all accounts.<sup>17</sup> The nearest town, Montello, is thirty three kilometers away, hosting one grocery store with a gas station, two bars, a motel, and a few homes. As with most remote works, people absolutely require a car, distinguishing inaccessible locations from those that can be reached with public transportation. There are two possible routes of equal distance from Salt Lake City along either the southern and northern highways. Holt recommends the southern route. Her directions are as follows:

Take route 80 West from Salt Lake City through Wendover (a wild border town with casinos) to Oasis, Nevada. At Oasis take Routes 233/30 Northeast through Montello, Nevada (Pilot's Motel, Cowboy Bar and Cafe where they have SUN TUNNEL maps and information, last gas and water) back into Utah. About 10 miles past the state border is a sign saying 'to Lucin'. Turn right onto the gravel road for approximately 5 miles to Lucin (the town population has been 0 since 1992). Bear right at the unmarked fork in the road, cross over the railroad tracks and continue south of Lucin for about 2 1/2 miles (you should be able to see SUN TUNNELS in the distance on your lower left - SE). Turn left at the steel post with two orange reflectors onto another gravel road (when this road is overgrown it is sometimes difficult to see the turn off) for 2 miles and then right 3/4 of a mile to SUN TUNNELS. Even though there are car tracks already there in the earth, please park on the gravelled area and walk to SUN TUNNELS, as the desert ecology is fragile. You may camp on my land, but please leave everything the way you found it.<sup>18</sup>

With Holt's precise instructions, it is easy to find *Sun Tunnels*, despite its isolation. Her expectations are that it be "a focused journey where the kind of time that you spend at the work is quality time. You're seeing it differently than you would see a

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<sup>17</sup> Except perhaps for Russell, a Californian who lives on a mountain that he owns nearby. For him, the walk is approximately one hour; the tunnels are in what he calls 'his backyard'.

<sup>18</sup> Nancy Holt, letter to author, New Mexico, 6 June 1997.



sculpture in a museum, because you're seeing it in a focus. The work brings you to a place that you would never have gone to. You're sensing yourself on the planet, a sense of the cosmos."<sup>19</sup>

Calvin Tomkins describes his search in the Nevada desert for De Maria's *Las Vegas Piece* with Virginia Dwan, displaying an example of a primary trip:

About an hour and fifteen minutes after we left the freeway, it became evident that we were on the wrong road. The landmarks on De Maria's map were not materializing. We went back about ten miles, found a turn we had missed, and continued on in hopeful silence. But half an hour later, having followed this road to an abandoned mining site that did not appear on De Maria's map, we realized that error once again had crept in. The evening drew on apace. We doubled back and, after a period of eagle-eyed reconnaissance, managed to locate one of De Maria's landmarks. We turned there, drove one mile, as instructed, parked, and set off on foot, taking pains to skirt the juniper and the low-growing cacti, because De Maria had said they might harbour snakes or scorpions. Twenty minutes later Miss Dwan said we must have missed the earthwork somehow. We retraced our steps to the car, drove it a little farther along, and then struck off again into the purple sage. . . . In the end, having spent a little more than ten hours looking for it, we never did find Walter De Maria's earthwork.<sup>20</sup>

This quote is a clear indication of the possible difficulties that one may encounter while searching for a landwork. Despite having a map at their disposal, Tomkins and Dwan were unable to locate De Maria's work. It did not help their situation that they were unaware of what they were looking for, as De Maria did not want people to know what the work looked like ahead of time.

Among accounts of searching for *Las Vegas Piece*, Lawrence Alloway was lucky. It should be noted that he had guides to help

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<sup>19</sup> Nancy Holt, telephone interview by author, tape recording, Montreal/Finland, 15 July 1997.

<sup>20</sup> Calvin Tomkins, *The Scene. Reports on Post-Modern Art* (New York: The Viking Press, 1976), 141-142.

him find this and other works, whom he thanked at the end of the article describing his trips.<sup>21</sup>

Mary Beebe was unable to locate Smithson's *Spiral Jetty*:

Even with precise directions, the Jetty proved elusive. After an entire day on miserable roads, frustrated and angry, I sought the assistance of a rancher. He confirmed that I had followed the directions exactly but was able to suggest another possible route. I drove another forty miles, saw a wonderful pelican, an abandoned structure of some kind, a lot of cattle, and some horses - but no jetty. The water was pink with brine shrimp; the salt built up earthily on the shores. I knew the territory was right and I had to be close, but the great picture was in my mind and not in my camera. I shall return someday with a tougher car and a foolproof map.<sup>22</sup>

She made little mention of the trip to Heizer's *Double Negative*, though the voyage to James Turrell's *Roden Crater* project could have become difficult:

Access again became an issue: as the construction hadn't yet begun (planned for January 1982), guidance from Jim or his good-humoured project manager, Mike Yost, and a four-wheel drive were required. The two-hour voyage to the crater though black sand territory was unforgettable, and it probably was contrived to be a bit so. To get to several of these earth works it seems you somehow have to prove yourself worthy of the journey to Mecca. Traversing treacherous cliffs and canyons of black sand, I thought we might be crossing the bottom of the ocean minus the water. There was no question that we'd never find our way back without a guide.<sup>23</sup>

Just as numerous ancient sites are unmarked and difficult to locate (though unintentionally), landworks may be so inopportunately located that viewers can barely find them, unguided by distinguishable features in the surroundings to help discover them.

Questioning locals as to the specific whereabouts of a landwork, studying maps, and making wrong turns are all potential

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<sup>21</sup> Alloway, "Site Inspection," 55.

<sup>22</sup> Mary Livingstone Beebe, "Tell Me, Is It Flat or Is It Round," *Art Journal* 41 (Summer 1981): 169.

<sup>23</sup> *Ibid.*, 170.

aspects of the quest. Sometimes, it is not necessarily the difficulty in finding sites that creates discomfort. In his descriptions of perilous journeys to landworks, Tomkins made frequent mention of the heat that he endured, among other deterrents. On his way to see Heizer's *Double Negative* with Dwan:

A filling-station attendant told us how to get up on top of this eminence, and added a warning about going there on such a blistering day - the temperature, which had been 105 degrees when we left Vegas an hour before, showed no signs of relenting. As we approached the mesa, the blacktop road changed to dirt. Suddenly it became quite steep. The rented car churned and skidded through soft sand that had drifted over the track in places, and I became acutely aware of the sharp drop at the outer edge of each hairpin turn.<sup>24</sup>

Jan Van Der Marck described his trip to see *Double Negative*: "Virginia Dwan met her guests, among them Carlo Huber, a Swiss museum director, and myself, in Las Vegas, as impeccably attired for the trek ahead as Meryl Streep in 'Out of Africa'. John Weber cut a no less impressive figure in his Western getup and silver dollar belt. But the glamour quickly faded when we began inhaling dust on the undercushioned tailgate of Michael Heizer's pickup truck."<sup>25</sup>

Elizabeth Baker considers the trip to landworks complicated enough that they warrant a distinction from the actual act of art appreciation:

Much writing on earthworks gets rather effusive. The experience of visiting the works is a complicated one, no small part of which is the difficulty of getting there and the exoticism of locale and life-styles. Things can become intensely anecdotal: you learn about local economics, land purchasing in the west, enormous government land reserves, atomic test sites, snakes, trucks and desert climates. All this, especially in the course of short visits, tends to overwhelm, so at a

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<sup>24</sup> Tomkins, *The Scene*, 135.

<sup>25</sup> Jan Van Der Marck, *Virginia Dwan. Art Minimal - Conceptual - Earthworks. New York, Les Années 60-70* (Paris: Galeries Montaigne), n.p.

certain point it becomes necessary to separate the art experience from the general experience.<sup>26</sup>

De Maria's *The Lightning Field*, 1977, located near Quemado in the desert of southwestern New Mexico, is also completely secluded and involves travel in remote desert (fig. 15). However, it generates a different type of primary trip due to its maintenance by the Dia Center for the Arts, a foundation that purchased the land for this landwork.

It consists of a rectangular grid of 400 highly polished stainless steel poles of varying heights with pointed tips, measuring one mile east to west, and one kilometer north to south. The east/west rows contain twenty five poles, while the north/south rows contain sixteen, each spaced 67 meters apart, 101 meters on the diagonal.

In an article written for *Artforum*, De Maria instructs that: "It is intended that the work be viewed alone, or in the company of a very small number of people, over at least a 24-hour period."<sup>27</sup> Dia ensures that the number of visitors remain limited by requiring reservations in advance and accepting no more than six people at one time. Thus they maintain the harmonious ratio of a few people to a large amount of space, as per De Maria's specifications.

After making the decision to see *The Lightning Field*, visitors must initially write to the office in Albuquerque (a reservation form is available from the Dia office in New York), stating when they wish to visit (people must list three choices of dates in case they coincide with prior reservations) and the number of visitors in the party. The minimum cost for an overnight stay at the cabin adjacent to the field is \$85.00 (the approximate cost to Dia is \$125.00 per person; visitors are asked to pay as much of that amount as they can), while students are given the option of paying the reduced fee of \$65.00. For this charge, one is driven to the

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<sup>26</sup> Elizabeth Baker, "Artworks on the Land," 94.

<sup>27</sup> Walter De Maria, "The Lightning Field," *Artforum* 18 (April 1980): 58.

site from Quemado, lodged and fed, experiences *The Lightning Field*, and is returned to Quemado the following day. Arrival and departure times to and from the site are predetermined; people are picked up for transport to the field at 3:00 P.M. and returned the following day at 11:00 A.M., with no unscheduled trips available.

Once at the work, engulfed within the desert's isolation, viewers experience the culmination of their trip. Complete as a landwork in itself, *The Lightning Field* has the added element of lightning incorporated in its mediums, as the steel poles attract lightning and cause a dazzling show (in fact, viewers must sign a release freeing De Maria and the Dia Center for the Arts of liability should death or injury occur) during storms (fig. 16). Aside from regions suffering drought, *The Lightning Field* is probably the only place in the world where people wish for rain, for violent torrents of it, accompanied by loud, crashing thunder and electrifying bolts of lightning.

Seeing the field in action is never assured, as there can be no guarantee of lightning when visiting. As with all works that rely on nature to provide the climax, there is an element of chance, and thus a threat of disappointment. Just as the alignments of sunrises and sunsets can be obscured by clouds at other works, viewers here should make the intention of their trip to see *The Lightning Field*. Lightning should be considered a bonus; in fact, it rarely strikes the area. Some people have asked for refunds because of this, but the majority respond favourably regardless of thunderstorm activity.<sup>28</sup>

There are restrictions related to this trip; viewers are forbidden to take photographs, ensured by removal of all camera equipment at the Quemado office. This frees people from the task of taking pictures, encouraging them to focus on the landwork and enjoy the moment rather than looking through a viewfinder. Anyone

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<sup>28</sup> Ibid.

that wishes to own a visual memory of the field can purchase photographs, costing \$20.00 per set of eight.

The prohibition of taking photographs at the site, and/or using those bought for other than personal use without written consent from Dia, is imposed by De Maria. In 1969, he decided against photographic reproductions of his landwork: "I felt that I had to go back toward direct personal experience, no matter what the difficulties were. Maybe only twenty or thirty people would see my work in a year, but that was better than a lot of people partially seeing it through photographs."<sup>29</sup> Considering this attitude, one questions why De Maria allows his works to be illustrated in magazines and books, thereby producing 'partial' viewing, and why photographs of *The Lightning Field* are sold if he insists that people see the actual work.

John Beardsley does not appreciate the hype related to *The Lightning Field* and is frustrated with the mystery shrouding the work: "Given the complexities of this procedure, one might rightfully expect some revelation during residence at the *Lightning Field*. . . . The necessity of making an appointment, signing a release against a danger which seems more imagined than real, and of being delivered to the Field rather than allowed to drive, all conspire to induce a feeling of awe, to ensure that one will fully expect to see God at the *Lightning Field*. Needless to say, He doesn't appear."<sup>30</sup>

Beardsley asks a Dia representative why there are so many constraints related to the work which he feels are "an expression of the willful cultivation of mystery."<sup>31</sup> They justify the regulations as a means to ensure that viewers be alone or nearly so, and to protect the fragile, semi-arid environment. Though a

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<sup>29</sup> Tomkins, *The Scene*, 140.

<sup>30</sup> John Beardsley, "Art and Authoritarianism: Walter De Maria's *Lightning Field*," *October* 16-19 (Spring 1981): 36-37.

<sup>31</sup> *Ibid.*, 37.

legitimate response, Beardsley reminds his readers that works in similar landscapes such as *Sun Tunnels* and *Double Negative* are unprotected and remain in good condition, and that on his visits to these sites, he has never encountered other people.

Compared to other sites, *The Lightning Field* is a relatively easy trip which entails getting to Quemado (not so simple if travelling from afar, and always entailing a three hour drive from Albuquerque). Once at the Dia office, all arrangements are taken care of. Visitors have no decisions to make; they do not need to concern themselves with finding the site, sleeping accommodations, or food. They do not even have to think of a time factor, arriving and leaving according to Dia's schedule. The fact that they spend many hours at the site (overnight), and the lack of effort stimulates an intimate and unhindered interaction between viewers, the landwork, and its environment. Organized like a tour, the ease with which this experience is accomplished makes *The Lightning Field* appealing to visit to those seeking a guaranteed landwork interaction.

All landworks induce the same intimacy when actively involved with them; however, as we indicated above, the trips are not always so easy. Decisions abound about provisions, transportation, and lodging. These concerns are related to every type of trip, though primary trips necessitate more organized and complicated efforts.

Unless craving adventure, a highlight of *The Lightning Field* may be that people are driven to the landwork. The guarantee of finding the site, and associated lack of frustration resulting from searching for and possibly not finding the site, is also reassuring.

#### The Artists' Intentions and their Works' Viewers

Considering the inconvenience of travelling to see some landworks, a question arises pertaining to its viewers: do people actually bother to make the trip? In fact, few pursue the actual experience. Those that do are usually associated to art in some



way; artists, their friends, dealers, and art critics compile the typical array of visitors.<sup>32</sup>

Richard Long has a unique relationship to the concept of trips, since a large part of his artistic output is created by walking throughout the continents, sometimes for months at a time. Though the route is not always predetermined and with no specific destination, the act of walking is like making a trip. And certainly whatever landworks he makes require a displacement, as he makes them during his walks: "A journey is a meandering line. To walk straight up and down many times to make a dusty line makes a sculpture. . . . Sculptures are stopping places along a journey. They are where the walk meets the place. . . . A walk is a line of footsteps. A sculpture is a line of stones. They are interchangeable, they are complementary. I have made walking into sculpture."<sup>33</sup>

Among the dealers, Dwan was an avid traveller, having visited numerous sites on several occasions, accompanying both artists and critics. During the summer of 1970, Philip Leider, editor of *Artforum* magazine, drove with artist Richard Serra and Joan Jonas to Nevada to see Heizer's *Double Negative*, and with art critic John Coplans, Smithson, and Holt to see *Spiral Jetty*.<sup>34</sup> Alloway based an entire article in *Artforum* on visits to sites in Arizona, Nevada, Texas and Utah.<sup>35</sup> Tomkins also documented his trips in his book, *The Scene. Reports on Post-Modern Art*, and in various articles.

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<sup>32</sup> This observation is based on literature and the author's field notes.

<sup>33</sup> Philip Haas, producer and director of film, *Stones and Flies: Richard Long in the Sahara*, London: Arts Council of Great Britain, 1988.

<sup>34</sup> Philip Leider, "How I Spent my Summer Vacation or Art and Politics in Nevada, Berkeley, San Francisco and Utah," *Artforum* 9 (September 1970): 40-49.

<sup>35</sup> Alloway, "Site Inspection," 49-55.



Occasionally, groups have been organized to visit landworks. James Pierce has conducted groups from the Maine Coast Artists Gallery in Rockport, Maine, from the Maine Audubon Society, and from Colby College, to see his *Garden of History*, and it has also attracted visitors from the nearby Skohegan School of Art.<sup>36</sup> The Stedelijk Museum organized a trip for the friends of the museum to Smithson's works in Holland in combination with a visit to the Museum of Modern Art in Groningen, on 10 November 1994. The group, consisting of one hundred people, spent one hour at the landworks.<sup>37</sup>

Critics instill images of certain types of visitors: "Curators with galoshes have been willing to chance the wilderness to view remote earthworks."<sup>38</sup> Gildzen tells us that Smithson's *Partially Buried Woodshed* "remains a haunting & controversial work visited mostly by vandals & dogs, & poets."<sup>39</sup>

Most of the people that visit *The Lightning Field* are from North America, though there are also a number of visitors from Europe and Asia. There appears to be a good mix of artists, art administrators and tourists that visit. Most of those from Europe are heavily involved in the arts, while North American visitors vary in regards to their artistic background.<sup>40</sup>

As noted in the previous chapter, there are many non-typical viewers that see Land Art. It is rare that people travel far distances unless they are specifically in pursuit of landworks and interested in art. However, there are people that come upon

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<sup>36</sup> Pierce, letter to author.

<sup>37</sup> Esther Hemmes, letter to author, Amsterdam, 8 December 1994.

<sup>38</sup> James Wines, "Landscape Sculpture Arrivals. The Case for Site Oriented Art," *Landscape Architecture* 61 (July 1971): 319.

<sup>39</sup> Gildzen, 120.

<sup>40</sup> Fil Inocencio Jr, Administrator at *The Lightning Field*, letter to author, Albuquerque, 8 September 1994.

landworks by chance; their lack of effort eradicates the concept of a trip with these casual viewers, but they are nonetheless viewers.

Works that incorporate astronomical alignments may attract astronomers during their special events. Other unlikely viewers are those that read about landworks in their local newspaper. They decide to seek out the artistic manifestation in their midst, even though they do not normally consider themselves to be involved in the arts. For these visitors, the journey is fuelled by curiosity.

The artists' intentions relative to viewers seeing their landworks is significant, and the question of whether they want their sites to be visited is paramount. By ignoring the notion of convenience and forcing a trip to see their works, artists seem to demand a high degree of participation from their viewers. They do not assume that many people will travel to see their works. However, artists would also not bother creating art if they did not want people to see it.

The function of art is to be seen and have an effect on viewers. Landworks exist in the desert and other obscure places; the wind rustles through them, the rain falls upon them, the sun rises and sets through some during the solstices and equinoxes, and yet most often, they remain in isolation, unseen. When viewers do arrive to interact with them, landworks take on a new, more versatile character as they are activated by the presence of people being physically engaged within them. But they exist regardless of visitors, and usually remain solitary.<sup>41</sup>

Harold Rosenberg wonders whether unseen art objects resist the neglect of vision: "As the art-world goes, the relation between artist and audience has been revolutionized. It is enough merely to hear about works of art or to receive information about them through other media. . . . Can spectators without objects cause art to last longer than objects without spectators?"<sup>42</sup>

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<sup>41</sup> Though this is difficult to verify, critics' accounts and the author's field notes substantiate this claim.

<sup>42</sup> Rosenberg, 244-245.

This is an important question to ponder in relation to remotely located landworks. Indeed, viewers are not crucial to a work's purpose as it has merit and subsists without human vision or intervention. But a work is created to be appreciated, otherwise why make art if it is not seen?

In fact, artists feel differently about people seeing their work. Some, such as Morris, wish for their works to be easily accessible and to be seen by many people. Others claim to be oblivious about whether their works are seen. The artists' attitudes can be classified into categories according to the level of their works' accessibility.

Holt appreciates the seclusion of her works and insinuates that they do not need viewers to be complete, enduring as art regardless of whether they are seen: "I like to think about the works existing alone, without visitors, like *Sun Tunnels* surviving time and weathering in the desert."<sup>43</sup> Her statement indicates that she is not concerned with making this work accessible to the public. *Sun Tunnels* does exist alone, but its feature of alignments during the solstices depends on human vision to subsist and seems pointless if no one sees them.

Contrarily, Morris wants his landworks to be accessible, so that people can see them without being too inconvenienced. Of his first version of the *Observatory*, 1971, he says: "I was pleased with the site because people could get to it, and insofar as I do something like that, that is physical I want it to be experienced for what it is. It is important to me that it is *there* and available."<sup>44</sup>

Morris has similar intentions for his second version of the *Observatory* made in 1977:

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<sup>43</sup> Castle, "Nancy Holt, Siteseer," 88.

<sup>44</sup> Robert Morris, *Six Years: The Dematerialization of the Art Object from 1966 to 1972*, ed. Lucy Lippard (New York: Praeger Publications, 1973), 257.

Where can you go and have just raw nature? It seems to me that if you are seeking that, the thing is going to have to be located so far away from civilization, and you have to make a pilgrimage to the work, and I am not at all interested in that . . . it's true it's a little more isolated, but . . . I mean there is a busstop not very far from it, so people apparently go there. It isn't as though it is in the desert or somewhere really inaccessible. But I wouldn't want it to be isolated that the only access you had to it was through a photograph. I don't like that and I feel from what people told me that this is a kind of area that people come to especially in the summertime, and so . . . that satisfies me. It won't exist as a kind of isolated phenomena. People won't have to make enormous journeys to get to the work.<sup>45</sup>

Indeed, seeing the *Observatory* is not a complicated venture out of Amsterdam, though the forty five minute trip to the landwork may be a deterrent, unless one truly wishes to see it.

There are various levels to the artists' intentions. Whatever the attitude, artists resolve the problem of viewing through photography. Heizer thinks that: "It is absurd to ask who will see these works: thousands already have, by means of photographs and articles like this one. More importantly, they will be around for hundreds of years to come, speaking to many millions far ahead in time."<sup>46</sup> Obviously, he is satisfied with his work's dissemination through second-hand imagery.

Heizer's statement is relevant of all landworks.<sup>47</sup> Most people see manifestations of this art form through visual documentation whether artists are comfortable with this fact or not; this frees artists from having to make their work accessible as it is ultimately acknowledged through photographs.

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<sup>45</sup> Robert Morris, "Interview," *Het Observatorium Van Robert Morris* (Amsterdam: Stedelijk Museum, 1977), n.p.

<sup>46</sup> Davies, "The Earth Mover," 113.

<sup>47</sup> Most art is viewed through photographs; people are forced to rely on illustrations unless they are lucky enough to be able to see the 'real thing', wherever it is.

Of *Spiral Jetty*, Kim Levin finds that: "Because hardly anyone had actually seen it, it functioned as legend, bouncing off our imaginations, planted in our memories by photographs with the magic of faraway places untouched by reality."<sup>48</sup> Robert Hobbs agrees that since most people know of landworks only second-hand, through illustrations, "They can become subjects for rumour and consequently assume a mythical status."<sup>49</sup>

The unseen object or place commonly becomes mysterious. Photographic evidence should eradicate any rumours about the existence of landworks. However, the mythical and legendary status that Levin and Hobbs refer to is interesting; when people know of a certain place but have never actually seen it, they may endow it with fanciful features within an illusory domain. Just as ancient sites engender fantasies about the activities that took place within them, landworks have acquired an almost imaginary character.

#### **Trips During Astronomical Events**

Archaeological sites and landworks that incorporate astronomical phenomena indicate dates of special importance, thereby dictating when people should visit. Alignments relate to the creators' intentions; they imply that sites are intended to be visited periodically, and/or viewed at certain times of the year. Since some structures are designed to coincide with the cyclical movement of features in the sky, viewer appreciation should peak on specific dates.

The moments captured within aligned sites are fleeting. Once the sun rises or sets, the spectacle is over and a visitor is unable to recapture it until the next occurrence. Aside from the few days within the yearly cycle during which there is an

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<sup>48</sup> Kim Levin, "Reflections of Robert Smithson's 'Spiral Jetty'," *Arts Magazine* 52 (May 1978): 136.

<sup>49</sup> Robert Hobbs, "Introduction," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 15.

astronomical alignment present, there is no difference between when one visits, except for weather conditions.

There are few aligned landworks that one can visit (some will be described in the next chapter). Contrarily, if one considers the archaeoastronomical theories pertaining to megalithic remains, the Nazca lines, the Indian mounds, and other sites to be accurate, many ancient sites offer a chance to see alignments.

The dictation of when sites should be visited by virtue of astronomical alignments is highly valued, manifested by the highest proportion of visitors per special event. For example, at Stonehenge, the summer solstice is indeed the most popular date to visit, when the sun is said to rise directly above the Heel Stone. This event is said to hold a particular meaning for Druids; considering Stonehenge a sacred site, they have celebrated and conducted various ceremonies during the solstice for centuries. Since the early nineteen sixties, small groups of youngsters were present as well, and from that time, the numbers rose steadily peaking in 1984, with over 30,000 people in attendance (fig. 17, fig. 18).

In 1988 and 1989, English Heritage limited the number to 500 people on a first come first serve basis. Due to disgruntled visitors that were not permitted entry, violent clashes ensued with police, and since then, access is forbidden during the solstice sunrise. Thus only a small number of 'Druids' attend, forced to hold their ceremonies outside the fence near the Heel stone.

During the winter solstice at Newgrange, the sun rises through a slit above the dolmen's entrance, passing through the tunnel leading inside and illuminating the chamber's interior (fig. 19). Since the phenomenon is only visible from inside the small enclosure, access is restricted. Entrance on December 21 during the sunrise is reserved for dignitaries such as archaeologists and politicians. For days around the actual solstice, there is a waiting list based on a first come first serve basis. The event is already fully-booked until 2006. There is even a lottery that

offers a few people without the hindsight to reserve in advance a chance to see the event.

The summer solstice at Callanish attracts an increase of 200-300 people, including astro-archaeological enthusiasts, mystics and New Age travellers (fig. 20). There should be a peak every 18.5 years coinciding with horizon alignments during the moon's minimum cycle at this site, but it has been unobserved if more people visit at that time.<sup>50</sup> Certainly, few people know about this phenomenon unless they are involved in archaeology and aware of the moon alignment.

It appears that people prefer to see ancient sites during their alignments.<sup>51</sup> Landworks that are aligned astronomically are most sought after during their highlight as well. The option of seeing an alignment may be perceived as a potentially enhanced viewing experience as viewers see the work in its totality, functioning on all its levels, in comparison to seeing the work under 'regular' conditions. Therefore, visitors are inclined to make their trip to coincide with alignments, if they exist.<sup>52</sup>

Since so few people are motivated enough to go out of their way to visit the sites altogether, it is statistically probable that the only time visitors will encounter other people at astronomically aligned landworks is during the alignment (or on the rare occasion of a tour visiting). The only way to determine viewer attendance during these events would be to actually monitor the

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<sup>50</sup> Fojut, letter to author.

<sup>51</sup> There is no way of knowing whether people plan their first visit to a site to see alignments or make another trip at a later time to see them.

<sup>52</sup> People present at *Sun Tunnels* on 21 June 1997 told the author that they had come especially to see the alignment. While they could have chosen any other time to year to visit, they chose that date in order to benefit from the added element. Russell, the man that lives on a mountain nearby, told us that the site is always empty of visitors.

sites and note how many people come.<sup>53</sup> However, since most sites are open to the public and have no supervised access, it is not possible to record the number of visitors.

De Maria's *The Lightning Field* is the only modern site where access is monitored; however, the 'special event' at this landwork has such a random character that viewers are not hindered by the need to travel during specific dates. The period when lightning is most likely to occur coincides with dates that the site is open (between May 1 - October 31); unlike other landworks that feature highlights only a few days each year, the option of viewing lightning lasts for six months. There is no peak time to visit; trips are not dependant on the viewers' willingness displace themselves during limited dates, but rather by restrictions of access and the long viewing season.

A yearly gathering takes place at Holt's *Sun Tunnels* during the summer solstice, though there is no apparent connection between the groups of people that attend. *Sun Tunnels* hosts an array of repeat customers for the solstice, mostly people coming from Utah (Salt Lake City, Brigham and Ogden). There were twenty three people watching the sunset on 20 June 1997 when we visited the site, twenty five - thirty five present at the sunrise on June 21, and another large crowd for sunset (fig. 21, fig. 22).

There were fourteen visitors during the spring equinox on 21 March 1995 at Morris's *Observatory* when we visited (fig. 23, fig. 24). Out of six trips that we made to the work, three were solitary, while two, three and fourteen people were encountered during other visits. The summer solstice is also a popular attraction at the *Observatory*. A gathering occurs during this time; considered a cultural grouping, it attracts artists, writers and poets.<sup>54</sup>

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<sup>53</sup> This option is not feasible due to financial constraints.

<sup>54</sup> Attendant at Tourist Information office, Lelystad, 26 October 1993.



The fact that more people are present during alignments, especially those that coincide with comfortable weather conditions, indicates that many people plan specifically to witness these moments, and subsequently most visit on these dates.

The desire to see an alignment is constricting; it requires planning in advance. Visitors must organize their whole trip according to the special moment that they wish to see. Whether fitting the event into a short trip specifically to see the alignment, which is usually instigated by locals travelling a short distance, or a longer trip that involves other attractions as well, the event must be planned, requiring being at a particular place on a specific day, at a specific time. It is therefore improbable that casual visitors will see an alignment. As their trip is unplanned, it is highly unlikely that they be lucky enough to chance upon a site during its special moment, which would constitute such coincidence as to be extraordinary.

Dates of astronomical significance not only attract a higher numbers of visitors at both modern and ancient sites, but also different types of people, including curious locals, people interested in astronomy, and New Age followers.

As people hear more about ancient and modern sites, especially those with alignments, they are inspired to visit during the highlight. Attendance at sites during alignments has increased considerably in the last few decades. For example, though twenty years ago no one visited *Sun Tunnels* during the summer solstice, it now hosts a large group of people that view the sunrises and sunsets.

#### **Conceptual Similarities Seen By Modern Viewers**

Due to the immobility, wide range of dispersal, and frequently remote locations of both ancient and modern sites, they require a trip to be seen. This is what relates them on a conceptual level. Should one wish to view a specific site, one is impelled to embark on a possibly distant journey to fulfill the desire. This need is

not necessarily novel to ancient sites and landworks; it is true for any object or place that is not immediately accessible and that one must travel to see.

The more well-known a site is, the more people will visit it. In contrast to ancient sites that attract large groups of people due to their touristic appeal, Land Art is still a relatively unknown art form, thus drawing few viewers. Subsequently, the concept of 'must-see' does not apply except among people involved in the arts. It is unlikely that people visiting Holland will see Morris's *Observatory* near Lelystad or Smithson's *Broken Circle and Spiral Hill* in Emmen, unless they are specifically interested in art. Likewise, the 'in the middle of nowhere' location and lack of other touristic attractions in the area of remote works such as Heizer's *Double Negative* near Overton in Nevada, draws infrequent visits.

Making a trip to see Land Art and the experience of art appreciation can be analogous to the gratification gained from visiting ancient sites. The compensation for one's efforts might be a unique experience, as it can be *fun* to visit a landwork and perceive it physically and psychologically. By seeing the real thing, one is rewarded with, if nothing else, an adventure and seeing a new place and object in nature.

The landworks' presence in any region, whether remote or not, create places for people to visit other than the usual touristic destinations that the United States is famous for. The country's natural beauty typically ranks high as an attraction; there are many national parks and areas of wilderness that lure nature-lovers. And for a dose of American culture, people can visit any large city. Or they can visit a landwork.

### **Beyond the Facts**

The descriptions in this chapter and the previous one are important to situate Land Art into its context and to understand the logistics entailed in all aspects of its existence. However,

they do not address the more substantial issues of Land Art relative to the artists' achievements in the development of modern art and the meaning of their manifestations.

To deal with these aspects, we will examine four historical paradigms in depth in the next chapters. As noted in the introduction, these types of parallels were already noted by critics, but only in terms of influence. Now we can set out to discover how the artists' use of ancient references benefited their art.

ASTRONOMICALLY ALIGNED LANDWORKS

## Astronomically Aligned Landworks

Let us begin with facts. Many landworks are astronomically aligned. The first version of Robert Morris's *Observatory*, 1971, in Velsen, Holland, was the first landwork to incorporate astronomical dimensions in its design. It was aligned to both the solstice and equinox sunrises, highlighting four special events each year, one per season.<sup>1</sup> The second version, constructed in 1977, in Oostelijk, Flevoland, Holland, is a slightly enlarged copy of the first, and incorporates the same astronomical alignments.

This massive landwork has a diameter of ninety one meters and includes two concentric rings of earth. The outer circle consists of several symmetrical sections. Three bell-shaped curving mounds form this circle which is interrupted by empty space in between. The mounds are made entirely of earth while features within it include wood and granite. Two rectangular granite boulders form a V shape on two of the mounds, and the third is cut to provide a triangular wood-lined passage into the inner section. Beyond the circle, on the opposite side of the triangular entrance, a path leads to two square flat slabs of steel that also form a V shape.

The central enclosure is lined with upright planks of wood on the inside, while the outside is covered with earth (and grass or snow depending on the season). It has four rectangular openings. The widest one is used as a passage into the circle. From inside, the view through two others lead to the granite boulders on the outer mounds that mark the points of the sunrise on the summer and winter solstices, while the third aperture accommodates the equinox sunrises as they rise in between the steel squares (fig. 25, fig. 26, fig. 27, fig. 28, fig. 29).

Nancy Holt's *Sun Tunnels*, 1973-76, that we described in our preface, contains several references to astronomy. The association functions on several levels; not only is the work aligned

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<sup>1</sup> Carter Ratcliff claims that this work is aligned to the sunsets as well as sunrises, but it is only aligned to sunrises. Carter Ratcliff, "Robert Morris: Prisoner of Modernism," *Art in America* 67 (October 1979): 107.

astronomically, but hourly, daily, and yearly time are marked as well as solar and lunar time, all represented through sculptural means.

The four concrete tunnels are placed in an open X configuration so as to be aligned to the sunrises and sunsets of both the winter and summer solstices (fig. 30, fig. 31). Holt chooses the diameter, length, and distance between the tunnels based on proportions of what can be seen of the sky and land, and how long the sun can be seen rising and setting on solstices.<sup>2</sup>

Describing this work and referring its astronomical features, Holt explains: "By marking the yearly extreme position of the sun, *Sun Tunnels* indicates the 'cyclical time' of the solar year. . . . The changing patterns of light from our 'sunstar' marks the days and hours as it passes through the tunnel's 'star-holes'. The positioning of the work is also based on star study: the surveyor and I were only able to find True North by taking our bearings on the North Star - Polaris - as it ovals around the North pole because of the earth's movement."<sup>3</sup>

Other astronomical elements are the differently sized holes drilled in the top half of each tunnel. The holes form different configurations corresponding to the stars in four different constellations: Columba, Draco, Perseus, and Capricorn. The holes' diameter, 18, 20, 23, and 25 centimeters, vary relative to the magnitude of stars represented.

The sun and moon shine through these holes, casting circular or oval shadows on the bottom surface and sides of the tunnels' interiors, thus forming constellations within the tunnels as well (fig. 32, fig. 33). The shapes and positions differ from hour to hour, day to day, season to season, and relative to the sun and moon's positions in the sky.

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<sup>2</sup> Holt, "*Sun Tunnels*," 35.

<sup>3</sup> Ibid.

Bill Vazan uses astronomical alignments in some of his works. *Stone Maze*, 1975-76, made for the Olympics in Montreal (and destroyed since) consisted of 250 rocks forming a circular maze. It had markers towards the summer and winter solstice sunrises and sunsets (fig. 34). *Sun Zone*, 1977-78, (faded away) at York University in Toronto, was a spiral drawn with chalk on turf with 13 blocks of granite dispersed within the spiral. The rocks were aligned to the solstice and equinox sun points on the eastern and western horizons.

Pierce's *Earthwoman*, 1976-77, (fig. 35, fig. 36), on Pratt Farm in Maine, is an earthwork shaped in the form of a woman lying nude on her belly with her legs spread. The work is oriented so that during the summer solstice, the sun rises exactly through the center of her buttocks.

Michelle Stuart's *Stone Alignment/Solstice Cairns*, 1979, in Columbia Gorge, Oregon, is aligned to the summer solstice sunrise (fig. 37). Made out of 3,400 rocks, this circular landwork forms a drawing of radiating lines like a wheel, punctuated by four stone cairns. During the solstice, the sun rises above a bee-hive shaped central cairn and sets over the peripheral conical cairn.

Other works offer more complex alignments. Both Charles Ross and James Turrell are working on grandiose projects since the 1970s. Ross incorporates astronomy into *Star Axis*, begun in 1971 and ongoing (fig. 38). It is located on a small mesa, 129 kilometers from Santa Fe, New Mexico, forming a semi-circular concavity in the ground. The center has a deep inverted cone carved in the capstone and is lined with rock masonry.

This work is related to the precession of the North Star, Polaris. Ross intends to capture the relationship between the earth and Polaris which changes periodically according to precession of the equinoxes. As the earth revolves on its axis, it wobbles and shifts toward and away from Polaris, taking 26,000 years to complete its cycle while its axis points to different parts of the sky.

Ross intends that visitors will enter a stainless steel tunnel and walk up stairs to the mesa's top. Each stair has a past and future date engraved upon it to indicate when Polaris filled, or will fill the opening. As people walk upstairs, their perception of the opening, from which Polaris will be visible, will enlarge. Standing on each step, they can view the orbit of Polaris as it was thousands of years ago, and see how it will appear in the future in relation to the cylinder's opening. Ross considers it to be an "Earth/Sky sculpture and naked eye observatory," where "an individual can experience the movement of the Universe in relation to himself or herself."<sup>4</sup>

James Turrell's plans for the natural cinder cone (an extinct volcanic crater with an elevation of 1625 meters) at *Roden Crater* (fig. 39), in the Painted Desert of Arizona, are to construct a 305 meter tunnel that will lead to the top, at the open space of the crater. Turrell is also creating various spaces from which certain sky features will be visible. The project has been under construction since 1977 and according to Julia Turrell, the director of the Skystone Foundation which is organizing construction, will be complete by 2000.<sup>5</sup>

The North Star is the most important element of the *North Space*. Within this area, there is a reclining seat from which one can view the direction of celestial north. The *East Space* contains two pools and is related to the sun. The exterior pool has a diameter of eighteen meters, from which one can look at the surroundings and watch the sunrise. During the equinoxes, the sun rises between two small hills that are visible from this space. Narrow slits in the east wall allow light from every sunrise to enter the space of the interior pool.

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<sup>4</sup> Charles Ross, "Charles Ross," *Sculpting With the Environment*, ed. Baile Oakes, 51.

<sup>5</sup> Julia Brown Turrell, Skystone Foundation Director, letter to author, Arizona, 10 June 1994.



The *Bath Space* includes a sphere with a diameter of eighteen meters in which a bath acts as a lens. The bottom of the bath has a tilted mirror in it so that the image of the sky is magnified within it twenty four hours a day. It is located on top of the *Fumarole Sphere* which is also an eighteen meter diameter sphere made of concrete and finished plaster. It acts as a lens for the imaging of the summer solstice sunrise on the stone at the center of the *Sun and Moon* room adjacent to the *Fumarole Sphere*.

In the *Sun and Moon Room*, every 18.61 years (following the lunar cycle), weather permitting, the image of the moon will fit in its entire opening for a few moments, appearing on the rear wall. Two other rooms near the *Fumarole Sphere* serve as places where people can stay overnight. These areas image the sun at sunrise, achieved by closing a shutter that has an opening in it that aligns the sunrise on the wall over one's head.

The *Tso Kiva* is a pool at the centre of the crater. From here, visitors will be able to lie down in one of four seats designed so that one's head is below one's feet in order to view the horizon backwards and experience a celestial vaulting. The *West Space* is a sunset area, while the *South Space* serves as a map indicating what is happening in each space during the day.

Each work exposes an astronomical alignment differently, depending on its form. The sun rises and sets through the tunnels of Holt's *Sun Tunnels* but it only rises through the granite and steel features on the outer bank of Morris's *Observatory*. Both Morris's and Holt's works feature four alignments but they contain different ones. Holt's tunnels are aligned to the winter and summer solstice sunrise and sunsets, whereas Morris's work includes the sunrises on summer and winter solstices and spring and fall equinoxes, but is not oriented toward any sunsets. So while the attraction at the *Observatory* occurs once a day four times per year, alignments occur at *Sun Tunnels* twice a day on two days each year.<sup>6</sup>

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<sup>6</sup> Exact alignments are actually visible within landworks for a

At Pierce's *Earthwoman* and Stuart's *Stone Alignment/Solstice Cairns*, the alignment occurs once a year during the summer solstice sunrise. At *Earthwoman* the sun rises above the woman's buttocks, and at Stuart's work it rises above a cairn.

At Ross' *Star Axis*, Polaris will be visible (along with the rest of the sky) through the structure's opening every night. Turrell's *Roden Crater* will offer various astronomical phenomena throughout the year, as well as regular views of the sun, moon, and stars, all visible from different areas specially designed for viewing specific celestial events and/or objects.

Alignments are elusive; while their existence affects the structure of a work, they are not tangible, remaining invisible except on specific dates.

### **Critical Response**

Art critics were quick to see a connection between astronomically aligned landworks to Stonehenge and other megalithic alignments, if not with archaeoastronomy as a whole.

By studying and documenting the interest in astronomical phenomena in ancient cultures, archaeologists, more specifically archaeoastronomers as well as astronomers, have contributed information that is available to the public and to critics. The structures of various ancient cultures such as the Mayans, Babylonians, and the Indians at Chaco Canyon are said to incorporate astronomical alignments into their design. There is also much speculation that many megalithic sites and some of the Nazca lines and Indian mounds are also astronomically aligned. In fact, there are enough ancient sites that make references to the sky to conclude that some manifestations are aligned to astronomical phenomena.<sup>7</sup> Stonehenge is even said, notably by

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few days before and after the solstice or equinox.

<sup>7</sup> For an undisputable example of megalithic astronomy at Newgrange, see Michael O'Kelly, *Newgrange. Archaeology, Art and Legend*. (London: Thames and Hudson, 1982), 124.

British astronomer and mathematician Fred Hoyle, to predict eclipses.<sup>8</sup>

During the 1960s, discoveries in the field of archaeoastronomy flourished, especially pertaining to the megalithic site of Stonehenge. Astonishing theories rejuvenated an interest in prehistoric structures and received widespread media coverage, thus informing the general populace and possibly Land artists.

The new concepts were sensationalized and popularized in newspapers and magazines. Books appeared that stripped the technical details out of subjects and offered easily understandable interpretations. Suddenly the mysteries that had shrouded these remains became clarified, and prehistoric man was endowed with capabilities previously unnoticed or ignored.

Archaeoastronomer Anthony Aveni remarked that popular works broadcasted what people wanted to hear: "For we want to view our forebears as mathematically oriented intellectuals who pursued knowledge for its own sake, and erected everlasting monuments as a way of proclaiming their scientific curiosity and industry - the Einsteins of the Stone age."<sup>9</sup> The notion that modern technology was anticipated by ancient civilizations was a powerful idea in popular culture.<sup>10</sup> Innumerable articles appeared about new theories and a media frenzy ensued, rejecting, approving, and often, simply explaining the new trends.

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For an example of archaeoastronomy, see Anthony Aveni, ed., *World Archaeoastronomy*. Selected Papers from the 2nd Oxford International Conference on Archaeoastronomy. Held at Merida, Yucatan, Mexico, 13-17 January 1986 (Cambridge: Cambridge University Press, 1989).

<sup>8</sup> Fred Hoyle, *From Stonehenge to Modern Cosmology* (San Francisco: W.H. Freeman, 1972), 51

<sup>9</sup> Anthony F. Aveni, "Review of *Lines to the Mountain Gods: Nazca and the Mysteries of Peru*, by E. Haddingham," *Antiquity* 61 (November 1987): 497.

<sup>10</sup> Gopnik, 77.

In 1964, Gerald Hawkins published his incredible revelations about Stonehenge in *Nature* and *Harpers Magazine*, catering to both scientists and casual readers.<sup>11</sup> In 1965, he published a book called *Stonehenge Decoded* in which he recapitulated the tantalizing news of his discovery.<sup>12</sup> By 'decoding' the ancient monument through the use of statistics with the aid of a computer, Hawkins proposed that Stonehenge was an ancient astronomical observatory (fig. 40). As a reliable calendar, it was thought to be used for the prediction of seasons through its orientation to solstices and for signalling eclipses of the sun and moon. This was a revolutionary theory and the fact that a prehistoric monument could predict eclipses was a media scoop, creating a landmark of Stonehenge. It was even called 'the Eighth Wonder'.<sup>13</sup>

In 1969, Alexander Thom published his book *Megalithic Sites in Britain*.<sup>14</sup> He claimed that the builders of megalithic structures used advanced geometric skills, exposing knowledge of the Pythagorean triangle long before its invention. He believed that they used a unit of length called the megalithic yard, accurately measuring 2.72 feet, to construct the stone circles and other sites that were said to be aligned with stellar bodies.

The Nazca lines also became known to the general media. In 1965, Paul Kosok published an illustrated book entitled *Life, Land and Water in Ancient Peru*. He considered the lines as calendrical devices marking the seasons when water would appear in the parched desert of Peru (a crucial aspect to a culture based on an agricultural economy). This led him to be the first to attribute

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<sup>11</sup> Gerald S. Hawkins, "Stonehenge: A Neolithic Computer," *Nature* 202 (1964): 1258-61; Gerald S. Hawkins, "Secret of Stonehenge," *Harper's Magazine* 228 (June 1964): 96-99.

<sup>12</sup> Gerald S. Hawkins, *Stonehenge Decoded* (New York: Dell Publishing Co., Inc, 1965).

<sup>13</sup> Anonymous, "The Eighth Wonder," *Time*, 12 November 1965, 82.

<sup>14</sup> Alexander Thom, *Megalithic Sites in Britain* (Oxford: Oxford University Press, 1967).

astronomic associations to the lines which he called "the largest astronomy book in the world."<sup>15</sup> Kosok's theories were publicized in an article from 1970 in *Saturday Review Magazine* that narrated how he had noted that the sun set on the horizon precisely at the base of a line where he stood on June 22, the day of the winter solstice in the southern hemisphere.<sup>16</sup>

Erich Von Daniken's *Chariots of the Gods* was a bestseller published in 1971.<sup>17</sup> According to his farfetched speculations, the ground drawings at Nazca were made to be viewed from the air by extraterrestrial beings who used them as runways and landing strips. Even if Von Daniken's propositions about ancient relics being created or inspired by extraterrestrial intelligences had absolutely no foundation whatsoever, they achieved a high level of success and popularity due to their sensationalist impact.

A comprehensive photographic exhibition of the Nazca lines in 1974 mounted by Kunstraum Munchen in Germany, would also have alerted the attention of people unaware of the Nazca lines.<sup>18</sup> An illustrated catalogue called *Peruanische Erdzeichen. Peruvian Ground Drawings* appeared on the occasion of the exhibition, providing mostly black and white photos and a few colour plates as well, with explanatory texts by Maria Reiche and art critic Hermann Kern.<sup>19</sup>

<sup>15</sup> Paul Kosok, *Life, Land and Water in Peru* (New York: Long Island University Press, 1965), 53.

<sup>16</sup> Paul Kosok, "Woven Calendars of Peru: Excerpt from *Life, Land, and Water in Ancient Peru*," *Saturday Review Magazine*, 10 January 1970, 109.

<sup>17</sup> Erich Von Daniken, *Chariots of the Gods* (New York: Bantam, 1971).

<sup>18</sup> This photo show and the published catalogue instigated Bill Vazan's trips to Peru in 1975, 1984, 1985, and 1986. Vazan, interview by author.

<sup>19</sup> Maria Reiche and Hermann Kern, *Peruanische Erdzeichen. Peruvian Ground Drawings* (Munich: Kunstraum Munchen, 1974).

In 1975, Jim Woodman and other members of the International Explorers Society published their beliefs that the Nazca drawings were laid out by hovering above them in hot-air balloons. They were convinced that it was technically impossible to create or appreciate the drawings without the viewpoint from the sky. Using native fibres of the region, they constructed a balloon that floated, attempting to prove that the ancient culture had the skills needed for flight.<sup>20</sup>

*Science* magazine published an article in 1964 by Alexander Marshack who declared that prehistoric man was counting moon phases.<sup>21</sup> In 1972, his book *The Roots of Civilization* described numerous Upper Palaeolithic to Late Magdalenian examples of engraved bones, possibly used from 35,000 to 10,000 years ago as notational devices. He claimed that the patterns on these bones were not random, that they were sequential notations of lunar cycles.

To those that accepted his propositions, Marshack changed the perception of Cro-Magnon man from a primitive tool maker and hunter to a more sophisticated being with intellectual curiosities. In 1975, he published and condensed his views into a short article in *National Geographic* magazine.<sup>22</sup> Glossy photographs of bone tools adorn the pages, illustrating the 'earliest human notations' of phases of the moon. Though not a formal source for land art, awareness of the possibility that ancient 'abstract' markings on Palaeolithic tools were calendrical could have been inspirational.

The evidence documenting the existence of ancient astronomy suggests that there might be a preoccupation with recording certain

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<sup>20</sup> "Nazca Balloonists?," *Time*, 15 December 1975, 58.

<sup>21</sup> Alexander Marshack, "Lunar Notation on Upper Palaeolithic Remains," *Science* 143, 6 November 1964, 743-745.

<sup>22</sup> Alexander Marshack, "Exploring the Mind of Ice Age Man," *National Geographic* 147 (January 1975): 64-89.

events in the sky. The presence of these references reveals the importance in observing the astronomical events aligned by structural features. It is presumed that ancient sites are aligned in order to measure specific times of year and possibly gage approximate dates.

The boom of information about prehistoric cultures in the latter 1960s and 70s lead to an intensified awareness of prehistoric remains. Robert Smithson was obviously familiar with Hawkins's *Stonehenge Decoded*, since he had an opinion about its theory being unlikely: "Stonehenge doesn't strike me as a Neolithic computer. What is interesting is how we fail to understand such remote things."<sup>23</sup> While referring to changes of the earth's position, Holt reveals that she is also aware of Hawkins: "Stonehenge does not work accurately anymore."<sup>24</sup> Referring to this hypothesis, Pierce claims on the contrary: "Stonehenge is the most obvious example of solar alignment."<sup>25</sup>

Shortly after Hawkins's sensational ideas become famous, artists such as Morris (1971), Holt (1973-76), Vazan (1975-76), Pierce (1976-77), Stuart (1979), Ross (1971-ongoing), and Turrell (1977-ongoing) create works that are astronomically aligned.

The fact that Hawkins's hypothesis about Stonehenge as an observatory coincides with the appearance of astronomically aligned landworks is interesting and suggests, if not a direct causality between the two, a general awareness of archaeoastronomy. Indeed, the presence of works whose features coincide with astronomical events might be indicative of an awareness of Hawkins's theory and

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<sup>23</sup> Smithson, "...The Earth, Subject to Cataclysms, is a Cruel Master," interview by Gregoire Muller, *Writings*, ed. Nancy Holt, 180.

<sup>24</sup> Janet Saade-Cooke, "Touching the Sky: Artworks Using Natural Phenomena, Earth, Sky and Connections to Astronomy," *Leonardo* 21 (1988): 128.

<sup>25</sup> Pierce, letter to author.

a desire to recall his (and other) astronomical and calendrical hypotheses.

As the megalithic site that has achieved the most wide-spread fame, Stonehenge is the example used most often to juxtapose with landworks. Despite the fact that since the latter 1960s, pertinent theories about astronomy present in the Nazca lines, Indian mounds, and other sites are made public, it is usually megalithic examples that are used when discussing ancient astronomy.

In art historical literature, we find many affirmations of an affiliation between Stonehenge and landworks. John Beardsley notes: "A Neolithic work such as Stonehenge, with its orientation to the solstices, provides a precedent for Morris's *Observatory*, Holt's *Sun Tunnels*, and Charles Ross's *Star Axis*."<sup>26</sup>

Martha Wright echoes Beardsley's sentiments: "In the past decade computers have tackled the mystery of Stonehenge and such earthworks as *Observatory*, *Sun Tunnels*, *Star Axis* and many others with celestial orientation, obviously relate to Stonehenge, at least in part."<sup>27</sup> Both Beardsley and Wright designate Stonehenge as a model for Morris, Holt, and Ross.

While some formal features of Morris's *Observatory* and Ross's *Star Axis* resemble ancient sites and justify the critics' associations with Stonehenge, *Sun Tunnels* has no formal counterpart among ancient remains. Rather it is its preoccupation with astronomy and the passage of time that relates it, and other landworks by Holt, to prehistory.

The associations of Morris's use of astronomy with ancient sites, especially Stonehenge, are plentiful. Critics use words such as 'model' and 'making reference' to classify his sources for the novelty of astronomy present in *Observatory*.

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<sup>26</sup> Beardsley, *Probing the Earth*, 16.

<sup>27</sup> Martha McWilliams Wright, "Washington: Some Winter Exhibitions," *Art International* 22 (January 1978): 62.



For example, Edward Fry connects Morris's work to Neolithic structures: "Using his privileged knowledge of the past, based on Western history and archaeology and their eclectic but nearly universal recording of human activities both present and past, Morris has chosen as the *model* for the *Observatory* the similar structures devised by prehistoric men for marking the seasons. Neolithic structures, such as Stonehenge, were built by cultures that either possessed no written history or whose history has not survived."<sup>28</sup>

Rosalind Krauss also relates the *Observatory* to Stonehenge: "Morris had begun to think about the structures both made (like Stonehenge) and found (like caves) by prehistoric societies to convert the arc of the sun's revolutions into the straight line of the intelligible, arrowlike trajectory, and thus to 'read' the solstices. *Observatory* (1971) is a massive project through which to think and to experience this culturally ancient notion of marking, which is to say, of entering into a text that one has not oneself written, and that will continue to be produced to the end of solar time."<sup>29</sup>

Krauss's avoidance of words like 'influence' or 'model' distinguishes her from other critics. Rather than focussing on the *astronomy* inherent in Stonehenge, she appoints man-made and natural places as sources for Morris's use of alignments. She also claims that his use of astronomy offers viewers a chance to experience sky observation like their predecessors had done, exposing this interest as temporal.

Gilles Tiberghien claims that: "*Observatory* transcribes solar time while making reference to certain Neolithic monuments (Stonehenge being the most well-known) that are thought to have

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<sup>28</sup> Fry, *Robert Morris/Projects*, n.p.

<sup>29</sup> Rosalind Krauss, "The Mind/Body Problem: Robert Morris in Series," *Robert Morris. The Mind/Body Problem*, Robert Morris (New York: Solomon R. Guggenheim Museum. January-April 1994), 12.

served as solar calendars."<sup>30</sup> Because of the reference to ancient astronomically aligned sites at the *Observatory*, Tiberghien expects viewers to think about Stonehenge and its potential function as a calendar. And while Morris's work might 'transcribe solar time' as Stonehenge is said to do, it is not used to mark time, though the association, as Tiberghien suggests, is inevitable.

Of Vazan's use of astronomy, David Burnett states: "The references in the *Stone Maze* form part of Vazan's interest in ancient sites, in burial mounds, in monuments such as Stonehenge and the Pyramids. It is an interest in their transformation of simple areas to sacred sites that gave order to the course of natural events; the marking of the sun's equinoxes, the links between heaven and earth, between life and death, in developing patterns of dependency and security in the unknown."<sup>31</sup>

Among other associations to prehistory such as the demarcation between secular and sacred space, Burnett names Vazan's use of astronomy as stemming from his interest in ancient sites.

Of the astronomical phenomena that are visible at Turrell's *Roden Crater*, Mario Diacono explains:

These aspects of the project seem to link it to the primary architectures of ancient civilizations, which were designed to function as sacred spaces for the observation of astronomical events and which incorporated a precise celestial symbolism. Thus the Roden Crater project would seem to open a new chapter in the history of the relationship between primitivism and contemporary art. But why would a contemporary artist work to reconstruct the most ancient of situations for observing determined astronomical events (such as the sunrise at the winter solstice)? Probably because there is a correlation, the archeo-astronomers would tell us, between initial artistic representation and such events. The shaman who established the conditions whereby at the winter solstice the first light of the astronomical new year illuminated the central symbols of human existence

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<sup>30</sup> Tiberghien, *Land Art*, 153.

<sup>31</sup> David Burnett, "The Irony of the Unthinkable," David Burnett and Pierre Landry, *Bill Vazan. Ghostlings* (Canada: Artexpte, 1985), 26-27.

- symbols carved or painted by him on the rocks - assumed the task of collaborating in the maintenance of the order of the universe and in the preservation of the *kosmos*. The shaman thus became both the means and the witness to such events. The contemporary artist, taking on that original role of the artist/shaman, seems to want to interpret anew the very reasons for his/her being and working.<sup>32</sup>

The question asked by Diacono is genuine: why would a contemporary artist work to reconstruct an ancient situation? However, we are not sure that we would answer as he does. Even if sometimes critics try to liken modern artists to ancient shamans, for example, Jackson Pollock and his seemingly borrowed technique of the Navajo sand painters, this link cannot apply here.<sup>33</sup> Obviously, modern artists are not fulfilling any societal role and we do not need them to mark the beginning of the winter solstice. It would appear that their intentions are closer to our suggestion, that landworks that include a reference to the past convey a memory dimension to an environment especially poor in such references in comparison to Europe.

Wright refers to artists using alignments in their works in general: "The modern earthworker like the ancient one links man to his world through his works. We may come to these discoveries of identity though experiencing the earthworks. Knowledge is acquired here through experience, action and participation."<sup>34</sup> Again, this type of comparison seems to miss the point. There might be similarities, but the differences are too big to ignore.

Kirk Varnedoe also refers to this trend in general: "We can see a recurrent concern for such structures of alignment, a concern that oscillates between the math of astronomy and the immediacy of

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<sup>32</sup> Mario Diacono, "Iconographia Coelestis," Craig Adcock et al., *Mapping Spaces. A Topological Survey of the Work of James Turrell* (New York: Peter Blum Editions, 1987), 46.

<sup>33</sup> Ellen G. Landau, *Jackson Pollock* (New York: Harry N. Abrams, Inc, 1989), 60-63.

<sup>34</sup> Wright, 62.

experience, maps of knowledge and fields of perception, the cosmic and the chthonic. For these artists, the geomancy of ancient sites, and Primitive systems of order that align stars and stones together, are often crucial inspirations."<sup>35</sup>

The common theme in the critics' analyses is that artists are affected by their knowledge of prehistoric astronomy in their decision to include alignments in their works. The quotes presented above indicate the critics' efforts to associate the artists' use of astronomy with a probable source.

It is a general practice of art criticism to look for models and antecedents, the main concern being to establish the originality of works discussed. This practice, understandable under a 'regime of art', to borrow an expression from Anne Cauquelin, applies less here, since as we have seen, one of the first intentions of Land Art was to escape from the commercial gallery system and confining spaces of museums.<sup>36</sup>

It is easy to agree with the critics' statements that the Land artists' use of astronomy is derived from prehistory. However, we feel that there is more to the artists' use of astronomy in their work than a simple acknowledgement of sources. Analyzing their statements regarding this trend can provide insight about their intentions.

### **Artists' Statements**

At first, one might think that the artists are agreeing with the critics by admitting, sometimes quite candidly, to being influenced by ancient works. For instance, one could quote Morris responding to an interviewer that asks him the extent that *Observatory* has to do with Neolithic and Oriental architectural complexes: "I think that certainly Neolithic structures like

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<sup>35</sup> Varnedoe, 666.

<sup>36</sup> Anne Cauquelin, *L'Art Contemporain* (Paris: Presses Universitaires de France, Que Sais-Je?, 1992).

Stonehenge and others have . . . been concerned about marking seasons, being big clocks in some way, that's an obvious connection."<sup>37</sup>

What is remarkable here is Morris's readiness in admitting the 'connection' with Stonehenge. When critics adopt the old debunking attitude of revealing hidden or little known sources or secret borrowings, the artist is perfectly comfortable with admitting to a connection.

Of the natural cycles featured in her work such as solstices, compass directions, constellations, and the North Star, Holt says: "To experience these works it is not necessary to know they indicate universal directions or patterns - that is part of my private world."<sup>38</sup> This claim may seem paradoxical, since it is impossible to deny, especially in *Sun Tunnels*, the importance of alignments that offer viewers a unique sight of watching the solstice sun rise and set through the tunnels comprising her work.

Holt is challenging one avenue taken by criticism, namely the more scientifically oriented one that tries to apply knowledge of astronomy to the works but misses their formal and symbolic impact. What is critical, however, is her will to relate the modern viewer's experience of the world to a viewer of '10 thousand years ago': "I am not involved with astronomy; I am just looking at the world, that's all. Anyone alive who had enough food and shelter, even 10 thousand years ago, would start observing the sky and would want somehow to demarcate the things that were happening. It is a basic human desire. I don't think one needs to know anything about astronomy."<sup>39</sup>

Holt makes a distinction between experience and bookish knowledge; clearly, she is more interested in experience. For her,

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<sup>37</sup> Robert Morris, "Interview," *Het Observatorium Van Robert Morris*, n.p.

<sup>38</sup> Foote, "Situation Esthetics," 26.

<sup>39</sup> Saad-Cook, 128.

the experience of the sky is pertinent, while the science of astronomy is much less critical.

She tells Ted Castle:

You know that saying in biology that ontogeny recapitulates phylogeny. Well, I think that within my own ontogeny there is this phylogeny principle too, so that later on I may see an analogy between say, *Sun Tunnels* and Stonehenge, but it isn't part of my intentions. . . . After spending a lot of time in the desert, I don't see why people think it's so remarkable that early man had these advanced astronomical techniques. If you had enough food even for one day, the first thing you'd want to do would be to look at the stars, and you'd want to orient your house, for example, to the star that never moved.<sup>40</sup>

Her statement is important in relation to supposed influences of ancient sites on modern works. Critics claim that the subject of astronomy and the inclusion of alignments in modern art is consciously derived from the use of astronomy in ancient sites. Holt challenges the notion that her use of astronomical alignments is intentional rather than coincidental. Though not intending to make an analogy with Stonehenge, her choice of using alignments does relate her work to ancient astronomically aligned sites; the association may be irrelevant as she claims, but it is nonetheless present.

Clearly, a direct approach - and seemingly archaic approach - to the natural world is what Holt is striving for. The formal similitude of her works with specific ancient works or a will to use modern astronomical knowledge is less crucial to her than this shared experience with the past. By using alignments, Holt makes a connection with the past for herself as well as her viewers.

The apparent denial of intent to refer to Stonehenge alludes less to a preference for independence from influence, as strengthening the stance of her work as a personal and original art. Like one could find in so many artists before Land Art, there is a will to belong to a community of feelings with the humanity of

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<sup>40</sup> Castle, "Nancy Holt, Siteseer," 90-91.

the universal past. Suggesting that the history of her development recounts the history of her species implies less that she thinks of using alignments, whether she is aware of ancient astronomy or not, than again expressing an incredible sense of continuity with the past.

Responding as to whether she is affected by ancient astronomy, she claims,

I don't think the effect was direct. It wasn't that I saw these things and then got the idea for my art. My art evolved out of previous work that I was doing. Out of wanting to get outside the system, like the gallery and museum system, of interior rooms, special kinds of pure places where art was separated from life. Moving into the landscape was partially motivated by that, partially by an extension of earlier work, and a sensitivity to certain things in the built environment, and then also you could add onto that perhaps some of these prehistoric monuments or archaeological sites that I had experienced. . . . It wasn't really foremost on my mind. I had been doing work with light, and shining lights, interior lights. . . . So I really was thinking about light, casting lights from holes and using the sun, and then I thought, Oh well, maybe I should align these tunnels with the rising and setting of the solstice sun. . . . At the time that I did *Sun Tunnels* I wasn't that aware of solar alignments, of ancient sites. It was in the mid 70s and there's been so much literature on that since that time, but at that time there wasn't a whole lot of knowledge about the astronomical alignments. . . . It was more about being in the desert and watching the sun rise and aspiring to use the shadow and the sunlight. I really didn't think that much about it being astronomic. . . . But it's all after the fact. It wasn't there in the beginning to motivate me. But now, I know so much about it.<sup>41</sup>

Here Holt reminds us of the contingency of artistic inspiration. A simplistic causal reasoning looking for 'sources' or 'influences' outside the artist's own development is often misleading and not illuminating. Holt also reminds us about the context of Land Art, of the need to operate 'outside the system' of museums and galleries that were seen as stifling and confined.

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<sup>41</sup> Holt, interview by author.



Artists had to 'move into the landscape', to work outside. But that is not all, since architecture, gardening, and landscaping could have been said to work outside of the gallery and museum system. To have Land Art, a certain 'sensitivity to the built environment' was necessary, in which archaic structures had a role to play, as marginal as one could make them. But by 'playing with light', Holt was suddenly giving a new dimension to her 'sculpture'. The environment was no longer a neutral background in which to put a piece. It was part of the sculpture like it was at Stonehenge or Avebury, albeit probably for less exclusively aesthetic reasons.

In fact, Holt's reticent approach is not so far from Morris's acquiescence. Both are interested in an experience with light, and both feel a link with a very old and basic apprehension of the world through natural light. We could say that these modern works are giving meaning to the landscape by loading it with the memory of Stonehenge.

Like Holt, Turrell is also interested in working with light and makes no mention of being affected by ancient astronomy.<sup>42</sup> Of events observed at *Roden Crater*, he differentiates from the experience at Stonehenge: "Actually, it is not so much observing the events but observing something that happens inside the space. For instance, if one has something like a Stonehenge - a situation where there are sitting stones and one stands at a certain place to observe an event - one's attention is directed to the event. Here, attention is not directed to the event but to the space itself. It is the *space* that responds in one manner when the event occurs. In other words, it has its own way of forming its response to this event."<sup>43</sup>

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<sup>42</sup> He does associate this work to more obscure sites: "In the crater, there are situations that are very similar to naked eye observatories like Tycho Bray and Jai Singh." James Turrell, "James Turrell," *Sculpting with the Environment*, ed. Baile Oakes, 67.

<sup>43</sup> Saad-Cook, 129.



Turrell is interested in providing spaces that will enable visitors to experience events seen in the sky. He explains:

My desire to set up a situation to which I can take you and let you see. It becomes your experience. I am doing that at *Roden Crater*. It's not taking from Nature but placing you in contact with it. *Roden Crater* has knowledge in it, and it does something with that knowledge. Environmental events occur; a space lights up. Something happens in there, for a moment, or for a time. It is an eye, something that is itself perceiving. It is a piece that does not end: it is changed by the action of the Sun, the Moon, the cloud cover, by the day and the seasons that you're there."<sup>44</sup>

Turrell's interpretation could be defined like a reverse reading of the archaic work that he refers to indirectly. At Stonehenge, seemingly, the main concern is to witness an event that happens in a fixed moment, making people oblivious of the space that they are in. *Roden Crater* does exactly the opposite: the 'event' is perceptual and makes people focus on the space that they are in. But we cannot escape the impression that we are in fact dealing with the same parameters, though their signs (in a mathematical sense) are reversed. Like Holt, Turrell is sensitive to the issue of originality, but his work has the same mnemonic dimension as Holt's.

It appears that artists may use astronomy simply as an added element in their work. By including the sky and its visual components as sculptural elements, as a 'material' part of their landwork, Land artists expand the repertoire of subject matter and material beyond what viewers are used to seeing in the context of galleries and museums, especially since Minimalism. In works aligned to the equinox and/or solstice sunrises and/or sunsets, the equinoxes and solstices become part of the works' subject matter, while the sun becomes a sculptural medium.

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<sup>44</sup> James Turrell, "James Turrell," *Sculpting with the Environment*, ed. Baile Oakes, 77.

### **Assessment of a Comparison**

As we have seen, both the critics and artists must deal with the issue of a possible connection between landworks and ancient astronomically aligned sites, especially Stonehenge. It is also evident that the artists are more edgy on this subject than critics, insisting that the connection, if there is one, is not essential to understanding the works, and that they are more interested in observation of the sky than the science of astronomy, ancient or modern.

One tends to agree with the artists on this. What is the meaning of the ancient astronomically-aligned works as modern archaeoastronomy makes us understand?

Without modern technology to guide them, we deduce that only events that are visible to the naked eye are recorded, and thus the sky and objects within it prove to be accurate foretellers of time and seasons. The sun, moon, and stars are objects with the most visibility due to their size and duration in the sky. Following their paths could serve to follow the cycles of nature and thus measure time. Their courses could provide ancient farmers with such information, explaining the possible associations among ancient sites to these celestial objects.

For pre-calendar, agricultural (or pastoral) groups whose existence depends on the fruitfulness of earth, noting the cycles of nature that affect the earth's fecundity could be indispensable. This leads us to believe that the ancients were inspired to observe the patterns that influenced their environment.

We know that the sun can provide an accurate and simple way of marking the passage of time. Watching its regular pattern of rising and setting, its daily movement across the sky, and the changes of its position and duration in the sky according to time of year can all supply information equivalent to a calendar.

The most significant solar events are the solstices and equinoxes. The solstices occur during the sun's cycle of its annual orbit in relation to the fixed stars. These are the longest and

shortest days of the year. In the northern hemisphere, they occur June 21-22 and December 21-22 respectively, during which the sun is furthest from the equator.

The equinoxes occur in the autumn, Sept 23, and spring, March 21, and signify the moment that the sun crosses the equator as it moves from north to south, and consequently, night and day are of equal length. The sun rises due east and sets due west.

The summer and winter solstices and spring and fall equinoxes can be important dates designating when certain farming activities should take place; therefore, we expect that they be recorded through some sites.

These events divide the year into four parts that, depending on location, might coincide with important dates of the agricultural year, helping determine when to plant and harvest. The spring equinox can signify when to till fields and plant. The summer solstice occurs during the beginning of official summer, marking the peak of productivity. The autumn equinox can designate the period of harvest, and the winter solstice predicts the advent of spring.

The moon can provide an even easier means with which to tell time, thus its cycles are what all calendars originate from. Like the sun, it rises and sets; its dependable rhythm of waning and waxing divides the year into periods of 29.5 days, taking 18.6 years to go through the range of its cycle in terms of position relative to the solstices. Its position in the sky is also determined by time of year and its shape changes as it orbits the earth, evolving from crescent-shaped to circular.

Stars also have courses that can aid in the detection of directions and seasons. Polaris in Ursa Minor, also known as the North Star, is almost motionless; following the line below Polaris to the horizon allows the direction of north to be located. The winter and summer months are occupied by the stars of various constellations whose movements and presence in the sky can help gauge time of year.

By following movements within the sky, Neolithic farmers were able to improve their chance of survival. Creating structures that measured the passage of time by recording and keeping track of the cyclical patterns of nature, thereby predicting important dates during the year that affected events on earth as seasonal markers to farming communities, could help to provide beneficial information. This is what may have motivated their arduous endeavours, justifying the vast investment of time and effort required for the construction of their sites. Or at least, that is how the nostalgic mind justifies and explains the presence of astronomically aligned sites; we imagine that for early agricultural people, noting and marking the change of seasons must have been very important to their survival.

However, these events do not affect the daily life of the artists and critics living in modern times. These are city-dwellers for whom food is a bought commodity rather than a season-dependant necessity, and seasons affect pleasure-oriented activities rather than survival.

It is easy to predict the cycles of nature and astronomical phenomena. The modern-day calendar allows people to situate themselves very precisely in time; events can be planned in advance by determining when they occur in relation to the present, eliminating the need to look at the sky as a locator in time.

Artists have advanced astronomy at their disposal; they can have accurate alignments at their works if they wish. They simply hire astronomers to guide the location of their works and its features with the aid of technological implements.<sup>45</sup>

While artists may be interested in ancient references, their choice of including alignments in their work is personal, unhindered by societal requirements.<sup>46</sup> Unlike their practical

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<sup>45</sup> Nancy Holt hired one astrophysicist, Leslie Fishbone, and one astronomer to guide the placement of *Sun Tunnels*. Holt, "Sun Tunnels," 34.

<sup>46</sup> The setting of Morris's second version of the *Observatory*

predecessors, the artists' renewed interest in sky observation and the decision to include the celestial vista in modern works has no utilitarian function that benefits their survival. Modern landworks are not *used*, though they can provide the same type of information that ancient sites may seek.

From Stuart's, Holt's, and Morris's comments, we can infer that the motivation for using sky observations in their work is a combination of wanting to mark time and a yearning for primal roots. Stuart describes a sensation at *Stone Alignment/Solstice Cairns* that suggests this longing: "When the solstice sun came up over the cairn, I felt that I was sharing an experience with humankind of all times."<sup>47</sup>

Holt speaks of her experience at *Sun Tunnels*: "Out there a 'lifetime' seems very minute. After camping alone in the desert a while, I had a strong sense that I was linked through thousands of years of human time with the people who had lived in the caves around there for so long. I was sharing the same landscape with them. From the site, they would have seen the sun rising and setting over the same mountains and ridges."<sup>48</sup>

Both mention 'sharing', either the experience or the landscape, with humankind. Holt and Stuart thus see a link between themselves and the rest of humanity along with their shared past. For them, watching the slow passage of time through the cycles of nature is a means to envision ancient perceptions.

Holt's statement sums up this concept: "I feel that the need to look at the sky - at the moon and stars - is very basic, and it is inside all of us. So when I say my work is an exteriorization of my own inner reality, I mean I am giving back to people what they

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(1977) within cultivated fields associates it to ancient sites through a relation to agriculture and the subsequent need for astronomical observation. However, this aspect is circumstantial, as Morris had nothing to do with the work's location.

<sup>47</sup> Lippard, *Overlay*, 111.

<sup>48</sup> Holt, "Sun Tunnels," 34.

already have in them."<sup>49</sup> Her belief, that all humans share an innate intimacy with the sky, might be shared by other artists that choose to reinstate this ancient interest. For anyone spending time outside, the sky becomes a vital component of one's existence as it guides all activities. But this may depend more on culture and history than implied here.

The concept of marking time is also expressed. Of *Observatory*, Morris notes that: "It is concerned with time passing. . . . with acknowledging different seasons."<sup>50</sup> Beardsley echoes this idea: "Morris seeks to link the viewer with time, as indicated by the solstitial and equinoctial sight lines."<sup>51</sup> Of *Sun Tunnels* but relative to her other works as well, Holt says: "I think the work is about 'time' - a sense of time that is more universal. The works really do function to keep time, to measure time."<sup>52</sup>

The artists' statements imply that their aspiration is to mark time in a more psychological than calendrical sense. Obviously there is no need for information provided by a rudimentary calendar; rather it is a more abstract concept of time that is alluded to, one closer to what we imagine was perceived by the ancients.

We have only introduced one dimension of ancient astronomy here, but there are other reasons that ancient cultures built sites with alignments. The interpretation of astronomical events vary according to culture. For example, in Mesoamerica, celestial objects were believed to be supernatural forces and divinities presiding within the celestial sphere. Being a more spiritual and culture-specific interpretation, it would be difficult for artists to use this type of perception as a reference, whereas the use of

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<sup>49</sup> Saad-Cook, 128.

<sup>50</sup> Morris, "Interview," *Het Observatorium Van Robert Morris*, n.p.

<sup>51</sup> Beardsley, *Probing the Earth*, 23.

<sup>52</sup> Saad-Cook, 126.

astronomy to mark the passage of time is more objective and universal in nature, and thus more pertinent to members of a modern culture.

### Conclusion

There is no better time to bond with the ancients than seeing an alignment at an archaeological site that they had seen as well, and for whom, archaeoastronomers tell us, the event was significant. When on the spot, people get a feeling of reliving an experience just as their predecessors had, by sharing not only a precise location but a particular phenomenon and cyclical moment in time as well, even if the gap in time is thousands of years apart. And thus 'sky' phenomena are celebrated as periodic apparitions, much like we imagine our predecessors did.

Little attention has been given to the possible reasons that artists create references to the sky and astronomy. The use of alignments in modern art can be a means of reminding people of ancient ways. Modern astronomy has solved many mysteries and instigated new puzzles, but ironically, as knowledge about the universe is gained, an intimacy with the sky is lost. Whether due to a lack of need or the demystification of nature, contemporary societies are rarely connected with the sky.

By creating works that are connected with nature, modern artists want to make viewers share ancient perceptions. The preoccupation with astronomical alignments makes a connection with an imagined past. We must stress, however, that artists are not only making a 'revival' of ancient astronomy; these landworks are also about space, light, time, and the cycles of nature, and viewing them is also the simple appreciation of art.

In the context of Minimalism, art that contains so much meaning is like the antithesis of the avant-garde. Frank Stella repeated the Minimalist mantra time and again: "What You See is What You Get." If all you see is a box on the floor, that is all

you are meant to see. There is no hidden meaning behind the box. It is pure form. That is the subject.

Instead of the geometric variations of Minimalism that abound in museums and galleries, in Land Art, people are suddenly confronted with exterior artworks that contain more than what one sees. Rather than the aloof constructions of Minimalism, Land artists are offering a sensitive interaction with a situation that archaeoastronomers would have us believe is how ancient astronomically aligned sites were used.

Despite the fact that landworks do not function as calendars, they allow people to have an experience that is synonymous with what archaeoastronomers tell us our predecessors did. Viewers are able to witness events as perceived by their predecessors through modern structures rather than ancient ones, but the effect is similar. While they may not be dependant on the information supplied by the art, they are reminded of how Neolithic farmers might have felt.

The modern interest in sky observation is also an extension of a preoccupation with the cycles of nature. The sky is a paramount part of nature. There is evidence that it is a revered force among the ancients; by aligning their works to astronomical phenomena, artists reunite with this perception of nature.

By creating astronomically aligned landworks, artists help people elicit how we think the ancients observed the sky and celestial events taking place within it. This intimate contact with the sky further reinforces the perception of ancient man as living in tune with the forces of nature. The experience provides viewers with a connection with the past that they would most likely not have otherwise, as well as a situation in which they would not normally find themselves when they view art indoors.

Artists thus tap into people's imaginations. By the power of association, astronomically-aligned landworks link viewers with their predecessors, helping them to look back in time and think about history and how it might have felt to look at the sky through



ancient structures especially built for such purposes. The artists do not mimic the ancient structures that are said to be astronomically aligned; they simply use them as references so that people can make the connection.

Viewing such astronomically aligned landworks simultaneously instills a memory within the viewer. One that visits Holt's *Sun Tunnels* (or any other aligned work) is not bound to forget the artwork or the desert that harbours it. It leaves a lasting impression, much stronger than the equivalent work would in a museum with a simulated sunrise. One's involvement with the sky thus compounds the effect of memory and artists thereby effectively create a landscape.

THE NAZCA LINES

## Nazca Lines Paradigm

In 1968, Michael Heizer made a series of works called the *Nine Nevada Depressions*. Digging with a pickax, he made nine huge trenches in the desert floor of the Nevada and California flatlands. The works, of various shapes, no longer exist as they have eroded with time.

The surroundings were desert terrain at its bleakest; the land was stark, encompassing vast amounts of empty space with mountains in the distant background. The soil was cracked dry both within the displaced earth of Heizer's works as well as around them. Nothing was growing in the nearby vicinity except for small, dry shrubs.

Heizer's earthwork, *Isolated Mass/Circumflex*, was *Nine Nevada Depressions 9*, made in a dry lake called Massacre Creek. It was a gigantic loop in the earth, like a huge letter 'e', made by displacing six tons of earth (fig. 41).

*Rift* was *Nine Nevada Depressions 1*, consisting of a trench dug out in the shape of a pointy zigzag (fig. 42). Heizer displaced one and a half tons of earth to create this geometric, angular shape.

Five rectangular wood-lined trenches, seemingly placed at random in a dried up river bed composed *Dissipate*, which was *Nine Nevada Depressions 8* (fig. 43).

The trenches shared a number of formal features: they were linear (though not necessarily rectilinear), formed geometric shapes, and were best seen from above.

One cannot help but think of the Nazca lines when one deals with Heizer's works (fig. 12). They may not have resembled the ancient ground drawings in terms of imagery that much, but their linearity, geometrical form, location in the desert, and the fact that an aerial view offered the most clear image of their form, are aspects which relate these works to the Nazca lines. Indeed, critics also make the same connection. During their comparisons, they focus most often on their common need for an aerial view.

Referring to the *Nine Nevada Depressions*, David Shirey mentions that: "They stretch intermittently, for distances as great as six hundred miles, and from the air, they offer the same impact

as the ancient Peruvian anthropomorphic configurations that turn deserts into megamasterpieces. Laid out with plombs, transits and a compass, his [Heizer's] land labours curve and recurve like a giant's calligraphy."<sup>1</sup>

Shirey's statement makes a formal rapprochement between Heizer's works and the Nazca lines, implying a continuity, of both having 'the same impact'. He connects these works according to the factor that they transform the landscape and are best perceived from the air, perhaps making an allusion to Von Daniken's *The Chariots of the Gods*.

Klauss Kertess refers to the aerial as well as the topographical view: "In this context Heizer's immense drawings into the ground (*Nine Nevada Depressions*, 1968, for example) carried over these intentions from the gallery or museum floor to the earth, while also making visual his involvement with ancient Indian cultures. They relate, for example, to the vast still drawings on the desert floor of Peru's Nazca Valley. Those drawings are level with the ground, and can only be visually grasped in their entirety from the air."<sup>2</sup>

Klauss also claims that as an analysis of surface, the topographical view is a 'major concern for Modernism': "The view as seen (Cubism, Surrealism, Expressionism, and so on) and the view down have largely supplanted the view through (the painting as window, the picturesque) and the view up (religious art, statues on pedestals and such)."<sup>3</sup>

When looking at Heizer's series or other horizontally laid out landworks, the views 'as seen' and 'down' that Kertess refers to are the appropriate ways to look, superceding the more traditional

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<sup>1</sup> David L. Shirey, "Impossible Art - What it is," *Art in America* 57 (May/June 1969): 34.

<sup>2</sup> Klauss Kertess, "Earth Angles," *Artforum* 24 (February 1986): 77.

<sup>3</sup> *Ibid.*

viewpoints of 'through' and 'up'. This is logical, since looking at a horizontal object from ground level or above offers the best and often the *only* appropriate viewpoint, since one could not look up or through Heizer's series.

Heizer makes an important statement when he tells Julia Brown: "I was intentionally trying to develop an American art, and the only sources I felt were allowable were American, South American, Mesoamerican, or North American. That might mean Eskimos or Peruvians."<sup>4</sup>

It is interesting to analyse this declaration along with the critics' comments. If it is true that Heizer wants to get out of the museum and gallery context as a reaction to the prevalent museum art of the time, he insists on something else, the desire to develop an 'American art', specifically an art which could take its roots exclusively in America, north and south. The 'source' that he speaks of is less an 'influence' as art historians usually have in mind than a reference to a specific past, without which, according to Simon Schama, one cannot have a landscape: "Acknowledging the ambiguous legacy of nature myths does at least require us to recognize that landscapes will not always be simple 'places of delight' - scenery as sedative, topography so arranged to feast the eye. For those eyes, as we will discover, are seldom clarified of the promptings of memory. And the memories are not always pastoral picnics."<sup>5</sup>

What we would like to suggest is that Heizer, and we will see many others, could make a reference to an American past by alluding to very specific ancient works, in this case, the Nazca lines. One could say that the ancient ground drawings are used as an historical paradigm for many landworks.

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<sup>4</sup> Michael Heizer, "Michael Heizer Interview with Julia Brown," interview by Julia Brown, *Michael Heizer Sculpture in Reverse*, ed. Julia Brown, 11.

<sup>5</sup> Schama, 18.

### The Lines

The Nazca lines are ground drawings of geometric designs (including straight lines, trapezoids, triangles, rectangles, spirals, zigzags, and meandering patterns) and biomorphic figures (only 5% of the drawings are figures representing birds, fish, other animals, and plants) made by the Nasca culture between 200 B.C. - A.D. 600 (fig. 12, fig. 44).<sup>6</sup> The lines are the most famous remains left by the Nasca culture and are alternately called drawings, lines, figures, geoglyphs, features, and etchings.

The lines are located near the south coast of Peru on the surface of a desert valley known as *Pampa Colorada* (red plain). The area is in a long lowland basin where the Nazca River runs down the foothills of the Andes to join the Grande River, between the foothills of the Andes to the east and a range of low hills that run north to south. The region is flanked by the Andes (that run northwest to southeast) to the east, and west, by the Pacific Ocean.

Geological circumstances have produced a hardened desert base covered with stones. These stones are oxidized (due to evaporation of the morning dew in the sun), so they are now a dark, red brown. Runoff from the mountains carried fine, light coloured soil into the basin while floods carried in larger products such as pebbles and boulders. Thousands of years of erosional filling have created a wide and level plain while wind carried away the dusty surface soil. This process left a hard ground which provided a huge area with an ideal surface for the drawings.

The drawings were made by selectively picking up stones, exposing the lighter coloured soil underneath and creating a

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<sup>6</sup> A discrepancy in the spelling of Nasca arose since the nineteenth century when publications appeared using Nasca with a 'z'. We will follow the suggestion to use Nasca with an 's' for the culture and its people and Nazca with a 'z' to designate the place. Alexandra Menzel, John H. Rowe, and Lawrence E. Dawson, *The Paracas Pottery of Ica. A Study in Style and Time* (Berkeley: University of California Press, 1964), 8.

shallow depression (maximum depth of 30 cm), while pebbles were heaped at the edges of designs. The aridity of the climate has helped to preserve them; since it hardly rains, there are negligible erosive effects. Strong winds also have no impact, since there are no dust particles left to fly away.

Ground drawings of lesser size and density exist in other sections of Peru, Chile, Bolivia, and Europe. In England, the white horse effigies, Long Man of Wilmington, and the Giant Cerne Abbas made during the late Iron Age (first or second century A.D.) are also figures made by exposing the chalk under them on hillsides.<sup>7</sup> Others surely existed but have disappeared.

Some drawings are barely perceptible from the ground. Erich Von Daniken would like us to believe that they were made to be viewed from the air, even though the technological means to achieve this were not invented yet:

Seen from the air, the clear-cut impression that the 37-mile-long plain of Nazca made on me was that of an air-field! . . . According to my way of thinking they could have been laid out on their gigantic scale by working from a model and using a system of coordinates or they could also have been built according to instructions from an aircraft. It is not yet possible to say with certainty whether the plain of Nazca was ever an airfield. . . . What is wrong with the idea that the lines were laid out to say to the 'gods': 'Land here! Everything has been prepared as 'you' ordered.' The builders of the geometrical figures may have had no idea what they were doing. But perhaps they knew perfectly well what the 'gods' needed in order to land.<sup>8</sup>

Even if Von Daniken does not specify which type of gods he is referring to or what kind of aircraft, certainly he means extraterrestrials and spaceships, as the rest of his text about other archaeological sites alludes to these. He wonders whether the

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<sup>7</sup> Richard Long paid homage to the Cerne Abbas Giant in his work *A Six-Day Walk Over All Roads, Lanes, and Double Tracks inside a Six-Mile-Wide Circle Centered on the Giant of Cerne Abbas*, 1975. At the bottom of the map which he exhibited as the gesture of his walk, he drew the giant.

<sup>8</sup> Von Daniken, 31-32.

lines were made by to be seen by a being floating from above: "Could this be an aerial direction indicator rather than a symbol of religious significance?"<sup>9</sup>

His theory is not supported by any archaeological evidence but might have more of a sensationalist impact than one would want to believe. The reader should remember that the art critics quoted above about Heizer's work (and in following sections) insist that the works of modern artists are best seen from above. While considered as the most far-fetched 'theory', Von Daniken's ideas are well-known and might affect critics that focus on the necessary bird's eye view to see both the Nazca lines and landworks (without necessarily insinuating, of course, that they agree with his opinions). In any case, despite his ideas, the more researched and documented interpretations should prevail.

Theories pertaining to the meaning and function of the Nazca lines are numerous and varied. Their most common deficiency is the focus on only one aspect of the Nasca culture without considering the culture as a whole. Johan Reinhard is correct in stating that any interpretation of the lines must also take into consideration the ecological situation and the sacred geography of the region.<sup>10</sup>

Alfred Kroeber and Julio Tello discovered the drawings in 1926, but it was Mejia Xesspe, a Peruvian archaeologist, who first published his speculations about the drawings as ceremonial roads associated with ancient aqueducts and cemeteries of the region.<sup>11</sup> Hans Horkheimer was the next to see them and attributed ancestor worship to the lines.<sup>12</sup>

<sup>9</sup> Ibid., 48-49.

<sup>10</sup> Johan Reinhard, *The Nazca Lines* (Lima: Los Pinos, 1985), 55.

<sup>11</sup> Xesspe, T. Mejía, *Acueductos y Caminos Antiguos de la Hoya del Rio Grande de Nasca* (Lima: Museo de Antropologia, 1927).

<sup>12</sup> Hans Horkheimer, "Las Plazoletas, Rayas y Figuras Prehispánicas en Las Pampas, y Crestas de la Hoya del Rio



Paul Kosok was the first to investigate the lines in detail. He ascribed great importance to astronomical observations and calendrical calculations in helping to regulate the life of evolving agricultural societies throughout the world.<sup>13</sup>

With the rise of a more advanced type of agriculture and the transformation of tribal society into an early period of civilization, a more structured and organized social life developed which eventually led to an interest in astronomical observation. When it became clear that the regular movements of celestial objects directed the progress of the seasons around which the whole productive and social process revolved, there was a need for a fuller understanding of astronomy. The rainfall economy and poor water supply established astronomy as a practical science in order to regulate the developing agricultural process.<sup>14</sup> The astronomer - priests could thus predict the cycle of life-sustaining rain, establish relative rituals, and exert control over the people, as it appeared that only they could influence the forces of nature.

According to Kosok, the 'roads' constructed under the supervision of these priests are ancient sight lines pointing to solstices, equinoxes, and the appearances of important stars.

Although Kosok's interpretation accounts for the ecology of the region and the need for water, his insistence upon all the drawings being associated with a calendar and the paucity of supporting evidence render it questionable, particularly since there is no confirmation of a prehispanic Andean calendar to date.

Maria Reiche, a German astronomer and mathematician who has devoted her life to the study of the Nazca lines (she has lived in Peru for many decades), also believes that the lines mark the position of the sun at summer and winter solstices and that other

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Grande," *Revista de la Universidad Nacional de Trujillo* (Eppoca 11, no.1, 1947): 45-63.

<sup>13</sup> Kosok, 52.

<sup>14</sup> *Ibid.*, 55.

lines have calendrical significance.<sup>15</sup> Her research has continued along the lines of her predecessor, Kosok.

Gerald Hawkins collected data to examine the calendar, star-alignment hypothesis proposed by Reiche and Kosok. With the same technique that he used to 'decode' Stonehenge as an observatory and calendar, and with adjustments for latitude and a new program for stars, he made a computerized analysis of the Nazca line orientations. His results did not support the astronomical and calendrical theory, as not all the lines were found to point to the sun or moon at any of the calendar extremes or to other celestial objects.<sup>16</sup> Hawkins had incorrectly assumed that *all* the lines had to point to significant alignments without considering that astronomical observation may have governed the placement of only some of the lines. Moreover, the emphasis on the statistical approach without combining other data based on cultural considerations makes this approach insufficient.

Clive Ruggles used a statistical approach to the radial azimuths of the lines. The over-regularity of the results implied that centers and their radial lines were deliberately constructed according to a single plan, with uniformly spread directions which were relevant in light of the Andean radial system.<sup>17</sup> The direction of wide lines was correlated to the upstream/downstream water flow axes. No preference was noted for azimuths within the solar arc or in the vicinity of the solstitial or equinoctial sunrise or sunset. The radiating lines of certain line centers (#44, #19 and #45) did possess astronomical considerations with orientations toward

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<sup>15</sup> Maria Reiche, *Mystery on the Desert. Nazca. Peru* (Stuttgart: Eivenverlag, 1968), 70-1, 74.

<sup>16</sup> Gerald Hawkins, *Beyond Stonehenge* (New York: Dorset Press, 1973), 115-6.

<sup>17</sup> Clive Ruggles, "A Statistical Examination of the Radial Line Azimuths at Nazca," *The Lines of Nazca*, ed. Anthony F. Aveni (Philadelphia: The American Philosophical Society, 1990), 253.

equinoctial and solstitial sunsets, and with celestial formations (Pleiades, Archnar, Rigel Alpha Crucis, Alpha Centauri and Vega).

The lines have been ascribed as ceremonial roads or pathways as first suggested by Xesspe and subsequent authors. Helaine Silverman believes that the lines were functionally and symbolically associated with the ceremonial center located nearby at Cahuachi as part of the same religious phenomenon, with each line being made at a particular time by a distinct social group.<sup>18</sup>

Cahuachi was the locus for ceremonial activities involving prediction, whereby shamanic-divining priests could foretell the availability of water and agricultural fertility. Silverman suggests that in order to make predictions, the Nasca priests observed the natural phenomena, celestial bodies, and the supernatural world through the mounds at Cahuachi and the drawings on the *pampa*.<sup>19</sup> The knowledge of prediction accumulated through repetitive experience was physically recorded on the *pampa*, substantiated by an excellent view of many drawings from the hills behind Cahuachi. The lines that point to Cahuachi could either be contemporaneous or later, indicating recognition of its continued sacredness even after its decline.<sup>20</sup>

Some lines are brighter and more easily seen than others due to the practice of sweeping by the Nasca, attributed to a religious act involving distinct social groups.<sup>21</sup> Silverman suggests that this practice may have played the role of highlighting the relevant lines of current rituals. Today's baffling proliferation of lines could be due to cyclical use and re-enactments of calendrical

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<sup>18</sup> Helaine Silverman, "The Early Nasca Pilgrimage Center of Cahuachi and the Nazca Lines. Anthropological and Archaeological Perspectives," *The Lines of Nazca*, ed. Anthony F. Aveni, 236.

<sup>19</sup> *Ibid.*, 249.

<sup>20</sup> *Ibid.*, 238-9.

<sup>21</sup> Gary Urton, "Andean Social Organization and the Maintenance of the Nazca Lines," *The Lines of Nazca*, ed. Anthony F. Aveni, 173-206.

rituals, particularly after the decline of Cahuachi when religious activity shifted to the *pampa*.

According to Silverman, the drawings were also related to Cahuachi by defining pilgrimage routes across the *pampa* terrain, which then became sacred. The *pampa* was converted into an integral part of Nasca religion, and the people were transformed from ordinary to ritual social beings upon arrival at Cahuachi.<sup>22</sup>

William H. Isbell proposes that the drawings were primarily a product of social mechanisms for regulating the balance between resources and populations.<sup>23</sup> When agricultural and economic fluctuations resulted in population changes, these were buffered by occupying people on the *pampa*. A common concern with ritual activities that required a large investment of labour was therefore encouraged and population growth was thus levelled, holding it below what the environment could support.<sup>24</sup>

According to Isbell, the function of the ground drawings had nothing to do with whether they were meant to be viewed from the air, ground, or even viewed at all.<sup>25</sup> If this was the case, however, one would not expect such straight lines and precision drawn geometry and animal figures.

Contrary to the basis of Isbell's theory, creating the drawings did not necessarily require a large investment of time and labour. In 1984, Anthony Aveni and the EARTHWATCH research team dispelled the myth that the drawings were incredible feats of engineering, by constructing a straight line that wound up into a spiral thirty five meters long and one meter wide within an hour

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<sup>22</sup> Ibid., 242.

<sup>23</sup> William H. Isbell, "The Prehistoric Ground Drawings of Peru," *Scientific American* 239 (October 1978): 150.

<sup>24</sup> Ibid., 148b.

<sup>25</sup> Ibid., 148d.

and a half.<sup>26</sup> They suggested that with a workforce of 10,000 people, it could have taken one decade to clear the areas of all the lines.<sup>27</sup>

However, even if they proved that completing the Nazca lines might not have been as time-consuming as previously assumed, they cannot dispel the intricacy of the drawings. Unless they were all done by the same task forces, Aveni and his team did not take into account that work must have stopped periodically for responsibilities such as hunting and fishing.<sup>28</sup>

Tony Morrison suggests that the drawings might have been family or kinship group paths (such pathways are still being used in certain dance rituals today) or belonged to the entire community, used on sacred days. Based on contemporary ethnographic data, he proposes that the rituals were related to ancestor worship.<sup>29</sup>

Anthony Aveni criticizes his predecessors' search for a single explanation for the creation of the lines, and for commonly regarding each mark to be related to every other mark. He questions the underlying assumption that they were all made at the same time, with the same message, and for the same reason.<sup>30</sup> His analysis of

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<sup>26</sup> Anthony F. Aveni, "The Nazca Lines: Patterns in the Desert," *Archaeology* 39 (July/August, 1986): 33.

<sup>27</sup> *Ibid.*, 34.

<sup>28</sup> According to Persis Clarkson, the linear drawings overlies the biomorphic figures, indicating that they are products of two different cultures separated in time and space. See Persis B. Clarkson, "The Archaeology of the Nazca Pampa: Environmental and Cultural Parameters," *The Lines of Nazca*, ed. Anthony F. Aveni, 168. Associations between ceramics and drawings confirm that the Nasca people made them between 220 B.C. - 600 A.D. of the EIP. See Helaine Silverman and David Browne, "New Evidence for the Date of Nazca Lines," *Antiquity* 65 (June 1991): 219.

<sup>29</sup> Tony Morrison, *The Mystery of the Nasca Lines. Pathways to the Gods* (Lima: Andean Air Mail & Peruvian Times, Publishers, 1978).

<sup>30</sup> Anthony F. Aveni, "Order in the Lines," *The Lines of*

the lines encompasses many aspects of the Nasca culture, and is therefore one of the most reliable and well-researched.<sup>31</sup>

According to Aveni, the lines bear a resemblance to Andean coastal roads with regard to straightness, dimensions, method of edging, and the position of cairns at points where changes occur in width. Some lines are too wide to be paths and others too short and narrow to travel upon for a distance. Therefore, Aveni concludes that the lines were intended to be walked over, run, and danced upon, but not simply to get from one place to another.

Aveni was the first to conduct detailed ground-based observations and thus provided accurate descriptions and measurements of the lines. He noted that without exception, the lines converged into what Reiche called 'star-like centers or networks'. Aveni designated these points as 'line centers' and defined them as "... one or several natural hills or mounds often topped by one or more piles of boulders."<sup>32</sup> All other geometrical shapes (trapezoids 62%, triangles 27% and rectangles) also terminate at line centers or to another geometrical figure.

Until Aveni's research, there were few descriptions of straight lines, even though they cover the largest area (literature had focussed on biomorphic figures instead). Aveni walked the area and mapped 62 line centers (45 are interconnected) and tabulated 762 lines (71% narrow, 29% wide). Each line center averages 12 lines, ranging in length from 15 meters to 9 kilometers in length.

He was struck by the resemblance of the line centers with the *ceque* system at Cuzco (Late Horizon site), the Inca capital, which through the research of R.T. Zuidema, had provided reliable data about how cities were planned and organized. Xesspe had already applied the term *ceque* (*seque*=line) to the Nazca lines in the context of roads.

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*Nazca*, ed. Anthony F. Aveni, 43.

<sup>31</sup> Ibid., 41-114.

<sup>32</sup> Ibid., 49.

The *ceque* system provided an organizational scheme for social order, time, and space by using radially arranged lines. Descriptions, analyses, and notational schemes developed by Zuidema enabled Aveni to find similarities between the two cultures despite the time difference between them. In fact, it is possible that the Inca radial system had a precedent in a previous culture, deriving from Nazca.

The city of Cuzco was segmented into two halves, each divided into two sectors - *suyus*. The boundaries between *suyus* were dictated by demarcating the flow of underground water rather than geometrical considerations, and were drawn by the four roads leading out of the city. Thus water rights were delineated by birth to people of various kin related groups - *ayllus*, who received the underground water directly from their ancestors believed to reside in the earth. The Inca had a moiety system, and their administrative system also apparently reflected some sort of dualism. Therefore, segmentation was probably not only linked to water rights and might have had ramifications in other parts of their culture.

A number of imaginary radial lines of sight within each *suyu* emanated from the most important center of worship, the Temple of the Sun. Each line could be traced by a series of *huacas* which were temples or sacred places in the landscape. They could either be man-made arrangements of stones or natural, such as bends in rivers, springs, springs, and hills, often involving the themes of water and an agricultural calendar.

The *ceque* system at Cuzco provided an organizational scheme in a social context. The lines were identified according to which social class tended them, and were used in sequence to rotate the assignments of the hierarchy of worship. The placement and arrangement of the *ceques* provided information about the various kin groups associated with royalty and their inter-relationships,

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as well as about the organization of agricultural and ritual activities.

The Andean *quipus* (a cotton cord with thinner subsidiary cords containing knots suspended from it) whose primary function is accounting, also has striking similarities with the *ceque* system. The cords can be compared to *ceques* and the knots to *huacas*.

A comparison of the *ceque* system at Cuzco and the Nazca lines reveals certain similarities and differences that can be attributed to the characteristics of each culture and the purposes of their creation. The similarity of Nazca designs to the *ceques* of Cuzco do not imply that their functions were identical. The radial theme of straight lines emanating from line centers present on the *pampa* evidently reappeared in the highlands of the Inca capital. Even certain peculiarities of the *ceque* system such as the chain-linking of features are also common in Nazca designs. Like *ceque* lines, Nazca lines do not follow the most advantageous path, rather they climb up over hills and through ravines. Although the lines on the *pampa* also provide an organizational scheme of the Nasca society, several of them are believed to represent ceremonial pathways.

Aveni concluded that certain *huacas* along *ceques* were used to indicate positions of celestial objects at times of calendrical, agricultural, and ritual importance. The fact that some, but not every *ceque* and *huaca* are related to astronomical alignments is important, and supports the suggestion that not all the Nazca lines need to have orientations of astronomical significance.

Statistical tests on the frequency of line alignments with celestial targets revealed that the design and layout of all line centers was not dictated by astronomical planning. In some line centers an increased frequency toward the Pleiades, the zenith sun, and the Alpha and Beta Centauri, known to have been significant in the Andean tradition, was observed.

The line centers are located at the first hills toward the mountains, along the rim of the *pampa* near the river valleys, and



along the broader tributaries. All centers are tied exclusively to the Nazca river drainage.

Early Post Conquest period documents reveal that controlling and utilizing water is a prime concern in this particular ecological zone, so that the positioning of line centers could be connected with the location of mountains and surface water. Many lines connect important points that delineate the flow of water across the *pampa*, such as bends in rivers and river banks (at Cuzco many lines also terminate at points of where water flow changes direction). Aveni suggested that the directions of alignments of trapezoids were selected deliberately to correspond to the movement of water.<sup>33</sup> His histograms illustrate the correlation between the orientation of geometrical figures and the flow of water.

The agriculture/irrigation hypothesis relates to the astronomical theory, as some lines emanating from centers are oriented to the sunrise position during the two annual passages of the sun across zeniths, which coincides with the arrival of water in *quebradas* (small valleys).

Aveni supports a hybrid of walking, agriculture/irrigation, and astronomical hypotheses, suggesting the lines and associated geometry were intended to be walked over in rituals pertaining to bringing water to the valley from its underground and mountain sources.<sup>34</sup>

With the guidance of ethnographic, ethnohistorical, and archaeological data, Johan Reinhard concludes that the drawings were associated with the worship of mountains and a water/fertility cult. The worship of mountains stemmed from their influence upon fertility of crops and animals as the controllers of meteorological phenomena, thus of water. Common throughout the Andes, this has a sound ecological basis, since rivers originate from mountains and rain, snow, and clouds originate there as well. The Nasca economy

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<sup>33</sup> Ibid., 105.

<sup>34</sup> Ibid., 110.

was dependent on rainfall and the rivers originating in the mountains. Underground filtration canals were built to allow agriculture during dry periods (the Nazca River remains dry for several months per year).

Lines fulfilled water ritual functions by connecting a central place of worship (the mounds) with critical places of the irrigation system (points where canals change direction). The large number of lines on the plateau and their crossing over suggests that through time, different groups may have made their own lines to make offerings.<sup>35</sup> Short or wide lines were probably not paths, but rather delimited sacred space in which worship was performed.

Most lines served as sacred paths to places where rituals of fertility rites took place. Triangles and rectangles may have served as symbolic connectors with water sources (rivers, mountains, and the ocean) and were sacred areas. Offerings made to water sources could be made in an open space within view of the most important sources or at places associated with them, such as at critical junctions of rivers or water outlets.

Gary Urton uses ethnographic analogies from contemporary communities (such as Pacariqtambo), and archaeological and ethnohistorical data (from Quebrada de la Vaca, Cochabamba Valley) to draw conclusions about public land divisions and assignments of maintenance and rituals to various *ayllus*.<sup>36</sup>

Narrow elongated strips (*chiuta*, *suyu*, etc.) of divided public territory were allocated to each *ayllu* based on a parallel rather than radial scheme. Rights to resources and responsibilities for public works were distributed according to principles and practices of turn-taking (*mit'a*). Urton suggests that there was a ritual maintenance of the lines involving sweeping them clean to renew their contrast. This group activity would also symbolize the

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<sup>35</sup> Reinhard, 21.

<sup>36</sup> Gary Urton, "Andean Social organization and the Maintenance of the Nazca Lines," *The Lines of Nazca*, ed. Anthony F. Aveni, 173.

renewal of the *ayllus*, like the construction of the mounds at Cahuachi.

This type of social organization for ritual processes and dynamic interactions could account for the maintenance of lines and probably their construction.<sup>37</sup> Urton's belief that social groups interacted with each other on ritual and ceremonial occasions on the *pampa* is compatible with Silverman's theory about Cahuachi. In that respect, the lines may have been the focus of solving problems of space distribution and resources among *ayllu* groups.

It has become evident that the riddle of the Nazca lines has not been explained by a single hypothesis, but rather by a combination of speculative concepts involving rituals, agriculture, water sources, astronomy, and social structuring.

#### An Artist's Approach to the Nazca Lines

Robert Morris writes an article in *Artforum* entitled "Aligned with Nazca," in which he describes various theories pertaining to the lines and reveals both his interest and impression of them.<sup>38</sup> As an artist, his perceptions are compatible with other artists, and, occupying a prominent position among theoreticians, his views are essential to our subject.

Morris defines the lines from a Minimalist and Land artist's approach. Though the article was written at least seven years after artists began making works that resemble the Nazca lines, it is important because it serves as a document that recapitulates the artists' views. Within the article, we can also find some of the factors that critics refer to when comparing landworks to the Nazca lines.

Morris writes: "In a landscape like that at Nazca the ground plane does not remain merely horizontal, for it extends up into

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<sup>37</sup> Ibid., 205.

<sup>38</sup> Robert Morris, "Aligned With Nazca," *Artforum* 14 (November 1975): 26-39.

one's vision to the height of one's eyes at the distant horizon. The opposition of street and building, floor and wall, of close-up urban seeing, is nonexistent."<sup>39</sup> Contrasting the urban landscape with that of the lines and accentuating their differences is relevant in terms of the spatial conceptions that would concern and affect Land artists.

He continues: "One sees instead always at a distance, the known flatness of the ground also becomes visible 'elevation' at the horizon. The lines inscribed on the plain become visible only by virtue of the extension of that plain - literally from under one's feet up to the level of one's eyesight. The horizontal becomes the vertical through extension."<sup>40</sup>

The continual relationship from horizontal to vertical is not available within cities, and by their power of gestalt and perspective, the lines are strengthened at the horizon. In the city, one's view can be obstructed by constructions, whereas in the desert, one's field of vision is unimpeded; other than mountains in the background, the view is homogeneous.

Another significant factor is the Nazca lines' horizontality that appeals to Minimalist ideals:

The lines are both markings and constructed excavations which nominally occupy the horizontal but are located within a perceptual vertical as well. Much recent Western history on the plastic arts can be read only within the context of the confining rectilinear room, where space is either an illusion or limited to a few feet, and where the details of the work are never out of focus. The Cartesian grid of rectilinear room space involves a mental as well as a perceptual focus which implies simultaneous presentness of all parts.

The lines of Nazca were created for as yet unknown reasons by a culture unacquainted with the enclosing visual grid of urban space. . . . Yet common to this ancient drawing and certain recent work is an obsession with space as a palpable emptiness: for the Indians an

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<sup>39</sup> Ibid., 31.

<sup>40</sup> Ibid.

indeterminate exterior, and in the 1970s, an interior, a bounded void, a recaptured absence.<sup>41</sup>

Considering the planar sculptures of Minimalism and their focus on the ground as surface, the Nazca lines can be seen as manifestations sharing these features with the modern Land artists' efforts.

### **Modern Affinities With The Nazca Lines**

Aside from Heizer's *Nine Nevada Depressions*, there are other landworks that resemble the Nazca lines. Landworks that are 'drawn' on the earth's surface inevitably inspire comparison. The technique of drawing is different for all artists, but generally, such works are contrasted with prehistoric ground drawings. Indeed, Heizer, Walter De Maria, Richard Long, Robert Smithson, Bill Vazan, and Dennis Oppenheim make ground drawings that are reminiscent of the Nazca lines in their formal configuration.

Another immediately visible link is through form. The Nazca lines are vast areas of straight lines, geometric figures, spiral forms, and animal figures. Modern artists that use these kinds of configurations show affinities with the Nazca lines. This explains why linear landworks forming a straight line, spiral, or the shape of an animal can be compared with the Nazca lines. De Maria and Long incorporate straight lines into their formal vocabulary. De Maria made *Half Mile Long Drawing* and *Mile Long Drawing* in 1968, as well as *Las Vegas Piece* in 1969, and Long made *Walking a Line in Peru* in 1972. Heizer made geometric shapes such as *Circular Surface Displacement*, 1970 and he used insect and amphibian shapes in *Effigy Tumuli Sculptures*, 1983-85 (the latter example will be examined in a later chapter). Vazan also used animal imagery at *El Poulpo*, 1984.

Spirals were made by Smithson, *Spiral Jetty*, 1970; Vazan, *Spiral Man*, 1971-73; Oppenheim, *Identity Stretch*, 1970-75; and Pierce, *Stone Serpent*, 1979 (fig. 45). Aside from being found on

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<sup>41</sup> Ibid., 33.

the Nazca *pampa*, spirals are also featured on megalithic rock drawings (the passage tombs of Newgrange in Ireland and Gavrinis in Brittany, France, being the most famous), one forms an end of the Serpent Mound in Ohio, and they adorn other ancient and primitive manifestations (fig. 46).

The linear effect obtained in landworks is another aspect that might promote comparisons. While close observation of some edges in the Nazca lines and landworks may not be so sharp, the works are commonly depicted in illustrations from a distance, giving them a linear effect with sharp borders.

The fact that some landworks are located in American deserts further compounds the effect of similarity. The landscape surrounding the ground drawings, both ancient and modern, though thousands of kilometers apart, shares many features common to all deserts.

However, it is possible that the artists' choice of location has little to do with an effort to make something look like the Nazca lines. Land is cheap in the desert, space is vast, and there are few bureaucratic difficulties to contend with. Moreover, the location of landworks is often dependant on medium. Those made out of plants are made in fields while those made of snow require cold climates; artists use whatever medium and location they have at their disposal.

There are a number of modern examples that one can choose from to juxtapose with the Nazca lines. Heizer's *Circular Surface Planar Displacement*, 1970, was another work in the desert that might make people think of the ancient lines (fig. 47). This ground drawing of overlapping circles was made by superposed motorcycle tracks that cut a narrow track in a dry lake bed near Las Vegas. Like Heizer's earlier pieces, the area that it covered was also huge: 152 by 274 meters.

This work is related to the Nazca lines by Hermann Kern.<sup>42</sup>

...the question normally arises in art history as to the influences at work, i.e.: were the land artists familiar with the Peruvian earth marking? Is our view of the Peruvian works influenced by our knowledge of land art?

First of all, it should be noted that the land artists are naturally familiar with the pertinent historical material: for example, Michael Heizer's father worked as an archaeologist on stone alignments in Nevada and California, and Richard Long - who did not want to see any of his works published in the present connection - flew to Peru, lives by the way, in Bristol, and thus is familiar with the southern English monuments in the vicinity.

It should further be remarked that only our knowledge of land art enables us - or at least makes it easier for us - to look upon the Peruvian earth markings as works of art: an achievement of the art aspect as an additional dimension.<sup>43</sup>

Kern's approach is unique, as he suggests that knowledge of Land Art can help to understand the artistic value of the Nazca lines (though the Nasca people did not necessarily perceive their lines as works of art). He speaks of influence and says that it is modern works that allow us to see the ancient works as art. We suggest that things actually go the other way around. The Land artists need the reference to the past in order to add a dimension to their works that will hasten an emancipation from Minimalism.

De Maria also drew on the desert surface. His earliest landworks consisted of straight lines in the desert drawn in different configurations. He made his first landwork in April 1968 in the Mojave Desert in California. *Half Mile Long Drawing* consisted of two parallel chalk lines, drawn twelve feet across and a half mile long. Later, *Mile Long Drawing*, 1968, also in the Mojave Desert, was created with Heizer's help.<sup>44</sup> This piece

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<sup>42</sup> Kern, 144.

<sup>43</sup> Ibid., 122.

<sup>44</sup> Tiberghien, *Land Art*, 56.

consisted of two parallel chalk lines four inches wide and one mile long.

In 1969, De Maria made one of his most famous works, *Las Vegas Piece*, in the Tula Desert of Nevada (fig. 48). This massive earthwork covered an area of five kilometers. It consisted of four straight lines that were cut through the desert with a bulldozer. The lines were oriented north to south and east to west.

As with his earlier works, this piece also resembled the Nazca lines and of course, *Las Vegas Piece* is also related to the ancient drawings by critics. John Beardsley makes his statement in the context of relating landworks to other prehistoric manifestations: "The Nazca lines in Peru similarly represent a parallel to some of the works, notably de Maria's *Las Vegas Piece* and certain of Richard Long's."<sup>45</sup>

Craig Adcock refers to the Nazca lines among other examples of juxtapositions, stating that *Las Vegas Piece* "is very much like the drawn lines on the coastal desert of Peru by the Nazca culture."<sup>46</sup> The concept of similitude is based on 'grandeur', as Adcock precedes this quote by stating that: "Modern earth artists apparently wanted to recapture the force of primitive monuments."<sup>47</sup> Adcock is right in assuming that the artists want to recapture the force of ancient remains; by reinstating their grandeur, they ensure an imposing effect that would cause a lasting memory.

However, that the Nazca lines could constitute a 'parallel' to the modern works as Beardsley suggests, or that landworks like De Maria's *Las Vegas Piece* try 'to recapture the force of primitive monuments,' does not describe, as it seems to us, the artists' intentions. It is not so much that they want to imitate the ancient works, rather than to give, through their pieces, a new temporal dimension to the landscape that they transform.

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<sup>45</sup> Beardsley, *Probing the Earth*, 16.

<sup>46</sup> Adcock, "The Big Bad," 105.

<sup>47</sup> *Ibid.*, 104.



Gilles Tiberghien also sees these pieces in the context of the prevalent Minimalism. Of *Las Vegas Piece*, *Double Negative*, and *Lightning Field*, he writes: "Simply drawn in the ground, these lines evoke the lines of Nazca, Peru. . . . which, according to Morris, now have a radically new aspect for us - specifically because of Minimalism - whose aesthetic has transformed our view. The network that they constitute, as an arrangement of markings, produces a flattening effect close to drawings, plans, or diagrams, from which the first minimalist works originated."<sup>48</sup>

Tiberghien's reference to Minimalism is legitimate, but the relationship that we envisage with the Nazca lines is the other way around. It is not that Minimalism gives us a renewed perception of works of the past, rather that the comparison with the past makes artists like De Maria or Heizer realize what is lacking in Minimalism, namely a memory, a reference to a past.

Tiberghien takes his comparison one step further when he states that: "While Heizer's and De Maria's forms on the ground are probably inspired by the Nazca lines, their interest in these ancient lines is primarily visual and aesthetic. Merely objects of historical inquiry, or of simple curiosity, they are now used as a design schema."<sup>49</sup> Again, neither artist claims nor denies to be influenced by the Nazca lines; while it might be true that Heizer and De Maria appear to be affected by them, their inspiration surely goes further than using the lines merely as a 'design scheme'.

Long's *Walking a Line in Peru*, 1972, is a more obvious work to place in juxtaposition with the Nazca lines.<sup>50</sup> Composed of one straight line, it is not only reminiscent of the Nazca lines, it is done in their nearby vicinity (fig. 49, fig. 50).<sup>51</sup> An unusual

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<sup>48</sup> Tiberghien, *Land Art*, 98, 102.

<sup>49</sup> *Ibid.*, 225.

<sup>50</sup> Varnedoe, 668; Tiberghien, 102.

<sup>51</sup> Richard Long, letter to author, Bristol, 11 February 1997.

feature about its title is the wording. The titles of Long's linear works are usually preceded with the words *A Line*, and then he includes the location of where he walks. In this case, the use of the word *walking* before the regular wording might suggest Long's idea of not merely reducing a work of art to an object, but also to imply an action.

Long's *Walking a Line in Peru* and De Maria's linear landworks such as *Mile Line Drawing* are among the few that do share more aspects with the Nazca lines. Features in common are form and orientation (straight line), visual effect (two differently coloured surfaces combined with linear edges), desert location, and status as 'drawings' rather than 'sculptures'.

Kirk Varnedoe juxtaposes *Walking a Line in Peru* with a photograph of a triangle at the Nazca lines, referring to this connection among other landworks.<sup>52</sup>

Tiberghien also juxtaposes a photograph of this work with the Nazca lines, yet makes no particular statement about the link.<sup>53</sup> He insinuates that Long's work is a photograph of one of his walks on a line at Nazca, but *Walking a Line in Peru* is actually done in the vicinity of the lines, not on an actual line.<sup>54</sup>

Tiberghien later connects *Las Vegas Piece*, *Double Negative*, *Lightning Field*, and *Walking a Line in Peru* by their common need for an aerial view: "It is most often from the sky that these works, and the sites that the works have transformed, are best viewed. This is also true for the lines on the Nazca plain and other similarly enigmatic inscriptions that one finds in England such as *The White Horse of Uffington* in Berkshire, or *The Giant of Cerne Abbas* in Dorset."<sup>55</sup>

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<sup>52</sup> Varnedoe, 668.

<sup>53</sup> Tiberghien, *Land Art*, 102.

<sup>54</sup> Long, letter to author.

<sup>55</sup> Tiberghien, *Land Art*, 102.

Tiberghien's reference to an aerial view that is so popular in the literature on Land Art from its very onset must be contended with. As seen in the comparisons done with Heizer's *Nine Nevada Depressions*, critics associate some landworks with the Nazca lines because they supposedly share the need for an aerial view to be seen properly.

Heizer himself appreciates the aerial view, evident by the fact that he flew over his works in a helicopter to photograph *Isolated Mass/Circumflex* and later, *Circular Surface Displacement Drawing*. This indicates that he wanted to illustrate these works from above as well as the ground.

Of artists in general, Lucy Lippard states that: "Another important idea that contemporary earth and garden artists have taken directly from prehistoric monuments is that of the form too large to be comprehended from the ground - like the mysterious Nazca earth drawings in Peru and those along the U.S. - Mexican border."<sup>56</sup>

Whether due to massive size or planar configurations, the designs at Nazca (and other ancient sites such as the Serpent Mound and the hill figures in England) cannot be identified in their totality from ground level. Seeing them from above provides a more dramatic view as their images can be recognized in their entirety. The larger a site (the Nazca lines cover an area of 48 kilometers north to south), the more beneficial an aerial view. This type of construction clearly interests Land artists.

As mentioned earlier, Von Daniken would have us believe that the Nazca lines were made to be seen from the air: "But what can have induced the pre-Inca peoples to build the fantastic lines, the landing strips, at Nazca? . . . . These tasks would have taken decades without modern machines and appliances. Their whole activity would have been senseless if the end-product of their

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<sup>56</sup> Lucy Lippard, "Gardens: Some Metaphors for a Public Art," *Art in America* 69 (November 1981): 143.

efforts had not been meant as signs to beings approaching them from great heights."<sup>57</sup>

Despite the improbability of Von Daniken's fantastic theories, they have a strong impact and those that hear about them cannot help but think of the necessary aerial view when referring to the Nazca lines. Subsequently, comparisons with landworks tend to yield a reference to this concept, and since it is true that both benefit from the bird's eye view, the idea is repeated throughout the literature.

However, this aspect that landworks supposedly share with the Nazca lines is partially erroneous; critics do not take into account that the Nazca lines were not originally intended to be seen from above. Stating that both require to be seen from the air is a perception of the twentieth century.

Seeing the lines from above is a popular way to see them today and many tourists that visit the Nazca lines do fly above them. Bill Vazan even documents a helicopter ride in a photowork called *Andes Steps - Horizons*, 1984. Smithson claimed that: "The Nazca lines have meaning only because they were photographed from airplanes, at least for our eyes conditioned by the 20th century."<sup>58</sup> He made the distinction of 'our eyes' to appropriate this modern viewpoint.

As for landworks, many are photographed from the air and illustrated in books and magazines from an aerial view. Among those that are best perceived from the air are De Maria's *Las Vegas Piece*, Heizer's *Isolated Mass/Circumflex* and Oppenheim's *Directed Seeding - Cancelled Crop*, 1969 (fig. 51). Granted, most people that visit landworks do not fly in helicopters to see them from the air, but the view they see in photographs is often from above. While this is considered the ideal view, it is important to note that it

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<sup>57</sup> Von Daniken, 32.

<sup>58</sup> Robert Smithson, "The Earth, Subject to Cataclysms, is a Cruel Master," interview with Gregoire Muller, *Writings*, ed. Nancy Holt, 181.

offers a *different* view, more comprehensive of the work's form, but not necessarily a *better* view.

In his article on the Nazca lines, Morris explains this aspect of the lines:

The further down the line one looks, the greater its definition. Yet the greater the distance, the less definition or detail. The lines are both more general and more distinct as lines in direct proportion to the distance focused by the eye. The gestalt becomes stronger as the detail becomes weaker.

It is no wonder that everyone I spoke to in Peru advised me to contact the nearby naval air field and see the lines from the air. Comments such as 'there is nothing to see from the ground' or 'you are going to fly over them, aren't you?' were common from people in the U.S. who had seen them as well as the Peruvians. And various books speak of the near invisibility of the lines from the ground. Aerial photography returns us to our expected viewpoint.<sup>59</sup>

Morris offers a more appropriate way of seeing the lines in their totality:

At close range, the lines simply do not reveal themselves. It is only by positioning oneself within a line so that it stretches away to the horizon that they have any clarity. And their definition or emergence as distinct geometric figures occurs only with a mid- or long-range view, where the effect of perspective then compresses the length and foreshortening reinforces the edges. Since the lines are seldom perfectly straight within any local segment, it is only by looking out rather than down that, by virtue of their great length, the irregularities fade and the gestalt of linearity emerges. All this happens when one stands within a line and sees it meet the horizon perpendicularly. At that vantage point, the greatest foreshortening and compression occurs and the line is revealed with the greatest clarity.<sup>60</sup>

By positioning himself *within* a line to clarify his image, Morris puts himself in the same position that the Nasca people would have in order to see them well. Finally, rather than the constant focus on *above*, Morris implies that there is a different

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<sup>59</sup> Ibid., 31.

<sup>60</sup> Morris, "Aligned with Nazca," 30.

way of looking at the lines, which is in fact, much more congruent to their true meaning. Another logical way to get a better view of the lines is to look at them from mountain tops.

Another landwork that is frequently depicted from an aerial view is Smithson's *Spiral Jetty*, 1970. It also has features that are reminiscent of the Nazca lines. Its spiral form is the first aspect that resembles the lines. Moreover, like the Nazca lines, it can be perceived as both sculpture and drawing. From an aerial view (or on top of the hill nearby), it looks flat and linear, like a drawing, and its entire image is identifiable. From ground perspective, *Spiral Jetty* is highly sculptural and three dimensional, and as one walks along the jetty, it is impossible to see its entire form (fig. 52, fig. 53).

The dichotomy between the technique of drawing versus sculpting in landworks as well as the Nazca lines is a factor that affects one's perception. The Nazca lines as ground drawings should not deter from their actual three dimensional qualities. The association may be ambiguous; drawing is associated with the placement of matter on a surface while the Nazca lines involve the removal of matter, creating a negative versus positive space. But the lines and other ground drawings, whether modern or ancient, achieve both a two-dimensional effect from the air as well as a three-dimensional effect from ground observation. Moreover, the surface texture on the *Pampa Colorado* is far from smooth - aside from the pebbles placed at the edges of lines, the rest of the surface is covered in pebbles as well.

Landworks such as Heizer's *Nine Nevada Depressions*, De Maria's *Las Vegas Piece*, and Smithson's *Spiral Jetty* fall into both categories of drawing and sculpture as different perceptual experiences take place. Seen from above, they appear as flat, two dimensional drawings. Viewed from the ground, their three dimensional qualities prevail and they appear sculptural. If defining what constitutes a drawing is related to the final outcome and its visual impact, then these are drawings. When related to

method of creation, their sculptural qualities must be considered, since they are not actually drawn on the earth's surface.

*Spiral Jetty* is related to the Nazca lines by Kern, Adam Gopnik and Varnedoe.<sup>61</sup> Kern (his reflections about the associations are quoted above) and Varnedoe include photographic juxtapositions of this landwork with the Nazca lines.<sup>62</sup>

Gopnick remarks that an aerial view of *Spiral Jetty* is favoured:

Smithson's late work and the *Spiral Jetty* in particular, comes to inhabit a symbolic space that works through possibilities of looking down on something from a great height.

It seems that there is a path of vision having more to do with the act of looking down that is particularly modern. It's as though there's a channel of vision, a cosmic zoom, whose two extremes, the microscopic and the cosmic, somehow becomes associated with notions of the primitive. So we find in Miro's work of the Thirties a curious mix of microbe and folk imagery, while at the other extreme of the cosmic zoom we find today a close connection between aerial or satellite views and the sci-fi primitive. Indeed, the visual material on which this new kind of primitivism depends not only owes its typical artistic form, but most of its primary material, to the simple presence of a camera in an airplane. There's a whole range of primitive art - the Nazca lines, the Glastonbury Zodiac - which is, in a very literal sense, work created in the last twenty-five years. The confrontation of the hovering, high-tech, flying saucer viewpoint with the laboriously traced and gouged-out earthwork, seems, in its sheer formal structure, to sum up the reconciliation of the very old and the very new that we've seen as central to the structure of ideas involved in this new kind of primitivism.

It seems inevitable that the canonic image of the *Spiral Jetty* should therefore be an overhead view.<sup>63</sup>

Gopnick offers concrete explanations for the modern interest in aerial views, placing this preoccupation in its appropriate

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<sup>61</sup> Kern, 145; Gopnik, 78.

<sup>62</sup> Kern, 145; Varnedoe, 663.

<sup>63</sup> Gopnick, 78.

context. He marks the relation between the aerial view and integration of the remote past in the modern landscape. An aerial view allows artists to take possession of the landscape and to 'inform' it in the direction they want.

Smithson detached himself from any other aspects of the lines other than form and gave a sense of scale that could be dealt with. But scale and form here are not detached from time, rather on the contrary. By alluding to the Nazca lines, the modern works include a dimension of memory of the past that can transform the significance of a simple structure like a spiral, a straight line, or a circle.

Varnedoe juxtaposes a photograph of *Spiral Jetty* with a half-maze drawing at the Nazca lines and claims that "Smithson's *Spiral Jetty* similarly recalled prehistoric land drawings."<sup>64</sup> He relates both to Minimalism: "The Minimalist ideal of neutral forms at the base-level of cognition set up an implicit bond between reduction and regression, between hard-edged geometry and the *ur*-forms of the mind, a juncture of the pristine and the primal popularized by Stanley Kubrick's choice of a Minimalist slab to embody the origin of all human achievement in the opening scenes of the film *2001* (1968)."<sup>65</sup>

Smithson's spiral is not as simplistic as Kubrick's slab. Smithson saw the spiral as a symbol of entropy - the more it grows, the more it encloses - and by transforming it into a kind of sun catcher, he wanted to relate it to shamanistic art.

A surprising association of *Spiral Jetty* with the Nazca lines is by Anthony Aveni. Within an archaeological publication, he includes a section called 'The Nazca Lines as Works of Art' in which he interprets Morris's article "Aligned with Nazca": "Sculptor Robert Morris (1975) has suggested that the apparent economy in creating and delineating a few basic classes of abstract

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<sup>64</sup> Varnedoe, 665.

<sup>65</sup> Ibid.



shapes by the simple process of removal is a characteristic shared by the Nazca line and twentieth century environmental art."<sup>66</sup>

Aveni continues his analysis: "There is a certain public aspect about the way the Nazca artist treats the open space of the desert and its surrounding mountains that one can regard as similar to the way the minimalists of the 1960s exhibited a desire to communicate their own logic to the public via the great works of nature - a form of emotional dialogue between the individual and his fellow humans. Smithson's 'Spiral Jetty' in the Great Salt Lake is but one example that can be offered for comparison."<sup>67</sup>

Aveni uses Kern's juxtaposition of *Spiral Jetty* as an example for comparison between landworks and the Nazca lines, and gives the landworks a function as a symbolic message between individuals, nature, and the rest of humanity.<sup>68</sup>

From the selection of quotes presented above, three main themes emerge in comparisons between the Nazca lines and landworks, namely the insistence on the bird's eye view, the relation to Minimalism, and the transformation of the landscape.

Critics are careful not to stress a notion of influence. Instead, they use a discourse of similarity such as 'same impact', 'they relate', 'parallel', 'very much like', and 'evoke'. There is a problem of the paradigm's exact relation to landworks, as critics do not always explain *how* the modern works are similar to the Nazca lines. Despite the fact that readers are often left to presuppose their own speculations about the similarities, we can deduce the various formal aspects that critics might be considering, which are mentioned above.

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<sup>66</sup> Anthony F. Aveni, "An Assessment of Previous Studies of the Nazca Geoglyphs," *The Lines of Nazca*, ed. Anthony F. Aveni, 37.

<sup>67</sup> Ibid.

<sup>68</sup> His source for the juxtaposition is Maria Reiche and Hermann Kern, *Peruanische Erzeichen. Peruvian Ground Drawings* (Munich: Kunstraum Munchen, 1974), fig. 144, 145.

However, despite the formal resemblances between the ancient and modern, we feel that there has to be more to the affinities than simple reiteration of form. It is possible that a more appropriate explanation would be a combination of the critics' reasonings, namely that forms derived from the Nazca lines, along with the repeated insinuations that landworks transform the landscape are more compatible with the true efforts of the artists.

### **Different Intentions**

The functions of the Nazca lines and landworks cannot be compared. They are made thousands of years apart by different cultures. While there are many distinct theories about the lines, no one really knows what role they played in their culture. If we speculate, we can suggest that they fulfilled a social need. Landworks, by eliciting memories of the past for the American culture, also fulfill a social need. Moreover, for people interested in the New Age mysticism, Land Art might play some sort of sacred or ritual role.

The short overview presented above about the Nazca lines is intended to illustrate their complexity. They were made by a rich culture and were not as simple as implied by the critics. And most importantly, their functions were vastly different from those of landworks. While critics are quick to point out the resemblances between landworks and the Nazca lines, the more important differences between the two should not be overlooked.

Landworks are not ceremonial roads or associated to ancestor worship. While some landworks can be associated with astronomy as some of the Nazca lines are speculated to be, none of the landworks that have a formal similarity with the Nazca lines are astronomically aligned. They do not define pilgrimage routes. They are not created to keep the population busy during times of economic fluctuations resulting from population changes. They are not family or kinship group paths, nor do they lead to water

sources. They have nothing to do with worshipping mountains and they do not serve as ritual paths that lead to sacred places.

So that when critics make statements regarding similarities between the two, they should emphasize that they are referring to some, and they should specify which, formal associations and nothing more. Otherwise, the reader may construe meaning where it does not exist.

A more interesting question would be to identify the intentions of landworks in comparison with what we can guess of the intentions of the ancient models. Already when one compares the way they are made, one can sense a difference of intention.

As mentioned above, the Nazca lines were made by removal of matter from the desert surface which caused visible patterns to emerge. The contrasts occur due to colour distinction between the untouched top surface to the layer underneath, which is of a different colour. Therefore, wherever soil was removed, a pattern appeared. This method was manual, and required time-consuming labour.

There are a wide variety of techniques used to make landworks that resemble the lines. The only factor that they may share with the ancients on this level is the creation of images through the opposition between a light surface and a darker recess.

Heizer removed matter to create his *Nine Nevada Depressions* just as the makers of the Nazca lines did, but he removed much more than at Nazca. The effect of visible patterns was achieved by the depth of the trenches that he dug with a shovel and pickaxes, thereby creating a darker area than the surface. *Circular Surface Planar Displacement*, done two years later, was made by patterns created with motorcycle tracks.

To make *Half Mile Long Drawing* and *Mile Long Drawing*, De Maria drew with chalk. He later used a bulldozer to cut the four straight lines in *Las Vegas Piece* to achieve a similar effect of contrast as Heizer in his *Depressions*. The deeper areas were darker than the surface, thereby marking his lines. Smithsonian also used bulldozers,

dumptrucks, and other modern equipment, but he used them to add rocks and boulders into a lake in order to create *Spiral Jetty*. Long's *Walking a Line in Peru* was made by the repetitive walk up and down the desert surface. Through movements of his feet made by kicking the surface of the topsoil, he created his line.

The techniques to create landwork drawings are limitless. Oppenheim achieved the effect at *Directed Seeding - Cancelled Crop*, 1969, in Finsterwolde, Holland, by harvesting a wheat field in the shape of an X. At *Identity Stretch*, in Artpark, Lewiston, New York, he sprayed hot tar to create the patterns of his and his son's thumbprints. Oppenheim also used snow to create some images such as *Time Line*, 1968, made with a snowmobile to form a straight line at the boundary of the time zone between the United States and Canada at St. John River in Forte Kent, Maine. Vazan's *Spiral Man* was made by walking through snow in Parc Maisonneuve, Montreal (fig. 54).

In *Lay Down as it Started Raining or Snowing Waited Until the Ground Became Wet or Covered Before Getting Up*, 1984-88, (fig. 55, fig. 56), made in Cumbria, Japan, the Borders, and the Hague, Andy Goldsworthy achieved a negative effect in his ground drawings uniquely by using the impression of his body on a dry versus wet surface. He lay on the ground and remained there until the surface around him became wet from rain, or white with snow. Since the surface under his body was shielded from the elements, it remained dry. When he stood up to photograph the image of his body impression, there was a colour contrast created by differences in the dry surface and between the wet surface. If it was raining, the surface was darker than his body impression, and if it was snowing, it was white.

As we have seen, there are no affinities between how the Nazca lines and landworks are made. Vazan is the exception to this distinction. He is the only artist that made his ground drawings according to the method of the ancients while making a series of works near the Nazca lines. He met Maria Reiche in 1974 and was aware of her hypotheses for the lines' functions and their methods

of creation. He decided to use ancient methods of digging and adding stones to make edges: "So a thousand years from now, there may be some confusion between the two. But you can tell mine from theirs by the kind of stuff I do. You can't escape that. We are always prisoners of our time and place."<sup>69</sup>

Vazan made sixteen major pieces between 1984-86 (conceived in 1974), some spread over 100 meters in each direction. *Mummy With Umbilical*, 1984, is a curvilinear 'topsand scraping' (his term) displaying a foetus with an umbilical cord spiralling around it. *Windwheel (Remolino #2)*, 1986, is a more angular and geometric design. The series is linear in nature, achieved by removing the top layer of soil to create a visible pattern underneath with stone placements at edges to create a more definite border. The title of *El Pulpo*, 1984, means octopus in Spanish; even the iconography of an animal configuration is similar to the Nazca lines (fig. 57, fig. 58). Vazan even used Peruvian workers to help make his ground drawings, allying himself with the communal aspects of construction at the Nazca lines.

A by-product of the dissimilarities in how the Nazca lines and landworks are made is that many of the landworks mentioned above have disappeared in time, while surprisingly, many Nazca lines have survived due to the desert's aridity. The factor of impermanence in landworks is related to the medium used and method of creation. For example, De Maria's use of chalk to draw eliminated any option of long-term existence for his works, as the medium was erased by the first rain. Likewise, Oppenheim's snow melted and his fields were harvested.

But the foremost difference between the modern and ancient ground drawings is their purpose of creation. We have suggested that artists are trying to add a layer of history onto the land in order to create a landscape. Their grandiose gestures of possession imply this need to transform the land, even if temporarily. The use

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<sup>69</sup> Vazan, interview by author.

of the Nazca lines as a reference simply interjects an element of memory into the process, thereby adhering to Schama's hypothesis: there is no landscape without memory.

### **Beyond Minimalism**

From our point of view, it is not important to know whether artists are consciously borrowing directly from the Nazca lines model or not. What is important is that the effect of some landworks has the potential to evoke the ancient lines and add this layer of meaning to their work.

As we have seen, there are many formal options at the Nazca lines that artists can pursue such as large scale, linearity, simple forms, and horizontality. Propositions abound about why artists make the choice to create works that resemble the lines. The critics' focus on the preferred aerial view and link to Minimalism that both seem to share are logical associations, as they are important aspects to the works in question.

A common suggestion by critics is that Minimalist aspects of the Nazca lines appeal to artists, justifying their choice of using the ancient ground drawings as sources as a means to perpetuate the formal features of Minimalism. We believe that the situation is actually the reverse, that Land Art is a reaction *against* Minimalism rather than an extension of it.

The reason that people compare Land Art to Minimalism is understandable, as many landworks reiterate some of the more revolutionary aspects of Minimalism. Among these is making sculptures that are horizontal rather than vertical. This interest sparks large, flat constructions of geometric shapes on the floor. Horizontal floor pieces create environments that can be explored and viewed as places rather than structures. While there are definite formal links between the two, it may be the coldness of Minimalism, its lack of symbolism, its rigid *thereness*, that might be what Land artists are reacting against.

Abstract Expressionism had dominated the art world during the 1950s. It had been an introspective vision in which it was the artists' private, inner, and sometimes tumultuous world expressed through abstract painting that was the subject matter. Minimalists reacted against this style by eliminating all remnants of subject matter, making a non-representational art that did not even contain symbolic meaning. They created cool, inexpressive, non-agitated, and anonymous art with an increased objectivity and formal simplicity.

The similarities between landworks and the Nazca lines may partially stem from Land Art's appearance as an extension of Minimalism and the Nazca line's formal relation to Minimalist ideals. Some of the works described above, such as De Maria and Long's straight lines, are like transpositions of Minimalist sculpture created outside. Due to the exterior locations of their work, artists are free to expand their formal repertoire as they are unhindered by walled enclosures.

While Land Art might appear to be aloof and reserved like Minimalism, we believe that artists are looking for something beyond form. Despite a prevalent abstraction, they are searching for new references that some find in ancient sites. Perhaps artists are referring to something that has so much meaning as a means to try to get a meaning of their own, to bring a sensitivity back to art.

Heizer's statement about his sources being 'American, South American, Mesoamerican, or North American', reinforces the possibility that artists are hoping to create a uniquely American art. As we will see in a chapter on Indian mounds, the same efforts apply to other works that resemble ancient sites.<sup>70</sup>

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<sup>70</sup> There are other sources from South and Central America aside from the Nazca lines that artists use as well. Michael Heizer's *Complex One/City*, 1972-1974, in Garden Valley, Nevada, (fig. 59, fig. 60), looking distinctly Mayan, is the landwork that most exemplifies this. This inevitable correlation is noted by critics as well: Beardsley, *Probing the Earth*, 16-18; Tiberghien, *Land Art*, 72.

Among the aspects that the Nazca lines offer to artists are their form. But they offer much more. As remnants of a past civilization, they stand for much of what is missing in the United States in comparison to Europe, namely layers of history. The Nazca lines offer artists the example and idea of creating a landscape within the United States. And most importantly, they suggest to artists the option of transforming the environment into a landscape.

The most important reason that artists create landworks that resemble the Nazca lines is not to imitate them; rather it is to benefit from a reference to an ancient site, to its way of transforming the land. As such, the ancient lines become appropriate sources of reference for the artists. Landworks that look like the Nazca lines are informed with a memory, and as viewers look at them, they make the association between the ancient and modern, and transpose whatever they expect of a landscape onto them.



**MEGALITHS**

## Megaliths

As another type of ancient manifestation that is alluded to in literature on Land Art, megaliths will be the third paradigm to be examined. Among megalithic remains, Stonehenge is the example used most frequently by critics to compare with landworks, an honour that is surely bestowed due to its fame.

Megaliths exist within a Neolithic context, between the fourth and second millennium B.C., and can be found throughout Europe, the Middle East, Japan, and Africa.

The forms of megaliths are varied, their common characteristic being the use of rocks as structural or architectural elements. The term megalithic expresses this fact well, *mega* denoting large in Greek, and *lithos* being rock (though it must be noted that small stones are also used in megalithic sites).

Alignments are rows of upright rocks, ranging from two rocks to thousands (fig. 8). Cromlechs are circles, squares, and ovoids of standing stones (fig. 5). Menhirs are single standing rocks (fig. 11). Dolmens, also called passage graves, are burial chambers built of rocks. Sometimes they form a roofed enclosure covered by an earth mound, while others have their rocks exposed. Made of earth, henges or embankments that sometimes surround stone circles and mounds are also included in the megalithic inventory. Megalithic remains, whether any of the above forms, are of various sizes and differ regionally.

There are many theories pertaining to the functions of megaliths. Evidence of single or multiple burials found within dolmens allow archaeologists to label, with certainty, these remnants as tombs. As for stone circles and alignments, archaeologists are forced to conjure hypotheses that range from naming them as meeting places, sacred territory, and places where other social and/or ritual activity took place.

### Megalithic Paradigm

Richard Long, Robert Morris, and Robert Smithson are among the Land artists whose works are compared with megalithic sites. In

some cases, the comparisons are made with a specific ancient example such as Stonehenge, while in others, statements are more general regarding an affinity to megaliths as a whole.

Perhaps because Long's body of work is so vast and there are so many examples to choose from, critics tend to make general comments when making their comparisons. Rather than bring forth specific examples, they juxtapose his body of work as a whole with megaliths.

April Kingsley finds that Long's work is: "...fusing art and nature much like the builders of Stonehenge."<sup>1</sup> This comment may be more revealing about the intentions of modern artists than about the ancient builders of Stonehenge. Needless to say that for the latter, Stonehenge was not art and the world was not nature. But for modern Land artists this will of 'fusion' with nature makes sense.

Nancy Foote expresses this by stressing the new awareness of ancient landscapes made possible by the new landworks. She also sees an affinity to prehistory in Long's work, and distinguishing between form and content, she links him with the formal tendencies of ancient sites.

Long makes no secret of his interest in the ancient work; some pieces draw directly on it. Stonehenge and the Cerne Abbas Giant have been focal points for walks. . . . The differences between Long and his unknown ancestors are more subtle than the similarities. Were the ancient monuments religious, funereal, astronomical? Convincing arguments have been put forth for all three. But Long does not borrow his sources' presumed content, as does much recent art that depends on deliberate 'primitivizing'. His primary concern seems to be with the geography and topography of the landscape; with measuring and marking on it, with echoing its character in his choice of sculptural materials and methods. Long's connection with the ancient monuments has more to do with their presence in the landscape than with their role in prehistoric sculpture.<sup>2</sup>

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<sup>1</sup> April Kingsley, "Reviews and Previews," *Artnews* 71 (May 1972): 52.

<sup>2</sup> Nancy Foote, "Long Walks," *Artforum* 18 (Summer 1980): 46.

The point that Foote makes is important. Long's works could define ancient sites as landscapes by making us aware of their beauty. We could assume that those aesthetic dimensions did not escape the ancients, though we do not have the means to determine this possibility with certainty. What Foote makes us realize is that by his very presence at an ancient site, Long adds a dimension of awareness to nature, what she calls a 'presence'. But a general sense of an awareness of the past must play a bigger part. In the cases referred to by Foote, history seems to be an obligatory component of landscape. Landscape is never a given of nature. It always has some cultural components, and in the case chosen by Long, a very ancient cultural component going back to prehistory.

By establishing a strong distinction between Long's pieces and the ancient works near which they are performed, often as only a walk or a trace in the environment, Foote defines the nature of Long's interest in ancient works. They are not sources. To discuss his relation to them in terms of influence is irrelevant, since what is gained is an awareness of their presence in the landscape, not an imitation nor a representation of them.

David Bourdon feels that: "References to Britain's ancient earthworks make a recurrent but subtle appearance in the work of Richard Long. . . . He has also made two pieces 'about' Silbury Hill and several of his stone groups deliberately evoke British megaliths."<sup>3</sup>

One of the works he is referring to is certainly *A Line the Length of a Straight Walk From the Bottom to the Top of Silbury Hill*, 1970. The other references are more elusive, but he is probably referring to those that most formally resemble megaliths, those being Long's stone circles and alignments. Bourdon seems incapable of thinking of the relation of Long's works to ancient

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<sup>3</sup> David Bourdon, *Designing the Earth. The Human Impulse to Shape Nature* (New York: Harry N. Abrams, Inc., Publishers, 1995), 220.

sites other than as a borrowing or an influence. Of course similarities exist, but what is their significance?

In an article on Long, British archaeologist Colin Renfrew makes reference to his association with prehistoric remains, providing a rare example of an archaeologist writing a text about a modern artist. Renfrew does not make his statements blindly, as he is familiar with megaliths and has formulated speculations as to their functions and meanings.<sup>4</sup>

It is perhaps inevitable moreover that an archaeologist or a prehistorian should notice here a similarity in personal response to these works and to various British prehistoric monuments - circles of standing stones, or earthen long barrows. The point here is not that Long has seen these prehistoric monuments (as in some cases he indeed has) or been inspired by them: it is that our early ancestors were in some cases making statements to their contemporaries and successors which in some ways are analogous to those which Long is making. In comparing Long's work to prehistoric monuments, we therefore stand to learn more about the monuments (and about our response to them) than we do about Long's work itself. . . . Long has chosen some of the basic elements used by humans in early times. The earliest prehistoric paintings known to us are the imprints or outlines of hands upon cave walls of the Old Stone Age. The hand prints and footprints of the mud works use the same basic human resources as did those remote precursors. Like so much of Long's work they are part of a continuing monologue (which we can share) about what it is to be human, and to live, walk and create in a material world.<sup>5</sup>

Sure enough, Renfrew avoids an easy rapprochement between Long's pieces and ancient works, but by situating his comparison on such a general level when he says 'a continuing monologue. . . . about what it is to be human', he loses much of the specificity of Long's works. Renfrew's argument could apply to any 'primitivizing' endeavour. What is specific to Long is the intervention in a

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<sup>4</sup> Colin Renfrew, *Before Civilization* (Middlesex: Penguin Books, 1973).

<sup>5</sup> Colin Renfrew, "Languages of Art: The Work of Richard Long," *The Cambridge Review* (October 1990): 114.

landscape already transformed in the past. As we have seen, the main thrust of his work is to make us aware of this dimension of history in a landscape.

It is understandable that Morris's *Observatory* is the modern example used most frequently to demonstrate an affinity to megaliths, as there are various formal features that critics can allude to as well as its astronomical alignments (fig. 61).

Edward Fry, for instance, refers to the granite blocks that greet the solstice sunrises as a similarity to megaliths: "Morris's reference to such structures [he refers to Neolithic structures, such as Stonehenge] is explicit in his use of huge granite blocks for the solstitial sight lines."<sup>6</sup> Beardsley makes the same connection: "However, he [Morris] alludes to the time of human history as well, through the use of archaizing elements such as the granite blocks which mark the sight lines."<sup>7</sup>

While the shape of the granite blocks that Fry and Beardsley allude to are different from the rocks used in megalithic sites, they are similar in concept. At ancient astronomically aligned sites, the sun is said to rise in between two such rocks on dates of special importance, just as it does in between the blocks at Morris's *Observatory* (fig. 62).

John Beardsley sees further formal similarities: "An additional reference to prehistoric structures is provided by the use of traditional earthen embankments and canals which relate the work to Neolithic fortifications. The grooves formed by dragging the steel plates to their present positions inform the work with a sense of process and also become an archaizing element in this work, for our sense of the awesome physical effort involved in building various Neolithic structures often colours our perception of them."<sup>8</sup>

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<sup>6</sup> Fry, *Robert Morris/Projects*, n.p.

<sup>7</sup> Beardsley, *Probing the Earth*, 23.

<sup>8</sup> *Ibid.*, 58.

Considering these obvious correspondences, one has to determine their meaning in a landscape like the Dutch one where they are found. Holland is notoriously a man-made land, gained polder by polder, with relentless effort. Morris's *Observatory* seems to erase this recent past of struggle against the sea and proposes a mock Neolithic structure instead, in a region particularly void of megaliths (contrary to the north of Holland). It is as if the artist could invent another past to the region, not by retrieving its actual past, but by the transformation of nature into a landscape, as Simon Schama suggests, by the intervention of memory, any memory in the process.

We agree with Carter Ratcliff who says that the *Observatory*: "is like Stonehenge stripped of the culture which sustained its meanings. (Stonehenge itself comes to us precisely that way: locked, like Morris's art, into a deprived present)."<sup>9</sup>

Ratcliff's comment makes us go one step further. Landworks refer less to ancient sites than to what modern archaeology makes of them. While one is presented with explanations, reconstructions, and guided tours of ancient sites, and some are particularly well done such as the experience provided by English Heritage at Stonehenge or by The Office of Public Works at Newgrange, the modern tourist is made aware of the distance between his/her present experience of the archaeological site and what it could have meant for the ancients. Ratcliff suggests that it is this touristic experience that modern artists refer to by 'quoting' one or other aspects of ancient works.

Marti Mayo claims that: "*Observatory* has an obvious relationship not only to Nazca, but also to Stonehenge and other primitive expressions which probably were man's way of seeing himself in relation to nature."<sup>10</sup>

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<sup>9</sup> Ratcliff, "Robert Morris," 107.

<sup>10</sup> Marti Mayo, *Robert Morris, Selected Works 1970-1980* (Houston: Contemporary Arts Museum, 1981-1982), 7.

While this may be true, it cannot be the case here. Certainly the ancients had a need to understand the world around them, a factor that might have motivated their efforts to create structures that would have helped them make sense of the laws and forces of nature. But this cannot be the need of people living in the modern world, as they benefit from answers supplied by science. The function of *Observatory* and other landworks has more to do with the transformation of nature into a landscape rather than trying to interpret the energy and rhythm of nature.

Bourdon is unimpressed with the affinities that he sees in Morris's work: "*Observatory's* obvious allusions to ancient megalithic monuments such as Stonehenge and Avebury seem somewhat heavy-handed and pedantic. At the same time, Morris appears to be uncritical in his facile adaptation of ideas derived from the unproven theories of contemporary archaeoastronomers. His *Observatory*, unlike its prehistoric antecedents, is devoid of religious or ceremonial overtones, although its pretensions are indeed astronomical."<sup>11</sup>

This harsh criticism misses the point just made above. The relation to history here is not a question of influence, quotations, or models, but answers to the necessity of alluding to the past, if one wants to redefine a piece of land as landscape or Land Art. Artists feel the need to allude to the remote past as a way to include all the pasts in their perception for the landscape.

Another work by Morris that is compared to megaliths is *Untitled*, 1977, consisting of a field of stones made for the *Sculpture for Hercules*. *Documenta 6* exhibition in Kassel, Germany (fig. 63). David Shapiro finds: "The whole seems a bit too dedicated to a neo-Stonehenge experience that one might better calculate by a reading of European menhirs, but the desire for a high unity of multiplicity resounds. If *Documenta* is known for

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<sup>11</sup> Bourdon, *Designing the Earth*, 218, 220.



anything, it will be these fugues, these extrications from a blanker dogmatics seen in the commentary, not in the works."<sup>12</sup>

Shapiro sees that the artists' works are sometimes more convincing than the rhetoric that accompanies them. But, like we said before about the touristic dimension of these allusions to the past, their superficiality or their borrowed character is no longer an issue when what is looked at is not an exact replica of the past, nor even a particular appreciation of a specific past. It is rather a reference to the past as such that is operational here. In Europe, where both Long and Morris have worked, the allusion to a very remote past is probably more efficient because of the pervading presence of humans everywhere. Therefore, *Untitled* is not dedicated to Stonehenge, nor is it in competition with European menhirs. Morris creates a landscape with these units of rocks, loaded with the power of memory.

Documenting the same show, Theodore Heinich claims that Morris wants viewers to reject all associational references to man-made constructions with his work, but "Inevitably the elements that fuse so perfectly with nature on this acre of woodland turf do suggest the ruins of primitive houses, protective palisades, the last bits of a processional way, sacred runestones. This seems, in the fashion of a still more remote Stonehenge, to be the remains of some unsheltered community."<sup>13</sup>

As Heinich suggests, it is difficult to comply with Morris's wish, though the associations by no means weaken his work. By virtue of his references, Morris simply adds another layer of meaning, thereby creating an environment for viewers to experience, much like they would visit an archaeological site.

Lucy Lippard calls this work 'imitation megaliths', and suggests that it "offers a domesticated version of the ancient

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<sup>12</sup> David Shapiro, "A View of Kassel," *Artforum* 16 (September 1977): 60.

<sup>13</sup> Theodore Allen Heinich, "Sculpture for Hercules. Documenta 6," *Artscanada* 34 (October/November 1977), 7.

sites, more formally and less symbolically complex."<sup>14</sup> Indeed, *Untitled* may lack the complex symbolism that we assume megaliths contain. However, it does embody another significant meaning as relevant to its modern viewers and as complex as the messages that the ancients understood in megaliths: there is no landscape without memory. If this is true of the European landscape, to what degree could it be fitting for America where history is thinner and less perceived?

Some of Smithson's work is also compared to megaliths. Describing the film about *Spiral Jetty*, Robert Hobbs makes a reference to Stonehenge: "The final section of the film is most interesting in terms of the formalist/contextualist tension because the photographer works hard to manoeuvre the sun into the center of the *Jetty*. Playing on recent studies of Stonehenge, which interpret the prehistoric earthwork as a monumental calendar, Smithson tries to make his formalist land piece a mechanism for viewing the sun."<sup>15</sup>

Hobbs probably alludes to Hawkins's or Fred Hoyle's studies, but the connection that he makes between Stonehenge and *Spiral Jetty* is very remote. It is true that seen from above, one can see a reflection of the sun at the heart of the spiral. There is even a preparatory drawing by Smithson that suggests this, but the connection is not calendrical, as *Spiral Jetty* has nothing to do with predicting any celestial events.

At any rate, the bird's eye view is not the habitual way that people perceive the piece; most people see it from the ground (fig. 53). Elizabeth Jaeger notes: "From the ground the configuration is obscure; the only obvious feature is a path, suggesting an ancient processional route. It is this aspect of *Spiral Jetty* that ties the site most strongly to a Neolithic site like Clava Cairns. It isn't

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<sup>14</sup> Lippard, *Overlay*, 21.

<sup>15</sup> Robert Hobbs, "Robert Smithson: Articulator of Nonspace," *Robert Smithson Retrospective* (Paris: Musee d'Art Moderne de la Ville de Paris, 30 Novembre - 16 Janvier, 1983), 18.

just looking at the site that conveys the notion of a passageway to death or rebirth; it is actually crawling through the passageway that (presumably) was the significant action at that site in the Neolithic period."<sup>16</sup>

Jaeger defines the feature that resembles megaliths as a path. Her link to an ancient processional route is congruent with Smithson's intentions for viewers at the *Spiral Jetty*, which is that they walk on the path. However, Jaeger's choice of megalithic example is bizarre. The Neolithic site that she refers to, the Clava Cairns located at the north-eastern end of the Great Glen in Inverness-shire in the Scottish highlands, consists of a cluster of fifty four round chambered cairns (passage graves). Within the megalithic inventory, it is the linear form of alignments that are associated with processional routes, not passage graves.

Lippard finds it appropriate that Smithson's *Broken Circle* and *Spiral Hill*, exist in Europe: "With its content specifically tied to ancient sites . . . where innumerable and often unnoticed prehistoric monuments are virtually underfoot, and where the layers of humanmade nature are so much more obvious than in America."<sup>17</sup>

While it is true that *Spiral Hill* and *Broken Circle* are at home in Europe because of their prehistoric associations, they could mark the landscape in any region of the United States, as *Spiral Jetty* demonstrates. This would allow Smithson to add a layer of 'humanmade nature' that is so seemingly lacking.

Lippard writes about the boulder in the center of *Broken Circle*, and juxtaposes a photograph of it with a Dutch dolmen from Drenthe (fig. 64, fig. 65): "Yet the center boulder in fact significantly expands the associative levels of this work because it offers a direct tie to prehistory. . . . In the Bronze Age they [this type of large rock] were used to make huge dolmens and

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<sup>16</sup> Jaeger, 48.

<sup>17</sup> Lucy Lippard, "Breaking Circles: The Politics of Prehistory," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 35.

passage tombs the Dutch call *Hunnebedden* ('Hun's Bed's')."<sup>18</sup> One could go further and suggest that this boulder of glacial origin links the piece to an even more remote past, when geology rather than culture defined the land.

Other examples of comparisons between landworks with megaliths exist. Craig Adcock makes specific comparisons: "Michael Heizer's *Adjacent, Against, Upon* recalls megalithic dolmens such as the Devil's Den in Wiltshire, England. Alice Aycock's *Williams College Project* brings to mind neolithic passage graves such as Bryn Celli Ddu [the latter is a stone burial chamber in Wales, England]."<sup>19</sup>

Rather than elaborating on the formal affinities that he sees, Adcock provides photographic evidence to speak for him. Indeed, upon looking at the juxtapositions, one can establish what the formal comparisons that he is making are. Heizer's use of horizontally-placed boulders at *Adjacent, Against, Upon*, 1976, in Myrtle Edwards Park, Seattle, Washington, is similar to the capstone of the Devil's Den Dolmen or any other dolmen with a large capstone. The covered passage tombs of Western Europe are featured by Aycock's *Williams College Project*, 1974, in Williamstown, Massachusetts, which is a mound covering an underground chamber (fig. 66, fig. 67).

Bourdon feels that Carl Andre's *Stone Field Sculpture*, 1977, in Hartford, Connecticut, is based on Carnac in Brittany, France: "The Hartford piece has some of its origins in Andre's 1954 visit to Stonehenge and other megalithic monuments in England. Though he has not visited Carnac on the Brittany coast, he is aware of the menhirs there, hundreds of upright stone slabs that extend in eleven parallel rows along the shore."<sup>20</sup>

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<sup>18</sup> Lippard, *Overlay*, 32.

<sup>19</sup> Adcock, "The Big Bad," 104-105.

<sup>20</sup> David Bourdon, *Carl Andre. Sculpture 1959-1977* (New York: Jaap Reitman Inc, 1978), 38.

This is another case where we can deduce what the similarity is, as Bourdon describes Carnac as a site consisting of parallel rows of upright stones (which are not located along the shore as he claims). Looking at a juxtaposition of a reproduction of Andre's piece with a photograph of Carnac clarifies what Bourdon refers to, namely the feature of rocks arranged in an alignment (fig. 68, fig. 69). Clearly, Lippard agrees with Bourdon's comparison, as she juxtaposes a photograph of *Stone Field Sculpture* with alignments at Kermario, near Carnac.<sup>21</sup>

The critics perceive the paradigm of megaliths in the same manner as the Nazca lines. Most take note of formal similarities, some venture beyond form and mention conceptual affinities, and some propose reasons for the visible likenesses. And again, few stress the differences between the modern and ancient works. As with the Nazca lines, it is clear that once again, the differences in time and function are too vast to speculate about similar purposes.

The most useful aspect of megalithic references is that they harbour a memory within them. Just as people make the association with an ancient culture when they see landworks that contain a reference to the Nazca lines, those that refer to megaliths have the same impact of association. Viewing modern stone circles and alignments automatically make us think of ancient ones. This inevitable correlation allows artists to achieve the dimension of memory in their landworks, enhancing the effect of transformation at the sites of their works as they become imbued with layers of memory.

### **Landworks, Memory, and Megaliths**

As with the paradigm of the Nazca lines, critics bring forth eloquent examples to justify their associations of landworks with prehistory. The works they compare with megaliths quoted above,

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<sup>21</sup> Lippard, *Overlay*, 21.

namely Long's work in general, Morris's *Observatory* and *Untitled*, Smithson's *Spiral Jetty*, *Broken Hill* and *Spiral Hill*, Heizer's *Adjacent*, *Against*, *Upon*, Aycok's *Williams College Project*, and Andre's *Stone Field Sculpture*, among others, do share some formal affinities with megaliths.

The recurring use of rocks and earth as sculptural mediums suggest an interest in megaliths on the part of modern artists. Stonehenge, being the most famous such site, provides the most common model proposed (fig. 70). Its features include a circle of large standing rocks, an enclosing earth mound and ditch, and a mound on either side of the structure. A site such as Carnac, being the most famous megalithic alignments, provides the formal option of upright stones arranged in a linear formation.

Prior to building the original *Observatory* in 1971, Morris wrote: "For some time I have been working with ideas about an 'observatory' which is related to Stonehenge on some levels, but does not involve the forms of construction of Stonehenge."<sup>22</sup>

The use of quotation marks for 'observatory' is interesting and refers to Hawkins's idea of Stonehenge being an 'observatory' of celestial events and a calendar. At first sight, *Observatory* does not seem to have much formal resemblance with Stonehenge. We are made to believe that what Morris saves from Stonehenge is the idea of a sculptural work working like a calendar, a work having links with the universe rather than the art world.

But a closer examination reveals some formal similarities. *Observatory*, both the 1971 and 1977 versions, does share certain features with Stonehenge due to Morris's use of earth mounds, a circular formation, and especially the alignment to the solstitial and equinoctial sunrises (fig. 61). It is believed that the Heel Stone, one of the stones placed outside the circle at Stonehenge, is aligned to the summer solstice sunrise.

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<sup>22</sup> Robert Morris, "Letter to Wim A. L. Beeren, 16 February 1971," *Het Observatorium Van Robert Morris*, n.p.

Of Morris, Smithson noted that: "What interested him most when he visited Stonehenge was not the trilithons at the center of the monument, but rather its moundlike fringes."<sup>23</sup> Indeed, *Observatory* has large circular henges encircling the central structure much like at Stonehenge, suggesting that he adopts this formal feature for his landwork.

Morris explains that: "The *Observatory* is not a scientific instrument any more than it is an earthwork. . . Enclosures and openings; the uses of earth, sky, and water; sight lines and walkways; changing levels - such things ally the work more to Neolithic and Oriental building complexes than to the sculptural qualities of earthworks."<sup>24</sup>

One can understand Morris's need to differentiate his work from that of his colleagues. However, it is difficult not to see an earthwork, more specifically a landwork, in *Observatory*, so much so that he is not the only one to be interested in 'enclosures and openings', in 'the use of earth, sky, and water', and in 'sight lines and walkways'. But he is right when he claims that in his case, the 'historical' reference to the past is more explicit. Memory is part of the work. As with his statements regarding the astronomical alignments of this work in which he admits to being affected by his awareness of prehistoric alignments, once again, Morris concedes to a relation of other features of this work with Stonehenge.

The rocks used for Morris's *Untitled*, 1977, share their form with Carnac's or Avebury's boulders (fig. 63, fig. 71). Aside from their upright positions, their linear arrangement also resembles megalithic alignments.

The formal aspects that some of Long's work share with megaliths are his recurring presentation of unmodified rocks in

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<sup>23</sup> Eugenie Tsai, *Robert Smithson Unearthed* (New York: Columbia University Press, 1991), 74.

<sup>24</sup> Robert Morris, "Observatory," *Avalanche* 3 (Fall 1971): 35.



circular or linear formations, typical of megalithic stone circles and alignments. *Mount Whitney Stone Circle*, 1992, is a work made during a walk in California, consisting of a stone circle like any other megalithic stone circle such as Drombeg in West Cork, Ireland (fig. 72, fig. 73). Similarly, *A Line in Scotland, Cul Mor*, 1985, resembles megalithic alignments, indicating a potential interest in their form (fig. 74, fig. 75).

Long has seen many megalithic remains during his walks across the British countryside, and his work reflects the direct contact that he has with ancient sites. Responding as to whether his awareness of megalithic sites affects his art, he answers:

I don't have any 'specialized' megalithic earthwork knowledge - I grew up in the English countryside of which such places are a part, along with many other things (I didn't see Stonehenge until I was about 20...). When a student in London I used to hitch-hike the old Bristol-London road many times, and the road went right past Silbury Hill. . . . In general I would say I am a modern artist whose subject is nature and the landscape, and each landscape holds all its histories on its surface. My work is inclusive of many things, so I have sometimes used ancient places as the subject of my work, or walks.<sup>25</sup>

Clearly, for Long, landscape implies memory and not erudition about the past, nor archaeological technical knowledge. Since ancient megalithic sites are part of the landscape that he visits, they are included in his work. One should see his work as inclusive instead of referential, since he wants to take in the megalithic past, not to refer to it from outside. Therefore, the concept of influence is not operational here.

In *A Line the Length of a Straight Walk From the Bottom to the Top of Silbury Hill*, 1970, Long presents the line of his walk up Silbury Hill as part of his work (he visited the prehistoric mound before the prohibition of walking up the hill was enforced in order to protect it). The work consists of mud on the floor in the form of a spiral, framed photography, and text. It does not resemble

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<sup>25</sup> Long, letter to author.



Silbury Hill formally except perhaps the spiral path that encircles the hill. His title alludes to a straight walk, but the confining gallery walls force him to compress his walk into the size of the room, and he chooses the form of a spiral to depict his walk.

Andrew Causey makes a distinction between British and American artists:

In the almost excessively modest works which the English land artists leave on the landscape there is something of a pastoral society's respect for nature as lord and sustainer; there is no equivalent in England for the American land artists' pursuit of nature with aerial surveys and mechanical diggers, with their displacement of materials with the aid of heavy trucks. Compared with the Englishman the American (apart from the Indian) is relatively new to his landscape, much of which is in any case uncultivated. Britain on the other hand is remarkable for the variety of its geological formations and hence its landscape, and also for the length of time it has been under continuous and intensive cultivation.<sup>26</sup>

Long's works are certainly more humble than his American counterparts. Therefore, he is able to make many small landworks in contrast to others who make fewer but more grandiose works. As Causey suggests, it may be that Long's (and other British artists) direct contact with England's layers of history affects his efforts. Having benefited from this connection, he is less compelled to mark the landscape with imposing manifestations; Long's familiarity with the histories of landscapes endows him with a confidence of modesty.

Whether his intention or not, Smithson's landwork *Broken Circle* and his earthwork *Spiral Hill*, 1971, in Emmen, Holland, can be perceived as formally related to Avebury, the megalithic stone circle in Wiltshire, England. Smithson and Holt visited Stonehenge in 1969; since Avebury is so close, they might have seen it, or if not, at least seen it through photographs.

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<sup>26</sup> Andrew Causey, "Space and Time in British Land Art," *Studio International* 193 (March/April 1977), 126.

Avebury's most prominent features are a huge stone circle and Silbury Hill, an equally huge man-made mound. The title of *Spiral Hill* sounds much like Silbury Hill and is also a conical mound with a spiral path to the top, though significantly smaller than its ancient counterpart (fig. 76, fig. 77).

Its association with *Broken Circle* seems more than coincidental. *Broken Circle* is an incomplete circle partially filled with earth forming a semi-circular platform, while the other half is water. Similarly, a broken rather than complete circle relates to Avebury's present state (fig. 78, fig. 79). The stone circle's formation and its surrounding ditch in the town of Avebury is broken by buildings and the United Reformed Church, founded in 1670. The road that leads through the town divides the circle and breaks the unity of its adjacent sites such as Silbury Hill and West Kennet Long Barrow. The circle itself is also broken by many missing stones.

An unexpected tribute to megaliths is the presence of a boulder in the full half of *Broken Circle*. Drenthe, the northeast region of Holland (where Smithson's works are located), houses megaliths called *hunnebeds* (translated into English as "Hun's beds"). These large dolmens, sometimes within a ring of upright stones, are made of the same type of rare glacial boulder that is part of Smithson's work (fig. 64, fig. 65).

Actually, this boulder's presence is circumstantial. It was discovered during construction and despite the fact that Smithson initially intended to remove it, the boulder remained due to technical problems. Besides the fact that Smithson found out that it was one of the largest rocks of its kind in Holland and therefore rare and somewhat desirable, it would have been too expensive to remove. Apparently only the Dutch army could move it, so he finally decided to keep the unplanned element.

The boulder also appealed to Smithson's fascination with geology and the region's dolmens. Smithson walked past a *hunnebed* on the way to his site every day during construction, and admitted

to Gregoire Muller that he had the prehistoric monuments of Holland in mind when he built the piece: "It's an entropological [*sic*, for entropy] manifestation - I see it as a link up in terms of lost intentions."<sup>27</sup>

Smithson's plans for the film about this work were that it focus on a boulder of a *hunnebed* and then would move to his own boulder: "There would be a forward zoom and a backward zoom that would link up the two boulders in a kind of cinematic parallel that would cover vast stretches of time."<sup>28</sup> The cinematography that he envisioned would have clarified the union between this modern work with the ancient dolmens of Holland.

When critic Kasha Linville visited these works with Smithson and Holt, they took her to see a *hunnebed* on the way. Besides the fact that this decision indicated that they felt the site was worthy of a visit, it might also be that they wanted to show her an example of a megalithic site to associate with Smithson's work.<sup>29</sup>

There are many other examples of formal affinities between landworks and megaliths that could be presented. Among them, Andre's *Stone Field Sculpture*, 1977, in Hartford, Connecticut, shares the feature of aligned stones placed in a linear formation with megalithic alignments (fig. 68, fig. 69).

The disposition of rocks in Andre's work might appear to be an extension of the type of Minimalist construction that is composed of series of identical and thus interchangeable units carefully arranged on a floor. This type of compositional strategy in Minimalism yields units of repetition, sometimes of varying sizes, arranged from smallest to largest in serial progression.

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<sup>27</sup> Smithson, "...The Earth, Subject to Cataclysms, is a Cruel Master," interview with Gregoire Muller, *Writings*, ed. Nancy Holt, 182.

<sup>28</sup> *Ibid.*

<sup>29</sup> Kasha Linville, "Sonsbeek: 'Speculations, Impressions'," *Artforum* 10 (October 1971): 56.

Just as landworks that are related to the paradigm of the Nazca lines are linked to Minimalism due to similar formal traits, the modular units of rocks in Andre's *Stone Field Sculpture*, Morris's *Untitled*, or Long's alignments and circles could be linked with the interest in mass production that characterizes Minimalism. However, instead of a linear appearance, instead of each element having an identical size and shape with no hierarchical relationship between them, or instead of a display of similarly shaped but progressively sized units, Andre, Morris, and Long allow their natural materials to distance them from the mechanical rigidity of Minimalism. Again, these landworks might be the artists' effort to break away from Minimalism. They use the idea of repetition but add meaning to their work by incorporating affinities to megaliths that carry a reference to the past.

### Conclusion

As we have seen, while artists transform part of nature into a landscape, they use other sources as references other than the Nazca lines. Through literature and travel, they discover the existence of other ancient sites that could become identifiable sources for their work.

An advantage that megalithic sites have as a reference is that so many people are familiar with them. While small sites are not famous, Stonehenge is recognized by most people. So landworks that resemble megaliths have a powerful referential impact as viewers make an association with the past while viewing them.<sup>30</sup>

Landworks that share formal similarities with megaliths also have a structural advantage over those that have affinities with the Nazca lines. 'Ground drawings' are low markings on the earth's surface or empty voids, frequently quite shallow. This type of construction produces manifestations with a precarious existence as

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<sup>30</sup> Advertisers are aware of the power in images of megaliths; advertisements using photographs or drawings of megaliths are testimony to this fact.

they are unable to withstand the elements to which they are exposed.

On the contrary, megaliths exist above ground as more sturdy three-dimensional objects. And while they are also vulnerable to the ravages of time, natural elements, and humankind, they have a better chance of enduring.<sup>31</sup> So they cause a *lasting* memory rather than one that erodes.

Due to their subtle design, the Nazca lines have a powerful impact when seen from above but are barely visible from ground level. Megaliths protrude above the surface and are more imposing from the ground, which is the level that most people see them from. As such, they have a forceful effect both visually and symbolically as they inspire associations of the past within viewers. And while it may not be an American past, the landworks described above can still be useful to create a landscape with memory.

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<sup>31</sup> Long's works do not fit into this category. While they could theoretically last for a long time, he dismantles them after photographing them.

NORTH AMERICAN INDIAN MOUNDS

## North American Paradigm

The fourth paradigm that we will examine is the North American Indian mounds. Modern earthworks that make use of compacted earth to form a mound are reminiscent of Adena and Hopewell mounds (as well as megalithic henges and mounds), and again, critics note these similarities.

North American Indian mounds, also called tumuli and effigies, are compacted earth modelled in varying shapes (fig. 13, fig. 14). Most are geometric forms (circular, square, conical, oval), while others are biomorphic (birds, snakes, and other creatures).

The mound-building tradition was composed of three cultural subgroups, namely the Adena, Hopewell, and Mississippi. The latter made truncated pyramids and platform mounds, upon which houses or temples were built.<sup>1</sup> The Adena and Hopewell made burial mounds (up to 6-21 meters high respectively), effigy mounds (1 meter), and earthen embankments (100-350 meters diameter). Their chronological framework spanned from the first millennium B.C. for the Adena, the Hopewell rose at 300 B.C. declining by A.D. 600, and the Mississippi culture pattern originated in A.D. 750 and ended by A.D. 1450.

Adena mounds can be found all over the Ohio River Valley, in Pennsylvania, West Virginia, Kentucky, and Indiana. The Hopewell mounds are located south of the Great Lakes, along the Mississippi River up to the Gulf of Mexico, and from eastern Kansas to New York. The Mississippi extended to the same regions and to the southeast.

Critics do not usually refer to specific mounds by name except perhaps the Serpent Mound, which is the most famous Adena effigy mound. Therefore, whatever comparisons they make between modern earthworks and Indian mounds are very general.

Ironically, despite the presence of these ancient mounds in the United States, there are fewer comparisons made by American

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<sup>1</sup> This form of mound building will not be presented in this thesis.

critics between modern earthworks and mounds. This is possibly due to the fact that the mounds are less well known than the Nazca lines and megaliths, and that when recognized, the formal similarity is established with megalithic mounds rather than Indian mounds (fig. 80). Also, rather than yield specific remarks, Indian mounds are typically mentioned among lists of other prehistoric manifestations as objects of formal similarity with modern earthworks.

Of the possible relation that Indian mounds have with artists' work in general, John Beardsley states: "In our own country, Indian forms, such as the Great Serpent Mound that extends over 1,200 feet of Southern Ohio landscape, indicate an indigenous tradition of earthworking which may have suggested forms and provided an impetus to contemporary artists."<sup>2</sup>

The fact that the Indian mounds are located in the United States might indeed affect artists. They provide the only actual prehistoric cultural reference that is truly American. In fact, the Indian tradition is the oldest layer of prehistory visible in the American landscape. As such, the mounds offer artists a historical reference that is indigenous to their region, while they can simultaneously perpetuate the ancient American technique of working with the earth, as Beardsley notes.

Among the Land artists, James Pierce and Michael Heizer are those whose work is most frequently compared to mounds. In both cases, the comparisons are substantiated by the artists' statements regarding their intentions.

Pierce named the seventeen-acre plot of land next to his country home on Pratt Farm in Maine, *Garden of History*. It is a landscaped park consisting of meadows and woodland, located on the east bank of the Kennebec River near Hinckley. Between 1970-83, he constructed, with the aid of his two sons, seventeen landworks whose titles and forms represent different periods in history. The associations range from landworks that refer to the area's local

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<sup>2</sup> Beardsley, *Probing the Earth*, 16.



history, European warfare, mounts in medieval European gardens, to various burial practices and other prehistoric manifestations.

Of Pierce's *Burial Mound at the Garden of History*, Beardsley notes: "The *Burial Mound* is of a type common throughout the central United States and associated with Indian cultures."<sup>3</sup> Michael Charlesworth makes a similar correlation: "Pierce's *Kiva, Serpent and Burial Mound* relate to native American practices."<sup>4</sup>

Both Beardsley and Charlesworth are correct about their comparisons. *Burial Mound*, 1971, is an earth mound that resembles Indian mounds in its form (fig. 81, fig. 82).

Referring to Heizer's five *Effigy Tumuli Sculptures*, 1983-1985, in Buffalo Rock, Illinois, Beardsley states: "Their title suggests a connection to prehistoric Indian mounds. A tumulus is an artificial hill, often over a grave; many of those of the upper midwest and the Ohio Valley were made to resemble animals - birds, bears, and serpents. Heizer's reference to prehistory is consistent with his other work, as he is looking to native American rather than European models for his sources."<sup>5</sup>

Previously, we saw that Heizer uses aspects of the Nazca lines as sources for his *Nine Nevada Depressions*. His decision to make a specifically American art, as he tells Julia Brown, is congruent with his use of Indian mounds as references for his work as well.

Klauss Kertess also notes the connection between Heizer's effigies and the North American Indian mounds: "Heizer's dialogue with the site's materials was accompanied by the dialogue with American Indian cultures that has been an ongoing force in his work. The sculpture at Buffalo Rock is specifically engaged with

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<sup>3</sup> Ibid., 66.

<sup>4</sup> Charlesworth, 129.

<sup>5</sup> John Beardsley, *Earthworks and Beyond. Contemporary Art in the Landscape* (New York: Abeville Press, 1984), 98.

the much-neglected earth mounds left by Indians throughout the Midwest and Southeast."<sup>6</sup>

At Buffalo Rock, Heizer's pieces take their material such as earth and grass from the landscape, and the form of his earthworks recall the famous mounds of the Adena culture (fig. 83, fig. 84). But what is crucial here is the 'dialogue', a will to evoke the remote past into a modern earthwork. In this fashion, the land transformed by Heizer takes on another dimension that we might call mnemonic in the sense that now, by the very transformation induced by the piece itself, the area has become a place of memory. It is not an empty space with vague references to past Indian history, nor a modern rest area more or less landscaped. The choice of the reference to Indian mounds makes all the difference here. It is this reference that transforms the environment into a landscape.

Gilles Tiberghien tells us: "On an abandoned mining site not far from Chicago, Michael Heizer created a series of colossal sculptures which, instead of using his typically abstract vocabulary, are inspired by animal forms comparable to the tumuli constructed by the ancient Indian civilizations of Mississippi, called the Mound Builders. . . . Heizer's work thus pays homage to an extinct civilization, to a people who have disappeared. Thus political gesture is a truly commemorative one, restoring to these monuments their primitive function."<sup>7</sup>

Once again, the connection between the effigies and the Indian mounds is made, but Tiberghien goes one step further by giving Heizer's works an added purpose beyond a purely formal exercise. The function of a homage that he alludes to is affirmed by Heizer himself, as we will see shortly.

The use of earth mounds at Richard Fleischner's *Sod Drawings* also inspire comparisons with Indian mounds. *Sod Maze*, 1974, done on the grounds of Chateau-Sur-Mer in Newport, Rhode Island, (fig.

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<sup>6</sup> Kertess, 77.

<sup>7</sup> Tiberghien, *Land Art*, 226-227.

85), is made of earth and sod.<sup>8</sup> It looks like a maze with low relief borders that make up sloping paths, but its form of four concentric rings with a hanging line at the bottom is known as a cup-and-ring mark, widespread in megalithic art.

Hugh Davies states: "The *Sod Maze* may be considered the first of three three-dimensional *Sod Drawings*. These *Sod Drawings* relate the prehistoric fortifications and burial mounds, eighteenth century formal gardens, as well as to contemporary golf tees and greens which are similarly manicured."<sup>9</sup> Davies takes his comparisons further than others by adding to the list of references. For him, the sources for Fleischner's work are all exterior places which transform the land, thereby adding man's imprint to the environment.

Lucy Lippard also recognizes the formal similarities between Fleischner's (and Pierce's) work with the mounds: "The effigy mounds in the Mississippi Valley - like the extraordinary Serpent Mound in Ohio, thought to have been constructed between 1000 B.C. and 700 A.D. - have provided models for several contemporary artists; likewise Mound City, also in Ohio, which Richard Fleischner echoed on a small scale in his 1976 *Sod Drawing*. And James Pierce, an expert on the American Mounds, has himself made a series of historically related earthworks as a kind of roadside 'folly' on his farm in Clinton, Me."<sup>10</sup>

### **The Artists' Relationship with Mounds**

Pierce has an intimate connection with Indian mounds, and the formal affinities between some of his works and the ancient mounds are intentional: "My approach was primarily aesthetic; my aim, [was] to raise consciousness of this great, relatively neglected,

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<sup>8</sup> *Sod Maze* was made for *Monumenta*, an outdoor sculpture exhibition in 1974.

<sup>9</sup> Hugh M. Davies, "Richard Fleischner's Sculpture of the Past Decade," *Arts Magazine* 51 (April 1977): 121.

<sup>10</sup> Lippard, "Gardens: Some Metaphors," 143.

art."<sup>11</sup> In 1972, Pierce received a grant from the 'America the Beautiful Fund' to photograph ancient earthworks in the Ohio Valley. His photographs were shown in a travelling exhibition originating at the University of Kentucky Art Gallery, in 1973.<sup>12</sup> The photograph of a Hopewell mound at Newark on page nine in Beardsley's book *Earthworks and Beyond* is Pierce's.<sup>13</sup>

Pierce makes no secret of the references that Beardsley and Charlesworth make note of above: "Many of my works are based directly on ancient precedent. The burial mound at Pratt Farm is identical in appearance to thousands of Native American mounds throughout the greater Mississippi Valley."<sup>14</sup>

An artist who claims that his artwork 'is identical' to its source indicates that the concept of originality is not at the forefront of his intentions. As he states, his intentions are to make the public aware of a 'relatively neglected form of art'. By creating *Burial Mound* with its form evidently derived from Indian mounds (and other landworks whose forms come from ancient sources), he calls attention to their existence. Moreover, he also creates an added layer of indigenous history by using references that are distinctly American.

The precursors for the iconography and forms of Heizer's *Effigy Tumuli Sculptures* are the Indian effigy mounds (the animal imagery can also be said to be derived from the Nazca lines). The Adena animal effigies such as the Rock Eagle Effigy Mound depicting a bird, near Eatonton, made in 500 B.C., are clearly featured in Heizer's enormous earthworks in the configurations of animals

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<sup>11</sup> Pierce, letter to author.

<sup>12</sup> James Pierce, *Sacred Symmetry: Ancient Earthworks of the Ohio Valley* (Lexington: University of Kentucky Art Gallery, 1973).

<sup>13</sup> Beardsley, *Earthworks and Beyond*, 9.

<sup>14</sup> James Pierce, "The Pratt Farm Turf Maze," *Art International* 20 (April/May 1976): 25.

indigenous to the region, namely a frog, turtle, snake, water strider, and catfish (fig. 83, fig. 84).

Heizer also does not hide these references as he tells Douglas McGill: "It's in the nature of my work that I keep in mind the environment I'm taken into. The native American tradition of mound building absolutely pervades the whole place, mystically and historically in every sense."<sup>15</sup>

As mentioned earlier, an entire book entitled *Michael Heizer. Effigy Tumuli. The Re-emergence of Ancient Mound Building*, is dedicated to the relation of Heizer's *Effigy Tumuli* with North American Indian Mounds.<sup>16</sup> Despite the title, there is only a small section that describes the 're-emergence' of mound building; the book is foremost about Heizer's effigies with a short section on the Indian mounds. Since it is published with Heizer's collaboration, it is clear that he is aware of an affinity of this series of works with Indian mounds.

When Heizer took up the project, his wife Barbara, found *The Antiquities of Wisconsin* by I.A Lapham, a monograph published in 1854, in an antiquarian bookstore in Manhattan. Though Heizer was already familiar with mounds, much of the detailed knowledge he has come from this book: "It's an untapped source of information and thematic material. It's a beautiful tradition, and it's fully neglected. And it's from a group of people who were *genocided*. So, in a lot of ways, the *Effigy Tumuli* is a political and social comment. To me it is."<sup>17</sup>

Heizer assigns a symbolic function to these effigies. The reference to the Native American Indian plight gives these works a social function, relating this series to a chapter of American

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<sup>15</sup> McGill and Heizer, 22.

<sup>16</sup> Douglas C. McGill and Michael Heizer, *Michael Heizer. Effigy Tumuli. The Re-emergence of Ancient Mound Building* (New York: Harry N. Abrams, Inc, Publishers, 1990).

<sup>17</sup> *Ibid.*, 11.

history that could be perceived directly by looking at the pieces and being aware of their sources.

Heizer limits his use of ancient references for his work to American models: "The European tradition is a fabulous one, but I'm not European. I'm not going to copy their work. My purpose is to get to what is the essence of being American. You can't help but use some European elements, but if you want to run a good experiment you try to do with as little of that as possible."<sup>18</sup>

Responding to the association of his works with mounds, Fleischner says: "People in referring to my sod pieces sometimes are unable to get away from the idea of the serpent mound in Ohio, and Indian burial mounds. Those are definite sources, but a golf course is as much a source."<sup>19</sup>

This statement does not negate any intention on Fleischner's part to highlight a particular interest in Indian mounds as a source for his work. But as Davies notes above, the other source that Fleischner refers to is a golf course, that being a piece of land transformed by the hand of man into a manicured landscape. It could be seen in continuity with ancient mounds as a kind of profane transposition of ancient works. One must not forget the ever-present paradigm of the garden, as nature transformed in the present context. Golf might seem to be a very mundane reference, but it is nevertheless a kind of garden created for the enjoyment of sportsmen, as modern landworks are transformed landscapes with references to the past.

There are other ancient American sources that have not been examined, for example, Michelle Stuart's *Stone Alignment/Solstice Cairns*, 1979, in Columbia Gorge, Oregon. The disposition of rocks that Stuart uses in this circular landwork is similar to how Native American medicine wheels are formed (fig. 37, fig. 86).

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<sup>18</sup> Ibid., 18.

<sup>19</sup> Hugh M. Davies, *Richard Fleischner* (Amherst: University of Massachusetts, 1977), 19.

By using Indian mounds or other American sources, Pierce, Fleischner, Heizer, Stuart, and others add a layer of American culture onto the thin layers of history. And simultaneously, they successfully transform the chaotic nature of the United States into a cultural area.

### **An Indigenous Reference**

The aspect that distinguishes the North American mounds from the other paradigms is their presence in the United States. As the oldest manifestation visible above ground, they provide a distinctly American reference to artists. The power of using such sources lies in their associational prospects. People that recognize the formal similarities with Indian mounds are reminded of their presence in the landscape, while those unaware of this ancient manifestation on their continent are encouraged to become familiar with them.

And with each earthwork that resembles the mounds, artists create an American art using a source from their own history rather than that of South America or Europe, while adding a layer of an indigenous form onto the thinly layered history of the American landscape.

This section concludes our investigation of the four prehistoric paradigms used by Land artists. Our analysis does not exhaust all the ancient sources used; as we indicated, there are other paradigms that artists make reference to such as Medicine Wheels, Mayan architecture, rock art, the Venus of Willendorf, and others.<sup>20</sup> We chose to concentrate on those that are depicted most frequently.

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<sup>20</sup> The Venus of Willendorf, found in 1908 in Willendorf, Austria, is an upper Paleolithic stone figurine of a woman, dating from 25,000 B.C. Other female figurines sharing the same pronounced belly, breasts, vulva and thighs were found throughout Europe, appearing between 29,000 and 20,000 years ago. See Henri Delporte, *L'Image de la Femme dans L'Art Préhistorique* (Paris: Picard, 1979), 136-139.

There are different nuances observed between artists that tend to correspond to the artists' familiarity and/or interest in ancient forms. For example, Heizer limits himself to American sources while Smithson uses various aspects of different paradigms. Holt focusses on the astronomical paradigm, Morris combines paradigms of astronomy and megaliths, and Long incorporates various ancient paradigms into his work. Each approach is specific to the artist, but they all use the references to benefit the form, meaning, and effect of their works.

These analyses on ancient paradigms have stressed the cultural components of Land Art. But Land Art is frequently perceived as being about nature. We feel compelled to deal with this subject, and in the last chapter, we will test our hypothesis on its most sensitive grounds.



NATURE OR CULTURE?

## The Ecological Movement

If it is defensible that the intention of landworks is to make us more aware of nature and more ecologically minded, our thesis of landworks as transformations of nature in the landscape by the addition of layers of memory will be compromised. This is the reason that we must examine the issue of ecology in detail.

The apparition of landworks during the latter 1960s coincided with the onset of an ecological crisis. In 1962, American marine biologist and nature author Rachel Carson, published her controversial book *Silent Spring*.<sup>1</sup> Much to the chagrin of chemical companies, she exposed the hazards of pesticides and made people aware that nature was defenseless against human intervention. Conservationists and ecologists had warned the American public about the earth's vulnerability and the need for its protection for decades.

In 1948, Fred Hoyle predicted that: "Once a photograph of the earth, taken from outside, is available - once the sheer isolation of the earth becomes plain, a new idea as powerful as any in history will be let loose."<sup>2</sup> Twenty two years later, at a dinner address to attendees of the Apollo 11 Lunar Science Conference, he attributed the modern awareness of ecology to an image of earth taken from the moon: "You will have noticed how quite suddenly everybody has become seriously concerned to protect the natural environment. Where has this idea come from? . . . It seems to me more than a coincidence that this awareness should have happened at exactly the moment man took his first steps into space."<sup>3</sup>

One of the astronauts of Apollo 11, Michael Collins, expressed his feelings about what he had seen on his mission: "If I could use only one word to describe the earth as seen from the moon, I would

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<sup>1</sup> Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962).

<sup>2</sup> Donald D. Clayton, *The Dark Night Sky: A Personal Adventure in Cosmology* (New York: Quadrangle, 1975), 127.

<sup>3</sup> Ibid.

ignore both its size and color and search for a more elementary quality, that of fragility. The earth appears 'fragile', above all else."<sup>4</sup> These infamous words resounded throughout the modernized world in 1969.

Industrialization had caused pollution, ecological imbalances, and poisoning of the environment, while the earth's non-renewable resources continued to be extracted at an alarming rate. It was believed that the continued disregard and subsequent destruction of the earth and its resources would lead to the eradication of all living forms, including humankind. Awareness of these facts triggered an urgency for caution and a need to protect the environment, to make peace with nature rather than trying to conquer it.

Considering the timing of Land Art's appearance during this period, the negative response against some of the more massive landworks is not surprising. Critics such as Joseph Marsheck, Grady Clay, Michael Auping, and David Bourdon criticize artists for interfering with the landscape, for gouging into it or blocking its open vistas with man-made masses, proclaiming that landworks cause harm to the environment.

Michael Heizer's *Double Negative* is a prime example to illustrate the case in point (fig. 87). This landwork elicits much reproach. Marsheck feels that: "It proceeds by marring the very land, which is what we just learned to stop doing."<sup>5</sup> His response to *Double Negative* is understandable; the act of displacing tons of earth with bulldozers in a remote part of the desert does seem to contradict every message imparted by the ecological movement. Considering the overwhelming concern for the environment at the time, Marsheck could not accept what Heizer was doing.

Clay also complains about this and other works: "Some of these adventurous artists have also become landscape defacers - ripping

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<sup>4</sup> Michael Collins, cited in Clayton, 129.

<sup>5</sup> Joseph Marsheck, "The Panama Canal and Some Other Works of Art," *Artforum* 9 (May 1971): 41.

off cliffs, digging up untouched deserts, scarring rare landscape with their ego-strips, getting away with it easily in remote locations. They talk ecology but practice destruction."<sup>6</sup>

Auping feels that: "...earth art, with very few exceptions, not only doesn't improve upon its natural environment, it destroys it."<sup>7</sup> Surely one of the exceptions that Auping is referring to is Richard Long whose art could be considered harmless; whatever interactions that he has with the environment are minimal and temporary. But they are nevertheless interventions in nature.

Bourdon is also disapproving: "While Land Art certainly contributed to the citizen's interest in ecology, few of its makers would have qualified as environmental activists. Indeed, some artists displayed a chilling insensitivity to nature, regarding the great outdoors as nothing more than a colossal sketch pad on which to impose their artistic egos."<sup>8</sup>

The critics' accusations against artists for 'marring the very land' and displaying 'a chilling insensitivity to nature' are charges that appear reasonable. They believe that artists treat the land with disrespect and condemn them for doing so.

There seems to be a strange dichotomy between Heizer's actions which appear to be the archetype of the destruction of the environment, versus his non-intrusive statements. Heizer's discourse indicates that his intentions are very different from his actions and what his critics feel about them. He doesn't sound like an 'earth destroyer' when he claims that Land Art "was spiritual and mystical and oriented toward the earth."<sup>9</sup> He further substantiates his point when referring to his *Nine Nevada*

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<sup>6</sup> Grady Clay, "The New Leap - Landscape Sculpture," *Landscape Architecture* 61 (July 1971): 297.

<sup>7</sup> Michael Auping, "Michael Heizer: The Ecology and Economics of 'Earth Art'," *Artweek*, 18 June 1977, 1.

<sup>8</sup> Bourdon, *Designing the Earth*, 223.

<sup>9</sup> McGill and Heizer, 11.

*Depressions*: "I don't want any indication I've been here at all."<sup>10</sup> Heizer also implies that landworks have nothing to do with pompous attitudes: "Man will never create anything really large in relation to the world - only in relation to himself and his size."<sup>11</sup> This is not the statement of an egomaniac as Clay and Bourdon reproach him to be.

Meanwhile, Robert Smithson once wrote: "The actual *disruption* of the earth's crust is at times very compelling."<sup>12</sup> When taken out of context, this statement can appear to be the antithesis of ecological concern, and along with his landworks in remote areas, may help to reinforce the notion that Smithson, like Heizer, also destroyed the environment.

It is difficult to find an argument that will adequately defend the artists' interventions on the landscape. Even if artists are well-intentioned and mean no harm, their landworks do cause damage. Bulldozers and trucks violated the desert's tranquility to create works like *Double Negative* and *Spiral Jetty*. Even if the disruption is temporary, even if ultimately landworks do not alter the ecology in and around them as the environments tend to reclaim their original state, the most ecologically friendly art would be away from nature. While the price of destruction might seem minimal in comparison to the end result, it would still be best to leave nature alone.

Certainly if we listen to the artists' discourses trying to find evidence that might help in their defence, we do not get rewarded. There is no unanimous agreement that the interest in nature is sparked by an ecological awareness, no indication that their works are meant to send a message about the environment or that they are suggesting a much needed reverence of nature. Rather on the contrary; when confronted with the question of their

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<sup>10</sup> Junker, "Getting Down to the Nitty Gritty," 46-47.

<sup>11</sup> Heizer, "The Art of Michael Heizer," 36.

<sup>12</sup> Smithson, "A Sedimentation of Mind: Earth Projects," 45.

relation to nature, the artists' responses tend to be full of dissent.

Even Long, who is most frequently perceived as displaying a sensitivity to nature, does not admit to an intentional interest in the ecological crisis: "I realize there was a sort of romantic movement to nature as a result of the industrial revolution. I suppose if you have to put some historical or political slant on my work it does tie up to some extent with the Green philosophy and of sharing the world and respecting the resources of the world."<sup>13</sup>

There is a big 'IF' in Long's statement. Obviously, he is hesitant to associate himself with a particular 'slant', insinuating that there is more to his work than an interest in ecology. He summarizes his thought:

The source of my work is nature. I use it with respect and freedom. . . . In the mid-sixties the language and ambition of art was due for renewal. I felt art had barely recognized the natural landscapes which cover this planet, or had used the experience those places could offer. . . . I like the idea of using the land without possessing it. . . . A walk is also the means of discovering places in which to make sculpture in 'remote' areas, places of nature, places of great power and contemplation. These works are made of the place, they are a re-arrangement of it and in time will be re-absorbed by it. I hope to make work for the land, not against it.<sup>14</sup>

It is difficult to criticize Long for his landworks, as he does make efforts to be respectful of the land. Another artist that could be among the exceptions of 'earth destroyers' is Andy Goldsworthy: "What is important to me is that at the heart of whatever I do is a growing understanding and a sharpening

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<sup>13</sup> Richard Long, "An Interview with Richard Long by Richard Cork," interview by Richard Cork, *Walking in Circles*, Seymour and Fulton, 252.

<sup>14</sup> Richard Long, *Words After the Fact*, source unknown, 1982, n.p.

perception of the land."<sup>15</sup> Like Long, his statement is extremely positive as regards the environment, and indicates an effort on his part to instill an awareness of nature upon his viewers. It is impossible to find fault in Goldsworthy's impermanent series of ground drawings of his body impression that we described in the chapter on the Nazca lines, as they have no impact on the surfaces on which they are made other than a temporary mark.

Nevertheless, most artists claim that a connection to nature and ecology in their works is not their main intention. Some people wish to argue the notion that landworks carry a message about ecology. However, it is a by-product, completely secondary to the artists' formal concerns and their needs of leaving indoor exhibition spaces. James Pierce responds to this concept:

Saying I was going 'back to nature' trivializes my motives. Like many earth artists I was raised in an urban environment, so my early trips to Pratt Farm in the 1930s gave me a really extraordinary sense of freedom, expansiveness, growth, abundance, richness, complexity, flow, life after the confines of Flatbush, happy though I was, shooting through the tunnels and digging in my friend's backyard (we only had a front lawn, no backyard; most everything was paved).<sup>16</sup>

Pierce refers to the excitement that he experienced as a child in the country, and those feelings 'returned in full flood' when he revisited Pratt farm and started his landworks in the 1970s. Stating that "'going back to nature' trivializes my motives" clarifies that for Pierce, the link of his artwork with nature is less important than other aspects, in particular the allusion to history.

Nancy Holt admits to being affected by nature and incorporates the awe that it inspires within her into her work:

I had lived in the city for a long, long time, so when I went out into nature, nature was quite potent, you appreciate it more when you're not around it all the

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<sup>15</sup> Andy Goldsworthy, *A Collaboration with Nature* (New York: Harry N. Abrams, 1990), n.p.

<sup>16</sup> Pierce, letter to author.

time. . . . and I think that most of my works have dealt with the sky/ground relationship. Unlike the first earth artists who were really involved with the earth more than anything, I think that with me, it was more a feeling of space, of sky and light, combined with the earth. It's sort of bringing the sky down to earth. Yes, my personal connection with nature is right there in the work that I do.<sup>17</sup>

As an artist living in the urban world, Holt, like Pierce, epitomizes the appeal that nature has for those who are far from it. She also defines the formal appeal inherent in aspects found outside, clarifying how nature is able to serve her needs.

Responding as to whether he is interested in ecology, Bill Vazan answers: "Not really. . . . The idea of ecology. . . . is to do it in such a way that there really is no, or slight residue of your interaction. . . . But it's modified by the fact that nature can reclaim it."<sup>18</sup> Vazan denies a specific interest in ecology, though he does favour artworks that are impermanent by allowing them to disintegrate into the earth.

Some of Smithson and Heizer's comments also resist the notion that their art is linked to ecology in any way. Smithson's attitude was indifferent: "I think we all see the landscape as coextensive with the gallery. I don't think we're dealing with matter in terms of a back to nature movement."<sup>19</sup> He indicated that the efforts outside were to leave the gallery, not to link up with nature. His view was more attuned to the artistic context of his works; indeed, artists perceived nature as an extension or a substitution of gallery and museum space.

Heizer's statement refers to all Land Art: "It's about art, not about landscape."<sup>20</sup> He puts it bluntly and clearly. Landworks

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<sup>17</sup> Holt, interview by author.

<sup>18</sup> Vazan, interview by author.

<sup>19</sup> Robert Smithson, "Discussions with Heizer, Oppenheim, Smithson," moderator Willoughby Sharp, *Avalanche* 7-8 (Fall 1973): 62.

<sup>20</sup> Beardsley, *Earthworks and Beyond*, 19.



are art first and whatever relation they have to the landscape, if any, is not at the forefront of the artists' intentions. This is not hard to believe in Heizer's case, as *Double Negative* certainly makes no allusions to the landscape but does transform it.

From listening to what the artists have to say on the subject, we presume that ecological concern is not what motivates them to work outside.

However, there is a romantic understanding of Land Art that persists and demonstrates that this art form is created partially in response to the ecological consciousness of the latter 1960s. This argument suggests that the artists' choices of their work materials and exterior locations both delineate the earth's plight, even if indirectly and unintentionally, indicative that these concerns might have an impact on artists. This position sees Land Art as an art form that is sensitive to nature, whereby artists make an effort to contend with the ecological crisis by making 'ecologically correct' artworks that accentuate nature on many levels.

There are really two types of landworks, namely those that are blatantly harmful to the environment and those that have little or no effect on it. One cannot compare the modest interactions by Long or Goldsworthy with those of their American contemporaries such as Heizer or Smithson, whose massive projects do interfere with the land.

But there are critics that try to save all Land artists. Howard Junker feels that there are positive moral issues raised by Land Art: "The earth workers are posing questions about how and where we live. How do we deal with our natural resources? What kind of environment do we live in? Where have all the flowers and open spaces and the beautiful vistas gone?"<sup>21</sup>

Philip Leider's perception of *Double Negative* exemplify the same positive attitude:

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<sup>21</sup> Junker, "Getting Down to the Nitty Gritty," 46.

The piece was a new place in nature. . . . We were all expecting something strong, but none of us were quite prepared for it, as it turned out. . . . The sun was going down; we wound up slipping and sliding inside the piece in the dark. The piece was huge, but its scale was not. It took its place in nature in the most modest and unassuming shape in a particular configuration of valley, ravine, mesa and sky. From it, one oriented oneself to the rest in a special way, not in the way one might from the top of the mesa or the bottom of the ravine, but not competing with them either."<sup>22</sup>

Perhaps Leider's intuitions were different because he actually visited this work and experienced it physically, unlike those that had only heard about it. While the concept of the piece sounded terrible, gouging into a mesa, the reality may have appeared less detrimental, especially to one predisposed to like the landwork.

Elizabeth Baker defends Heizer, Walter De Maria and Smithson: "Yet none of these three artists' works is large enough to have any significant impact on the ecology."<sup>23</sup> Size is not necessarily what determines the extent of damage, but she makes a good point when she suggests that "someday these works, in their capacity as Art, may have a preservational effect."<sup>24</sup>

It is possible that landworks might help in conservation; if there is a sometimes huge and immobile work of art on the land, their locations could be designated as protected sites. So artists could theoretically be protecting a small portion of the environment; rather than destroying or conquering the land, they could be perceived as honouring it by selecting it as the site of their work.

Land ownership can play a role in preservation. Some artists purchase or lease land so as ensure a permanent status for their work and its surrounding area. For example, Charles Ross owns the land at *Roden Crater* and Smithson's *Spiral Jetty* is on leased land

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<sup>22</sup> Leider, 42.

<sup>23</sup> Elizabeth Baker, 96.

<sup>24</sup> Ibid.

(Holt pays \$160 per year to the Utah Land Board for the ten acre site. The lease was made for twenty years with an option to renew). And De Maria's *The Lightning Field* lies on a plot of land bought by the Dia Art Foundation, assuring that the landwork will be maintained and its site preserved.

Calvin Tomkins also defends Smithson's work: "The dialogue between abstraction and nature that Smithson often mentions in connection with his work seemed to be going on very agreeably, in a modest and nonassertive way, and the problem of art competing with nature did not arise."<sup>25</sup> Tomkins is oblivious to the destructive power of creating a spiral of rocks in a lake.

Clearly, one's perception of landworks is extremely subjective. There are extremes in differences of opinion regarding the effect that landworks have on the land.

In an attempt to exonerate the artists, one could bring forth characteristics that may appear to be ecologically friendly. The frequent use of natural materials instead of traditional art materials for sculpture like bronze or marble is perceived as reflecting a more humble attitude towards nature. Similarly, the inclusion in certain pieces of an awareness of the cycles of nature (days, seasons, or more lengthy periods) is seen as the sign of a desire to be closer to the great rhythms of nature. The duration of the landworks' existence is also a factor; their recurrent impermanent status can be perceived as 'ecologically friendly' as landworks are left to erode back into their components' original state.

The very fact of the landworks' locations outdoors is assumed to indicate a special awareness of the land on behalf of Land artists. Due to external locations, people might think that artists inadvertently make a reference to nature and to the ecological crisis by becoming 'in touch' with nature and encouraging viewers to share in the experience.

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<sup>25</sup> Tomkins, *The Scene*, 147.

And finally, the fact that certain pieces, namely land reclamation projects, literally save places already polluted or disintegrated by industrialization from further degradation, is seen as proof of an ecological awareness.

We will examine these five arguments one by one, because even if they are well intentioned, they still do not seem completely convincing. We might like to think that artists mean well, discerning their actions as positive, and proclaiming Land Art as an ecologically friendly art. But it is difficult to defend them on these grounds. The works still do not solve the plight of the environment, nor do they justify as such the extent of the artists' interventions. Even the label of 'environmental' art that is used is an inappropriate designation, since Land Art is not ecologically motivated.

### **Natural Materials**

There are two factors about the frequent use of natural materials by Land artists which can be perceived as ecologically minded, namely the implication of connecting with nature by using its elements and the notion of returning to one's roots. Just as man-made materials reinforce the grandeur of modernity and the industrial revolution, natural ones are compatible with a rejection of urbanity and allocate due respect to the earth, occasionally even allowing it to reclaim them. Moreover, working with the same materials as the ancients might suggest a desire to identify with our predecessors.

Long states: "It is no coincidence that there are parallels between my work and work from certain people of other cultures and societies, as nature, which is the source of my work, is universal."<sup>26</sup> Identifying nature as the common source for his work and that of other cultures, Long declares that similarities are

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<sup>26</sup> Richard Long, "An Interview with Richard Long by Richard Cork," interview by Richard Cork, *Walking in Circles*, Seymour and Fulton, 251.

inevitable. It is true that since landworks are frequently made with the same materials as ancient sites, it is not surprising that they be alike. The formula is simple: similar materials and locations could yield similar forms.

Long proclaims to have an intimate relationship with nature: "I do the things that actually have profound meaning for me. For me the most sublime or profound - most emotional feelings and state are touching natural materials in natural places."<sup>27</sup> His delineation of 'touching natural materials in natural places' could be a perfect mantra for the romantic perception of Land Art's relationship with nature. Though this is a personal statement, it does describe the common materials and methods of construction among many Land artists, but they might not necessarily feel the emotional bond that Long alludes to.

In fact, the use of natural materials can stem from convenience rather than a sensitivity to nature; it would be practical for artists working outside to become predisposed to work with indigenous materials. Long explains: "I use stones because they are the common material of the world. So I can be an artist and make sculpture anywhere."<sup>28</sup> Long's perpetual use of materials found during his walks such as rocks, wood, and seaweed, frees him from constraints of feasibility; his artistic output has been, and continues to be, vast.

Moreover, by taking advantage of easily accessible and free materials, Land artists are unlimited in their choices and in the quantities used. Unless using man-made materials that require an enhanced budget such as concrete (*Sun Tunnels*) or steel (*The Lightning Field*), artists do not necessarily have to rely on commercial suppliers, which eliminates the need for intermediary obstacles and liberates them in the production of their works. By

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<sup>27</sup> Ibid., 252.

<sup>28</sup> Long, "Lines of Thought," interview with Nick Stewart, 10.

the very nature of their projects, materials are sometimes predetermined, such as earth for *Double Negative*.

Working with the earth and its elements can also indicate an effort on behalf of artists to return to their primal roots, since this is a shared mode of expression with the builders of ancient sites. Prehistoric cultures were restrained in their choice of materials, as the only ones available were whatever they could find in their environment (though some overcame limitations by transporting materials over great distances), so common materials tended to be earth and rocks. Modern artists incorporate other mediums into their repertoire such as seaweed, sticks, leaves, sand and other local components in order to expand their endeavours, differentiating themselves from the ancients because they are making art and not a utilitarian object.

'Earthworking', as Pierce calls it (his works at Pratt farm are made from indigenous materials using shovels, picks, and wheelbarrows), is a process of "reliving the history of the race and discovering one's humanity in physical union with nature."<sup>29</sup>

Pierce refers to two things: 'reliving the history of the race' and 'physical union with nature'. These are the combined features of this subject, namely the relation to the past by virtue of common processes of working with the earth and its elements, and the potential that the artworks have to unite artists and viewers with nature.

Pierce further associates himself with a nostalgic connection to nature and the past by proclaiming: "My medium is the landscape itself, its earth, rocks, and trees. I work in these materials because I feel their elemental power."<sup>30</sup> He leaves us guessing as to whether he intends that his viewers feel the same power. We assume that for Pierce, the ideal situation would be that viewers

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<sup>29</sup> Beardsley, *Earthworks and Beyond*, 135.

<sup>30</sup> Shirley Jacks, "Earthworks," *Art New England* (August/September 1993): 33.

could gain a similar insight, and that contact with his work would inspire sensations of 'elemental power'.

Like Pierce, Heizer also expresses a sentimental interest in natural materials, underlying a positive union with nature and a connection with his roots: "In our times there's a real question about modernity and how far it stretches. My real feeling is that we have returned to a primitive stage. . . . I think earth is the material with the most potential because it is the original source material."<sup>31</sup> Heizer also claims to like the physical sensations that working with earth provides: "My personal associations with dirt are very real. I really like to lie in the dirt. I don't feel close to it in the farmer's sense. . . . The work I'm doing with the earth satisfies some very basic desire."<sup>32</sup>

We note that Pierce's and Heizer's explanations for using earth are different from Long's. While Long is practical and admits that natural materials are convenient, the Americans search for more meaning. Perhaps Long does not need the sentimentality associated with 'elemental power' and a 'return to a primitive stage' that Americans yearn for because his native countryside has already provided him with this sensitivity.

While using natural materials might appear to be in harmony with an ecological awareness, there is no argument that is convincing. Certainly, using them is better than putting man-made elements into nature. But ultimately, the ideal situation would be to keep the natural materials where they belong, as they are, in their place.

There is no way of knowing what kind of damage is done when rocks, earth, seaweed and other such materials are moved. Displacing earth can cause unnatural erosion and other ecological imbalances. Moreover, the creatures and plants that live within whatever natural medium is being used are surely affected; when

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<sup>31</sup> Brown, 13-14.

<sup>32</sup> Michael Heizer, "Discussion with Heizer, Oppenheim, Smithson," moderator Willoughby Sharp, 64.

Heizer and De Maria bulldozed into the desert, they may have destroyed innumerable habitats. Similarly, even Long may disturb a scorpion, snake, or insect when he lifts a rock for one of his stone circles. And even if he returns the rock to its original location after he photographs his work, the damage is done.

We can assume that the artists' use of natural materials and interventions in the land are always disruptive to the natural habitat, even if destruction is not their intention. Whatever positive aspects people see in the use of natural materials are postulated and oblivious of the possible negative effects upon wildlife and plants, not to mention the environment as a whole.

### **Cycles of Nature**

There are various aspects related to the cycles of nature in landworks which are a by-product of their exterior locations and natural materials. Depicting these cycles in Land Art can also imply an ecological awareness.

We have already referred to the long cycles that are depicted through astronomical alignments. Shorter cycles are also evident as landworks are expressed in time, both daily and seasonally. Every object and place outside displays different colours according to time of day, season, and weather. In Land Art, the passage of time is also represented through the versatile appearance of landworks and the duration of their existence.<sup>33</sup>

Depending on the cycles of nature, the appearance of landworks can be completely different. For example, Robert Morris's *Observatory* is usually green, covered in grass (and sometimes dandelions). When it snows, it becomes white, and during the intermediary seasons, it is covered in dead, beige grass (fig. 88). As shadow and light glide over the landwork, the green, white, or beige become duller or brighter, and when the sun pierces through

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<sup>33</sup> Time is also a focus of Minimalists and Conceptualists from the 1960s and 70s. Lippard, *Overlay*, 1983.



dark rain clouds the *Observatory* radiates with a yellow or blue glow.

John Coplans describes the variations that short cycles create at *Smithson's Amarillo Ramp*: "The color changes constantly. Between seven and eight o'clock in the morning the shadows are heavy and purple, the reflection of the sun off surfaces bright, giving a high contrast to form. At midday the land is flattened by the haze of heat and sun. In the afternoon, as the light softens, the whole land becomes rust colored. Once you are used to the differences in light it is possible to tell the time by the color of the land at a given moment."<sup>34</sup>

Coplans's detailed perceptions are gained through intimate and prolonged exposure to *Amarillo Ramp*; a viewer that sees it more briefly will not gain this insight. Thus, the longer one spends at a landwork, the more one can become aware of its cyclical characteristics.

Holt and Liza Bear recognize the same pattern at *Amarillo Ramp*: "Because the weather is so consistent, awareness of the light changing hour by hour becomes very strong, and you get to know the time of day by the changing color of the ramp."<sup>35</sup>

As natural forces shift, they transform the colours and shadows of a work and its surroundings. Spending a full day at any three dimensional object or 'environment' above ground that casts shadows is like observing a sun-dial that helps one to tell time.

Holt's *Sun Tunnels* is one of the most elaborate such works, as it offers three different ways of gauging the hour. One can tell time according to the shadows cast by the tunnels themselves, by light penetrating the tunnels through their openings, and finally, by the presence and location of spots of light piercing through the constellation holes.

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<sup>34</sup> Coplans, 43.

<sup>35</sup> Holt and Bear, 16.

*Sun Tunnels* allows a viewer to watch the sun's movement across the sky and to see how its placement changes the tunnels continuously. At each hour of the day, they appear differently as the colours of both the concrete and surroundings change.

The four tunnels, arranged and aligned in sets of two, are identical except for the constellation holes on top. Each set of opposing tunnels responds identically to the sun's cycles, yet differently from the other set due to their opposite placement.

The shadows cast by the tunnels change on the desert's surface. In the morning, two tunnels project elongated and oval shadows while the other two cast large, full shadows with holes in the center. The shadows become progressively shorter and full as the sun reaches the noon hour (fig. 89). When the sun is directly above the tunnels, two cast no shadow whatsoever while the other two cast very small shadows. In the afternoon, shadows elongate in the other direction.

Light in the tunnels also changes as the sun enters them. During the morning, the sun creates diagonal sections of light on one side so that the tunnels are half shaded, half sunny. In the afternoon, the other side becomes illuminated.

The holes representing constellations on the top of each tunnel also cast spots of light, first appearing and moving within the interior as time passes, and finally disappearing (fig. 90). Should one spend time in a tunnel at night, one can also watch the moon and stars' movement across the sky. The shapes and positions of shadows differ from hour to hour, day to day, season to season, and relative to the sun, moon, and stars' positions in the sky.

Occasionally, the period that viewers spend at landworks extends into the evening or night (especially if they are coming to see a sunrise or sunset), placing them in unfamiliar settings. For eyes accustomed to bright city lights, experiencing darkness in nature can be a new sensation.

Electricity has changed human perception of the sky. When the concept of cyclical time is obscured with the capacity to produce light artificially, people's senses are dulled and they lose touch

with the sky. Life without electricity is an inconceivable concept to city-dwellers, accustomed to the luxury of predetermined light. Taken for granted, it is an obvious necessity, and unless aware of others not endowed with the pleasures of nocturnal illumination, people are sheltered with a notion of universal electricity, turned on at their will with the easy flick of a switch. Spending time at a landwork in the dark can make people think about this dimension of nature.

Making landworks that can only be viewed under natural conditions enforces a contact with the sky; activities must be planned according to lighting. Being connected with the sky, even for a limited period, reminds people of how the ancients might have felt as their existence was guided by day and night.

Being able to watch how landworks are transformed by the cycles of nature is another reason that people assume that Land Art is sensitive to nature. But this is not the main intention of these works and could be seen as a 'fringe benefit'. Any habitat's natural features will adequately depict the cycles of nature; we do not need an artwork in the land to appreciate them.

It is more likely that representing these cycles is a way to enhance the transformation of the land as the landscape transformer becomes transformed itself, thereby adding a memory dimension to the artwork. By virtue of the constant transformations at landworks, we are instilled with different memories of their appearance at different times. This is how artists add a mnemonic component to the land, making culture out of nature. While this could be true of any statue in a city square, the relation of time is more complex and varied in Land Art, since landworks can either disappear or change soon after their creation, or they can fall into the same category as any monument or construction that lasts over time.

### **Permanent Versus Impermanent Landworks**

The cycles of nature are also featured through the duration of a landwork's existence. Permanence versus impermanence depends on

materials chosen, and, often, landworks created for exhibitions are dismantled after the show is terminated. Their existence has a beginning and an end, recording linear time versus the cyclical time of nature. Some works have a long existence, succumbing slowly to the forces of nature and the ravages of time, while others exist for a short period.

Land artists express an interest in time, both durational and cyclical, aware of the changes that it will make upon their works. They call attention to the forces and cycles of nature by leaving their works exposed outside, submissive to their termination or transformation as induced by nature. Rain, wind, snow, and heat all affect the materials that landworks are made of, changing and eroding them.

Artists make decisions about their art's durability through the choice of their materials. The option of tough materials that do not deteriorate easily versus fragile ones is what determines whether landworks will be permanent or impermanent.

Holt does not hesitate to use advanced rather than primal means that she has at her disposal, both in materials and methods of construction. She chooses man-made materials for her landworks to ensure that they endure centuries of weathering: "I am attracted to materials that have a time-span beyond our human life. It isn't that I'm trying to build monuments that will last forever, I'm interested in conjuring up a sense of time that is longer than the built in obsolescence we all have around us. I want the feeling that it will last beyond my lifetime."<sup>36</sup> Her choice of sturdy materials such as the concrete at *Sun Tunnels* resists decay and virtually guarantees this aspiration.

Another aspect of using artificial materials is related to the artists' intentions that it be obvious that their work is man-made. When asked why Morris uses materials such as stones and steel that are not directly related to site for his *Observatory*, he responds that: "They tend to be separate sorts of materials. They really

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<sup>36</sup> Castle, 88.

accent the thing as being separate from the earth."<sup>37</sup> Though landworks sometimes appear as if they sprouted from the earth as a natural entity, they are also intended to be seen as products of the artists' creative effort of transforming the land.

Preventing the encroachment of natural processes requires financial support to provide regular maintenance. Few works achieve the luxury of preservation by locals that Morris's *Observatory* and Smithson's *Broken Circle* and *Spiral Hill* have.<sup>38</sup>

Conversely, other works are ephemeral, disappearing moments after their creation, such as the water drips on the desert floor by Long, their short life documented by a photograph:

I suppose my work runs the whole gamut from being completely invisible and disappearing in seconds, like a water drawing, or dusty footprints, to a permanent work in a museum that maybe could last forever. The planet is full of unbelievably permanent things, like rock strata and tides, and yet full of impermanence like butterflies or the seaweed on the beach, which is in a new pattern every day for thousands of years. I would like to think my work reflects that beautiful complexity and reality.<sup>39</sup>

In a film that documents his work in the Sahara, Long is shown dismantling a stone circle, leaving the area looking as it did before his intervention: "I hope my works reflect the impermanence and changeability of natural processes. Often, after taking a photograph, I will replace or stand down the stones I have used. It is always my intention to use each place with respect."<sup>40</sup> This act also eliminates any option for subsequent viewing, thus there is a need for visual documentation should Long wish to have a record of his works.

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<sup>37</sup> Robert Morris, "Interview," *Het Observatorium Van Robert Morris*, n.p.

<sup>38</sup> Due to floods in Holland in 1995, the entrance to the Observatory was destroyed. By the following year, the damage had been repaired and the landwork was restored to its original condition.

<sup>39</sup> Seymour and Fulton, 104.

<sup>40</sup> Haas, *Stones and Flies*.

As mentioned earlier, Heizer's *Nine Nevada Depressions* in Nevada were left exposed to the elements and became overrun by sand, their trenches filled in. Among this group, *Dissipate #8*, August 1968, was photographed throughout its decomposition (fig. 43). Heizer wrote in *Artforum*: "There is no longer any photo that even loosely describes this work. These photos are taken 365 days apart. Next year the third and possibly final photo will be taken. It will probably only be the landscape. Climate has extended the process; it is being photographed throughout its disintegration. As the physical deteriorates, the abstract proliferates, exchanging points of view."<sup>41</sup> Rather than being 'destroyed' by weather, landworks are simply altered, eventually becoming invisible.

Heizer wants his work to "complete its life-span during my lifetime. Say the work lasts for ten minutes or even six months, which isn't really that long, it still satisfies the basic requirements of fact."<sup>42</sup> He feels differently about *Complex One/City* in Garden Valley, Nevada, that is "not for this generation, but for the millennium."<sup>43</sup>

Smithson's main objective was 'to make something massive and physical enough' so that it could go through all kinds of 'modifications': "If the work has sufficient physicality, any kind of natural change would tend to enhance the work."<sup>44</sup> While transformations were welcome, structural efforts ensured that his pieces last.

Prior to its submersion under the lake, Smithson visited *Spiral Jetty* with friends and was pleased that geological forces had imprinted his work (he was fascinated with geological processes

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<sup>41</sup> Heizer, "The Art of Michael Heizer," 32.

<sup>42</sup> Michael Heizer, "Discussions with Heizer, Oppenheim, Smithson," moderator Willoughby Sharp, 70.

<sup>43</sup> Grace Glueck, "Earth Artist Keeps a Foot in the Gallery," *New York Times*, 1 December 1974, 37.

<sup>44</sup> Smithson "...The Earth, Subject to Cataclysms, Is a Cruel Master," *Writings*, ed. Nancy Holt, 181.

like erosion and stratification), forming thick deposits of salts and creating a yellow mineral.<sup>45</sup> Though he perceived these changes as positive, Smithson did not intend for *Spiral Jetty* to become submerged under water as it has been occasionally since 1972.<sup>46</sup> When asked what he would do if the lake covered the jetty, he responded that he would build it fifteen feet higher.<sup>47</sup>

When making *Half-Tide* in 1971, a cross formation of stones on a bed of seaweed at Bertraghboy Bay in Ireland, Long noted that the "work was made miraculously a lot better by the tide coming in and covering it. That was a kind of amazing bonus. . . . an example of a work that comes about by a sort of combination of what I do, plus some unforeseen natural phenomenon which actually transforms the work."<sup>48</sup> Artists often see the changes as positive, suggestive of a humble attitude towards the environment.

Vazan writes: "My projects often offer configurations or formal structures destined to change over a relatively long period of time which forces us to reflect on the cyclical nature of time. . . . each end being a new beginning."<sup>49</sup> Vazan believes that his series of ground drawings in the Peruvian desert will last a very long time, much like the Nazca lines. He also uses snow and other impermanent materials that change his work over shorter periods of time.

Works that involve the growth of plants are a culmination of evolving landworks, the epitome of revealing cycles of nature and

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<sup>45</sup> Leider, 49.

<sup>46</sup> Contrary to popular belief that it is permanently submerged, the water level merely fluctuates at *Spiral Jetty*. The water-level also rises periodically in the quarry that houses his landwork in Emmen, *Broken Circle*.

<sup>47</sup> Robert Hobbs, "The Works," *Robert Smithson: Sculpture*, ed. Robert Hobbs, 197.

<sup>48</sup> Seymour and Fulton, 53.

<sup>49</sup> Bill Vazan, "Aménagement Conceptuel," *Urbanisme* 168/169 (1978): 104.



impermanence. Dennis Oppenheim's *Directed Seeding - Cancelled Crop* grew from seedlings into a field of wheat that was later razed to form curvilinear patterns (fig. 51). The field images always changed as the plants grew, reached maturity and then were harvested.

Of course, there is no point in trying to defend permanent landworks as ecologically friendly. As a lasting transformation on the land, they are about the artists' power to possess the land by leaving their markers upon it.

However, the use of natural materials frequently prevents a permanent existence for landworks, and their transformation can be perceived as serving the ecological cause. But the notion that artists reinforce the earth's power by offering their tributes as sacrifices to be devoured or changed is unlikely. Let us not forget that durable materials are more expensive. It is highly likely that the frequent impermanence of landworks is instigated by limited budgets rather than by ecological awareness.

Moreover, as mentioned above, even impermanent landworks can cause damage to the environment. Rather, it is more probable that artists transform the land most effectively this way, even if temporarily.

Another aspect about impermanent works is that they make us think of archaeological sites; both decompose in the landscape as time and weathering affect their form. When artists leave works to disintegrate, they add another layer of memory onto the landscape. After the work decomposes, we are left with only a memory, much like ancient ruins.

We have memories of ancient sites that have been destroyed or transformed either because they are reconstructed, physically or through drawings, or by the objects found within them displayed in museums and illustrated in books. Similarly, we have memories of landworks that no longer exist because they are documented with photographs, providing us with the knowledge that they once existed and images of what they looked like.



Smithson mentioned decomposing remains:

It's interesting too, in looking at the slides of ruins there's always a sense of highly developed structures in the process of disintegration. You could go and look for the great temple and it's in ruins, but you rarely go looking for the factory or highway that's in ruins. Levi-Strauss suggested that they change the word anthropology to entropology, meaning highly developed structures in a state of disintegration. I think that's part of the attraction of people going to visit obsolete civilizations. They get a feeling of gratification from the collapse of these things.<sup>50</sup>

Smithson believed in entropy, that all things will revert to their original state. He reiterated MacCannell's proposition, that seeing things that have decomposed might be satisfying to those seeking comfort and confidence in modernity.

### Site Selection

The selection of exterior locations for landworks is also assumed to be a positive effort by artists to contend with the ecological crisis. It might be true that by presenting their work outside, artists entice people to venture into the wilderness and immerse themselves in the terrain's natural features, encouraging them to view their work as well as its surroundings simultaneously. But what some critics seem to forget is that working outside is not necessarily meant to make people connect with nature; the decision is instigated by the artists' common need to get out of the museum and gallery system.

John Beardsley claims that landworks are part of a widespread effort to re-establish a relationship with nature: "They affirm the need for this relationship by requiring that we experience work and site as a single totality."<sup>51</sup> If the environment is almost as important as the work itself, it is in fact part of its subject

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<sup>50</sup> Robert Smithson, "Conversation in Salt Lake City, (1972)", interview with Gianni Pettena, *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley: University of California Press, 1996), 299.

<sup>51</sup> Beardsley, *Probing the Earth*, 27.

matter. Therefore, the place that constitutes a landwork's location is part of the work itself. And when a landwork transforms the land, we can see it as a landscape as well as a work of art.

Heizer is very clear on this: "The work is not put in a place, it *is* that place."<sup>52</sup> Referring to *The Lightning Field*, De Maria writes: "The land is not the setting for the work but a part of the work."<sup>53</sup> Including the surroundings as a formal part of a landwork causes the features of each distinct site to be paramount.

Long also repeats this sentiment: "My outdoor sculptures are places. The material and the idea are of the same place; sculpture and place are one and the same. The place is as far as the eye can see from the sculpture."<sup>54</sup> Long always includes a large portion of the surroundings in his composition when he photographs his landworks, implying that the work consists not only of his creation, but of its relationship with the environment as well (fig. 91).

Since he never transports material from elsewhere, form and matter are always suited to place. His works may be similar formally but they are all different, varying according to the region that he is working in. It is the surroundings where he makes his landworks that enhance his works; their textures are dependant on materials used and the backgrounds they are in.

Some landworks are incorporated into their surroundings so well that they appear natural, melding with the environment. Those who defend Land Art will assume that artists sometimes make the effort to create works that are in congruence with nature. This 'harmonious co-existence' is presumed to illustrate that art/humans and nature can merge if humankind is not overly obtrusive.

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<sup>52</sup> Tiberghien, *Land Art*, 277.

<sup>53</sup> De Maria, 58.

<sup>54</sup> Richard Long, *Five, Six, Pick up Sticks. Seven, Eight, Lay Them Straight* (London: The Curwen Press for Anthony d'Offay, September 1980), n.p.

Examples of this type of landwork are well featured by Long, the products of his gentle interactions appearing subtly in their environment, blending into it, looking as if they belong there. He claims: "A sculpture in a landscape, when it happens really well in a good way, is like a celebration of the place. . . . and everything coming together in a good way."<sup>55</sup>

Since a setting's particular characteristics are so significant, the selection of a site becomes crucial. Artists may choose the locations for their landworks very carefully. De Maria searched five years for just the right place for *The Lightning Field*, while Smithson looked for two months for the perfect lake in which to make *Spiral Jetty*. The features that most attracted him to the Great Salt Lake in Utah was the water's reddish colour and the crystals of salt on its edge.

Dave Hickey finds that *Spiral Jetty* "has a beaux-arts look about it, more related to other sculpture than to the lake. . . . I would rather it took dominion over the MOMA [Museum of Modern Art in New York] than over the Great Salt Lake."<sup>56</sup>

While Hickey might rather view Smithson's work in a more conventional location for art appreciation, his preference is inappropriate; the whole point is that *Spiral Jetty* is in a lake, specifically one with red water and salt crystals. Not only is it totally incorporated into its surroundings and thus immobile, it was not Smithson's intention or aspiration whatsoever that it take dominion in a museum; *Spiral Jetty* is meant to exist in a specific area of the Great Salt Lake in Utah and nowhere else.

It took Charles Ross four years to find an appropriate place to make *Star Axis*. He kept returning to mesas in New Mexico: "Later I realized that the powerful Spirit of this land gave me a feeling

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<sup>55</sup> Richard Long, "An Interview with Richard Long by Richard Cork," interview by Richard Cork, *Walking in Circles*, Seymour and Fulton, 251.

<sup>56</sup> Dave Hickey, "Earthworks, Landworks and Oz," *Art in America* 69 (September/October 1971): 41.

of standing on the boundary between Earth and Sky. . . . Only an hour and a half from Santa Fe, *Star Axis* also marks the boundary between civilization and wilderness."<sup>57</sup>

For Holt, site is also an integral part of her art; the tunnels that compose *Sun Tunnels* frame specific features in the distance as a camera lens would and could not exist in just any desert as their seeming mobility would imply.

Landworks that are voids, such as *Double Negative* or *Las Vegas Piece*, are totally immobile since they are literally fused into the earth. Others such as *The Lightning Field* and *Sun Tunnels* consist of artificial elements placed on the surface, therefore, they could be displaced with much mechanical effort, however inappropriate. Though some landworks appear mobile or could theoretically be made anywhere, it is vital to recognize their relationship to specific surroundings.

In all the cases above, the artists' intentions are that their works exist in the locations they choose. Even if they were offered to exhibit these pieces indoors, they would surely decline because the whole point is to get out of the museum and gallery system.

However, the distinctive properties of a place may be secondary if artists are contending with land availability and/or commissions. Edward Fry describes Morris's *The Grand Rapids Project*, 1973-74: "And so perfect is the fusion between man and nature that the artist's role becomes virtually invisible; the work seems inevitable, ageless, as though it had always been as it is now."<sup>58</sup> Fry identifies this work as well-integrated into its environment.

Theodore Heinich echoes this attitude when he claims that Morris's *Untitled*, 1977, occupies the circular opening in the parkland "...as naturally as though it had been forgotten there for

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<sup>57</sup> Charles Ross, "Charles Ross," *Sculpting With the Environment*, ed. Baile Oakes, 52, 54.

<sup>58</sup> Fry, *The Grand Rapids Project*, n.p.

the past four or five thousand years."<sup>59</sup> Both these statements could be said of many archaeological sites; they do not imply that Morris's works are part of nature.

Morris had no part in the selection of natural characteristics of these works' urban locations. The *Grand Rapids Project* was commissioned, therefore its location in Grand Rapids, Michigan was predetermined. *Untitled* was made for the *Documenta 6* exhibition in Kassel, Germany, existing among other artworks.

One might assume that if these works blend as well with their surroundings as Fry and Heinich suggest, they are less successful as transformers of the environment and injectors of memory. Perhaps Morris felt less of a need to transform nature in both these works because they were made in places already transformed.

If landworks are part of the land as artists claim, it is because they transform the land into landscapes; therefore, artists choose sites in which their transformations will have more meaning.

#### Remote Sites

The selection of sites is directly related to the effort to create landscapes. Since remote sites are usually the most unmodified land in the United States, the most untouched by humans, these are the areas that require the most transformation in order to instill a memory.

We suggest that the more remote a landwork's location, the more effectively an artist creates a landscape. With no other man-made features in the region, an artist's work of art becomes the highlight of the area, the landmark that transforms the place into a landscape with a memory.

There are countless locations of raw wilderness in the United States composed of pristine nature in which to make such marks upon the land. However, many untouched places such as forests and mountains contain features that might distract from a landwork's power of marking a territory.

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<sup>59</sup> Heinich, 7.

Consequently, many American artists favour remote desert settings. Initially, as pioneers of American Land Art, Smithson, Heizer, and De Maria made their first landworks in the desert. Ross, Turrell, Vazan, Holt, and others have also worked in the desert.

The desert is a chosen place to make landworks for a number of reasons. The environment is visually striking and, formally, it offers huge expanses of surface on which to work, with few distracting features. Logistically, land is cheaper to purchase or lease from the government. But foremost, artists might be attracted to such locations because this is where their interactions have the most powerful impact of transformation. The desert's vast, empty spaces are where landworks are most visible and transform the landscape most powerfully.

Smithson expressed the appeal of deserts: "The desert is less 'nature' than a concept, a place that swallows up boundaries. When the artist goes to the desert he enriches his absence and burns off the water (paint) on his brain. The slush of the city evaporates from the artist's mind as he installs his art."<sup>60</sup>

Smithson referred to two aspects of the desert, namely its purity and its unlimited expanses. To Smithson and others who work in this barren environment such as Heizer and Holt, the desert is a place to escape from the city. It is where they can be cleansed of polluted city muck and find tranquility. But the desert is also seen as an extension of the gallery, meaning that the only thing that artists bring from the city is art.

Perhaps the desert was a more cultural concept than 'nature' to Smithson because of its emptiness. Unlike other natural manifestations composed of changing terrain dotted with a variety of trees, plants, flowers, water sources and other components of nature, deserts are unvarying stretches of barren land. Their most diverse features are surface colour and texture, mountains, and occasional shrubs. The desert is silent except for the sounds of

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<sup>60</sup> Smithson, "A Sedimentation of the Mind: Earth Projects," 49.

wind and birds. There are no rustling leaves, no gushing water, no babbling brooks. It is bleak and bare. It is so vast and featureless that it appears to have no borders, as if its space is infinite.

Hickey notices that: "In the big country you do not see in the ordinary way. There is no 'middle distance', only 'near' and 'far', the dust at your feet and the haze on the horizon. Between, just a rushing away. There is literally nothing to see, so that is what you look at: the nothingness - the nothing - ness. Vacant space is the physical fact that you perceive most insistently."<sup>61</sup>

Since there are few distinguishable features to look at in the desert, whatever an artist puts into such an environment easily transforms the land. Holt defines her intentions at *Sun Tunnels*: "I wanted to bring the vast space of the desert back to human scale. I had no desire to make a megalithic monument. The panoramic view of the landscape is too overwhelming to take in without visual reference."<sup>62</sup> The immediate terrain surrounding her landwork is huge, empty and flat (fig. 92). The tunnels help place the viewer in the landscape more comfortably, offering not only refuge but a visual focal point in an otherwise limitless field of vision; without their presence the area would appear absolutely stark.

"I was struck," says Holt, "especially by the desert landscape when I first went there. It was overwhelming to me. And it was like my inner landscape and the outer landscape were identical. I had been carrying around a landscape within that I had never experienced on the outside. So I had a nirvana experience for two or three days when I first went to the desert. And then the sense of the sun and the sky."<sup>63</sup>

The experience of bliss that Holt has in the desert is shared by others. Heizer finds "that kind of unraped, peaceful, religious

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<sup>61</sup> Hickey, 41.

<sup>62</sup> Holt, "*Sun Tunnels*," 35.

<sup>63</sup> Holt, interview by author.

space artists have always tried to put into their work."<sup>64</sup> Morris calls earthworks in the southwest desert: "quasi-religious sites for meditation."<sup>65</sup> The references to serenity in these comments recall the sublime, which is in fact a reference to culture.

Paul Shepard believes that the desert environment provides the purest sublime experience:

Silence and emptiness convey divine immanence by their lack of prosaic forms. The desert is the environment of revelation, genetically and physiologically alien, sensorily austere, aesthetically abstract, historically inimical. It is always described as boundless and empty, but the human experience there is never merely existential. Its solitude is a not-empty void, a not-quiet silence. . . . The constancy of sensory experience in the desert - or in a cave in the desert - is in effect sensory deprivation. This is the saturation of solitude, the ultimate draft of emptiness, needing courage and sanity to face. It brings introversion, contemplation, hallucination. Space and time and silence are metaphors of the eternal and infinite. To the desert go prophets and hermits; through deserts go pilgrims and exiles. Here the leaders of the great religions have sought the therapeutic and spiritual values of retreat, not to escape but to find reality.<sup>66</sup>

The mention of hermits and prophets has nothing to do with nature and everything to do with culture. According to Shepard's notion, the historical dimension of deserts is evoked through a connection with the Bible. He believes that locales involving great distances, vast empty spaces, or impenetrable forests intensify the sense of nature's grandeur, suggesting the power and omniscience of the supernatural: "The spiritual effect of the wilderness runs deeper than any other encounter in nature."<sup>67</sup>

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<sup>64</sup> Junker, "Getting Down to the Nitty Gritty," 42.

<sup>65</sup> Morris, *Earthworks: Land Reclamation as Sculpture*, 14.

<sup>66</sup> Paul Shepard, *Man in the Landscape. A Historical View of Esthetics of Nature* (New York: Alfred A. Knopf, Inc, 1967), 43-44.

<sup>67</sup> *Ibid.*, 157.



This belief proposes that artworks in remote wilderness settings should promote a 'spiritual effect' upon viewers because of the contact with nature. Virginia Dwan's feelings instigated by *Double Negative* substantiate Shepard's claim: "It was really, really a special experience for me. It was rather like being in a cathedral in reverse. You had the sound of the desert and the whistling of the wind through the space and the light changing colours within the space. Truly a spiritual experience."<sup>68</sup> Again, we see a memory dimension in Dwan's reference to the cathedral, being an archetype of Western culture.

Tomkins is not as moved: "The experience of being inside *Double Negative* was certainly different from looking at a landscape by Claude or Turner, but whether it could qualify as a religious experience, or as a quantum leap beyond style, I must leave to the judgement of more physically robust critics than I. Heat and thirst had dulled my perceptions; I was thinking of the trip back."<sup>69</sup>

With no other distractions in the peaceful solitude of *Double Negative's* desertic and remote location, viewers might be inclined to feel the 'spiritual effect' that Dwan experiences. However, for Tomkins, physical discomfort supersedes this type of outcome.

Dwan's encounter can be seen as a positive effect inherent to Land Art. However, when people visit landworks, they visit culture. Dwan misses the point when she focusses on the sounds of the desert. What about the landwork? Heizer is oblivious to the 'whistling of the wind'. He says so himself, as we quoted him earlier: "It's about art."

David Reason would call Dwan's experience wishful thinking: "The idea that direct productive involvement with the land, unmediated by the market, results in being in some obscure sense 'closer to nature', and the hope that such apparent immediacy is

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<sup>68</sup> Virginia Dwan, interview by Charles Stuckey, *Virginia Dwan. Art Minimal - Conceptual - Earthworks*, Jan Van Der Marck (Paris: Galeries Montaigne, 1991), n.p.

<sup>69</sup> Tomkins, *The Scene*, 137-138.

equivalent to being in a better position to know nature are products of misguided desire on our parts."<sup>70</sup>

Reason is correct. Landworks have nothing to do with *knowing* nature, since they are about culture. The frequent selection of inaccessible places as locations for landworks, those 'in the middle of nowhere', pay the most obvious homage to culture, not to nature.

In fact, because their works are not ecologically motivated, isolated locations are where artists cause the most harm. As we have suggested, remote sites have the most powerful capacity to transform. Consequently, landworks in such places have the most negative destructive impact as they transform pristine nature into culture. By choosing to put their landworks in places as remote as possible, artists achieve the most effective transformation, thereby creating a landscape out of chaotic nature even at the cost of causing damage.

Another detrimental effect that landworks can have on their surroundings is the potential of visitors that mistreat the environment, especially during periods of higher influx such as astronomical events. As at every unattended attraction, people may exhibit disrespect; the lack of garbage bins, running water, toilets and other amenities promotes occasional instances of uncivilized behaviour. Any refuse left behind that is not biodegradable is likely to remain there for a long time unless a future visitor picks it up. While this may have nothing to do with the artists, if they did not make landworks in the middle of nowhere it is unlikely that people would reach these areas and possibly pollute them.

#### Perceiving and Noticing Nature

Depending on the location, viewers feel physical sensations induced by weather and can see birds, lizards, snakes, insects,

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<sup>70</sup> David Reason, "A Hard Singing Country," *The Unpainted Landscape*, Roger Ackling, et al (London: Coracle Press, 1987), 27.

deer, and any other creatures of the particular ecological niche that a landwork occupies. However, these sightings have nothing to do with the art. Artists do not intend for viewers to become focussed on other aspects of their surroundings; they make landworks for people to look at the art.

At Smithson's *Spiral Jetty*, John Coplans describes how:

You become unusually aware of the physicality of your body in relationship to its surroundings, of temperature, the movement of the wind, the sounds of nature, and of how isolated you have been from nature until this moment. . . . I think I saw the *Spiral Jetty* under the very best of circumstances, under romantically sublime conditions. On the day I was there the vast stretch of lake water that filled the horizon for 180 degrees was shot through with the widest range of coloration, from bright pink and blue to grey and black. On the left, near the abandoned drilling wharf, and for some ten or twelve miles out, a storm was raging, with black clouds massed high into the sky, claps of thunder and flashes of lightning, and the surface of the lake in turmoil. Toward the center the storm eased off, but with lower clouds and sheets of rain scudding across the lake surface, almost obliterating from view some islands lying offshore. To the right, a blue sky almost clear of clouds with a high moon and stars, and on the extreme right, the sun going down in a mass of almost blinding orange. Where I stood, in the center of the spiral, a warm wind blew offshore, carrying the smell of the flora, and rustling through it, the cries of birds. The scrubby, low hills behind began to flatten and darken against the twilight.<sup>71</sup>

Coplans had an intimate encounter with nature, and this is a common response among viewers of Land Art. He noticed many features aside from Smithson's work, such as an oncoming storm replete with black clouds, rain, thunder and lightning to his left, while a blue sky and orange sun dominated his field of vision to the right. He felt a warm wind carrying the smell of flora and heard cries of birds. His was a totally sensory experience involving vision, sound, smell and even tactile sensations that contributed to the impression that this work made on him.

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<sup>71</sup> Coplans, 42.

Tomkins's description of the compensations for not finding De Maria's *Las Vegas Piece* are also perceptions by someone completely involved with their surroundings: "The wide, level valley, ringed with jagged mountains, some of which were still snow-capped; the desert flowers; the pungent smell of juniper carried by the light breeze; the hot disc of the sun sinking luridly toward the horizon - all this was admittedly something that I had not previously experienced in an art gallery or museum."<sup>72</sup> Tomkins enjoys the marginal benefit of his futile efforts at locating the earthwork, but it has nothing to do with De Maria's work.

All aspects of the location are thus part of the experience. Robert Scull, Heizer's patron for *Displaced Replaced Mass*, 1968, watching his financial endeavour materialize in Nevada, said: "And suddenly I realized that art didn't have to involve the walls of my house. I was involved with nature - the whole desert became part of my experience."<sup>73</sup> Instead of experiencing art in his home, Scull was able to benefit from the added feature of incorporating the 'whole desert' into his appreciation of art.

At De Maria's *The Lightning Field*, Melinda Kurtz "became fascinated with the various inhabitants - enormous jack rabbits, ants skilled at conical architecture, beetles shaped like sea-shells, small birds, grasses, lichens, spider webs."<sup>74</sup> Of the creatures at Pratt Farm in Maine, James Pierce claims they ". . . add an everchanging variety of texture and movement to an underlying simplicity of form."<sup>75</sup>

The characteristics inherent in the location of landworks expand their form to yield more complex structures. The quotes above reveal the perceptions and sensations that experiencing

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<sup>72</sup> Ibid., 141-142.

<sup>73</sup> Tomkins, *The Scene*, 133.

<sup>74</sup> Melinda Kurtz, "Walter De Maria's 'The Lightning Field'," *Arts Magazine* 54 (May 1980): 172.

<sup>75</sup> Jacks, 33.

nature can produce at various landworks. However, they can occur at any exterior location. As we said regarding the cycles of nature, people do not need an artwork to experience the positive aspects of nature. If they had visited the same locations before the landworks were made, they could have experienced the same benefits and impressions. What it is all about is culture, not nature, and because it is culture, it brings in an element of the past as well.

Clearly, there are many other things to look at aside from landworks and these are part of the attraction for numerous visitors. But these are not what artists intend for them to focus on. The point is the art, the culture, and the history that it creates.

### **Land Reclamation**

Ecological awareness also prompted the beginning of land reclamation projects in which artists were commissioned to build landworks on sites that had been destroyed by industry, thereby contending with the destruction and injuries done to the earth. The trend peaked in the early 1980s, but Smithson had made the suggestion a decade earlier: "Across the country there are many mining areas, disused quarries and polluted lakes and rivers. One practical solution for the utilization of such devastated places would be land and water recycling in terms of 'Earth Art'."<sup>76</sup>

According to Smithson: "The best sites for 'earth art' are sites that have been disrupted by industry, reckless urbanization, or nature's own devastation."<sup>77</sup> In a proposal for an earthwork in the Egypt Valley, Ohio, he summarized his perception of the role of art during the ecological crisis:

Such a work would exist as a concrete example of how art can enter the social and educational process at the

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<sup>76</sup> Smithson, "Untitled," *Writings*, ed. Nancy Holt, 220.

<sup>77</sup> Robert Smithson, "Frederick Law Olmstead and the Dialectical Landscape," *Writings*, ed. Nancy Holt, 124.

same time. . . . The artist, ecologist, and industrialist must develop in *relation* to each other, rather than continue to work and to produce in isolation. . . . The ecologist tends to see the landscape in terms of the past, while most industrialists don't see anything at all. The artist must come out of the isolation of galleries and museums and provide a concrete consciousness for the present as it really exist, and not simply present abstractions or utopias. The artist must accept and enter into all of the real problems that confront the ecologist and industrialist. . . . Art should not be considered as merely a luxury, but should work within the processes of actual production and reclamation. . . . Art on this scale should be supported directly by industry, not only private art sponsorship. Art would then become a necessary resource, and not an isolated luxury.<sup>78</sup>

Smithson called upon artists to venture beyond their traditional confines and create artworks that extend deeper into the core of society. Rather than existing as a frivolous entity, he proposed that art should service the community. By fulfilling a function of reclamation, art could unite disparate needs to the benefit of the entire community.

Smithson's *Broken Circle* and *Spiral Hill* were his efforts to combine art and reclamation. Both are built in a sand quarry that was destined for reclamation in Emmen, Holland. Originally, Smithson had been invited to build his landworks in a park as part of the *Sonsbeek* international art exhibition but he chose the location that was decreed to become a recreational area instead.

Smithson advised that, "Art can become a resource, that mediates between the ecologist and the industrialist. Art can help to provide the needed dialectic between them."<sup>79</sup> Lucy Lippard credited him with being the first artist to live with the contradictions inherent in contemporary art involving nature, and noted that, "The greatest tragedy of Smithson's early death is not merely that there will be less 'good art' in the world, but that he

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<sup>78</sup> Robert Smithson, "Proposal, 1972," *Writings*, ed. Nancy Holt, 221.

<sup>79</sup> *Ibid.*, 220.

was virtually the only important artist in his aesthetic generation to be vitally concerned with the fate of the earth and fully aware of the artist's political responsibility to it."<sup>80</sup>

Certainly, his intentions towards the environment were positive. While some of his statements may have seemed apathetic, his interest in land reclamation indicated a concern. Nevertheless, Smithson was also ready to transform the earth.

In 1979, the U.S. Bureau of Mines paid \$39,000 for Morris's project at Johnson Pit No.30 in King County, Washington.<sup>81</sup> Chosen as a pilot artist among others to convert ecological disasters in Seattle into visually pleasing areas of reclaimed land, Morris followed the natural contours of the site, transforming an irregular pit into an oval bowl with terraces and steps down its sides (fig. 93).<sup>82</sup>

Responding to criticism that art made for land reclamation promoted the continuing acceleration of the 'resource - energy - commodity - consumption cycle', Morris explained that funds for making landworks were rare. Low budgets of museums, private individuals, international exhibits, and local communities made works possible but only barely, and usually only temporarily.<sup>83</sup> He justified the questionable sponsorship by noting that art which functioned as land reclamation had the possibility of millions of dollars for funding: "Now on the horizon there is potential for widespread sponsorship of outdoor earth and site-specific works.

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<sup>80</sup> Lippard, "Breaking Circles: The Politics of Prehistory," *Robert Smithson Sculpture*, ed. Robert Hobbs, 40.

<sup>81</sup> Robert Morris, "Notes on Art as/and Land Reclamation," *October* 12-15 (Spring 1980): 101.

<sup>82</sup> The King County Arts Commission in Seattle commissioned artists Herbert Bayer, Ian Baxter, Richard Fleischner, Lawrence Hanson, Mary Miss, Robert Morris, Dennis Oppenheim, and Beverly Pepper to repair damaged sites.

<sup>83</sup> Morris, "Notes on Art as/and Land Reclamation," 98.



Local, state, federal, and industrial funding is on tap. The key that fits the lock to the bank is 'land reclamation'."<sup>84</sup>

Besides Morris's reasoning, objections about art that function as land reclamation art are unfounded, because whether encouraging reclamation or not, artists are rectifying abuse of the environment by helping to repair the damage. The only problem is that the mending is not ecologically motivated. Morris admits that funding is difficult to find and claims that if industries are willing to pay for his artworks, then he will make them; it has nothing to do with being ecologically-minded.

Heizer accepted a commission to make *Effigy Tumuli Sculptures*, 1983-85, near Ottawa, Illinois, that was part of a massive reclamation project in an abandoned strip mine. Funds were available due to a Federal Surface Mining Control and Reclamation Act that imposed a tax on coal companies in 1977. The site had been mined in the 1930s and the damage had produced an acidity so toxic and lasting (even after forty years, nothing grew on the site), that the state had deemed it a priority for reclamation.

Heizer seems to contradict his actions when he states: "I'm not for hire to patch up mining sites. The strip-mine aspect of it is of no interest to me. I don't support reclamation - art sculpture projects. This is strictly art."<sup>85</sup> To Heizer, the fact that he is making land reclamation projects is irrelevant in comparison to the art he is making. Considering the unmarketable value of landworks, if the government is willing to finance artists' works, they are ready to take advantage of it.

Land reclamation as a means of beautifying nature that has been destroyed by humankind's presence had previously been the domain of landscape architects. By hiring artists instead, art and politics become intertwined as companies encourage the production of landworks and ensure a 'high art' result.

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<sup>84</sup> Ibid.

<sup>85</sup> David Bourdon, "Working with Earth, Michael Heizer Makes Art as Big as All Outdoors," *Smithsonian* 17 (April 1986): 74.



The fusion of high art with reclamation is perceived by some as a positive union in which art is able to fulfill an important function as Smithsonian had encouraged, while artists are able to take advantage of commissions and have their work funded. This art does not compromise itself to utility; it exists as a product of an artist's individual conception while simultaneously helping repair damaged sites.

However, while land reclamation might seem to be the supreme gesture toward ecology, this is debatable. Artworks can indeed help to detoxify the land, but there is also the option of allowing the land to reclaim itself after the industries that poisoned it clean it up. Again, no intervention would have been best. And of course, not contaminating it in the first place would be better.

The real reason that artists accept land reclamation projects is because they provide easy funding for their true intentions of transforming the land, wherever these transformations are to take place. The fact that these commissions entail working on damaged sites makes no difference. In fact, by agreeing to reclaim land, artists further prove the fact that they do not care about nature or the site. Heizer clarifies this notion again when he says 'This is strictly art'. Land reclamation projects are about art, about transforming nature into culture and adding layers of memory on the land, not about ecology. The actual reclamation of damaged sites is a by-product as artists take advantage of financing for their art.

### **Revival of a Postulated Ancient Attitude Towards the Earth**

Many people in modern American culture romanticize the past and in particular their alleged relationship to a category they identify as their predecessors. They idealize their 'simpler ways' and endow them with a sensitivity towards nature. People assume that as hunters and gatherers, agriculturalists, or pastoralists, ancient peoples maintained a respectful relationship towards nature because they were reliant upon it.

Coinciding with the onset of the ecological crisis, modernity and the technological advances affiliated with it came to be perceived as harmful. Dean MacCannell notes that: "Modern society, only partly disengaged from industrial structures, is especially vulnerable to overthrow from within through nostalgia, sentimentality and other tendencies to regress to a previous state, a 'Golden Age', which retrospectively always appears to have been more orderly or normal."<sup>86</sup>

When compared to the ancients, modern humankind is subject to insecurity as weaknesses are identified. Though less advanced technologically, our predecessors could be perceived as superior. But the ancient reverence for nature is postulated; the previous state that MacCannell refers to is one during which we imagine humans intimately connected to their environment. This is the condition that modernity wishes to go back to, as if to repeat an ancient formula.

Since our predecessors' attitude towards nature is regarded with nostalgia, adopting perspectives towards the earth that we attribute to the ancients is in congruence with the ecological crisis and is intended to remind viewers of a time when allegedly, people had a stronger bond with their environment and in which nature was revered.

Smithson recognized this potential function of Land Art: "It's an art of uncertainty because instability in general has become very important. So the return to Mother Earth is a revival of a very archaic sentiment."<sup>87</sup> But he told Tomkins, "The ecology thing has a kind of religious, ethical undertone to it. It's like the official religion now, but I think a lot of it is based in a kind of late-nineteenth-century, puritanical view of nature."<sup>88</sup>

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<sup>86</sup> MacCannell, 82.

<sup>87</sup> Robert Smithson, "Discussions with Heizer, Oppenheim, Smithson," moderator Willoughby Sharp, 66.

<sup>88</sup> Tomkins, *The Scene*, 144.

After all, the archaic sentiment is perhaps not so old. Smithson, who among the Land artists, was one of the more aware of entropy in nature and was a strong advocate, as we have seen, of land reclamation, was also aware of the glorification and idealization of the past inherent in the modern view as seen by MacCannell. One could ask indeed if reverting back to an 'archaic sentiment of Mother Earth' is the way to fill the void of emptiness and instability of modern culture.

Regarding this concept, Victor Turner exclaims: "Indeed, despair of finding systems in complex, postindustrial cultures may well motivate a search for them 'among the primitives'. It is not a question of 'back to nature', but back to 'cultural system'."<sup>89</sup>

But even this is questionable. What 'cultural system' of the past could be adequate to deal with the modern situation? By leaving their mark in the form of landworks, artists leave a cultural impact on the land. But this cultural component is modern and not a simple repetition of the past. If it refers to the past, as we have seen many times, it is because they want to include a mnemonic dimension to the landscape. This, needless to say, is thoroughly modern.

MacCannell analyzes the concerns for ecology and the romantic perceptions of our predecessors in relation to modernity and tourism. He feels that the efforts to perpetuate the assurance of modernity by stimulating a positive judgement of our predecessors at tourist attractions are rather insincere: "The solidarity of modernity, even as it incorporates fragments of primitive social life, the past and nature, elevates modernity over the past and nature. . . . Every nicely motivated effort to preserve nature, primitives and the past, and to represent them authentically contributes to an opposite tendency - the present is made more

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<sup>89</sup> Turner, "Symbolic Studies," *Annual Review of Anthropology* 4 (1975): 146.

unified against its past, more in control of nature, less a product of history."<sup>90</sup>

Land artists do not escape this necessity. By working outdoors, they open the contradiction inherent to any modern art work. Culture adds to nature even when it claims to be respectful to it. Culture can add more or less depending on the case, but it always transforms, displaces, and interferes.

Relating landscape architect Frederick Law Olmsted to Smithson, David Bellman expresses that their common manipulation of topsoil and sand is "a renewal of the Neolithic agrarian impulse to make morphological sense of the natural environment."<sup>91</sup>

Bellman proposes that by manipulating topsoil, Smithson, Olmsted and our Neolithic predecessors make sense of their environment. By transforming the land, people take control of nature and transform it into landscape. Bellman's reference to the need to 'make morphological sense of the natural environment' implies that there is also a social function to Land Art, necessary as to any form of art. But this does not make Land Art an expression of ecological consciousness.

The 'return to Mother Earth' is a concept championed by Lucy Lippard. She sees the yearning to regain contact with the earth and the rhythms of a seasonal cosmology by artists and others from the 'counterculture' as a call to 're-feminize' society.<sup>92</sup> Her terminology stems from a feminist approach; the concept refers to an ancient impression of Mother Earth being fruitful and feminine. In some cultures, goddesses have dominion over seeds, germination, gestation, dormancy, birth, menstruation, fertility, growth, and death. The yearning is supposed to be for an attitude of respect of

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<sup>90</sup> MacCannel, 83.

<sup>91</sup> David Bellman, "Robert Smithson and Frederick Law Olmstead: Earthworks in the Future Anterior," *Arts Magazine* 52 (May 1978): 126.

<sup>92</sup> Lucy Lippard, "Complexes: Architectural Sculpture in Nature," *Art in America* 67 (January/February 1979): 88.

the earth and simultaneously of rekindled spirituality. However, Lippard's feminist argument does not seem to apply to the male artists we are presenting.

She notes: "It has sometimes seemed that art is the only 'real' experience available in a synthetic, non-spiritual society. Art has often been suggested as the contemporary substitute for religion, as a rebellion against the separation of spirit and nature in Judeo-Christian ethics and against advanced sciences' rejection of the concrete experience which is so much a part of the archaeological concept of nature."<sup>93</sup>

Lippard's implication is that modernity has lost the sense of spirituality that we presume our predecessors had, and she suggests that art can replace the void that people are nostalgic about. She observes that artists react to the notion of modern humankind not being in synchronization with nature: "Deracination seems to have created a need to belong somewhere, inherent in all modern art mourning its lost place in society. It is this need which is being answered by an increasing amount of biomorphic, body-related 'architectural' sculpture sited in nature. And it is probably this need to 'go home' that makes architecture - especially ancient and so-called primitive architecture - so attractive a source."<sup>94</sup>

As much as we are sensitive to her desire to point to a new category of forms in contemporary art like biomorphism, body awareness, and outdoor sculpture, we have difficulty seeing it only as a nostalgic phenomenon and to define the relation of ancient models only in terms of source.

Nicholas Capasso describes the common thread that runs through works of certain artists as: "The need to reorient man in nature."<sup>95</sup> Again, we see the implication that man was once oriented

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<sup>93</sup> Ibid.

<sup>94</sup> Ibid., 87.

<sup>95</sup> Nicholas J. Capasso, "Environmental Art: Strategies for Reorientation in Nature," *Arts Magazine* 59 (January 1985): 73.

in nature, and that Land Art is an attempt to return to this attitude. Capasso misses the point. Artists have no desire to reorient man in nature; rather, they wish to reorient man in culture.

Heizer admits: "One of the implications of earth art might be to remove completely the commodity status of a work of art and allow a return to the idea of art as . . . more of a religion."<sup>96</sup> It might seem that both Capasso and Heizer imply a need to reconnect with a state that humankind once had. But the difference is that Heizer stresses the historical dimension of this 'return', which is in fact what artists want to reinstate by adding a memory dimension to the land.

#### **Tributes or Landscape Transformers?**

We have noted that the United States is a land relatively void of memory and therefore void of landscapes as Schama defines them. He states: "American modernity, even in its most imperial forms, then, has been no more depleted of nature myth and memory than any other culture."<sup>97</sup>

Unlike the transformed regions of Europe that are full of layers of memory and landscapes where the imprint of man is so visible, the United States is a region of vast areas of untouched land, empty of the evidence of humanity and unchanged since the beginning of geological time. It is composed of nature.

For Americans, nature is chaos. But nature can be transformed into habitable land, into landscapes. Since this has not occurred as much in the United States as in Europe, landworks seem to fulfill a cultural need. Artists create 'nature myth and memory' with their artworks. We suggest that by making their landworks in nature, artists make sense of its limitless expanses by putting a cultural imprint onto it, thereby creating a landscape with memory.

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<sup>96</sup> Tomkins, *The Scene*, 131.

<sup>97</sup> Schama, 207.

Elizabeth Baker notes that: "On a more subtle level, the works conceptually affect the land. The sites become places as vivid as the works themselves - they become concretized, identifiable, specific locales. Unmarked land is undifferentiated, whatever its beauty - it is something you pass through. If 'landscape' as an entity does not exist - if it is in all cases a mental construct - then these works are, among other things, the means of representing a particular place."<sup>98</sup>

Indeed, all remote landworks situated in vast expanses create a focus for the eye in an otherwise unchanging terrain void of human interaction, becoming landmarks in nature. Correspondingly, landworks in places that are not yet transformed have the most potent possibility to inject memory.

Jame Turrell's intentions at *Roden Crater* exemplify this concept: "I did not want the work to be a mark upon Nature, but to be enfolded in Nature in such a way that light from the Sun, Moon, and stars empowered the spaces. Usually art is taken from Nature by painting or photography and then brought back to culture through the museum. I wanted to bring culture to the natural surround as if designing a garden or tending a landscape."<sup>99</sup>

Turrell wants to use nature to a cultural aim. But foremost, he wants to 'bring culture to the natural surround'. In fact, this is the factor that distinguishes Land Art from other forms of art, namely the use of actual nature to create and transform. By transforming a natural cinder cone into an artwork, Turrell manipulates the desert and creates a cultural landmark.

There is an important distinction to note between Richard Long and American artists that were referred to in a previous chapter. Long tends to make more humble marks on the landscape; his exterior works are always impermanent and modest. Rather than making places to visit, Long leaves his mark temporarily and

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<sup>98</sup> Elizabeth Baker, "Artworks on the Land," 93.

<sup>99</sup> James Turrell, "James Turrell," *Sculpting With the Environment*, ed. Baile Oakes, 66.

offers photographs of the fleeting scenery that he creates in landscapes. Is this due to his upbringing in England, a land already transformed, where he has contact with ancient sites regularly? Perhaps he has less of a need to transform the landscape as drastically as his American contemporaries that make more grandiose landworks.

Conor Joyce claims that: "Long's sculptures are never about nature, but are human articulations in it, an account not of nature but of man's relation to it." Referring to one of his stone circles in nature, *Sahara Circle*, 1988, but pertinent to his work in general, she states that it has "two ingredients: the human desire to close off a space from nature and the human desire to transcend nature."<sup>100</sup>

Actually, Long's statements indicate that he wishes to be in congruence with nature and respect it, not *transcend* it. But Joyce is correct in seeing beyond the natural in Long's work and noting that his interactions are about how his art transforms the land.

The important aspect of Long's work as well as that of other Land artists, if one is to take their intentions seriously, is the transformation that their works make upon the landscape. The land inside Long's circle or any other landwork is 'safe' because it is *created*, namely man-made, whereas the land beyond the borders of a landwork is raw nature. So artists close off spaces in nature or 'occupy' them with landworks in order to make the land more comfortable and comprehensible to the viewer that is unfamiliar with wilderness.

Land Art, like other manifestations of culture on the land, is a way of controlling nature, of taming wilderness and making it less intimidating to humans. Artists add their cultural mark on the land when they make landworks, thereby making the nature around them more manageable and less wild. And by the very nature of their

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<sup>100</sup> Conor Joyce, "Walking Into History," *Flash Art* 147 (Summer 1989): 115.



intentions, namely to transform the earth, their interventions cannot be positive as regards their possibly damaging effect on the environment.

What so many people fail to recognize about Land Art is that it is culture, not nature. As Schama claims: "Landscapes are culture before they are nature; constructs of the imagination projected onto wood and water and rock."<sup>101</sup> As a land transformed into a landscape, when people visit landworks they are looking at cultural artifacts, not natural environments.

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<sup>101</sup> Schama, 61.

**VIEWER INVOLVEMENT**

## **Cultural Landmarks**

The contribution of this thesis has been the documentation of Land Art as a cultural phenomenon. Our approach to the use of ancient references in landworks has expanded the meaning and functions of these manifestations beyond ecology, nostalgia, and form, and allowed us to present a different significance to Land Art.

In Europe, Asia, and Africa, the layers of history are so deep that people can visit countless archaeological sites from a multitude of time periods and cultures. While this accounts for a booming industry in tourism to such locations, there are significantly less options to pursue in the United States.

Since the North American continent was inhabited much later than other parts of the world, the layers of visible history are thin in comparison. The oldest places to visit in the United States are those belonging to the indigenous people that inhabited this region before the arrival of the Europeans. People can visit Medicine Wheels, Chaco Canyon, Mesa Verde, the Hopewell and Adena mounds, among other sites. While rivalling attractions elsewhere, they are less numerous and not as old. Therefore the selection is limited for tourists interested in archaeology.

This is where the role of Land artists comes in. The lack of layers causes a void that motivates them to add layers of memory by making artworks with references to the past. The inclusion of landworks creates a new facet to American scenery. They are places for people to visit, and they offer an alternative to nature. So just as people visit archaeological sites, gardens, or parks, they can decide to visit landworks. And because they are cultural, they become landscapes with an additional layer of history.

### **The Physical and Mental Involvement of the Onlooker**

Robert Morris's *Observatory* lies in the midst of agricultural fields at a junction on the road that leads to Emmeloord in Flevoland, Holland. Depending on how one gets there, a viewer either drives, cycles, or walks down the tree-lined path to a

parking lot. From there, one takes a trodden path through a triangular entrance into the landwork. From inside, one either walks in the space between the two concentric circles or enters the inner ring through a rectangular doorway that lies directly ahead. Once in the central enclosure, a viewer typically walks around and explores the surroundings (fig. 61).

The approach to Drombeg Stone Circle in Cork County, Ireland, is also through farmland. Whether one walks, cycles or drives to the site (a small parking lot is available nearby), the last portion of the journey entails walking or cycling along a narrow path. At the end of this short path, one reaches an open, sloping space in which the circle is situated. The surroundings are rolling green hills dotted with cows and sheep. A visitor enters the ancient circle through any of two tall stones out of which it is composed, and walks around it to view it from different angles (fig. 73). Since the space inside the circle is small, it can be experienced quite quickly.

One cannot help but be intrigued by the similarity of the onlooker's behaviours at these two sites. It is as though common structures tend to yield similar responses. One reacts to Drombeg Stone Circle and Morris's *Observatory* correspondingly; both circles are entered and walked around.

In fact, it is due to the similarities between behaviours that are expected of a Land Art viewer and what the modern tourist does at archaeological sites, that make us suspect that we are dealing with the very means by which Land Art makes the onlooker imagine a past experience and introduces memory in the landscape. The physical involvement demanded from the 'onlooker' - we should say 'walker' - is the open door to the past, and the one which gives a new meaning to the land by transforming it into a 'landscape', in the sense that Schama uses the term.

Sites, both ancient and modern, invite visitors to perform certain actions, thereby involving them physically. Patterns of movement correspond to structure; enclosures are penetrated, lines are walked along, and circles are entered and walked around.

Physical movement within a landwork is common to all visitors. Form and size frequently create a need for locomotion; while some people may explore their environment more than others, everyone interacts physically with landworks. By doing so, the works' meaning can be experienced and not only seen (as in a photograph, for example).

### **Viewer Involvement**

Land Art shares with any touristic site - archaeological or artistic - a certain number of demands from the viewer. But it seems that what distinguishes Land Art from other more conventional art forms and from objects of touristic interest, is the type of interaction between the viewer and the actual work. Once people arrive at their destination, they invariably do certain things which can be defined as viewer involvement, the nature of which is specific to landworks, archaeological sites, and other exterior places. And while all paintings and sculptures also require viewer involvement to be appreciated, there is no other art form that requires the level of physical involvement that Land Art does.

The sheer magnitude of some landworks is a formal innovation that offers viewers a chance to interact physically with the piece. Modernism had already established the legitimacy of large-sized artworks; however, the scale of some landworks far exceeds any precedents seen in museums. Their huge scale creates an environment that is visually imposing and provides enough space for people to interact with and explore, as in any monumental architecture.

The need for physical movement is an aspect that Land Art shares with all archaeological sites that cover a large area, thereby relating the experience of modern art appreciation to the past. Tourists are also physically involved when they experience sites. Depending on structural design, tourists walk around, through, and in them; pyramids are climbed, tombs are entered, and sites as a whole are explored by walking. Similarly, people that explore gardens, parks and architectural spaces are also involved.

Meanwhile, the exterior locations of ancient and modern works, whether in remote areas or not, invoke various levels of involvement. Aside from the site-specific attributes of a location, a significant benefit derived from the exterior settings of landworks is that they involve all the visitor's senses. Nature's forces are incorporated into the works, becoming unconventional media that expand the repertoire of viewer involvement to include sound, smell, feeling (inducing physical responses to external stimuli such as heat and cold), touch, and sight. And visitors walk on grass, deserts, and mud instead of concrete floors.

These types of sensations are not new in the appreciation of an environment. All exterior locations produce these effects, so that once again, Land Art shares this level of involvement with what people do at touristic and archaeological sites, gardens, and parks. But what is typical of Land Art is that it is done through a reference to the past, as at archaeological sites. It is this intrusion of memory in the experience that is interesting here.

One of the earliest artworks that intentionally induces viewer involvement is *Earth Mound*, a work that consists of a mound and single standing stone placed within a circular henge, designed by landscape architect Herbert Bayer for the Institute for Humanistic Studies in Aspen, Colorado, in 1955 (fig. 94).

The status of this work is ambiguous. It is not a landwork, as it precedes the advent of Land Art, nor is it intended as such. As a landscape architect, Bayer constructs it as a sculpture to enhance the grounds that he is commissioned to work on. Bayer actually prefers the title *Grass Mound* to distinguish it from the connotations the other title has with earthworks. However, the title *Earth Mound* has stuck.

Bayer sees his 'designed garden elements' as "sculptural or space designs for enjoyment and experience outdoors, with sun and shadow, in the change of the seasons, and where elements of nature have become mediums of design."<sup>1</sup> It is remarkable that Bayer's

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<sup>1</sup> Herbert Bayer, *Herbert Bayer. Painter. Designer. Architect*

declaration of intention excludes any reference to the past, even if the idea of a mound and a standing stone could have achieved this. For him, the work is a way to experience nature and not to connect with a past experience. It encourages spectator participation by offering a total environment within which to explore the piece.

Bayer's interest in the viewer's pleasure invoked by his work's exterior location precedes Land Art. And despite its status as landscape architecture rather than art, a photograph of *Earth Mound* was exhibited next to Michael Heizer and Robert Smithson's works at the Dwan Gallery's *Earthworks* exhibition in 1968. By choosing to include it, Smithson acknowledged the importance this piece had for him and may have credited Bayer's work as an early rendition of an 'earthwork' that inspired future artists.<sup>2</sup> Jack Burnham made the connection between Robert Morris's first earth project of a circular mound sodded with grass done in 1967 to his trip in Aspen, Colorado in 1967, where he saw Bayer's *Earth Mound*.<sup>3</sup>

The exterior location of Bayer's piece and the interactive opportunities that it offers are among the features that are perpetuated in Land Art. The structures of some works make the intended behaviours clear; entrances invite viewers in, enclosures offer spaces to penetrate, and paths are platforms for walking.

In his analysis of the new breed of artist and art that emerged in the latter 1960s, Harold Rosenberg claims: "The post-artist can go further - he can fashion an 'environment' (most potent word in present-day art jargon) in which all kinds of mechanically induced stimuli and forces play upon the spectator and

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(New York: Reinhold Publishing, 1967), 113.

<sup>2</sup> Jan van Der Marck, *Herbert Bayer: From Type to Landscape. Designs, Projects & Proposals, 1923-73* (Boston: Nimrod Press, 1977): 38.

<sup>3</sup> Jack Burnham, "Robert Morris. Retrospective in Detroit," *Artforum* 8 (March 1970): 74.

make him no longer a spectator but, willy-nilly, a participant and thus a 'creator' himself."<sup>4</sup>

The viewer is a 'creator' as Rosenberg suggests, only if the physical participation in experiencing the 'environment' supplied by an artist affects views of a work as one manoeuvres around and through it.

Artists express their intentions that viewers interact with their work. Nancy Holt states: "I've always thought about how people would be involved in my work. The works are there to be seen from several points of view. I want the work to engage people."<sup>5</sup> For people to see her work from several points of view, they must become 'engaged' by physically moving around them.

Alice Aycock echoes Holt's notion in reference to *Maze*, 1972: "It's very much the immediate physical experience, and I never expect it to operate on any symbolic level at all."<sup>6</sup> Aycock seems to reiterate the views of Minimal Art when she annuls the potential symbolism present in her work. And while she claims that *Maze* is intended to be experienced physically, the use of a universal maze shape cannot help but inspire symbolic associations within some of her viewers (fig. 95).

Morris feels that Land Art involves the whole body, both in its production as well as its appreciation: "Not only the production of objects, but the perception of them as well involves bodily participation in movement in three dimensions."<sup>7</sup>

The need for physical interactions with art that Holt, Aycock and Morris call 'engagement', 'physical experience', and 'bodily participation', are concepts that are more akin to the touristic

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<sup>4</sup> Rosenberg, *De-Definition of Art*, 13.

<sup>5</sup> Nancy Holt, "Nancy Holt's Dark Star Park, Rosslyn, Virginia," *Landscape Architecture* 75 (July/August 1985): 80-82.

<sup>6</sup> Alice Aycock, "Janet Kardon Interviews some Modern Maze-Makers," interview by Janet Kardon, 66.

<sup>7</sup> Robert Morris, "Some Notes on the Phenomenology of Making: The Search for the Motivated," *Artforum* 8 (April 1970): 66.



experience than to art appreciation. Archaeological sites require the visitor's participation to be experienced whereas viewing art is considered to be more cerebral.

Referring to *Grand Rapids Project*, 1973-74, in Grand Rapids, Iowa, which is a huge landwork in an X configuration, Morris expresses a desire for the enactment of specific kinds of performances (fig. 96). In the catalogue for his work, using words depicted on the page in the form of an X, he writes some of the actions he intends that the public perform: "CLIMBINGS, DESCENDINGS, WALKINGS, RUNNINGS, CRAWLINGS, ROLLINGS, SIGHTINGS, VIEWINGS, CROSSINGS."<sup>8</sup> These actions sound more like what people do in parks and playgrounds than looking at art.

The site is a hillside with a steep but even slope. A large field exists at the base of the slope, and at the summit, there is a reservoir. The X consists of two paved pathways that bisect the hill diagonally and form level platforms at the intersecting midpoint, halfway up the slope.

Critics and viewers take note of the need for their participation to see landworks. As one who experienced *Grand Rapids Project* and organizer of the project, Edward Fry explains: "In almost every respect, one must physically move throughout the work in order to have any real knowledge of it . . . . Morris has once again created a beautiful demonstration of the philosophical problem of mind-body relationships: what the mind grasps for at first is a simple gestalt, which must be revised by direct, bodily experience before a truly adequate gestalt can be attained."<sup>9</sup>

Fry's statement is applicable to any large-scale structure or environment that is composed of several distinct parts. While the mind might identify certain features, only by physically manoeuvring through a work can its form be identified completely.

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<sup>8</sup> Fry, *The Grand Rapids Project*, n.p.

<sup>9</sup> Ibid.

Heizer insinuates that people need patience to appreciate Land Art: "People have this thing about immediate gratification. If they can't get it right away, they don't like it. But to me, that's where the fun begins. I can say, 'Gee, now I can walk around this thing and figure out what it is'."<sup>10</sup> The gratification achieved from landworks is gained only if viewers take the time to become involved with them and explore all of their dimensions.

The standard implication portrayed through the artists' statements is that they intend that people become actively involved with their works, and they all mention the need for physical movement to achieve this aim.

One might question the contradiction between the artists' obvious lack of concern for the viewer's convenience by making their works in such inaccessible locations, and their declarations that they intend their works to be seen and interacted with. Perhaps it is because artists relate more to the tourist's experience in remote archaeological sites. That is the price to pay if the element of memory of the past has to be included.

#### Participatory Behaviours

The structure of ancient sites encourage walking. People that visit the Hopewell and Adena mounds walk around the sites and climb on top of some. The more often-visited mounds have paths that delineate routes around them, such as around Serpent Mound.

The Nazca lines invite people to walk along or on the lines; however, the space that encompasses them is vast, therefore it is unlikely that visitors will see *all* the lines.

Megalithic remains are varied structurally, therefore each form yields a different pattern of walking. Visitors tend to encircle the site, whether it be a dolmen, menhir, an alignment, or a circle of stones. Alignments may not inspire a walk around the entire site if it is huge, such as at Le Menec in Brittany, which is 3.5 kilometers long. Usually people will choose to walk along

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<sup>10</sup> McGill and Heizer, 43.

and/or through the arrangements of stones. Dolmens and circles offer spaces to penetrate, thus they are typically penetrated. A conduct specific to burial chambers, though not related to walking, entails looking for engravings.

Some behaviours have been restricted at certain sites. In the past, the popular way to experience Stonehenge was to enter the circle; now it is to walk along a predesignated path around it. At the Le Menec alignments, people used to walk along and between the rows of stones; they must now be viewed through a fence along the road. At Silbury Hill, people once climbed up the hill; it has been fenced off and must be viewed from the bottom. Visitors are no longer able to walk on the Nazca lines; a viewing platform enables people to see them from an elevation, while some people fly over them.<sup>11</sup> Unfortunately, such protection radically modifies the experience.

Due to the structural similarities that exist between ancient and modern works, there are similarities in how people experience them. Just as ancient sites stimulate physical movement, landworks that are large enough prompt the same behaviours.

The concept of walking to see art is not new. Works of art have always required a certain amount of walking on the onlooker's part. People walk around sculptures, they walk within a room to see paintings and sculptures from different angles. They also walk outdoors to view exterior sculpture exhibits.

Minimalist constructions had already stressed the necessity of walking to experience art. By creating structures that are meant to be walked around, artists impose a new set of rules upon their viewers. Carl Andre says,

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<sup>11</sup> The same limitations apply to other archaeological sites. For example, the famous prehistoric cave containing Paleolithic paintings at Lascaux near Perigord in southwestern France is closed to visitors (except for five per day). A reconstructed version called Lascaux II is now open to the public instead. Such limitations have arisen due to the need to protect sites from vandalism and environmental problems, though it is not clear for whom these sites are being saved.

I think all my works have implied, to some degree or another, a spectator moving along them or around them. Even things like my early pyramids, they very much only revealed themselves when you walked around them . . . . My idea of a piece of sculpture is a road. That is, a road doesn't reveal itself at any particular point or from any particular point. Roads appear and disappear. We either have to travel on them or beside them. But we don't have a single point of view for a road at all, except a moving one, moving along it. Most of my works - certainly the successful ones - have been ones that are in a way causeways - they cause you to make your way along them or around them or to move the spectator over them.<sup>12</sup>

What is important here is not simply the idea of a work of art demanding movement from the spectator but the fact that these movements are not random, that they are controlled by the artist, who by the very structure and size of the piece imposes a specific kind of displacement on the viewer. This Minimalist concept is found in Land Art.

Some Land artists, such as Morris and Walter De Maria, started their careers as Minimalists and were already interested in the aspect of physical movement that best enhanced the perception of space. In their landworks, they, and others, simply continue the tradition of sculpture, encouraging people to walk in order to observe changing points of view.

As concerns Land Art, it is the *extent and quality* of walking that is novel. While the focus has always been the specific artwork, in Land Art, the impact is greater. It is the art as well as its surroundings, the work as much as its relation to the past, the activity and the memory of the onlooker. As viewers explore their environment, they control the shape of their space, and subsequently, the view they see. Consequently, spatial perception is affected by their movement.

Walking is accompanied by the act of reminiscence about what people are seeing; by visually focussing on everything around them

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<sup>12</sup> Carl Andre, "An Interview with Carl Andre," interview by Phyllis Tuchman, *Artforum* 8 (June 1970): 57.

while walking, viewers intensify their perception of the work and its surroundings. The more angles seen, the better understanding viewers will have of a work's form and environment, as well as of their own space. Morris describes this effect at the Nazca lines: "After an hour or so of walking and observing, one becomes very aware of how one's behaviour as an observer affects the visibility and definition of the lines."<sup>13</sup>

The structure of many works compels walking, should one wish to see them in their totality. Within each work there are different vantage points offering various views, and as one walks the perspective of the work and its surroundings change. The recurrence of landworks large enough to accommodate people and the creation of paths wide and long enough to walk on, are indicative of the artists' preoccupation with involving the viewer by walking.

Artists often make the intended actions obvious by leading the viewer through various entrances and offering routes to direct one's movement. The structure of works like Walter De Maria's *Las Vegas Piece* are a simple path that viewers walk on (fig. 48). De Maria claims that "basically, the piece is experienced by walking."<sup>14</sup> Lawrence Alloway recognizes this aspect: "The low visibility of the piece turns into insistent form once you enter, or board, it. It is a path: the invitation to walk is a command."<sup>15</sup>

Viewers know what they have to do. Much like walking along the paths that compose the Nazca lines or entering megalithic stone circles, people understand what is expected of them at landworks by virtue of their structure.

Any work that is composed of a path encourages walking. Smithson's *Spiral Jetty* also consists of a path along which people are expected to walk (fig. 53). In fact, they are constrained by the path, otherwise they would end up in the lake. In fact, because

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<sup>13</sup> Morris, "Aligned With Nazca," 31.

<sup>14</sup> Tomkins, *The Scene*, 140.

<sup>15</sup> Alloway, "Site Inspection," 52.

*Spiral Jetty* is occasionally submerged, people are forced to wade in water should they wish to 'walk' the piece.

John Coplans informs us that Smithson was interested in the stumbling aspects of walking, obliging people to pay attention to where they were going: "When he finished the *Spiral Jetty*, Smithson ripped up the boulders so that the pathway couldn't be negotiated smoothly. Evidently Smithson wanted to make locomotion discontinuous."<sup>16</sup> By forcing people to walk slowly, Smithson intensifies the viewers' perceptions, ranging from concentrating on walking to looking at the place they are in, and if so inclined, to thinking about the landwork, its relation to other spirals and structures and their experience in it.

Smithson felt that walking on the jetty affects the perception of scale: "The scale of the *Spiral Jetty* tends to fluctuate depending on where the viewer happens to be. . . . To be in the scale of the *Spiral Jetty* is to be out of it. On eye level, the tail leads one into an undifferentiated state of matter. One's downward gaze pitches from side to side, picking out random depositions of salt crystals on the inner and outer edges, while the entire mass echoes the irregular horizons."<sup>17</sup> Only by walking can viewers see all the aspect that Smithson alluded to.

*Amarillo Ramp*, 1973, located in Amarillo, Texas, is another landwork by Smithson that requires physical movement. It consists of a curvilinear mound forming an open circle jutting out from the shore of an irrigation lake (fig. 3). Coplans notes: "On the *Amarillo Ramp* you stop a lot, especially when going up the ramp, to watch how your relationship to the surroundings changes."<sup>18</sup> For Coplans, this work "is not just about centering the viewer in a

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<sup>16</sup> Coplans, 42.

<sup>17</sup> Robert Smithson, "The *Spiral Jetty*," *Arts of the Environment*, ed. Gyorgy Kepes, 225.

<sup>18</sup> Coplans, 42.

specific place, but also about elevating and sharpening perception through locomotion."<sup>19</sup>

Will Insley relates Smithson's landworks to architecture because of Smithson's repeated creation of spaces: "He never referred to them as 'architecture' but from two points of view they are in many ways 'architectural'. The points are scale and vocabulary."<sup>20</sup> Insley claims that *Spiral Jetty*, *Broken Circle* and *Spiral Hill*, and *Amarillo Ramp* "all consider direct relationship to the human scale. They are intended to be walked on and thus condition human participation in full-scale space. One enters the 'architectural' situation and is controlled by its particular structure. One moves along the spiral and up the ramp as one might move through the corridor or up the stairway of a normal building."<sup>21</sup>

As spaces designed to be experienced physically, Insley makes the relation between landworks and architecture. If he were to go one step further, he could relate them to the architectural aspects of ancient sites as well. By producing spaces that require a spectator's participation, artists recreate the architectural features of ancient sites, thereby adding a layer of history to their art.

Morris reiterates Insley's opinion when he refers to contemporary sculptors that focus on space: "Sculpture has for some time been raiding architecture."<sup>22</sup> One must question what artists gain by 'raiding' architecture. Since so many ancient sites are architectural, viewers make an association between the modern artwork they are experiencing and what they know or have seen of

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<sup>19</sup> Ibid., 53.

<sup>20</sup> Will Insley, "Seriocomic Sp(i)eleology: Robert Smithson's Architecture of Existence," *Arts Magazine* 52 (May 1978): 98.

<sup>21</sup> Ibid.

<sup>22</sup> Robert Morris, "The Present Tense of Space," *Art in America* 66 (January/February 1978): 76.

ancient sites. By the power of this mental connection, artists tap into their impressions of the past and recapitulate them anew.

Morris's *Observatory* is among many other landworks that are also 'architectural'. As mentioned previously, this work is composed of large spaces that the viewer is intended to enter and walk through. Morris tells us that he is "concerned with spaces that one enters, passes through, literal spaces, not just a line in the distance, but a kind of space the body can occupy and move through."<sup>23</sup> Much like architectural spaces, the viewer is compelled to explore all of the *Observatory*'s elements, to walk through it, around it, and on its mounds. As with all landworks, the view of the work and its surroundings changes with each step (fig. 97 - fig. 104).

The popularity of the maze and labyrinth shapes in Land Art is also indicative of the artists' preoccupation with involving viewers. Mazes and labyrinths are ancient shapes that have a tradition originating in prehistory, and have recurred throughout history in art forms or decorations of various cultures and time-frames. They share the composition of meandering lines and are loaded with symbolism, and there is much speculation about their meaning.

Labyrinths and mazes are extremely similar; openings through round or rectangular borders invite participants in. Once inside, paths with boundary walls outline the pattern of movement through the space to the center. They have two possible designs intended to be walked through, those being multicursal and unicursal, basically puzzle and non-puzzle types. A unicursal path has no false turnings from the outside to the center. Due to a lack of intersections, there are no options; the path ends at the center, from where people retrace their steps back out. A multicursal design has dead ends, therefore there are a number of routes to the center; this type entails searching and making detours.

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<sup>23</sup> Morris, "Interview," *Het Observatorium Van Robert Morris*, n.p.



While mazes and labyrinths are composed of a distinct architectural plan that is clearly seen from above, when people are inside either of these forms, whether high or low-walled, they enter without a prior awareness of structure. Composed of a path, Aycok's *Maze*, 1972, Pierce's *Turf Maze*, 1972-74, Morris's *Untitled (Labyrinth)*, 1974, Fleischner's *Sod Maze*, 1974, and Vazan's *Stone Maze*, 1975-76 are among examples of works that encourage walking.

Different structures yield different patterns of walking. Enclosures also involve viewers by enticing people to penetrate their space. Holt's *Sun Tunnels* are tunnel forms that are designed to accommodate viewers. In the desert climate, the shade caused by the objects attracts people inside.

For Holt, landworks "...are made so that people can be a part of them and become more conscious of space, of their own visual perception and of the order of the universe."<sup>24</sup> As viewers experience *Sun Tunnels* and other landworks, they become part of the works by existing within them and sharing their space. They also take note of 'the order of the universe' by being outside in a remote desert and taking in all of its components. From there they can imagine the primeval experience of man.

Without walking into some of the landworks, viewers remain unaware of their structure, since all their elements are not always visible from the outside. Like megalithic burial chambers, people outside cannot predict what exists inside. This is important as the source of extensive comparisons with the *perceived* past, the tourist's memory.

Just as some chambers include engravings, some landworks contain an element that is not immediately visible. Inside Holt's tunnels are the drilled holes on the top half of each tunnel, casting spots of light in the shape of constellations on the interior walls. At Morris's *Observatory*, a rock placed centrally in the inner circle is discovered by chance, unless one reads the Dutch sign in the parking lot describing this feature or has heard

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<sup>24</sup> Saad-Cook, 126.

about it. During orientation, one's effort to see the view through the openings in the central wall leads to its detection. Standing upon this rock, one is perfectly aligned to the V formations of the outer circle's features that receive the sunrise during the solstices and equinoxes. An added surprise is the effect of one's voice echoing from this position, as if through loudspeakers.

*Sun Tunnels* also has a rock (though polished) placed in the exact center of the work. Structurally and formally, these rocks do not appear to be necessary features; they are both small and flat (Morris's rock is in its natural state, so it slightly more elevated) and neither is a focal point. In fact, they are discovered only if one looks down on the ground while walking.

They *do* serve as a gauging device that helps viewers to align themselves within the landworks. The rocks mark the peak location from which the view is most intended and recommended. People can see 360 degrees around and are also perfectly aligned to view the works' most 'special' features, those being the views of where astronomical alignments take place.

Walking not only leads to an element of discovery, it also imparts to an understanding of the structure of landworks and a coherent recognition of their form. Some pieces can be viewed in their entirety and comprehended in one glance, such as Smithson's *Broken Circle* and *Spiral Hill* (fig. 64, fig. 76). The hill does not need to be climbed to see the circle well but it does offer a different, almost aerial view. However, though both of these can be experienced visually, they are designed to be walked upon; a grooved path delineates the route up to the hill and around it, while part of the circle is composed of a path itself (as at *Spiral Jetty*), and the full part provides ample space on which to walk and explore. As people walk, the landwork's structure becomes more apparent.

Whatever their shape or design, landworks fulfill their destiny when viewers become involved; walking achieves this need. Their structure invites viewers into their realm and involves them with walking as a means to see them in their totality. Everyone

that experiences a landwork is immediately aware of the need for this involvement. Landworks are not designed to be seen from one point of view; as three dimensional structures, they require the viewers' physical involvement for all their features to be seen.

#### Passage of Time

Another way that people become involved with sites, both ancient and modern, is achieved by the passage of time. Visitors must spend time in order to properly experience sites by exploring, contemplating, or just looking at them. Of course this is relevant to any place that is explored physically; parks, gardens, architectural spaces, and other sites all require a certain amount of time to be experienced.

There are various factors that affect the decision of time allocation. Some are dependent on subjective choices while others are related to external criteria. The most impersonal factor is the site's size. Logically, larger places require more time, as compared to smaller ones that can be experienced more quickly.

People that have travelled far to see something are inclined to spend more time observing it fully. The decision tends to coincide with effort; the more people displace themselves, the more time they are likely to spend. Consequently, casual visitors that chance upon a site spend less time than those that travel far to see it.<sup>25</sup> Also, if people have seen the place before, they might choose to spend less time since they have experienced it before.

At sites that are regulated, the passage of time might be predetermined. People are restrained at Newgrange and obliged to see the site according to the regulations imposed by the authority (The Office of Public Works) that manages it. And while a site like

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<sup>25</sup> Three Dutch visitors that stopped at the *Observatory* in March 1996 spent a total of seven minutes at the site. Considering its rather large size, they had just enough time to walk through it slowly and return. The stop was casual; they would not have gone out of their way, but since the *Observatory* was en route to their other destinations, they stopped to see it.

Stonehenge is also managed (by English Heritage), people are free to roam around the site for a whole day until closing hours if they wish (except for the summer solstice when access is limited). At De Maria's *The Lightning Field*, viewers' time is controlled and limited by the Dia Art Foundation that maintains it. For visitors on a tour, the amount of time is directed by the tour's organizers.

The human perception of time is recorded by people as they walk toward, through, and around landworks and archaeological sites. At *Sun Tunnels*, Holt feels that, "The work can be seen only in durational time - the time it takes to see it from many points of view and from both inside and outside. The 'audience' moves through and around the work in order to perceive it."<sup>26</sup> All works require time to allow the visitors to discover their design and scale.

Artists intend that people spend an adequate amount of time at their works and some dictate how long they think people should spend to view them. According to Heizer, one should spend at least twenty four hours to see the effects of light changing at *Double Negative*.<sup>27</sup> The same concept applies to all exterior works; they function more elaborately if viewers see them during different times of day, evening, and night as the light changes them.

Referring to *Las Vegas Piece*, De Maria claims:

It really takes all day to see my piece, counting the time spent getting there and back. You're involved with it ten hours or so. There's really no other kind of sculpture that demands that of you - if you come into an art gallery you may spend one minute, two minutes, five minutes looking at a David Smith or a Brancusi. Rarely more than five minutes. But with an earthwork you're really *in* the piece, you're in time, and your whole personality cuts through it in a much larger way.<sup>28</sup>

The kind of temporality involved here is quite similar to the one expected from a tourist at an archaeological site.

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<sup>26</sup> Foote, "Situation Esthetics," 26.

<sup>27</sup> Tomkins, *The Scene*, 138.

<sup>28</sup> *Ibid.*, 140-141.

One's perception of time passing can be especially heightened while waiting to see a specific event at a landwork. The necessity to reach landworks that feature an astronomical alignment before the event takes place requires successful time management and advanced planning. One must either make sure to rise early enough to see the sunrise or plan the day accordingly so that one can arrive to view a sunset. Once there, waiting for the event can yield an unusual anticipation and a sensitized awareness of time passing.

But there is another concept of time related to Land Art, and that is the viewer's cerebral perception of time. Coplans exemplifies this notion as he leaves Smithson's *Amarillo Ramp*:

Returning down the Earthwork, you retrace your footsteps, going past your own past, and at the same time you see the makings of the Earthwork, the construction of the construction; the quarry in the nearby hillside from which the rocks were excavated; the roadway to the Earthwork along which they were transported; the tracks of the earth-moving equipment; the tops of wooden stakes with orange-painted tips that delineated the shape still sticking out here and there; and the slope of the ramp shaped by the piled red shale and white caliche rock. An acute sense of temporality, a chronometric experience of movement and time, pervades one's experience of the interior of the Earthwork. . . . Stepping off the Earthwork, one has a sense of relief from pressure, stepping back into the normal world's time and space, and even a sense of loss. The piece, then, is not just about centering the viewer in a specific place, but also about elevating and sharpening perception through locomotion.<sup>29</sup>

Coplans makes a few allusions to time in this description. He talks about time in relation to his life, 'going past your own past', and about time in relation to his experience at the landwork, 'an acute sense of temporality, a chronometric experience of movement and time'. He even refers to the landworks' time, 'the construction of the construction', as the work reveals its genesis.

His narration also epitomizes how time and its passage can assume different dimensions when experiencing a landwork. As one

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<sup>29</sup> Coplans, 53-54.

enters its world of motionless time, every moment becomes unusual. Due to a unique situation, the viewer exists in a different time zone in comparison to any other that occurs outside the landwork, and as one leaves, the process entails stepping back into the normal world's time and space.

#### Miscellaneous Behaviours

Some behaviours that occur at both modern and ancient sites are subjective. People make picnics and camp at sites (decisions which are not unique to landworks). Others make personal ceremonies such as chanting and making physical movements such as waving their arms in the air. Young visitors tend to be playful, such as climbing on top of the rocks that compose dolmens (fig. 105).

There is evidence of present-day activity at ancient sites that appears to be bizarre. Excavations near Callanish in the early 1990s revealed the buried skeleton of a non-British species of snake.<sup>30</sup> Megalithic stone circles and the Hopewell and Adena mounds are deemed sacred by New Age followers. For centuries, Stonehenge and other megalithic sites have also appealed to modern Druids.

In Brittany, some megalithic sites contain remnants of peculiar activity as well. In March 1995, a Christianized menhir on top of a mound near St. Just had remnants of two bonfires on either side of the menhir. En route to Le Geant du Manio in Menec, a young woman was seen walking towards the site carrying flowers, suggestive of an offering. Inside a small dolmen near Le Vieux Moulin, an empty can of food, a wine bottle with dried flowers, and a pile of stones were found, also suggesting offerings (fig. 106, fig. 107). The fact that some of these behaviours are intended to imitate 'archaic' behaviour is interesting.

As regards megaliths, there are a number of practices and ceremonies concerning love, fertility, and health. During the last

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<sup>30</sup> Fojut, letter to author.

century, at Carnac, young women would undress and rub their navels on stones as they repeated their wish to become pregnant.<sup>31</sup>

Taking a photograph of the site itself, and/or oneself on, in, or near the site, either ancient or modern, is extremely common. This act involves marking a specific moment in time and recording one's presence at a site. It provides a permanent memory, documenting both the site as well as one's experience of being there. Writing graffiti is another act that is a more detrimental type of behaviour; the urge to mark sites as one's territory has defaced a number of them.

Sites promote various actions according to their structure. For example, *Sun Tunnels* induces many things. People climb onto the tunnels, swing from them, shout in them to hear the echo, and sleep in them. The drilled constellation holes in the tunnels also inspire people to do certain things, such as using them as a support to climb on top of the tunnels, or dangling their feet once on top (fig. 108). At Morris's *Observatory*, people stand on the rock and speak to hear their voices echo. Clearly, the various behaviours described above depend on the visitors and their character.

As we have seen, there are similarities in the behaviours of viewers at Land Art and those of tourists at archaeological sites. Ancient works generate more numerous and frequent behaviours simply by virtue of their greater quantity, longer existence, and their fame. They have been visited for centuries rather than decades and have been seen by more people, accounting for the more diverse behaviours that take place.

### **The Memory of a Cultural Artefact**

Ironically, despite the fact that Land artists scorn museums, their works function exactly like archaeological sites. Both can be potentially far away and inconveniently located, and people are attracted to them through interest, hearsay, or by photographs in

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<sup>31</sup> John Mitchell, *Megalithomania* (Ithaca, New York: Cornell



magazines and books. In fact, visiting landworks is no different than visiting Versailles, Borobudur, or any other touristic destination. Moreover, it is often the same types of people that visit both archaeological sites and landworks.

We have seen how the physical involvement necessary to experience landworks instigates actions that are performed by all viewers. There is a repetition of specific behaviours that people enact while interacting with landworks; in fact, everyone will invariably perform some of the same actions. As such, their actions become routinized as they follow the same route, walking along the same paths and through the same openings. With their landworks, artists offer situations that recreate the touristic experience. They make spaces for viewers to explore and have a chance to experience an adventure, much like they would at any archaeological or touristic site.

But there is another aspect in which the exploration of landworks is similar to tourism at archaeological sites. When tourists visit ancient sites, they think about the layers of history that they are looking at. They re-enact what archaeologists have us believe was done at these places, and while tourists explore the sites, they imagine what took place during the time of their functional use.

Similarly, in landworks that carry references to the past, artists incorporate an additional mnemonic dimension onto the land. Modern and ancient forms are similar, consequently, visitors' actions are similar. Artists create environments for people to re-enact whatever actions they imagine were done at ancient sites much like tourists do. This creates an inevitable association as viewers make correlations between what they know of archaeological sites and what they are experiencing at landworks.

Travelling to see sites involves a dimension of memory as people are left with an impression of both their trip, as well as the cultural artifact that they have seen. Physical exploration



at landworks further compounds the effect of memory. There are two associations as viewers explore their surroundings. One entails a classification of the memory of the experience. The other is related to the similarity that these sites share with archaeological sites, whereby viewers gain an association with the particular paradigm they are exploring. This is how a memory dimension of the past is achieved; while the layer of history at landworks is recent, it nevertheless includes a reference to memory.

Finally, we would like to suggest that by creating landworks that have associations to the past that are large enough to encourage viewers to become physically involved, artists further conform to Schama's views. Physical exploration as part of the experience of art appreciation intensifies the effect of memory, thereby including a mnemonic dimension to the land that artists are transforming by the addition of their landwork.

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**Observatory** by Robert Morris

Between Lelystad and Dronten in Flevoland, Holland

26 October 1993

Won a ticket to Holland and began planning trip. In the back of his book, *Earthworks and Beyond*, John Beardsley suggests going to the Stedelijk Museum in Amsterdam to ask for directions to the site. The library attendant pulled out Morris's file, told me to go to the nearest town, Lelystad, and perhaps I could find more specific instructions there.

From Amsterdam, I took the train to Lelystad. Duration of trip approximately 32 minutes. Upon arrival, I walked through the small town center, and found the tourist information office inhabited by very helpful and willing Dutch attendants that spoke no English. After much discussion with a co-worker, I was 'told' to take bus #154 that began its route directly outside the train station (direction Emmeloord). Then I was given a pamphlet in Dutch about the landwork, and set off. A photograph of the landwork was handy to show the driver (there is also a small sign on the highway). He dropped me off at the appropriate location, about 15 minutes from Lelystad Centrum. On weekends, the bus returns at 20 past each hour (with no service on Sundays except in the afternoon).

Got off bus, walked across the road to a paved pathway that led to a parking lot in the distance. The landwork lay all along this path, surrounded by a wet ditch that prevented direct access. From a distance, it was unimposing: earth mounds and a triangular doorway. It was completely different from what I had imagined, looking nothing like the reproductions that I had seen in books and articles. It was far more beautiful.

After looking at the Dutch explanations on the sign in the parking lot, I walked along a trodden path that led to a triangular opening toward the landwork. As I entered through the wood-lined mound doorway, about 5 meters long, I entered a new zone of the work, within two of the mounds that make up the circles, therefore, the ditch. Smithson had noted that Morris liked the particular feature of the mound-like formations at Stonehenge. From there, walked through the other doorway, leading to the central interior of the work.

This doorway is much narrower and has no roof over it, only a beam. The center is earth mound on one side and wood panelling on the other. Once within the center, nothing else exists in the world. Complete peace. Though the walls of this roofless enclosure are not that high, they effectively block the rest of the landwork. All that is visible aside from the panelling and openings in the center is the sky and the tops of trees.

The senses are involved on many levels. The smell of the cool, damp wood through the elongated triangular entrance. Sounds of tractors in motion, going about their agricultural affairs. Passings cars, motorcycles, and trucks. Foot steps. Feel cold, rain on skin, wind through hair, sun on skin.

As I walked onward toward the opposite doorway, I found a large flat rock with a nail in its center, placed, apparently, exactly in the middle of the inner sphere. Using it as my reference starting point, I walked in all four directions to the wall of the

enclosure, and found it to be 30 of my steps to each limit. And from this rock, all the other features that Morris incorporated into the outer circle became visible. The granite boulders and metal slabs placed in a V formation within the mound, each visible though another narrow pathway.

The design of its construction and its vast size encourages the viewer to explore it throughout. It basically consists of two circles, though from its exterior, this aspect is not apparent. Therefore, in order to fully appreciate this work, the viewer is required to walk into it.

When I left, I walked along the road on a path lined with trees.

### ***Broken Circle and Spiral Hill*** by Robert Smithson

Emmen, Drenthe, Holland

28 October 1993

The ticket-teller's first words to me after I requested a ticket to Emmen were "It's very far." Her last were "Good luck." Sense of isolation. Smithson couldn't have chosen a more inopportune place to make his landworks.

Train from central station in Amsterdam left at 11:32. Fields of green grass with sheep and cows grazing or lying down, and horses. 12:42, arrived in Zwollen. Get to platform 14 to wait for train to Emmen, leaving at 12:56. 1:15 at Ommen on way to Emmen.

I went to the tourist information office and was told that I could either rent a bicycle or go by taxi. I decided to take the easier route, and they called a taxi for me. The driver was extremely friendly. He spoke very little English. We entered the quarry through a non-paved road, drove down the path, and parked not far from the landworks. He came with me. I walked on the circle, around the boulder, and then up the furry, green hill. Little red berries on shrubs. From the hill, *Broken Circle* looked different.

### **THE BIG DOLMEN IN BORGER, Megalithic Dolmen**

Borger, Drenthe

After returning to Emmen, I took bus #50 to Borger to see some hunnebeds. Got off bus. No idea of what direction to head in. Entered a flower shop and spoke to a woman who answered in Dutch, but indicated the route to the hunnebed. Entered museum, found hunnebed outside. Incredible site. First huge dolmen I've seen. Children were scampering among the rocks.

### ***Observatory***

30 October 1993

Pre-dawn awakening. Flight home at 3:00 P.M. Take the first train back to Lelystad. Returned to the *Observatory*. Dutch countryside.

The second visit was easier than the first because I knew exactly how to get there, and thus didn't waste any time. Now I knew where the bathroom is, where the bus stop is, which bus number



to take. I flashed the driver a photograph of the landwork and pointed to myself. My message clear, I sat in the front and waited patiently for my prize.

Extremely early in the morning. Significantly colder than previous visit. Walked to the center. Sat on the rock, took notes, looked around, shivered, closed my eyes and smelled the fresh brisk air, the wind howled around me, time was still. Grey sky. Walked along tree lined path to bus stop.

**RUJUM EL HIRI, Megalithic Stone Circle**  
Golan Heights, Israel  
December 1993

My mother, Pnina, decided that she would like to join me on this expedition and offered me the gift of a guide. We drove to Katsrin, met with Dodi Ben Ami, and headed off. I was nonplussed at the idea of having a guide; this is when I realized that I preferred to see these sites alone or in guaranteed good company. Very Walter De Maria. I knew that my mother was suitable, but who was this Dodi Ben Ami anyway. A self-proclaimed and highly recommended guide of prehistory. The title dazzled my mother. We reached the site after our expert guide made the wrong turn a few times in his jalopy. Nice and knowledgeable man, though.

Large stone circle. Constructed with small rocks. Walked through path that is aligned to the summer solstice, into the center on which there was a mound of rocks with an opening in the middle.

The architecture of stone circles varies widely according to region. Were there only small stones available to the builders here? Gamla is nearby, and there, the dolmens are made of much larger slabs of stone.

Met two Israeli couples that had come to see the site as well. Spectacular nature. Goat droppings. Flowers. Blue sky. Nearby, there was a long row of burials, also made of small rocks, with the dolmen entrance somewhere in the mound.

From here we went to Machtsh Yaacov. Visited Tank Dolmens near the Sea of Galilee. Very different from those in the Golan. These are large chambers, resembling the hunnebeds of Holland.

***Broken Circle and Spiral Hill***

27 October 1994

Taxi driver took a different route to the landworks, and rather than descend the comfortable path the previous one had, he parked outside a fence, pointed to a hole in the fence, and sent me off. This time, *Broken Circle* was completely submerged under water, eliminating option of walking on it. It looked completely different. Softer. Its ghostly form was visible from *Spiral Hill*.

Getting back to the taxi was difficult. I thought of Victor Turner's description of pilgrimages as penitentiary. Though prickly shrubs, and where was an opening to that fence anyway? On the way back to the town center, I asked the driver to drop me off at a hunnebed. Walked along a narrow path with vegetable and flower

gardens on one side and a typically Dutch straight line of trees on the other. Huge dolmen with a weathered path all around it, indicating that many people had walked around the dolmen.

From there, I walked to another hunnebed through a path of golden autumn trees that I had admired during the taxi-ride on the way to Smithsonian's works. It was a long walk, very alone. Upon arrival, it began to rain. There were two women with children visiting. Another huge dolmen.

### **Observatory**

28 October 1994

Took train and bus to *Observatory*. This time, I met two Dutch artists. As I saw the bus approach around the corner, I ran to the road and hailed it. Easy trip.

LONDON, England

25 January 1994

Rented a car with gears. Harrowing experience. Roundabout after roundabout after roundabout. I grew to despise roundabouts. Bad enough doing a roundabout on a highway that you are familiar with, on the side of the road that you are accustomed to, stepping on gears with the foot that you are used to, and changing the gear shift with your right hand. I stuck to the left hand side of the highway meekly, hoping not to aggravate the drivers. It took me a few hours on the road to realize that I was in the fast lane.

### **STONEHENGE**, Megalithic Stone Circle Wiltshire

See Stonehenge from the road. Finally, made it. Alive. Beautiful site. Park, pay my fee, enter through gate that leads into shop. Walk under tunnel that crosses road (on the walls, there are explanations about how Stonehenge was built, when, and by whom), and walk along path towards the circle. A path surrounds the site; access is restricted to this path. I walk around in admiration. People. Not many, but people. In a whiny voice, a woman said: "Sowh, this is Stonehenge. For THIS I came all this way...Just to see a bunch of rocks?"

The monoliths are huge slabs of stone. Cloud, sun, colour, and light changed completely.

### **AVEBURY**, Megalithic Stone Circle Avebury, Wiltshire

Fun site with many features to visit. Located inside a village, so you are walking among homes, church grounds. 2 HUGE stone circles. The stones are of varying shapes. I recalled the theory by Stukeley about how the short, stinky slabs represent females, and the tall, lean ones are male. The ditch surrounding the circles is also shockingly large.

**SILBURY HILL, Megalithic Mound**  
Avebury, Wiltshire

After I was satisfied with roaming through the stones in the village, I, seeing Silbury hill prominently in the near distance, decided to venture there. Still uncomfortable with driving, therefore uninterested in discovering whether I could find the site by the road, decided to venture along the path designated for walkers. It was a major walk through water up to my knees. Slosh, splursh. More penitentiary pilgrimage, but very adventurous and fun. Surprisingly longer walk than I had anticipated.

Site enclosed by a fence. Huge man-made mound. Largest in Europe. One cannot walk up Silbury Hill. Very reminiscent of *Smithson's Spiral Hill*.

**WEST KENNET LONG BARROW, Megalithic Dolmen**  
Avebury, Wiltshire

Walked up at a steady pace to West Kennet Avenue. Halfway up the hill, I encountered two young men trotting down; we exchanged hellos and they looked at me as though I were a freakazoid. When I arrived at the barrow, I understood why. There were no less than eight young men inside the earth covered dolmen. When they saw me approaching, I could hear vocal exchanges and laughter. At this moment, I had to decide whether to trust them or to try to escape. Feeling breathless, the path back to the unpopulated road looking extremely long (which it was), and a sense of nonthreat in the air, I approached. "Hello, want to play skittles?" they asked in a friendly tone (this game is a British version of bowling). The aroma of marijuana permeated in the air and in the barrow. Though I was pleased to note that they were 'good' people, I did not linger. I took pictures of the sarsen decorating the outside of the barrow, walked inside to experience the claustrophobic feeling a lone woman carrying expensive camera equipment, all of her money, and a female body, experiences when enclosed in an ancient long barrow in the company of eight stoned youth, and left.

**DEVIL'S DEN, Three menhirs**  
Avebury, Wiltshire  
26 January 1994

Woke up before dawn to photograph the sunrise between two stones. There, I met another photographer, a pleasant young man that I classified in my brain as cool until he mentioned the spirituality of the sites. We stood, waiting, cold, for the sun to rise. I photographed. Then I drove to the avenue (I had learned my lesson from the day before; no need to walk if I can drive), took more pictures and left.

**THE SANCTUARY, Megalithic Circle**  
Near Avebury, Wiltshire

Wooden posts in circular formation. Bathed in early morning sunlight. Bright golden-green grass.

**TWO BARROWS, Megalithic Mounds**

Across the street

I got an early start to Bath, which was directly en route to Stanton Drew. Hoping to fulfill a childhood dream, I searched for the Roman baths miserably. Stuck in traffic on the wrong side of the road. Shifting gears with opposite feet. Major car trauma. Searched for parking. Walked through a luxurious interior to the baths, saw them, realized that I wanted to see another stone circle much more, and headed back into the countryside.

**STANTON DREW, Megalithic Stone Circles**

Stanton Drew, Avon

Despite the comfort of easy communication with locals, it took me a long time to find Stanton Drew. No one seemed to know exactly where the site was. Small village. Followed signs that led to stone circle. By the time I reached Stanton Drew, it was cloudy.

Parked car in tiny parking lot (wide enough for 2 cars) by a farm. Walked towards the field. Approaching, I saw sign stating there is an entrance fee to be paid at the third door to the right. I knocked, finding it difficult to believe that this was an 'organized' site. An older woman answered the door, I paid my humble twenty pence, and she gave me a little descriptive booklet about the stone circles of Stanton Drew.

Funny site, located in the middle of a field of cows. Entered through a gate, making sure to fasten it securely behind me so as not to allow cow escapees. Once at the edge of the field, I crossed over a narrow concrete area into the field. There were about 10 cows eating 2 meters from me. They all turned their heads as I trod into their realm, at least one foot deep into their moist dung. At least here, unlike the water-walking episode to *Silbury Hill* for which I was equipped with red, wet running shoes, I had the sensibility to dress for the occasion. I was clad in billy boots for this adventure, and gladly so. After three steps of sinking, I turned back, walked along the pavement edge for a few meters until it ended (it was obviously intended to provide unsullied access to the field if need be), and then back into the goop. Within a few steps, the goop became regular earth with cow droppings scattered throughout.

I walked towards the circle, sky ominous but cooperative, looking at the farmland around me, the cows in the distance near stones that make up another circle (much less complete than the one I was approaching), and explored each stone that comprised the circle.

I was alone, and because of that, it seemed more likely that some fairy, if they were to exist, would appear here rather than at the other sites I had seen. The imagination goes wilder when in the company of cows and not humans. Lack of aggressive civilization. This was the only circle still intact, with eight large stones.

Route back to London.

**WHITE HORSE OF UFFINGTON, Chalk Hill Figure**  
Oxfordshire

England's Nazca line chalk drawings on hillsides. It took a long time to find.

Encountered a seemingly unfriendly couple leaving as I ventured out of the car into the parking lot. It seemed capable of accommodating many vehicles, though it was now empty, surely due to the late hour, and perhaps due to the season. But obviously popular site.

I walked over grassy hills dotted with sheep. The only sounds were their bleating and wind. Alone. Upon realizing that to see the horse from the best angle would entail much more walking, possibly into darkness, I turned back.

On the drive back to the main highway, passed Waylands Smithy long barrow. Due to the oncoming night, I, disappointed, chose not to explore.

***Garden of History*** by James Pierce  
Pratt Farm, Stowkeley, Maine  
21 June 1994, Summer Solstice

Pierce's instructions were to drive to Hinckley, Maine, on route 201, to cross the bridge over the Kennebec river to Clinton and turn immediately south on the river road. Drive one mile, and the earthworks would be visible on the right side of the road.

Alarm rang at 4:15 A.M. Overcast sky. There would be no summer solstice sunrise through the cheeks of *Earthwoman's* buttocks. We continued sleeping. Being there at the special moment was less important than seeing it. Since there would be no alignment visible, there seemed to be no point waking up at 4:15.

The sculpture garden is in a large open field, closed off with trees on one side. The area is overgrown. *Earthwoman* was distinguishable, but not as sharp and linear as in photographs; she resembled the photo where the grass on her had not been mown. *Suntreeman* and the *Turf Maze* were indistinguishable. His mound earthwork was covered in dandelions. Incredibly similar to megalithic and Hopewell mounds.

Rain, drizzle, unrelentless black flies. Green.

***Observatory***

21 March 1995, Equinox Sunrise

Liz and I woke up at 6:00 A.M. in Dronten. Drove to the landwork, and as we turned off the road towards the parking lot, we noticed a car behind us. Pleasant surprise: there would be other people to interview. Upon parking, we noticed there were two other cars already. Excited, we approached. I noticed immediately that something was missing; the violent rains and floods of the past winter had destroyed the triangular entrance way. So we walked among the ruins and entered the circular enclosure. Inside, there were 2 young men sitting and leaning against the wooden beams, a man and woman with 5 young children, and one lone man. The car that

arrived after us was filled with 4 other people, associated to the 2 already inside.

Clear sky, except for a blanket of clouds on the horizon. The sunrise would not be visible through the V for the first while.

The lone man had come from Lelystad, equipped with a camera and tripod. As the sun began to come up, he climbed on the outer mound. It was freezing. When I asked him what had attracted him to come for the spring equinox, he answered: "It is a cosmic event." We labelled him the 'cosmic man'.

The man and woman with children had come to see the sunrise from a different point of view; he was their teacher and this was astronomy class.

The other group of people were art students. The two men that had first occupied the enclosure had made a 30 kilometer walk overnight. It was a very cold night.

After sunrise, everyone left.

BRITTANY, France

22 March 1995, Megalithic Tour with Liz

11:00 A.M., landed at Charles de Gaulle airport, rented a car, and entered the highway that circles Paris towards exit La Porte de La Chapelle. Traffic diverted off highway by police. Enter Paris. Major delay in returning to desired route. Fabulously sunny. Hot. Flowers blooming. Beyond Chartres, the scenery becomes soft and pleasant. Easy transition into rural vistas.

From the autoroute near Rennes hours later, a sign designating La Roche aux Fées lured us off the highway. At the fork with no mention of either the site or Esse (???!!!), instinct leads us left. Stop to ask for directions to Essé. Sun, fields of yellow flowers (mustard). Continued until we saw **LA ROCHE AUX FÉES** (Ille-et-Villaine). Huge slabs of stone. Impressive site. Angular. Refined. Surrounded by fields. After enjoying it alone for some time, 2 children (one girl, one boy) arrived accompanied by 2 fancily dressed women. The children scampered among the rocks of the dolmen, obviously familiar with the place. As we were leaving, a young man in his early twenties arrived equipped with a camera.

March 23

Bain-de-Bretagne, Hotèl de la Croix Verte. Head towards the Gulf of Morbihan. Stop at a site near St-Just. Under obvious excavation (with two male workers), site enclosed by a fence. Culte d'eau, called **LE CHATEAU BU**.

## 2 DOLMENS IN FARMER'S FIELD.

Found **MANÉ KERIONNED** off main road on way to Quiberon Peninsula. Group of three dolmens and a tumulus. Our first entrance into a dark chamber. The first attempt with no candle triggered exhilarating fear. Adventure, irrational, magnetic need to enter. Get candle from car. Scary and exciting. Engravings inside. Ecstatic discovery.



**CROMLECH DE ST PIERRE**, Quiberon. Circle of stones around a fence, thus no access inside center.

**DOLMEN DE ROQUENODE**, Quiberon, between St-Pierre and Pontivy. One chamber dolmen above ground. In middle of group of houses.

**DOLMENS DE PORT BLANC** on the coast of the east side of the peninsula. There were other cars in the parking lot - look out on cliff, overlooking the sea. Two small and dilapidated dolmens with many stones missing. Golden sand. Stayed till dark.

24 March  
Pluharnèl

**KÉRGAVAT, ER ROH**, tiny dolmen that we passed on the road between Pluharnel and Carnac every day. Barking dog.

Carnac

**ALIGNEMENT DU MENEK**, Carnac. The famous alignments. Incredibly impressive. Enclosed by fence. Grey sky. Disappointment at not being able to roam freely through the site.

**ALIGNEMENT DE KERMARIO** and its dolmen that looked like a huge insect. Also enclosed. Larger menhirs. One big menhir among alignments called Le Tertre du Manio, that is apparently decorated with serpents.

**TUMULUS DE KERCADO**, Carnac. Turned off road to long path. Cows. Unmanned entrance booth. Plastic-coated description of site available in different languages. Mound with menhir on top. Other menhir facing entrance. Circle of stones around tumulus. Encountered couple. Looked for Le Géant du Manio and Le Quadrilatère. Sign off road but no other sign. Path leads to forks heading in all directions. Lone man couldn't figure out how to explain route to us. Lone woman led us in wrong direction. Walked in farmers' fields. Searched to no avail.

**TUMULUS ST-MICHÈL** in town of Carnac. Another entrance booth with explanatory report. Unable to enter, as site is closed with door that is locked shot. Opens April 1.

**DOLMEN DE ROSNUAL** turned out to be very dilapidated. Is that why woman that had lived there 10 years had never heard of it?

**DOLMEN DE NOTÉRIO**

**LE MOUSTOIR** site with 2 mounds and dolmen on top.

**DOLMEN DU MANÉ-BRÉZIL**

25 March

Museum-lady tells us that both Gavrinis and La Table des Marchands, two major sites, are closed to the public until the beginning of April. Intense disappointment.

On way to Locmariaquer. Found **ALLÉE COUVERTE** in woods by chance. Side entrance made of 4 upright slabs, then changing in 90 degree direction to burial chambers. Open roof. We measured our paces here. 10 steps from entrance till slab in the ground, then change in direction to burial chamber, 80 steps long.

**LUFFANG** was a tumulus with engravings.

We search for other sites following our pathetic map: Le Chat Noir, Kerzuc, Crach, Parc Guren. Unattainable. Small communities with 3 or 4 houses, chickens, sheep, green fields. At Locmariaquer, view through fence **LE GRAND MENHIR BRISÉ**, the new tumulus over **LA TABLE DES MARCHAND** and **EL GRAH**. The dolmen renovations are unappealing - too new and white. Visual treasures inside. The topstone of La Table des Marchands is said to be huge and elaborately engraved. Met scholarly lone lady that also came to see sites and discovered they were closed. Old Breton man passing by on his way to bowl told us his life story. Good-bye in Breton is *kernavo*.

**DOLMEN DE MANÉ-LUID** in Locmariaquer. Attached to building. Stairs into underground chamber. Circular enclosure, engravings, sunlight streaming in through cracks of topstone. Huge stone slab on floor. An obvious closure here: unlikely successive burials. Scholarly lady was here when we arrived, and left immediately.

**DOLMEN DES PIERRES PLATES** on beach in Locmariaquer. Spectacular setting. Sandy beach. Menhir at front of dolmen opening with flat top incorporated into ground. Strange young man announces to us that he is the keeper of the site, and offers us a tour of the dolmen with a flashlight. We decline, go in with our humble candle. Long tunnel into several chambers. Lunch on beach. Return to dolmen. Eight people inside with 'guide'. Others roaming in vicinity. But are they here to see dolmen or ocean vistas?

**DOLMEN KERLUD**, Locmariaquer. Simple dolmen.

**DOLMEN DE MANÉ RITUAL**. Very long tunnel under ground.

26 March

Returned to Dolmen des Pierres Plates. Took note of the engravings this time. Family vaults - chiefdom communities?

**DOLMEN DE MANÉ-ROULARDE** in Trinite Sur Mer. Long, in ground, open sky.

**LE PENHER**.



**IDYLLIC MYSTERY.** 3 dolmens on top of mound covered in prickly yellow flower shrubs and scattered rocks. Well maintained site with grass. Who mows this grass?!

**LE MANIO ALIGNMENTS,** Carnac. Swamp.

**LE GÉANT DU MANIO,** Carnac. We had looked for this on our first day at Carnac but were unable to find it. It's a huge menhir situated very close to **LE QUADRILATÈRE**. Huge rectangular enclosure. On our return to the car, the young woman that was silently looking at Le Geant du Manio was returning to the site holding flowers. Offering?

**ST-PIERRE ALIGNEMENTS,** Quiberon. While exploring, Liz found the cromlech of St.Pierre, which we had seen when we first went to Quiberon.

**LE VIEUX MOULIN** alignment at Plouharnel. 6 menhirs. We could almost have seen it from our hotel window all these days.

**DOLMEN WITH OFFERINGS,** near Le Vieux Moulin. It had an empty can of food, a wine bottle with dried flowers, and a pile of stones.

**DOLMEN RONDOSSEC,** Pluharnel.

**DOLMEN DE CRUCUNO,** in Crucuno. On the side of a building. Tall slabs of stone compose one chamber. Especially beautiful dolmen.

**MANÉ-GROGH DOLMEN.** Long entrance, cross-like formation, 2 chambers. Above ground. Group of about 20 people visiting. They walk around the dolmen in a procession. Drizzle. Tour guide instructs them to walk through the dolmen, and to bend their heads as they go beneath the slabs covering the chambers (otherwise open roofed). They go through, one by one. Rain. Members of group walk toward parking lot to get their rain-coats. Some wear transparent plastic bags.

**KERZEHO ALIGNMENTS** at Erdeven.

27 March

Pont-Avèn. Feeling exhausted. Sun and clouds. Shadow and light sweeping across fields as clouds roll across sky. Bright colours. Silver fields, then green, then silver again.

**MENHIR DE BORDERO** near Langonnet. On edge of field. Cows grazing on other side of road.

**TUMULUS DE BOTVEN.** Just a mound with rocks on it. Exquisite path. Moss covered rocks and trees. Follow the path up extremely steep hill - difficult climb. Reach road not far from car. Walking in circles again. Where is tumulus? Must be mound at bottom with no entrance.

**ALLÉE COUVERTE DE MINGUIONNET.** Dolmen above ground with central entrance. Rested here for a few hours. Clouds rolling across sky. Open field.

28 March

From Gourin, drove to Plouéscat on north coast. As usual, not easy to find. Fields of artichokes, irises, tulips and other commercial flowers. Grey and rainy. Weather became increasingly bad throughout the day. Beautiful ocean vistas. Coffee in Plouescat.

**ALLÉE COUVERTE ON KENVIC BEACH,** near Plouéscat. Incredibly difficult to find. Black stones in a circular formation on the beach with an elongated burial chamber inside. Low tide. Violently windy and rainy.

**DOLMEN DE CREAC'H AR VRENN and MENHIR COULANDRE,** both on road from Plouescat to Morlais.

**PRAJOU MENHIR,** near Trebeurdien, Ille Grande. Long dolmen above ground. Covered and low. In the last burial chamber, on the far wall, are two pairs of breasts.

**DOLMEN OFF ROAD.** Sea to left, pouring rain. Small dolmen, opening to road.

**DOLMEN DE KERGUINTUIL.** Liz hated this one, proclaiming it as the tomb of an evil chief.

29 March

Bain-de Bretagne. On way to St-Just, turned off and found site with **2 MENHIR ROW** and one larger boulder not far. Sunny.

**MOUND WITH MENHIR AND CROSS,** on way to St-Just. Our first christianized menhir. No entrance into tumulus. Bizarre activity here: remains of two bonfires on opposite sides of mound. Eerie.

**MOULIN DE COJOUX,** at St-Just. 2 rows of alignments. One side has shorter row, other is long and elegant. Dog, yellow flowers. Sun, then cloud, sun again, cloud, wind, silence. Especially pointy menhirs. Each made of different stone. Windmill. Postman sitting in car reading newspaper.

**LES DEMOISELLES PIQUÉES,** St-Just. Drove car through rubble path. Two large menhirs - short alignment. Approached fenced site, very familiar. **CHÂTEAU BU,** St-Just. Same one we saw on second day. Indicative that we often go in circles. While walking, we find a group of sites. Associated with Château Bu? Some were reconstructed.

**DOLMEN DE LA CROIX DE ST-PIERRE and OTHER DOLMEN** enclosed in a wooden fence. Circular chambers with short entrances. Open sky.

**MOUND**, still covered in earth and unexcavated, with tops of menhirs protruding from the grassy soil.

**SEMI-CIRCLE OF MENHIRS**, in an open field.

**LAST DOLMEN/ALLÉE COUVERTE THAT WE SAW**, on top of mountain. Very new looking due to reconstruction that has removed the patina from the rocks. On the ground inside the tunnel, perfectly cut and arranged gravel. Very obviously reconstructed and polished.

Back to Paris. Total 2126.3 kilometers.

While on a megalithic tour in Brittany, encounters with other visitors were such:

La Roche Aux Fées: two fancily dressed women with two children that had obviously played here before, clambering over the rocks. Lone man with camera.

Dolmen de Port Blanc: a group of two young couples and a lone man. But this site is also a look-out over the sea, therefore it cannot be determined whether people come to see the view or the dolmens.

Sites in Carnac: While walking along the road between the sites, encountered approximately 20 people, most in groups of two or three.

Alignement de Menec: young woman on bicycle stops to ask us if there are more alignments, exclaiming her disappointment at the 'small' size of the rocks.

Kercado tumulus: older couple, not french.

Le Géant du Manio and Le Quadrilatère: three people in the parking lot - 2 other cars parked. On path, one lone man and lone woman. Asked man for directions to site. He hurried by, unable to explain, exclaiming it was too complicated. The woman sent us in the wrong direction. Second time, after trying other forks in paths, met young man with two older women. He had visited years before, and led us to the correct path. They visited both sites. At Le Géant du Manio, a young woman sat silently looking at the menhir. She left soon later. We saw her again as we returned to the car, heading back to the site with flowers in her hand.

Tumulus de St-Michel: lone old woman walking with a cane. How did she get here? Its a long path from the road.

Le Grand Menhir Brisé, La Table des Marchand and Er Grah: a lone woman who shared our disappointment at not being able to enter and one casual man walking, not-related to the site.

Dolmen de Mané-Luid: same woman that we saw at closed site. As we were leaving, a young couple wearing jeans and running shoes arrived. He held a video camera, while she looked uninterested.

Dolmen des Pierre Plates: Visited twice. First time, young man offering tour. Later during the same day, he was explaining to 6-8 young people inside. Second time, we saw two families visiting here.

Alignement de Manio: Couple walking down path toward site.

Alignement de St-Pierre, Quibéron: couple.

Mané-Grogh dolmen: Organized tour. 20 or so people of varying ages, no visible link between them.

Near Demoiselles Piquées, at St-Just: group of children cycling by. Postman reading, though seemingly uninterested in site.

The fact that we met other people in quite a few sites indicates that there are visitors even during the low season.

Common aspects: Rural vistas. Cows, sheep, farmers, villages, lacy curtains, stone brick buildings, barking dogs, ocean, green fields, yellow flowers on prickly bushes, birds, wind, sun, rain, clouds, crepes, wine, cheese, avocados, tomato, dolmens, menhirs, alignments, tumuli, pastries.

Frequent difficulty in finding sites. Asking people for directions. Up to six interactions per site. Searched for sites that we never found, combination of terrible maps, unclear or non-existent signs on roads, habitants unaware of sites nearby, thus unfruitful direction inquiries, and incorrect designation in books. For example, the location of the allee couverte on Kenvic beach was designated at Plouëscat in one book. Too general. Once we reached Plouescat, no one knew where the site was. Fortunately, another book mentioned Kenvic beach, which in itself wasn't easy to find.

So upon arriving at a destination, one must still search for sites. It occurred to me that we couldn't be the only people having trouble. Unless well-marked such as at Carnac, reaching a sites' general location doesn't guarantee finding it.

### **Observatory**

17 March 1996

Brought Nira, Mark, and David to see the *Observatory*. Most special approach. Reached Lelystad from across the dyke. Crossed a causeway. Cloudy. Dulled view. But we found angel voices singing on the radio (98.0) as we crossed over, and it was magical. Conceptual art. Had coffee in freaky restaurant halfway across.

The behaviours at the *Observatory* were more playful this time. I explained the details of the landwork to them, led them to the central rock, and instructed them to speak and hear the echo. It was a joyous adventure enjoyed by all.

As we were leaving, a car approached the parking lot. I spoke to the visitors. Casual visitors. They were driving through and decided to stop. Three Israelis. One, living in Amsterdam (Micha, the raftan), had heard of the landwork and of gatherings with music that take place during the summer solstice. The two others (architects) were visiting him from Israel. He was taking them on a tour, and instigated the stop as they drove by. We waited in the car as they explored. They spent a total of 7 minutes. They told me that they were cold.

### **GAMLA DOLMENS, Megalithic Dolmens**

Golan, Israel

22 April 1996

Family trip, accompanied by my mother once again, and Francois. We drove to the Golan on a gloriously sunny day. The

archaeological site of Gamla is also a nature reserve that boasts eagles and waterfalls, so this is a combined site of pleasures.

Since it was a holiday in Israel, Passover, Gamla was full of people. Parking was an issue. The entrance gate was shut, and access was limited. Cars allowed in only after visitors left.

The dolmens at Gamla are completely different from those in Europe or those quite nearby at the base of the Sea of Galilee. They are small, tiny, in fact, obviously containing one or few inhumations.

Father with three children clambering over a dolmen. Many people just walk by, their focus being the nature.

***Sun Tunnels*** by Nancy Holt  
Great Basin Desert, Utah  
20-21 June 1997, Summer Solstice  
sundown: 9:30 P.M., sunrise: 6:20 A.M.

Highway 80. Lake, mountains. Blue sky. Clouds in distance. Stunning drive through Bonneville Salt Flats. White salt. Sparkly water. Stopped to wade and examine sparkles.

People make designs and write with small black stone. On desert floor and in water.

Highway 233. Intended to buy gas, water, and food at Oasis. Closed. Coyote, antelopes and fox sightings off the road. Montello is a tiny town. Buy food, water, and gas. Lady at gas station/store, claims she's only been asked about the tunnels 2-3 times in the last eight months that she's been working there. Stopped at Cowboy bar as per Holt's suggestion to inquire about the tunnels. Barman seemed rather uninterested and did not have any information.

A retired old man drinking who heard my queries told me: "It's just another example of our government spending our damn money on something that's goddamned useless."

Stacey and I arrived at the tunnels just before sundown on June 20, and watched the sunset with 23 other people, including 6 children. There were 4 tents pitched, and 3 dogs.

Spoke to various groups present:

1. Three adults. Seventh year they came. Heard about it through newspaper from Utah. Stay till 11:00 P.M. "It's the pure air, not just the *Sun Tunnels*. We love nature and the starkness of the scenery." They told me people bring musical instruments. She asked about the symbolism of *Spiral Jetty*.

2. School teacher and security specialist, self-manager and 2 kids.

3. Young couple heard about it though sculpture professor. He studies art, she's into biology and botany. It's their third summer solstice. He brought her. They sleep here. Very into nature.

4. Lone man with dog: librarian from Salt Lake City. It's his fourth solstice. Camping. Spent the next day at the tunnels. He thought that the bird droppings decorating one of the tunnels was a nice addition.

5. Astronomy group: 5 people, all related. Grandfather, his son in law, two adult brothers, and two children. First time for solstice.

Heard about it through article (which the older man gave me the next day). Not much into art, but have visited *Spiral Jetty* out of curiosity. At night, once the stars had come out, they went from tunnel to tunnel. The adults helped the children identify the constellations that Holt had drilled into each tunnel. Outside, they looked at the stars. Stayed until the next morning.

6. New Age Group: three women. Parked their car and put tent very close to a tunnel. They came from Salt Lake City. Arrived Thursday, so they had already spent one night and day. They had seen antelope near the landwork that afternoon before everyone had arrived. During the moon rising, they were drumming. In morning, New Age Woman, Jody put our her healing rocks on white rabbit fur in the center of the tunnels on the circular rock, for cleansing by sun.

7. One woman and 7 men: Steve, Eric, and friends from Salt Lake City. Art students at University of Utah, and one geologist. Steve instigated the trip, knows all about Land Art, heard about it in class. They arrived Friday night after sundown. Were planning to stay until Sunday or until the alcohol ran out.

8. Russell, the mountain man. He lives on a nearby mountain that he owns. Very sociable. For a man seeking solitude and tranquillity in the middle of nowhere, he seemed delighted with the company. Howled at the moon at night. Spent the next day interacting with everyone. Had accurate information about visitors about the last eight months that he'd been living there. None during the spring equinox of 1997.

9. Lone woman with dog. She had tried unsuccessfully to convince her boyfriend to come for years.

Everyone was from Utah, either Salt Lake City, Ogden or Brigham. Their occupations varied. Some people were involved in the arts. The trip is frequently instigated by one person that convinces others to join them.

Many people expressed a desire to come before but had not managed to. I was told the site is unoccupied during the winter solstice. Though many people claim they would like to come for that time, the driving conditions, namely mud flats which make for hazardous driving, turn people off.

Slept in tunnel. Cold night. Freezing morning. 22 vehicles, 23-35 people to watch the sunrise. Some people come specifically to see sunrise or sunset and leave immediately after the event. People quietly waiting. The sun rises exactly in the center of the tunnel.

After the sunrise, eight cars remained for the day, hosting 6 separate groups: 3 new age women (that left for a few hours to go swimming somewhere nearby), remarried woman with compass and 2 kids, us, trailer, jeep, Steve and friends. Later, lone new age woman arrived. She did some sort of personal ceremony. Librarian also present. Dogs. Russell.

The sun brings warmth. Shadows moving. Constellation holes appearing, oval shaped, then circular as sun moves above us. Hang out like lizards in tunnels. People very territorial about their tunnels, claiming them for hours at a time. Amazing view out of the tunnel holes. They frame the desert. Each view is different. The constellations are different. Bright blue sky. Scrub brush



everywhere. Sand storm in distance. Birds. Insects. Mountains. Wind. Hot. People napping in shady tunnels. Speckles of constellation light. Tunnels cast moving shadows too.

Crowds for sunset again. New visitors pitching up tents. New Age women staying. Gio Magazine man taking photographs. Claimed that Holt was going to be there next year. Which she told me she hadn't planned on doing, but that if there's going to be a party, maybe she would go. People sitting in front of tunnels, in perfect alignment with their center. Waiting for sunset. It comes. People start leaving, including us.

During the summer solstice, *Sun Tunnels* attracts people involved in the arts, New Age followers, party animals, astronomy buffs, curious locals, and nature lovers.

*Sun Tunnels* and *Observatory* share a number of features: astronomical alignment, rock in center of work to help viewer gage exact center and best point from which to view alignments, echoing voice, when in tunnels or standing on rock in center of *Observatory*.

#### **GAMLA DOLMENS**

18 October 1997

With my brother, Yakir. Golden light. Alone.

Ireland

5 May 1999

**DROMBEG STONE CIRCLE**, west Cork. Exquisite stone circle, immaculate. Spectacular setting on a hill dotted with cows and sheep.

8 May

**POULNABRONE DOLMEN**, The Burren, Clare County. Surprisingly many tourists here. Small, angular dolmen.

9 May

**NEWGRANGE**, Boyne Valley, County Meath. Gigantic parking lot. Obviously many, many visitors. Incredibly organized site, from fancy visitor center to forced guided tour of the burial chamber. Smoothly run operation whereby sweet and informative tour guide lectures about Newgrange and its adjacent sites while other tour is inside. Wonderful engravings, though interestingly, our guide did not show the group the famous engraving of three spirals. As people were leaving the mound, I asked about them, and she pointed them out to me and explained that she refrained from showing them to tourists because people had a tendency to touch them. They were on the inside of one of the chambers.

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I appreciate everyone's generosity to respond to my questions and offer me documentation, giving me the opportunity to obtain original material and greatly helping this research.



## ILLUSTRATIONS



Figure 1. Nancy Holt, *Sun Tunnels*, 1973-76. Great Basin Desert, Lucin, Utah. Concrete: length of each tunnel: 5.5 m; diameter of each tunnel: 3 m; width of walls : 19 cm; overall diagonal length: 26 m. Photograph by Iris Amizlev.



Figure 2. Robert Smithson, *Spiral Jetty*, 1970. Rozel Point, Great Salt Lake, Utah. Black basalt and limestone rocks, and earth (according to Smithson, made of mud, salt crystals, rocks, water (Robert Smithson, 'The Spiral Jetty', *Arts of the Environment*, ed. Gyorgy Kepes, 227): spiral : 457 m long; 5 m wide. Photograph in John Beardsley, *Earthworks and Beyond*, 24.



Figure 3 . Robert Smithson, *Amarillo Ramp*, 1973. Amarillo, Texas. Rocks, red sandstone shale with veins of white calciche: diameter at top: 46 m ; at base: 47 m; width at top: 3 m; at base: 6 m; total: 121 m. Photograph in John Beardsley, *Earthworks and Beyond*, 25.

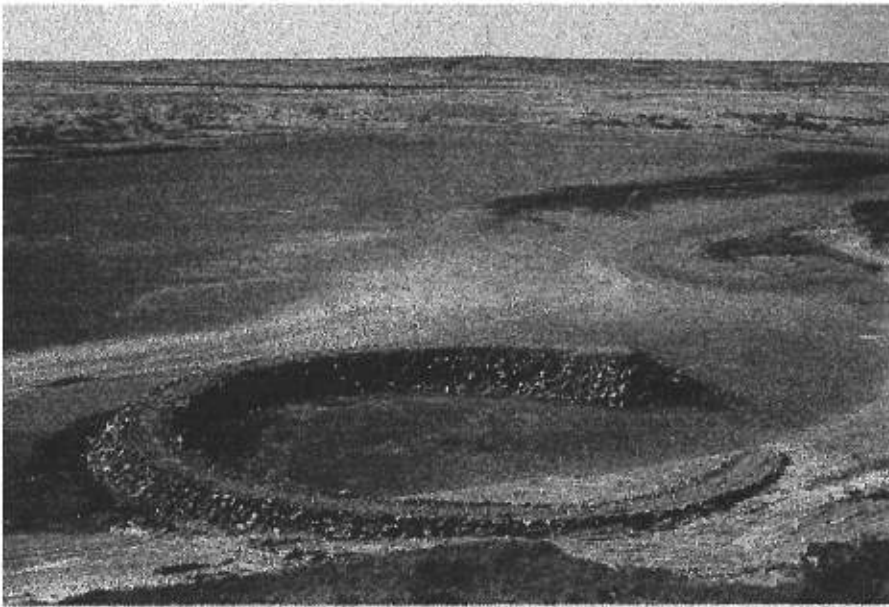


Figure 4. Robert Smithson, *Amarillo Ramp*. Photograph in Gilles A. Thiberghien, *Land Art*, 114.



Figure 5. Stonehenge, Wiltshire, England. Photograph by Iris Amizlev.



Figure 6. Newgrange, County Meath, Ireland. Photograph in Michael J. O'Kelly, *Newgrange. Archaeology, Art and Legend*, 20.



Figure 7. Callanish, Isle of Lewis, Scotland. Photograph in Aubrey Burl, *From Carnac to Callanish. The Prehistoric Stone Rows and Avenues of Britain, Ireland and Brittany*, 179.





Figure 8. Le Menec alignment, Carnac, Brittany, France. Photograph by Iris Amizlev.



Figure 9. Kermario alignment, Carnac, Brittany, France. Photograph by Iris Amizlev.



Figure 10. Le Petit Menec alignment, Carnac, Brittany, France.  
Photograph by Iris Amizlev.



Figure 11. Le Géant du Manio, Carnac, Brittany, France.  
Photograph by Iris Amizlev.



Figure 12. Nazca lines, Nazca, Peru. Photograph in Maria Reiche, *Mystery on the Desert. Nazca. Peru*, 67.



Figure 13. The Serpent Mound, Adams County, Ohio. Photograph in Alvin M. Josephy, Jr, ed., *The American Heritage Book of Indians* (New York : Simon & Shuster, Inc, 1961), 153.



Figure 14. Hopewell mounds, Mound City, Chillicothe, Ohio. Photograph in David Hurst Thomas, *Exploring Ancient Native America* (New York : Macmillan, 1994), 167.



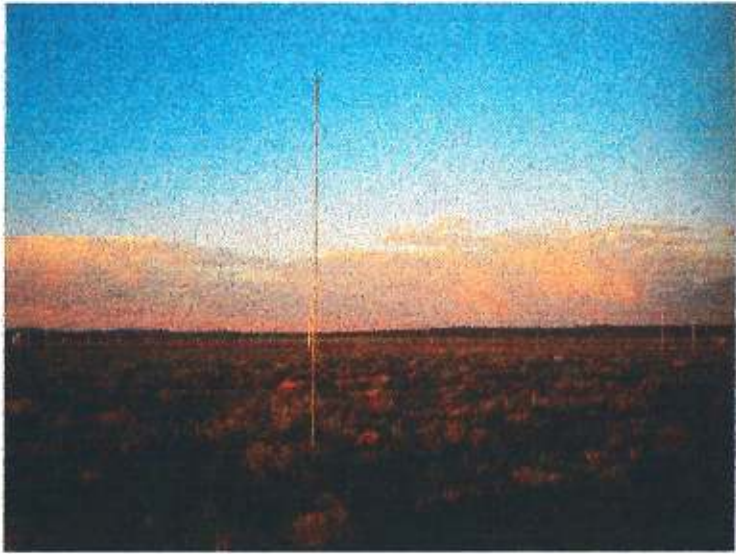


Figure 15. Walter De Maria, *The Lightning Field*, 1974-77. Near Quemado, New Mexico. Rectangular grid of 400 stainless steel poles : average height of poles : 6 m; overall dimensions : 1 mile x 1 kilometer. The eastwest rows contain 25 poles, while the northsouth rows contain 16 poles, each spaced 67 m apart, 101 m on the diagonal. Photograph in John Beardsley, *Earthworks and Beyond*, 60.



Figure 16. Walter De Maria, *The Lightning Field*. Photograph in Lucy Lippard, *Overlay*, 131.





Figure 17. Summer solstice at Stonehenge in the early 1960s. Photograph in Christopher Chippindale, *Stonehenge Complete*, 255.



Figure 18. Summer solstice at Stonehenge in the 1980s. Photograph in Christopher Chippindale, *Stonehenge Complete*, 254.



Figure 19. Newgrange, County Meath, Ireland. Winter solstice sunrise.  
Photograph in Michael J. O'Kelly, *Newgrange. Archaeology, Art and Legend*, 29.



Figure 20. Callanish, Isle of Lewis, Scotland. The moon follows its extreme south path every 18.6 years, June 1987. Photograph from postcard, Margaret Ponting.



Figure 21. People waiting for summer solstice sunrise at Nancy Holt's *Sun Tunnels* on 21 June 1997. Photograph by Iris Amizlev.

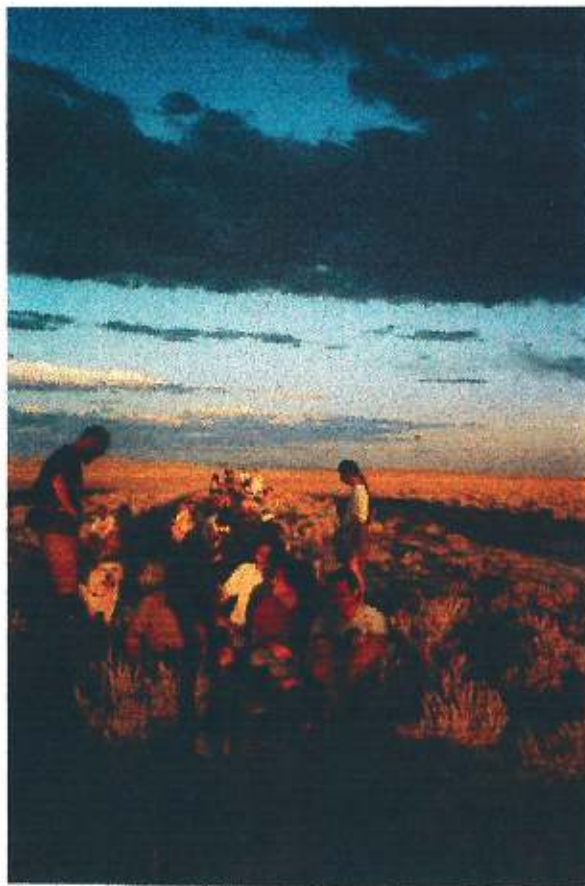


Figure 22. People waiting for summer solstice sunset at Nancy Holt's *Sun Tunnels* on 21 June 1997. Photograph by Iris Amizlev.



Figure 23. People waiting for spring equinox sunrise at Robert Morris's *Observatory* in Flevoland, Holland, on 21 March 1995. Photograph by Iris Amizlev.



Figure 24. Robert Morris *Observatory*. People waiting for spring equinox sunrise on 21 March 1995. Photograph by Iris Amizlev.





Figure 25. Robert Morris, *Observatory*, 1977. Oostelijk, Flevoland, Holland. Earth, wood, granite, steel, and water: diameter 91 m; inner ring : 24 m. Three openings through which equinox and solstice sunrises are aligned. Photograph by Iris Amizlev.



Figure 26. Robert Morris, *Observatory*. Equinox sunrise, 21 March 1995. Photograph by Iris Amizlev.



Figure 27. Robert Morris, *Observatory*. View from inner circle of metal slabs that are aligned to equinox sunrises. Photograph by Iris Amizlev.



Figure 28. Robert Morris, *Observatory*. Metal slabs through which equinox sun rises. Photograph by Iris Amizlev.



Figure 29. Robert Morris, *Observatory*. View from central enclosure of granite slabs that are aligned to summer solstice sunrise. Photograph by Iris Amizlev.



Figure 30. Nancy Holt, *Sun Tunnels*, 1973-76. Summer solstice sunrise, 21 June 1997. Photograph by Iris Amizlev.



Figure 31. Nancy Holt, *Sun Tunnels*. Summer solstice sunset, 21 June 1997. Photograph by Iris Amizlev.

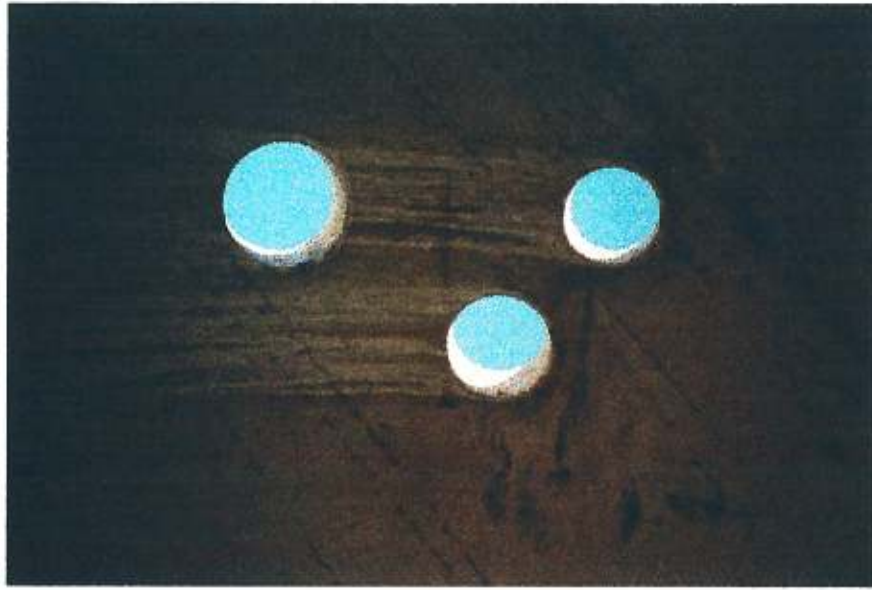


Figure 32. Close-up of constellation holes at Nancy Holt's *Sun Tunnels*.  
Photograph by Iris Amizlev.

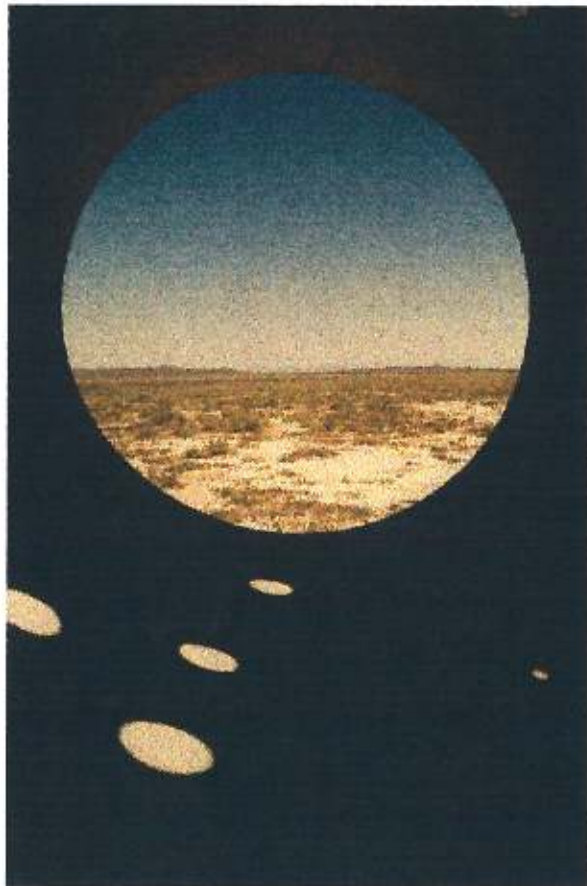


Figure 33. Nancy Holt, *Sun Tunnels*. Photograph by Iris Amizlev.





Figure 34. Bill Vazan, *Stone Maze*, 1975-76. Park Maisonneuve, Montreal. 250 field stones : 1 x 37 x 55 m. Photograph in Lucy Lippard, *Overlay*, 155.



Figure 35. James Pierce, *Earthwoman*, 1976-77. Pratt Farm, Maine. Earth: 9 m long; 1.2 m high. Summer solstice sunrise. Photograph in John Beardsley, *Earthworks and Beyond*, 69.



Figure 36. James Pierce, *Earthwoman*. Photograph in Lucy Lippard, *Overlay*, 144.



Figure 37. Michelle Stuart, *Stone Alignment/Solstice Cairns*, 1979. Columbia Gorge, Rowena Plateau, Oregon. Stones : 305 x 244 m; inner circle: 30 m diameter. Photograph by Michelle Stuart in Lucy Lippard, *Overlay*, plate 6.



Figure 38. Charles Ross, *Star Axis*, 1988 - ongoing. New Mexico. Photograph in Gilles A. Tiberghien, *Land Art*, 150.



Figure 39. James Turrell, *Roden Crater*, 1977 - ongoing. Near Flagstaff, Arizona. Photograph in John Beardsley, *Earthworks and Beyond*, 37.

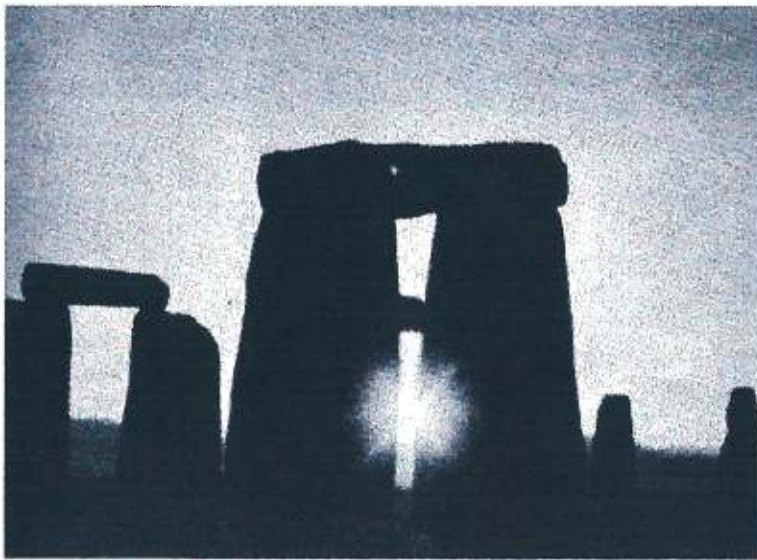


Figure 40. Stonehenge, stone circle. Wiltshire, England. Winter solstice sunrise. Photograph in Gerald Hawkins, *Stonehenge Decoded*, 129.





Figure 41. Michael Heizer, *Isolated Mass/Circumflex (Nine Nevada Depressions 9)*, 1968. Massacre Dry Lake, Nevada. Displaced earth : 36 x 4 x .3 m. Photograph in Gilles A. Tiberghien, *Land Art*, 244.

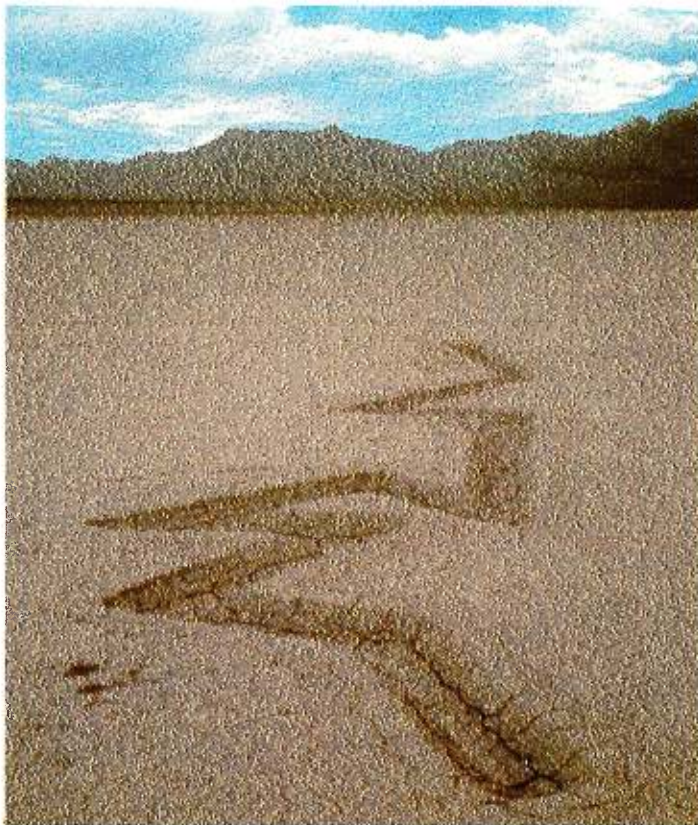


Figure 42. Michael Heizer, *Rift (Nine Nevada Depression 1)*, 1968. Jean Dry Lake, Nevada. Displaced Earth : 16 x .5 x .3 m. Photograph in Gilles. A Tiberghien, *Land Art*, 245.

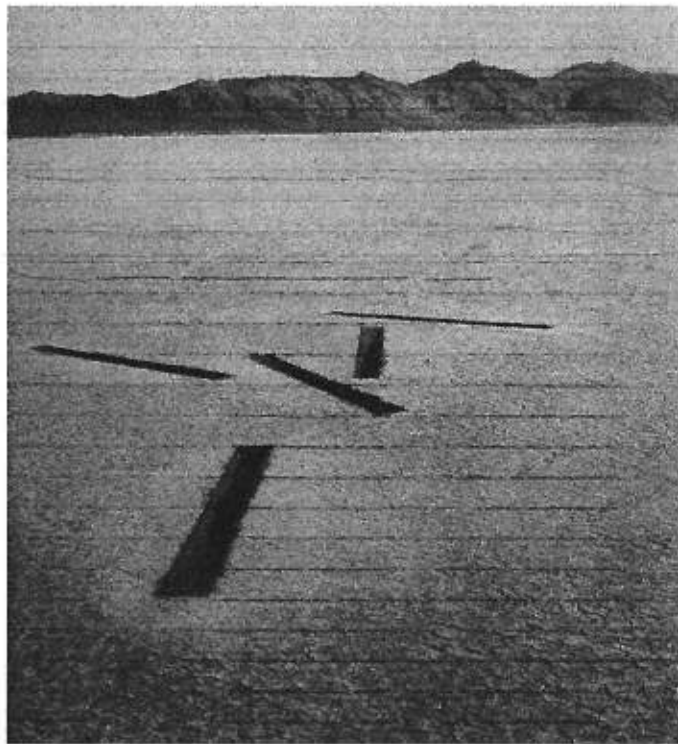


Figure 43. Michael Heizer, *Dissipate (Nine Nevada Depression 8)*, 1968. Black Rock Desert, Nevada. Wood : 14 x 15 x .3 m. Photograph in Gilles A. Tiberghien, *Land Art*, 23.



Figure 44. Nazca lines, Nazca, Peru. Photograph in Maria Reiche, *Mystery on the Desert, Nazca, Peru*, 66.

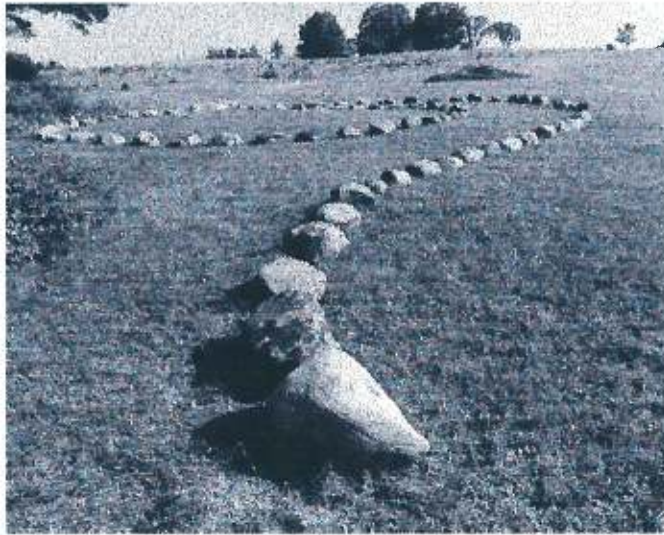


Figure 45. James Pierce, *Stone Serpent*, 1979. Pratt Farm, Maine. Rock : .3 x 24 x 17 m. Photograph in John Beardsley, *Earthworks and Beyond*, 71.



Figure 46. Newgrange, County Meath, Ireland. Photograph in Michael J. Okelly, *Newgrange. Archaeology, Art and Legend*, 19.



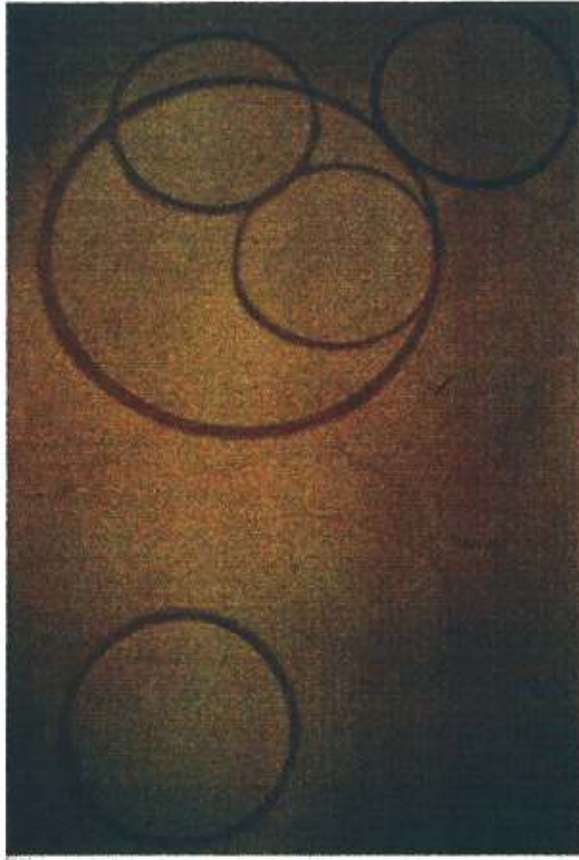


Figure 47. Michael Heizer, *Circular Surface Planar Displacement Drawing*, 1970. Jean Dry Lake, Nevada. Tire tracks: 274 x 152 m. Gilles A. Tiberghien, *Land Art*, 247.

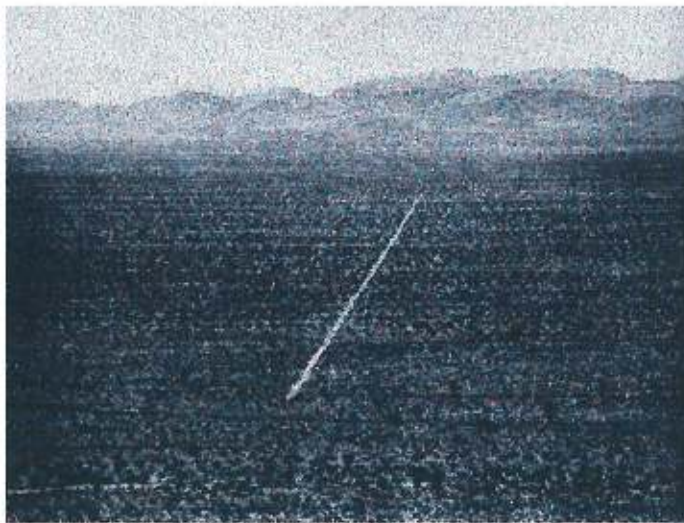


Figure 48. Walter De Maria, *Las Vegas Piece*, 1969. Tula Desert, Nevada. Trenches in the earth : 5 kilometers. Photograph in John Beardsley, *Earthworks and Beyond*, 18.

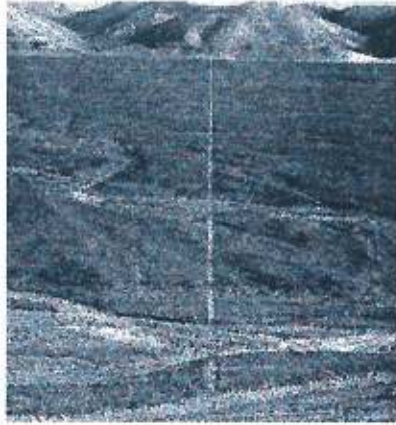


Figure 49. Richard Long, *Walking a Line in Peru*, 1972. Nazca, Peru. Photograph in John Beardsley, *Earthworks and Beyond*, 40.



Figure 50. Nazca lines, Nazca, Peru. Photograph in Maria Reiche, *Mystery on the Desert, Nazca, Peru*, 36.



Figure 51. Dennis Oppenheim, *Directed Seeding -Cancelled Crop*, 1969. Finsterwolde, Holland. Harvested wheat field : 155 x 67 m. Photograph in Lucy Lippard, *Overlay*, 52.





Figure 52 Robert Smithson, *Spiral Jetty*, 1970. Photograph in John Beardsley, *Earthworks and Beyond*, 24.



Figure 53. Robert Smithson, *Spiral Jetty*. Ground view. Photograph in John Beardsley, *Earthworks and Beyond*, 21.



Figure 54. Bill Vazan, *Spiral Man*, 1971-73. Parc Maisonneuve, Montreal. Snow. Photograph in David Burnett and Pierre Landry, *Bill Vazan Ghostlings*, 142.



Figure 55. Andy Goldsworthy, *Lay Down as it Started Raining or Snowing Waited Until the Ground Became Wet or Covered Before Getting Up*. Tewet Tarn, Cumbria, 5 March, 1988. Photograph by Andy Goldsworthy, in *A Collaboration With Nature*, n.p.



Figure 56. Andy Goldsworthy, *Lay Down as it Started Raining or Snowing waited Until the Ground Became wet or Covered Before Getting Up*. St Abbs, The Borders, June 1984. Photograph by Andy Goldsworthy, in *A Collaboration With Nature*, n.p.

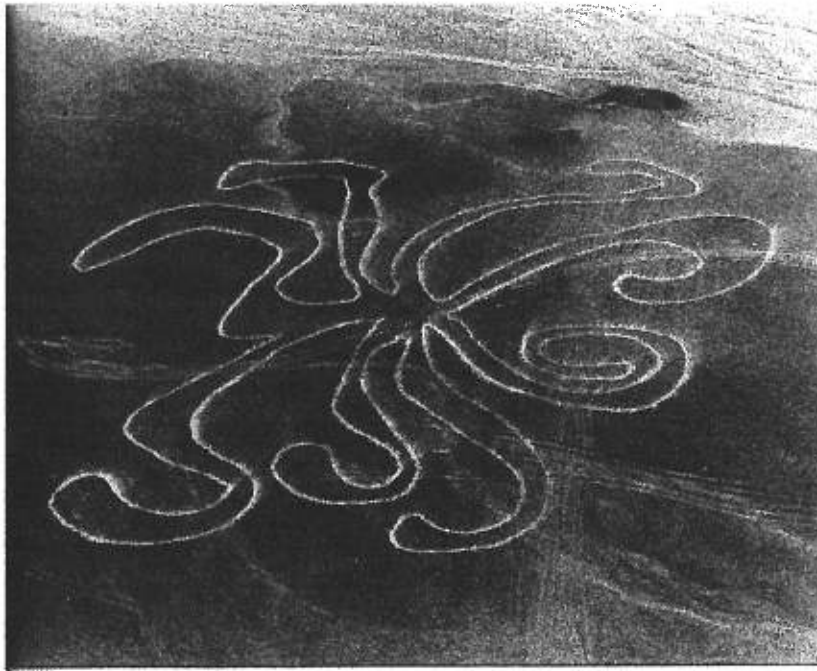


Figure 57. Bill Vazan, *El Pulpo*, 1985. Nazca, Peru. Topsand Scraping : 100 x 100 m. Photograph in James D. Campbell, *Bill Vazan. A Cosmic Dance*, 55.



Figure 58. Nazca lines, Nazca, Peru. Spider. Photograph in Maria Reiche, *Mystery on the Desert, Nazca, Peru*, 24.



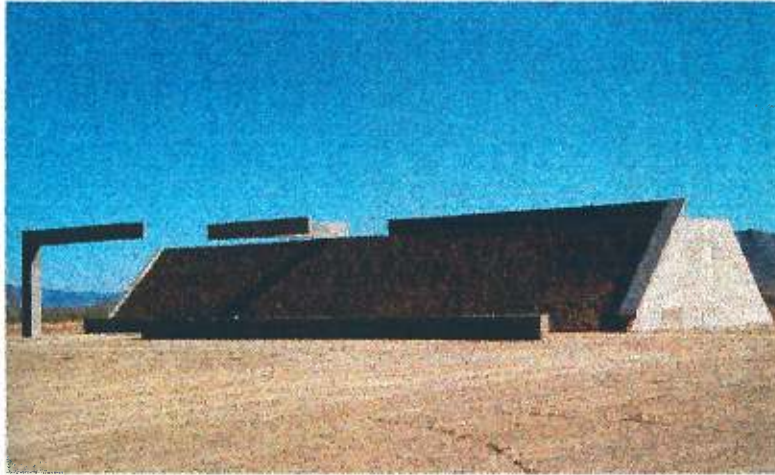


Figure 59. Michael Heizer, *Complex One/City*, 1972-1974. Garden Valley, Nevada. Concrete, steel, granite, and earth : 34 x 43 x 7 m. Photograph in John Beardsley, *Earthworks and Beyond*, 15.

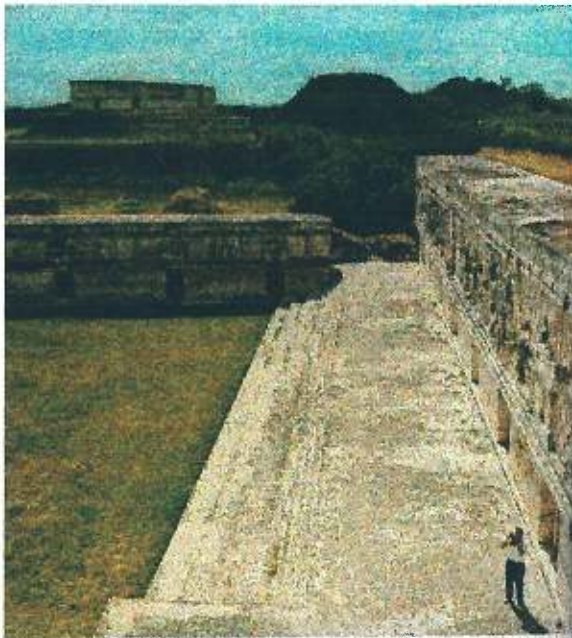


Figure 60. The Nunnery, Uxmal, Yucatan, Mexico. Photograph in Crave, Roy C., et al., *Ceremonial Centers of the Maya* (Gainesville : The University Presses of Florida, 1974), 72.



Figure 61. Robert Morris, *Observatory*, 1977. Photograph by Iris Amizlev.



Figure 62. Robert Morris, *Observatory*. Granite slabs flanking metal slabs on outer ring, which are aligned to summer and winter solstice sunrises. Photograph by Iris Amizlev.



Figure 63. Robert Morris, *Untitled*, 1977. Kassel, Germany. Basalt granite. Photograph in Lucy Lippard, *Overlay*, 7.





Figure 64. Robert Smithson, *Broken Circle*, 1971. Emmen, Holland. Earth, rock, wood : circle : 43 m diameter ; hill : 23 m at base. Photograph by Iris Amizlev.



Figure 65. Hunnebed, Emmen, Holland. Photograph by Iris Amizlev.



Figure 66. Alice Aycock, *Williams College Project*, 1974. Williamstown, Massachusetts. Earth over concrete chamber ; interior : 1 x 1.8 x .6 m ; entrance : 35 x 70 cm ; diameter of mound : 5 m. Photograph in Lucy Lippard, *Overlay*, 189.



Figure 67. Kercado Tumulus. Carnac, Brittany, France. Photograph by Editions AS DE COEUR, postcard.



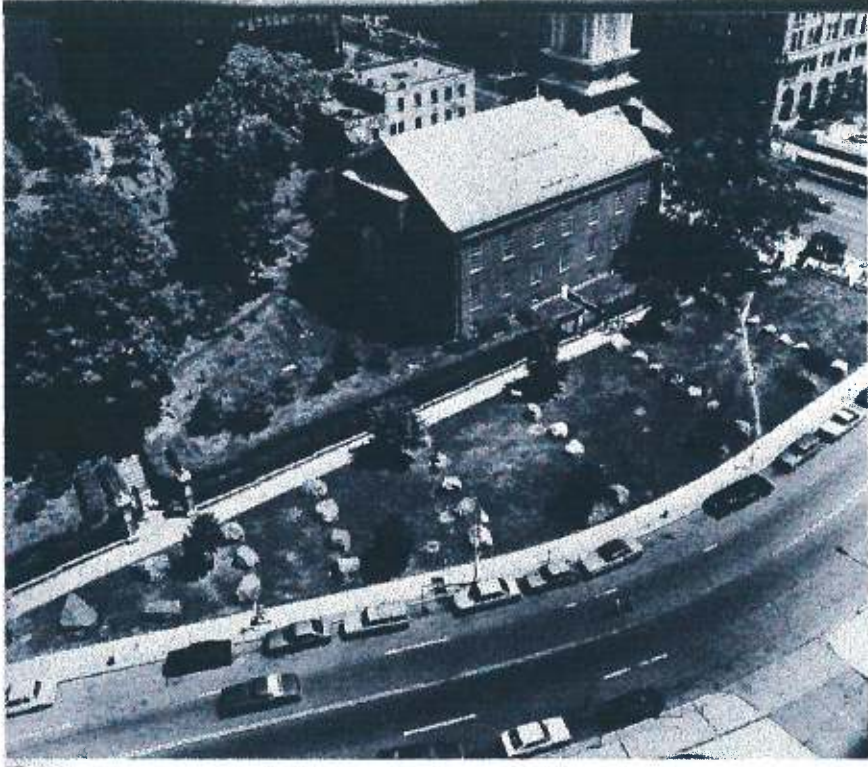


Figure 68. Carl Andre, *Stone Field Sculpture*, 1977. Hatford, Connecticut. 36 glacial boulders : 88 x 16 m. Photograph in John Beardsley, *Earthworks and Beyond*, 105.



Figure 69. Le Menec Alignment, Carnac, Brittany, France. Photograph by Iris Amizlev.

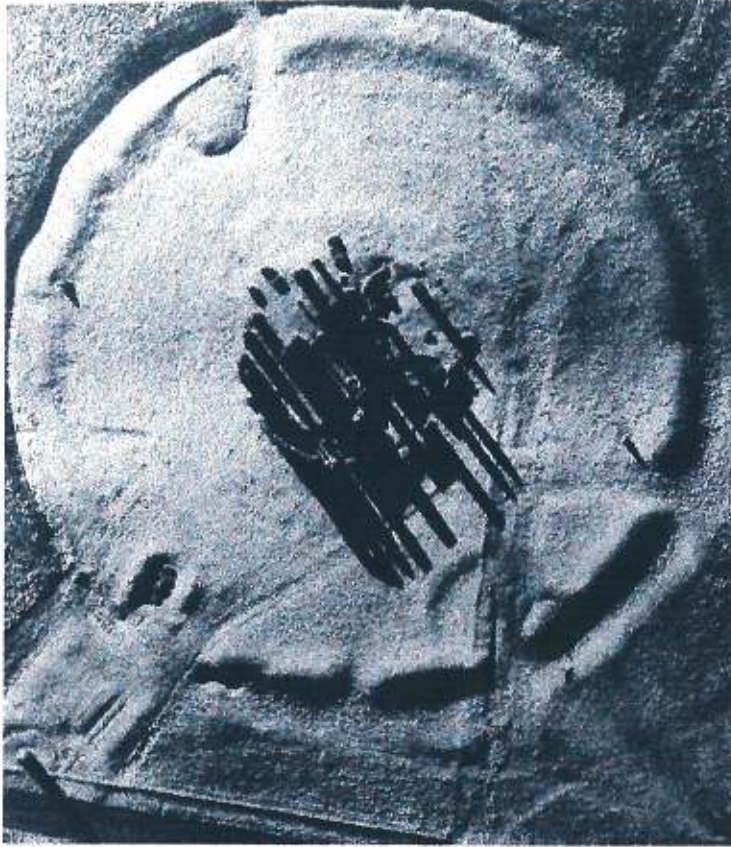


Figure 70. Stonehenge, Wiltshire, England. Photograph in Christopher Chippindale, *Stonehenge Complete*, 18.



Figure 71. Avebury, Wiltshire, England. Photograph by Iris Amizlev.





Figure 72. Richard Long, *Mount Whitney Stone Circle*, 1992. California. Photograph in Mario Codognato, et al., *Richard Long*, 128.



Figure 73. Drombeg Stone Circle, West Cork, Ireland. Photograph by Iris Amizlev.



Figure 74. Richard Long, *A Line in Scotland, Cul Mor*, 1981. Scotland. Photograph in John Beardsley, *Earthworks and Beyond*, 43.



Figure 75. Moulin de Cojoux, St. Just, Brittany, France. Photograph by Iris Amizlev.





Figure 76. Robert Smithson, *Spiral Hill*, 1971. Emmen, Holland. Earth, white sand ; approximately 23 meters at base. Photograph by Iris Amizlev.



Figure 77. Silbury Hill, Avebury, Wiltshire, England. Photograph by Iris Amizlev.



Figure 78. Robert Smithson, *Broken Circle*, 1971. Photograph by Iris Amizlev.

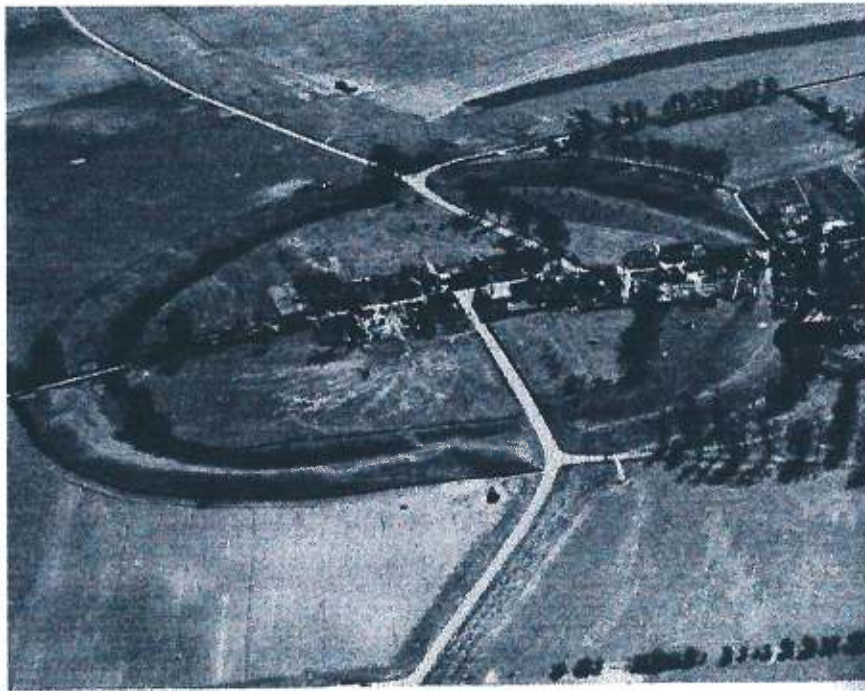


Figure 79. Avebury, Avebury, Wiltshire, England. Photograph in Aubrey Burl, *Prehistoric Avebury*, x.





Figure 80. Megalithic mounds near Stonehenge, Wiltshire, England. Photograph by Iris Amizlev.



Figure 81. James Pierce, *Burial Mound*, 1972. Pratt Farm, Maine. Earth : 1.2 m high, 4.2 m diameter. Photograph by Iris Amizlev.

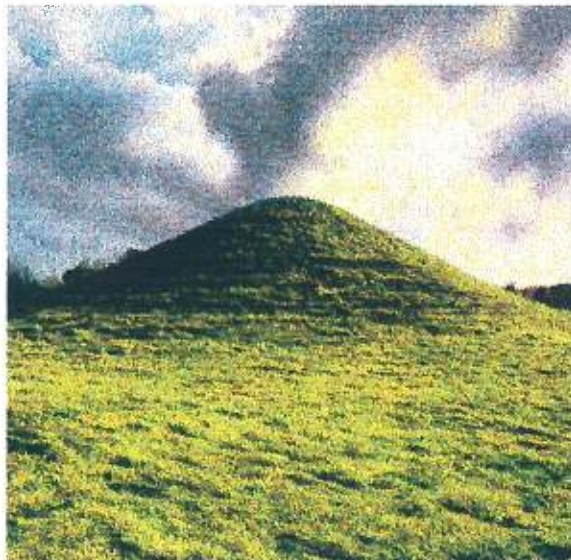


Figure 82. Hopewell Mound, Mound City, Chillicothe, Ohio. Photograph in editors of Time-Life Books, *Mound Builders & Cliff Dwellers* (Virginia : Time-Life Books), 6.





Figure 83. Michael Heizer, *Water Strider*, 1983-85. Buffalo Rock, Illinois.  
 Compacted earth : 209 x 24 x 4 m. Photograph in John Beardsley, *Earthworks and Beyond*,  
 96.



Figure 84. Rock Eagle Effigy Mound, Adena effigy mound. Near Eatonton, Georgia.  
 Photograph in George E. Stewart, 'Who Were the Mound Builders'?, *National Geographic*  
 142 (December 1972), 784.



Figure 85. Richard Fleischner, *Sod Maze*, 1974. Grounds of Chateau-Sur-Mer, Newport, Rhode Island. Sod over earth : 5 m high ; diameter : 43 m. Photograph in Sally Yard, ed., *Sitings*, 55.



Figure 86. Bighorn Medicine Wheel, Bighorn National Forest, Lovell, Wyoming. Photograph from Medicine Wheel Ranger District, Bighorn National Forest.





Figure 87. Michael Heizer, *Double Negative*, 1973-76. Mormon Mesa, near Overton, Nevada. Displaced earth : 457 x 15 x 9 m ; 40,000 and 20,000 tons of earth displaced. Photograph in John Beardsley, *Earthworks and Beyond*, 14.



Figure 88. Robert Morris, *Observatory*, 1977. Photograph by Iris Amizlev.

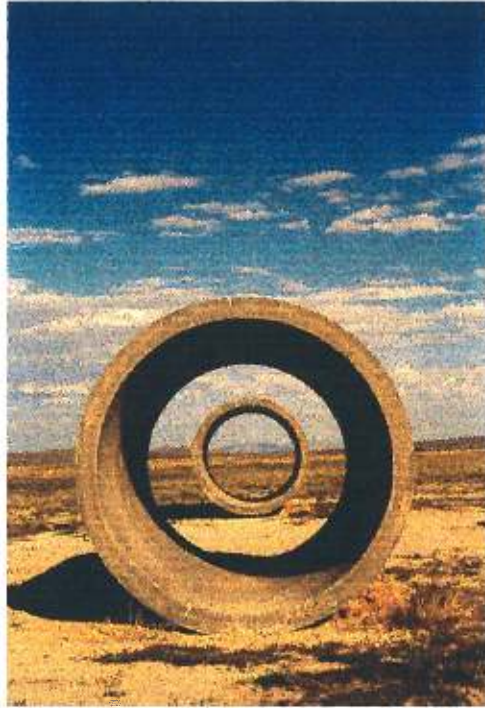


Figure 89. Nancy Holt, *Sun Tunnels*, 1973-76. Photograph by Iris Amizlev.



Figure 90. Nancy Holt, *Sun Tunnels*. Photograph by Iris Amizlev.



Figure 91. Richard Long, *A Line in the Himalayas*, 1975. Nepal.  
 Photograph in Mario Codognato, et. al., *Richard Long*, 51.



Figure 92. Great Basin Desert, Utah. Area surrounding Nancy Holt's *Sun Tunnels*.  
 Photograph by Iris Amizlev.



Figure 93. Robert Morris, *Untitled Reclamation Project*, 1979.  
 Johnson Pit No.30, King County, Washington. Graded earth: 3.7 acres.  
 Photograph in John Beardsley, *Earthworks and Beyond*, 92.





Figure 94. Herbert Bayer, *Earth Mound*, 1955. Aspen Institute for Humanistic Studies, Aspen, Colorado. Earth : diameter : 12 m. Photograph in John Beardsley, *Earthworks and Beyond*, 86.



Figure 95. Alice Aycock, *Maze*, 1972. Gibney Farm, Pennsylvania. Wood : diameter : 10 m ; height : 2 m. Photograph in Sally Yard, ed., *Sitings*, 41.



Figure 96. Robert Morris, *Grand Rapids Project*, 1974. Grand Rapids, Iowa. Asphalt : two ramps, each 5 m across, cut into graded hillside. Photograph in Lucy Lippard, *Overlay*, 53.



Figure 97. Path to Robert Morris's *Observatory*. Photograph by Iris Amizlev.



Figure 98. Robert Morris, *Observatory*. View from path. Photograph by Iris Amizlev.



Figure 99. Robert Morris, *Observatory*. Path leading into landwork. Photograph by Iris Amizlev.





Figure 100. Robert Morris, *Observatory*. Entrance. Photograph by Iris Amizlev.



Figure 101. Robert Morris, *Observatory*. Along path through main entrance, towards central enclosure. Photograph by Iris Amizlev.



Figure 102. Robert Morris, *Observatory*. Entrance into center. Photograph by Iris Amizlev.



Figure 103. Robert Morris, *Observatory*. View from inner circle, overlooking three openings that are aligned to equinox (through central aperture) and solstice sunrises. Photograph by Iris Amizlev.



Figure 104. Robert Morris, *Observatory*. View of the entrance, through the fourth opening. Photograph by Iris Amizlev.



Figure 105. Dolmen. Gamla, Golan Heights, Israel. Communal behaviours. Photograph by Iris Amizlev.



Figure 106. Dolmen. Brittany, France. Photograph by Iris Amizlev.



Figure 107. Offerings inside dolmen. Brittany, France. Photograph by Iris Amizlev.





Figure 108. Nancy Holt, *Sun Tunnels*. People hanging out in tunnel during the summer solstice, 21 June 1997, at night. Photograph by Stacey Miller.