

Mirror Reflections: Robert Smithson's Dialectical Concept of Space

Johannes Stückelberger

Volume 31, Number 1-2, 2006

URI: <https://id.erudit.org/iderudit/1069626ar>

DOI: <https://doi.org/10.7202/1069626ar>

[See table of contents](#)

Publisher(s)

UAAC-AAUC (University Art Association of Canada | Association d'art des universités du Canada)

ISSN

0315-9906 (print)

1918-4778 (digital)

[Explore this journal](#)

Cite this article

Stückelberger, J. (2006). Mirror Reflections: Robert Smithson's Dialectical Concept of Space. *RACAR : Revue d'art canadienne / Canadian Art Review*, 31(1-2), 90–99. <https://doi.org/10.7202/1069626ar>

Article abstract

Cet essai analyse le concept de l'espace dans l'oeuvre de l'artiste américain Robert Smithson (1938–73). La discussion porte principalement sur ses oeuvres avec miroirs. J'avance que Smithson a utilisé des miroirs pour en arriver à une perception « polyperspectiviste » de la réalité, laquelle correspondait à son concept dialectique de l'espace. Pour Smithson, l'espace apparaît dans la dialectique du site et du nonsite, dans l'aller et retour entre centre et périphérie, paysage naturel et industriel, réalité et fiction, histoire et temps présent, ordre et chaos. Son oeuvre avec miroirs lui a permis d'aborder ces aspects irrationnels, mystérieux et ouverts qui appartiennent à tout site et qui, en même temps, lui mérite un non-site. Smithson estimait que le site et le non-site ne sauraient être séparés, se renvoyant l'un à l'autre comme un miroir et sa réflexion.

Mirror Reflections: Robert Smithson's Dialectical Concept of Space

JOHANNES STÜCKELBERGER, UNIVERSITÄT BASEL / UNIVERSITÉ DE FRIBOURG, CH

Résumé

Cet essai analyse le concept de l'espace dans l'œuvre de l'artiste américain Robert Smithson (1938–73). La discussion porte principalement sur ses œuvres avec miroirs. L'avance que Smithson a utilisé des miroirs pour en arriver à une perception « polyperspectiviste » de la réalité, laquelle correspondait à son concept dialectique de l'espace. Pour Smithson, l'espace apparaît dans la dialectique du site et du nonsite, dans l'aller et retour entre centre et périphérie, paysage

sage naturel et industriel, réalité et fiction, histoire et temps présent, ordre et chaos. Son œuvre avec miroirs lui a permis d'aborder ces aspects irrationnels, mystérieux et ouverts qui appartiennent à tout site et qui, en même temps, lui mérite un non-site. Smithson estimait que le site et le non-site ne sauraient être séparés, se renvoyant l'un à l'autre comme un miroir et sa réflexion.

Room, space, site, locality, scene, nonsite, utopia, heterotopia, situs, locus, topos, chora – our languages would not have as many different terms to describe the space that surrounds us, in which we live, which we look at, if that space could be specifically defined. The way in which it is represented depends upon our concept of it. That it is more than that geometrically definable, empty container on which is based the Albertian concept of perspective representation we have known since the recent space theories developed by Martin Heidegger, Maurice Merleau-Ponty, Gaston Bachelard, Michel de Certeau, Michel Foucault, Marc Augé, and others.¹

An extremely complex contribution to the problem of space and its representation is the work of the American land art artist Robert Smithson. Smithson himself characterizes it as a discussion of the dialectic of site and nonsite. In order to represent this dialectic, he repeatedly makes use of mirrors, which are my focus in this essay. With the example of his works with mirrors and on the basis of his use of mirror metaphors in his writings, I would like to demonstrate that Smithson's dialectic of site and nonsite refers not only to a difference between nature (as site) and art (as nonsite) – as it is often described – but also to his concept of nature itself, which can be described as both site and nonsite. In Smithson's opinion site and nonsite cannot really be separated; they belong together like the mirror and its reflection.

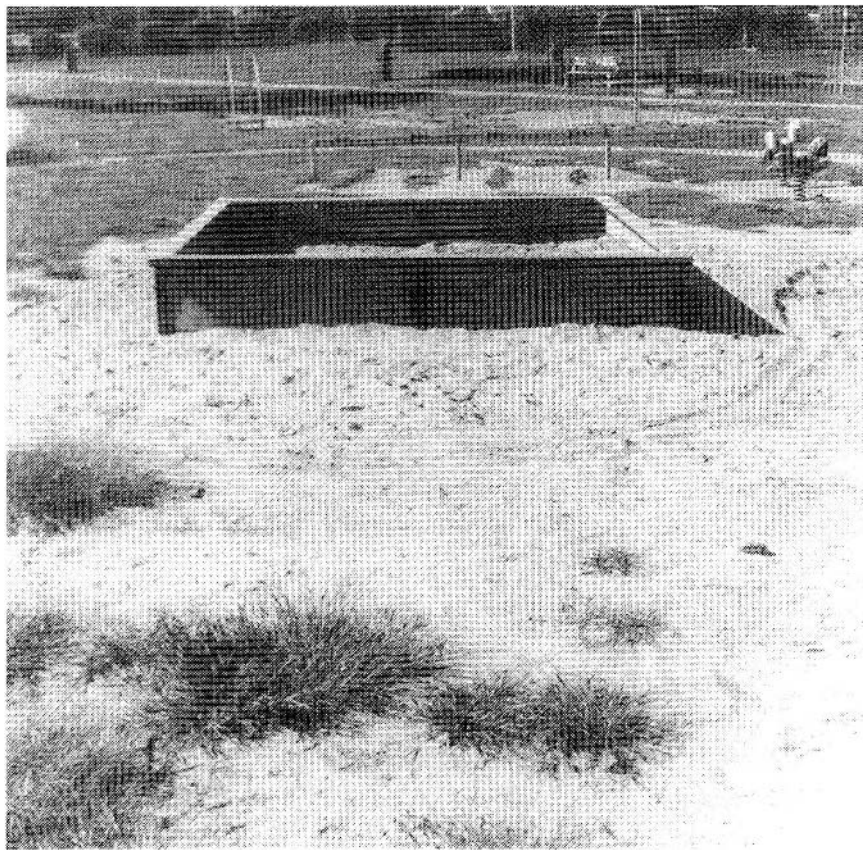
The dialectic of site and nonsite was already a theme in an earlier work that drew Smithson to his place of birth. On 30 September 1967 the twenty-nine-year-old artist left his home in New York and travelled by bus to Passaic, New Jersey. There he visited an industrial area west of the Hudson River in which he grew up and that may well be the source of his interest in the dialectic of site and nonsite. Viewed from Manhattan, Passaic is a suburb, an outer perimeter, a no man's land, a nonsite, but from the artist's perspective it is his home, the site of his origin. His observations and experiences during this excursion he described in a kind of travelogue, titled "The Monuments of Passaic," that appeared in the revue *Artforum* in December

1967.² The photos accompanying the article, taken by the artist himself, show the monuments he visited, among them many industrial constructions connected to the building of a highway. These are temporary monuments, which he describes as "ruins in reverse ...", the opposite of 'the romantic ruin' because the buildings don't *fall* into ruin *after* they are built but rather *rise* into ruin before they are built."³ This idea brings him to question whether Passaic has replaced Rome as the Eternal City.⁴ The question itself can be interpreted as a dual reflection: on the one hand as a reflection of time, which is the reflection of past and present; on the other as a reflection of space in which Smithson exchanges the periphery with the centre, interpreting the nonsite Passaic as a site – as the centre that at one time was Rome.

At the end of his tour the artist came across an abandoned playground. The photograph taken of this location is titled *The Sand-Box Monument* (also called *The Desert*) (fig. 1). These two titles lead us to think that he was already interested in the dialectic of site and nonsite. The sandbox is defined – with clear boundaries – as the centre of the playground, but at the same time sand is outside the box. The specific site, which the sandbox represents, changes at its periphery to a nonsite: a desert. From the perspective of this periphery the pre-existing centre becomes a nonsite, and the periphery the site. In addition to the dialectic of space there is also one of time, in that this place of friendly children's games becomes for the artist a metaphor of "infinite disintegration and forgetfulness."⁵

The Sand-Box Monument can be read as a model for Smithson's dialectical concept of space. This concept of site and nonsite is also the main theme of his series of the so-called "Nonsite" works, such as *Double Nonsite, California and Nevada* from 1968 (fig. 2), a work similar to *The Sand-Box Monument*.⁶ It consists of two elements: a sculpture of many pieces on the floor, and a picture hanging on the wall. The picture is composed of two sections taken from maps showing areas in California and Nevada in which Smithson collected the volcanic stones that are exhibited in the floor piece. The way the stones

Figure 1. Robert Smithson, *The Sand-Box Monument*, also called *The Desert*, 1967. Photograph, Museet for samtidskunst, Oslo (Photo: reproduced from Ann Reynolds, *Robert Smithson. Learning from New Jersey and Elsewhere*, Cambridge, Mass., 2003, 119; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



are presented in one rectangular and four trapezoid boxes reflects the presentation of the map, one being the frame and the other the picture.

By calling this work a nonsite, Smithson creates a dialogue with the site from which the material originates and that he encourages spectators to visit. The artwork is a nonsite (similar to the rectangular container of the sandbox) in the sense that it is only an abstract model of a site that in reality is characterized by its lack of boundaries, by fragility, and by its chaotic and entropic nature (similar to the desert surrounding the sandbox). By distinguishing site and nonsite, Smithson turns our attention away from the specific object, which was the centre of interest of Minimalism, to the unspecific site – to nature and landscape – which he perceives as open, unlimited, and subject to constant change. As these sites in their boundless existence are not really perceivable, the artist creates a dialogue with the nonsite of the artwork.

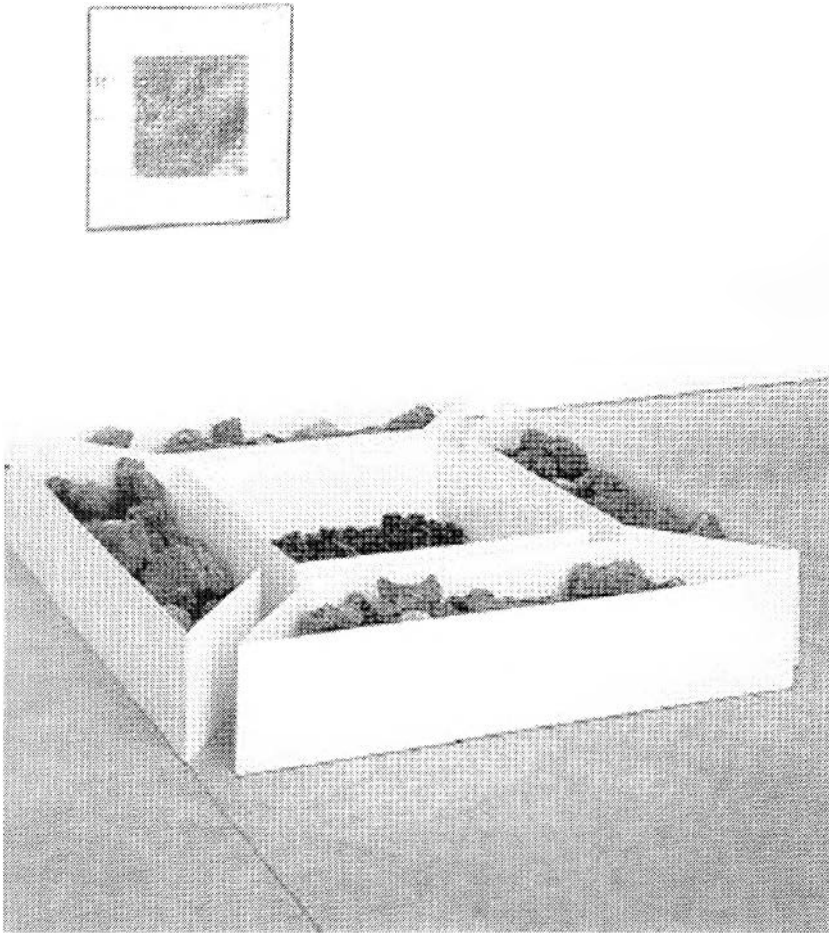
The differentiation between nonsite and site that in this work designates the relationship between the artwork in the protected space of the museum and the entropic nature outside is a differentiation that Smithson also employs for the site itself.

For him the space outside, in nature, is also subject to the dialectic of site and nonsite, which was already obvious in the example of *The Sand-Box Monument*. In his report about his trip to Passaic, there is a passage in which Smithson explicitly addresses this dialectic of real space. He describes an experience that took place in the centre of Passaic, in a large parking lot. It seemed to him as if this place in the city was transformed into a mirror and at the same time a reflection, mirror and reflection becoming interchangeable so that “one never knew what side of the mirror one was on.”⁷ I assume it was the monotonous form of the row of houses surrounding this area, or the reflective bodies of the parked cars, or perhaps the shimmering light that helped to create the artist's vision of a place that in no time changed to a nonsite and back: a place that was mirror and reflection at the same time; a place where reality and fiction interchanged. *Alice's Adventures in Wonderland* and *Alice Through the Looking Glass* by Lewis Carroll – favourites of the artist – give their regards.

In the same year, 1967, that Smithson travelled to Passaic and studied the dialectic of site and nonsite, Michel Foucault gave a lecture in Paris about a similar subject: “Of Other Spaces.”⁸ Not published until 1984, today this lecture finds a lively reception in the context of recent discussions of the problem of space. There are certain parallels between Foucault's and Smithson's conceptions of space, which – I believe – have not been discussed up until now. With this comparison I am not assuming there was a dependency between them. But the parallels are more than coincidence, considering the wide reading of the artist and the fact that Smithson and Foucault were contemporaries.⁹

Like Smithson, Foucault was interested in space in terms of its dialectic of site and nonsite. “Other spaces” he defines as being characterized by the fact that they refer to *all* other spaces, in the sense that they simultaneously represent and criticize the conditions of these places. In Smithson's terminology, Foucault's other spaces are nonsites referring to real sites. Foucault distinguishes two types of other spaces: utopias and heterotopias. In his lecture he is exclusively interested in heterotopias, defining them as real spaces, in contrast to the unreal spaces of utopias. But heterotopias have in common with utopias that they are also a kind of counter-site. Foucault's examples of heterotopias include museums, libraries, theatres, cinemas, cemeteries, psy-

Figure 2. Robert Smithson, *Double Nonsite, California and Nevada*, 1968. Steel, obsidian and lava, 12 × 71 × 71 in. Christie's New York, 3 June 1998 (Photo: reproduced from www.askart.com; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



chiatric clinics, and prisons. What all these other spaces have in common is summed up by Foucault at the end of his lecture using the metaphor of the boat, which for him epitomizes another space: a kind of nonsite, a floating piece of space, closed in on itself, and at the same time – what makes it so fascinating – given over to the infinity of the site that surrounds it: the infinity of the sea. Foucault's metaphor of the boat and Smithson's metaphor of the sandbox thus both seem to be based upon the same dialectical concept of space.

A further parallel between Smithson and Foucault is that they both use the metaphor of the mirror to explain their dialectical concepts of space. According to Foucault, the working of a mirror can be compared to utopias as well as to

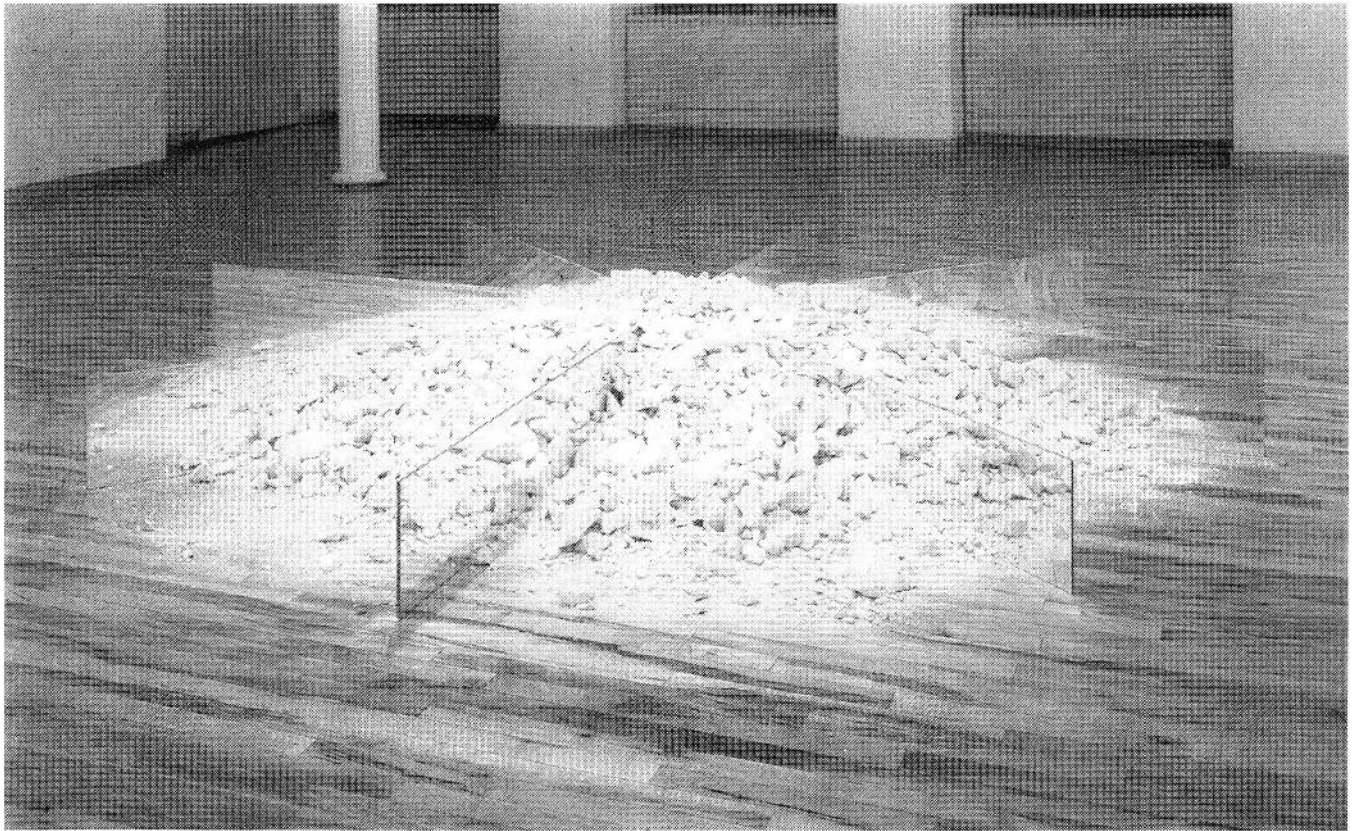
heterotopias. "The mirror functions as a heterotopia in this respect: it makes this place that I occupy at the moment when I look at myself in the glass at once absolutely real, connected with all the space that surrounds it, and absolutely unreal, since in order to be perceived it has to pass through this virtual point which is over there."¹⁰ In a similar way, Smithson uses the metaphor of the mirror when speaking about art's relation to nature. He says: "It's like the art in a sense is a mirror and what is going on out there is a reflection. There is always a correspondence."¹¹ And, he states: "You're always caught between two worlds, one that is and one that isn't."¹² Like Foucault on "other spaces," Smithson interprets the relation between art and world, not by assigning the art to fiction and the world to reality, but in terms of a permanent interchange between fiction and reality. At one moment the mirror is perceived as reality, and what it reflects seems unreal. In another moment, it is the reflection that represents reality, and the mirror seems to be a fiction.

After this general and theoretical introduction to Smithson's dialectical concept of space, I would like to discuss in greater depth the methods the artist used to represent this concept. In the first part I only touched on this question of representation. I will now explore it more concretely with two further works that are characterized by the use of mirrors. The artist used mirrors not only as a metaphor in his theoretical texts, he worked with them in a concrete way as well, in a direct transfer of his theory on his praxis.

Both works belong to a larger group of so-called "mirror displacements," which Smithson developed starting in 1968.

Chalk-Mirror Displacement of 1969 (fig. 3), a further development of the nonsite works of the preceding years, can be interpreted as an attempt to make the dialectic of site and nonsite visible in the work itself.¹³ The piece consists of a pile of chalk rocks with eight double-sided mirrors protruding from it in a star-shaped formation. The arrangement is reminiscent of Smithson's 1967 work entitled *Entropic Pole* (fig. 4). A section of a map of a swamp zone near Passaic was the basis for this work. This map, cut into a dodecagon, was covered by Smithson with a star-shaped screen instead of the more usual horizontal/vertical screen. The lines of the screen draw the eye into a

Figure 3. Robert Smithson, *Chalk-Mirror Displacement*, 1987 version of a 1969 work. Double-sided mirrors and chalk, 10 × 120 × 120 in. Art Institute of Chicago (Photo: reproduced from Jennifer L. Robert, *Mirror-Travels. Robert Smithson and History*, New Haven and London, 2004, 46; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



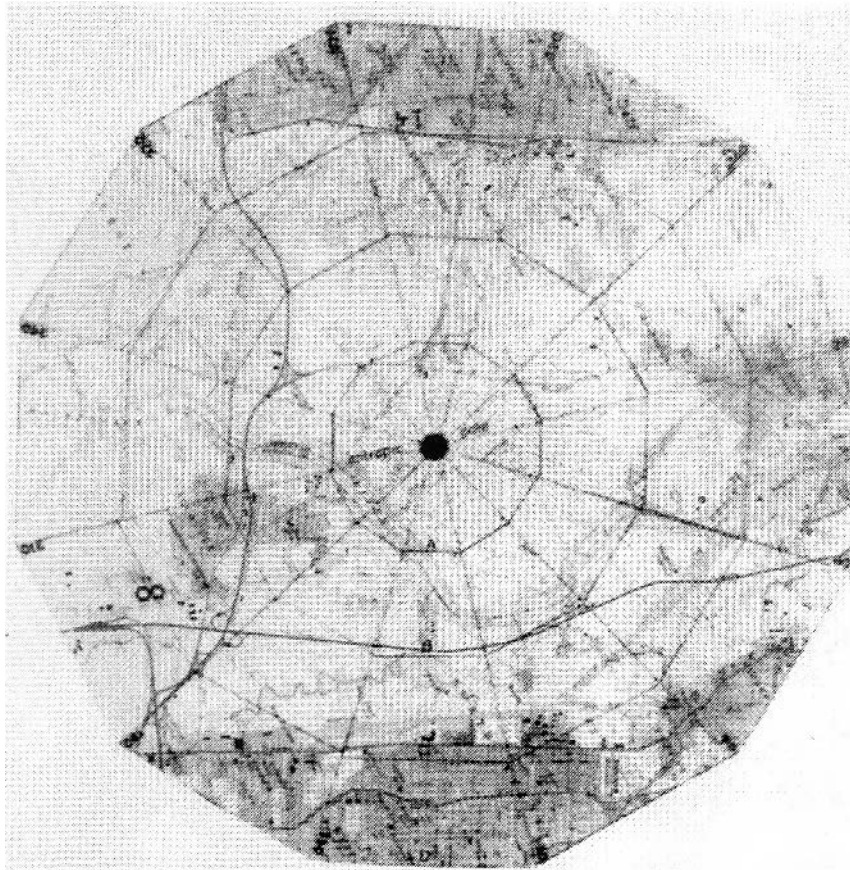
middle area, the swamp zone, which in this manner is interpreted by the artist as the centre, a site. The designation “entropic pole” indicates, however, that this site is at the same time a nonsite in the sense that although the orientation of the work draws the focus to this site, the site itself is without orientation. It is a black hole in which the needle of a compass would spin without being able to point in any one direction.

Chalk-Mirror Displacement functions in a similarly dialectical manner. In the centre, at the highest point of the pile, there are only rocks. Here we have nature in its pure form, while at the same time, on the edges, the mirrors stand out of the amorphous pile like coordinates or artefacts. In this constellation the middle is emphasized as the actual site, a physical somewhere, while the periphery becomes a nonsite in the sense of being an abstract nowhere. Simultaneously, one can read the work in reverse fashion: taken from the perspective of the centre, the stone pile has a limited expanse, making it a nonsite in the sense of an artistic artefact. At the same time, as it is revealed to the observer looking in from the perspective of the edges, placing his or her head in between the double reflecting mirrors, it becomes a site of infinite depth. In *Chalk-Mirror Displacement* Smithson attempts to free the work of art from its

role as a mere limited analogy of the expansive implications of the natural original. Smithson liberates artworks from the boundaries of the nonsite by opening them up to the infinity of their own inner possibilities.

It was in keeping with Smithson's larger artistic practice that he chose to move his further reflections on the dialectic of site and nonsite out of the confines of the gallery, to the actual site itself. A great number of the mirror displacements were conceived outdoors, including what is probably his most famous mirror piece, *Incidents of Mirror-Travel in the Yucatan*, which the artist published in *Artforum* in 1969 (figs. 5, 6).¹⁴ This work was the result of a trip in the Yucatan region in Mexico. Smithson visited nine sites, performing the same ritual at all of them. In this ritual he placed approximately a dozen mirrors at the site, burying some in the ground and nesting some in the branches of trees, and then he photographed the result before removing the mirrors. Our only source for Smithson's activities is the report that the artist himself published. Because all traces of the mirror displacement were removed, the report serves as more than just documentation; it becomes itself a part of Smithson's work by performing the function of a nonsite that makes references to a site by reflecting it. This aspect of the

Figure 4. Robert Smithson, *Entropic Pole*, 1967. Map, 24 × 19 in. Collection: Estate of Robert Smithson (Photo: reproduced from Robert Hobbs, *Robert Smithson: Sculpture*, Ithaca and London, 1981, 97; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



relationship between report and the work of mirror displacements has been discussed in depth in the literature on Smithson.¹⁵ Therefore, I will limit my analysis to the actual act of mirror displacement.

What did Smithson intend with these outdoor mirror displacements? We first notice the large number of mirrors that he used. If one sees the mirror as an instrument that serves the artist by capturing nature on a two-dimensional plane, as did the original myths concerning picture-making, one could see Smithson using his mirror displacements to confront nature with simultaneous, identical pictures of itself. One may think of Leonardo's *Treatise on Painting*, where the use of a mirror is recommended to test the construction of the image in comparison with nature.¹⁶ However, while a single mirror was enough for Leonardo's needs, Smithson used many, such that a different section of nature appeared in each mirror. In this work, the artist confronted the conventional perspectival or monocular view of nature, a view represented by the medium of the photography used by Smithson for the documentation of the mirror works, with a polyperspectival view, represented by the numer-

ous mirrors that he displayed and displaced. Smithson was interested not only in a traditional view, focused on the centre, on the site in the sense of the real places visible in his photographs; he was also interested in expanding the focus to the edges of the site to which the mirror images refer.

This interpretation is based on the large number of mirrors used, and is also made more plausible by the manner in which Smithson placed the mirrors at each site. It is remarkable that he generally laid them on the ground horizontally, sometimes even covering them with soil. In general, they reflect the sky or the sunlight. While the photographs of the mirror displacements are shot facing the earth, the mirrors direct our perception in the opposite direction by bringing the sky into the picture. In their materiality the mirrors, along with the soil, the sand, and the rocks that surround them, mark a centre, a site, at the same time as they make visible the periphery: nonsites like the sky and the light. The mirror displacements in natural settings gave Smithson access to the open, irrational, mysterious aspects of each site, which at the same time made nonsites of them.

Smithson's report on the performance in the Yucatan is full of references to the history of the area.¹⁷ As the text encourages us to believe, the old gods who were worshipped by the Mayans in these places accompanied the artist's every step. For example, he describes how he looked into his rear-view mirror and saw Tezcatlipoca, demiurge of the "smoking-mirror," who told him: "You must travel at random, like the first Mayans; you risk getting lost in the thickets, but that is the only way to make art."¹⁸ The mirror, usually known as a symbol of truth because of its enlightening function, mutates in Smithson's text as well as in his mirror displacements into the opposite. It becomes an instrument that confronts the artist with the infinite vastness of the heavens, and also, as he himself says, brings him "into a groundless jungle."¹⁹

Smithson published his nine photos of the mirror displacements in the Yucatan all on one page in *Artforum*, in three rows of three (fig. 7).²⁰ Here he uses a form of presentation that he used for many of his works and that is based on the model of maps. This aspect could be the subject of a separate article, and I can only touch briefly upon it now. Why the map as a model, when these are photographs? One parallel can be

Figure 5. Robert Smithson, *Yucatan Mirror Displacement #1*, 1969. Chromogenic-development slide. Solomon R. Guggenheim Museum, New York (Photo: reproduced from Jennifer L. Robert, *Mirror-Travels. Robert Smithson and History*, New Haven and London, 2004, 98; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



found between the coordinates used in cartography and the grid of the spaces between the photos in Smithson's presentation. More important, however, is the multiplication of images, which can be seen as analogue to the definition of the map in a purely mathematical sense: as an abstract visualization of an infinite

number of pictures. In the multiplication of images in his presentation of his works, Smithson echoes and emphasizes the multiplication already present in his initial act of displacing multiple mirrors and of repeating the ritual of the displacement not once, but nine times.

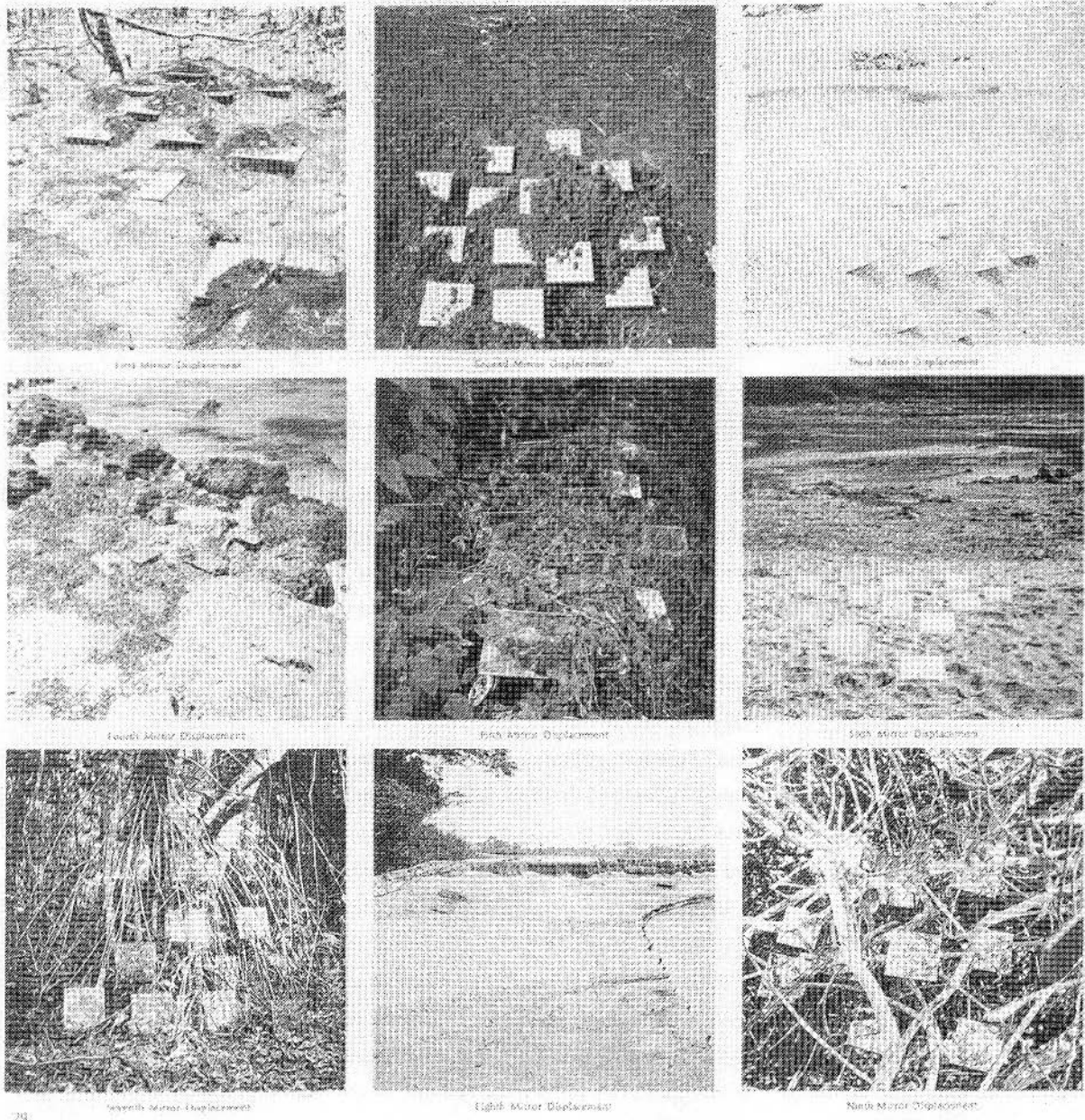
Figure 6. Robert Smithson, *Yucatan Mirror Displacement #2*, 1969. Chromogenic-development slide. Solomon R. Guggenheim Museum, New York (Photo: reproduced from Jennifer L. Robert, *Mirror-Travels. Robert Smithson and History*, New Haven and London, 2004, 99; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



Around 1970, many artists, in addition to Smithson, used the map as a model. Gerhard Richter was one of these artists. As a conclusion, I present a single work of his and compare it to the work of the American artist I have been discussing. I have selected one of the panels from Richter's *Atlas*, an enormous work the artist began in the 1960s and is still working on today (fig. 8).²¹ The panel, dated 1970, unites nine cloud photographs ordered in a formation that, at first glance, suggests a

window. However, when studied closely, each photograph shows a slightly different cross-section of the sky. The composition does not follow the model of the Albertian window, but rather of a map. The grid or net of coordinates, formed by the spaces between the photos, creates the illusion of a whole composed by different parts, while at the same time the varied sections of images indicate that the reality is too multiform and complex to be represented by a single view. The latter is one of the reasons

Figure 7. Robert Smithson, *Nine Mirror Displacements*, as reproduced in *Artforum* VIII, 1 (September 1969), 29 (Photo: reproduced from Ann Reynolds, *Robert Smithson. Learning from New Jersey and Elsewhere*, Cambridge, Mass., 2003, 178; © Estate of Robert Smithson / Licensed by Vaga, New York, NY).



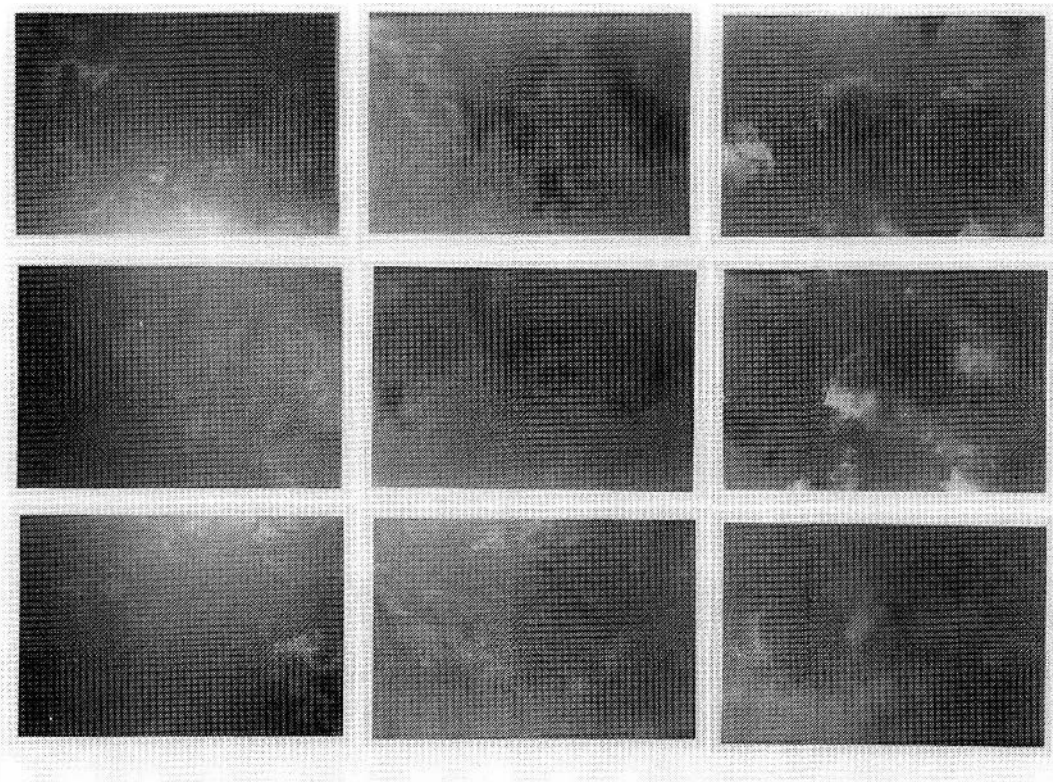
for Richter's interest in clouds and cloudy skies, which for him are a perfect example of complexity, variance, and contingency in nature.²²

The marriage of photograph and map may at first seem to be an attempt to create order in the chaos of natural phenomena. In the end, however, it can prove to be the opposite.²³ Richter's cartographic view, which forms the basis for the entire *Atlas*, is not meant to create order or structure in nature, but

rather to reveal the chaos and unpredictability of nature's diversity. This diversity, synonymous with infinity, can only become visible – and this is why Richter subjects himself to the enormous undertaking of his *Atlas* – within a certain order: within the finite order of this instrument.

To see finiteness and infinity as related to each other is also the intention behind Smithson's borrowings from the world of cartography. It is the theme of his distinction between site and

Figure 8. Gerhard Richter, *Clouds*, 1970 (*Atlas*, plate 211). 9 color photos, 36.7 × 51.7 cm. Städtische Galerie im Lenbachhaus, Munich (Photo: reproduced from Gerhard Richter, *Atlas der Fotos, Collagen und Skizzen*, ed. Helmut Friedel and Ulrich Wilmes, Cologne, 1997, plate 211; © Gerhard Richter).



nonsite, and it is the dialectic represented in his mirror works. The artist found a particularly memorable image for this dialectic, comparing it to the relationship between a shell and the ocean. For a long time art critics and artists would have seen only the shell in isolation, whereas Smithson was considering the shell within the context of the ocean.²⁴

Notes

- 1 Martin Heidegger, *Die Kunst und der Raum* (St-Gallen, 1969); Maurice Merleau-Ponty, *Phénoménologie de la perception* (Paris, 1945); Gaston Bachelard, *La Poétique de l'espace* (Paris, 1957); Michel de Certeau, *L'invention du quotidien. Arts de faire* (Paris, 1980); Michel Foucault, "Des espaces autres," in Foucault, *Dits et Écrits 1954-1988*, vol. IV (Paris, 1994), 752–62; Marc Augé, *Non-Lieux. Introduction à une anthropologie de la surmodernité* (Paris, 1992).
- 2 Robert Smithson, "The Monuments of Passaic," *Artforum* VII, 4 (December 1967), 48–51; cf. Robert Smithson, "A Tour of the Monuments of Passaic, New Jersey," in Robert Smithson, *Collected*

Writings, ed. Jack Flam (London, 1996), 68–74.; cf. Robert Hobbs, *Robert Smithson: Sculpture* (Ithaca and London, 1981), 88–94.

- 3 Smithson, *Collected Writings*, 72.
- 4 Smithson, *Collected Writings*, 74.
- 5 Smithson, *Collected Writings*, 74.
- 6 Hobbs, *Smithson: Sculpture*, 115–17.
- 7 Smithson, *Collected Writings*, 73.
- 8 Michel Foucault, "Des espaces autres" (lecture given at Cercle d'études architecturales, 14 March 1967), first published in *Architecture, Mouvement, Continuité* 5 (October 1984), 46–49; Foucault, *Dits et Écrits*, 752–62.
- 9 A list of all books in Smithson's library, compiled and organized by Lovi Cagnano, in Ann Reynolds, *Robert Smithson. Learning from New Jersey and Elsewhere* (Cambridge, Mass., 2003), 297–345.
- 10 Foucault, *Dits et Écrits*, 756, trans. Jay Miskowicz, <http://foucault.info/documents/> (2 July 2006).
- 11 Smithson, *Collected Writings*, 187.
- 12 Smithson, *Collected Writings*, 249.
- 13 Hobbs, *Smithson: Sculpture*, 169.
- 14 Robert Smithson, "Incidents of Mirror-Travel in the Yucatan,"

- Artforum* VIII, 1 (September 1969), 28–33; cf. Smithson, *Collected Writings*, 119–33; cf. Hobbs, *Smithson: Sculpture*, 151–61.
- 15 See among others Hobbs, *Smithson: Sculpture*, 14, 25, 151–54.
- 16 Leonardo da Vinci, *Sämtliche Gemälde und die Schriften zur Malerei*, ed. André Chastel (Munich, 1990), 206.
- 17 Jennifer L. Roberts, *Mirror-Travels. Robert Smithson and History* (New Haven and London, 2004); see esp. 86–113 for details on Smithson's travel in the Yucatán.
- 18 Smithson, *Collected Writings*, 120.
- 19 Smithson, *Collected Writings*, 124.
- 20 Robert Smithson, "Incidents of Mirror-Travel in the Yucatan," 29.
- 21 Gerhard Richter, *Atlas der Fotos, Collagen und Skizzen*, ed. Helmut Friedel and Ulrich Wilmes (Cologne, 1997).
- 22 About Richter's interest in clouds, see Johannes Stückelberger, *Blicke ins Unendliche: Wolkenbilder des 20. Jahrhunderts*, Habilitationsschrift, Universität Basel, 2002 (publication 2007).
- 23 Johannes Stückelberger, "Mapping the sky. Wolkenkartographie in der Meteorologie und bei Gerhard Richter," in Stephan Kunz et al., *Wolkenbilder: Die Erfindung des Himmels*, exh. cat., Aargauer Kunsthaus (Aarau, 2005), 163–69.
- 24 Smithson, *Collected Writings*, 371.