

## SMITHSON'S SPIRALS, PATAPHYSICS, AND SYZYGY

Edward Shanken

## ABSTRACT

Robert Smithson read about various scientific topics and applied this knowledge to his work, but he was fundamentally anti-institutional, and was as skeptical of science and industry as he was of environmentalism and the art world. His artworks and writings are brilliantly insightful, formally resolved, and logical as well as infuriatingly opaque, unresolved, and incoherent. He died at the age of thirty-five, leaving us to wonder how his work might have matured, and what clues his subsequent production might have offered to understanding his *oeuvre*.

Like the pataphysical proposals of late nineteenth century author Alfred Jarry, who died at thirty-four, Smithson seems to have been seeking out and articulating an alternate reality, a new system of values in which the "imaginary nature of things as glimpsed by the heightened vision of poetry or science or love can be seized and lived as real" (Shattuck ix). In contrast to the academicism of prevailing trends in art research today, Smithson's work seems much more aligned with the pataphysical pursuit of "imaginary solutions" that examine "the laws governing exceptions" and describe "a universe which can be – and perhaps should be – envisaged in place of the traditional one" (Harris fn 13). In this respect, the work of both Jarry and Smithson can provide a useful corrective to an overly rationalistic approach to art research, offering the field – and contemporary art in general – potentially valuable tools for forms of practice that challenge rather than adopt conventional academic models and epistemological constructs.

The copious scholarly and critical writing on Smithson has made very little of the many parallels between the inventor of earthworks and the author of pataphysics, despite the established fact that the artist read Jarry while working on the *Spiral Jetty* in 1970, which undoubtedly influenced the subsequent *Broken Circle &/ Spiral Hill* (BC &/ SH, 1971, Emmen.) This oversight can be explained in part by current trends in Smithson scholarship, which disparage readings of the artist's work that emphasize symbolic and/or mystical inferences. Nonetheless, given the insightful literature reassessing Jarry's influence on twentieth century artists including Marcel Duchamp, John Cage, and Rodney Graham, a consideration of Smithson's spiral earthworks in connection with Jarry is long overdue (Harris, Anastasi).

The spiral is a central symbolic figure for both Robert Smithson and Alfred Jarry, adorning the latter's well-known illustration of *Père Ubu* (1896) and serving as a recurring theme in *Exploits & Opinions of Doctor Faustroll*, *Pataphysician*, written in the 1890s and published posthumously in 1911. Early in the story, Dr. Faustroll bathes in "two-tone wallpaper painted by Maurice Denis, with a design of trains climbing up spirals." Later in the story the pataphysician drowns, and "the wallpaper of Faustroll's body was unrolled [another spiral form] by the saliva and teeth of the water.... Like a musical score, all art and all science were written in the curves of [his] limbs, and their progression to an infinite degree was prophesied therein." The narrative continues with the following passage, which Smithson entered in his notebook, "A Metamorphosis of the Spiral":

For, just as Professor Cayley [British mathematician] recorded the past in the two dimensions of a black surface [chalk-board], so the progress of the solid future entwined the body in spirals" (99).

Jarry's pataphysical spiral metaphor (or rather, pataphor) holds potential for interpreting a Smithson's spiral earthworks and their relationship to each other. Following the passage quoted by Smithson, the essentially two-dimensional *Spiral Jetty* may be read as recording the past, while his three-dimensional *Spiral Hill* – an inverted vortex – may suggest a prop for envisioning the future.

Recognized as a key inspiration for surrealism, Jarry insistently joined sense and nonsense, art and science, religion, and perversion. By creating friction through unexpected juxtapositions, and by destabilizing meaning through leaps of logic, he challenged the epistemological foundations of institutional knowledge. Similarly, Smithson was fascinated by science and technology but no more so than he was fascinated by science fiction novels and B-movies, having an "almost mediumistic sensitivity to the cryptanalysis of pop culture," according to his friend, artist Carl Andre (102). Much has been made of Smithson's interest in geology, geological time, mineralogy, the molecular structure of crystals and glass, and, of course, the Second Law of Thermodynamics, known as entropy: the tendency of closed systems to lose energy or order. Similarly, Jarry, who considered a career in science and studied philosophy with Henri Bergson, gravitated toward the "eccentric brilliance" and "bizarre experiments" of Lord Kelvin, who proposed an early theory of entropy, and Clerk Maxwell, whose "Sorting Demon" thought experiment attempted to defy the Second Law of Thermodynamics in order to achieve a net gain of energy. For Jarry, "science was an adventure, domestic and transcendent." (Shattuck, xiv-xv) The same could be said of Smithson.

Following the spiral path shared by Smithson and Jarry offers further insight into some possible meanings of this dynamic form in BC &/ SH. The common meaning of spirals as symbolizing a spiritual journey is particularly poignant, given the pilgrimage required to visit any of Smithson's earthworks. Smithson's performance in the film *Spiral Jetty*, at the end of which the artist runs the length of the spiral counterclockwise from the shore to its center core, has been described as a "reiteration of innumerable initiation rites" (Lippard 225). This cinematic journey does not offer a unequivocally transcendent moment but, in contrast to Klee's theorization, tends towards total unfulfillment (Klee 1961). After reaching the terminus, Smithson, slightly out of breath, seen from the back at roughly

forty-five degrees overhead, looks out south-southwest (away from the shore and over the lake.) His figure recedes into the distance as the helicopter filming him pulls back and up into the sky. The ascent of the camera's eye might symbolize a form of spiritual liberation, an ascension in which the artist's eye/mind is freed from its body by following an inward-turning path. At the same time, reaching the inner tip of the spiral has an anticlimactic quality that suggests nothing particularly mystical so much as it seems to confirm, as the artist's monotonous voice-over intones, that it is all just "mud, salt crystals, rocks, water" in every direction. The film leaves Smithson at the tip of a serpent's tail, arrested in time if not history, "bound to the centre" of the spiral that, to use Klee's words, "in the end will swallow [him] up" (399) - a conclusion possible only in the fictional cinematic construction.

Smithson's earthworks elicit completely immersive experiences that are highly charged with affect. They invoke an expanded awareness of space and time and of energetic forces that elude rational analysis on the basis of science, formal qualities, and media. Notwithstanding the film's strategic defiance of the inevitable (i.e. it ends with Smithson at the center of the spiral), anyone who walks the *Jetty's* counterclockwise spiral path from shore to core must reverse direction and walk clockwise from core to shore. Artist John Coplans noted "One enters *Spiral Jetty* backward in time, bearing to the left, counterclockwise, and comes out forward in time, bearing right, clockwise" (in Hobbs 47). This insight seems related to Jarry's own reflections on the spiral - albeit a three dimensional one - as holding the potential for embodying the future. By contrast, Smithson's film suspends the spiral journey into the future - at least as a corporeal experience - and placed in tension with the ephemeral liberation afforded by the spiraling camera, freeing the point of view-cum-spirit from the physical meat of existence.

While walking the decreasing radius of the counterclockwise spiral to its endpoint, I experienced at once a reduction and compression of energy, which was restored and released by walking clockwise along the spiral's increasing radius back to land. The diminished energetic state may offer a counterbalance to the hypertrophy of post-industrial life. Correspondingly, the compression that results from spiraling-in may be linked to a state of potential energy, which is transformed into the expansive release of kinetic energy during the process of spiraling-out. Whether or not one is transformed by the experience of walking the spiral, ultimately one returns back to where one started and heads into the future. Part of the beauty of Smithson's *Spiral Jetty* and *Spiral Hill* is that they offer fully embodied experiences of the energetic properties of spirals as architectonic forms that turn in both directions, contracting as the radius diminishes and expanding as it increases. It is unlikely that Smithson, who rejected the occult and Gnosticism, would have attributed anything mystical to the properties of spirals. But he might have accepted their ability to generate affective responses and physical effects, physiological parallels to the "crystal steps" that wind themselves "into a spiral during growth," (Verma and Krishna 207) to quote one of the scientific sources the artist employed in the film's script.

Smithson loved nature and he loved industrial detritus, but most of all he seemed to love their co-existence: the way that entropy was inevitably manifested in each, and particularly in their combination. For just as industry contributes to the degradation of its environment, so the environment contributes to the degradation of industry.

Indeed, the dilapidated remains of an abandoned oilrig and a withering industrial jetty in the red waters of the vast Salt Lake furnished for Smithson an aesthetically ideal setting for *Spiral Jetty*. The site of *BC & SH* provides a very different setting: a functioning sand and gravel quarry, filled with fresh aquamarine water, in which bull-dozers and other mining equipment, including a large dredging facility, continue to operate in the background of the artwork; or, rather, *BC & SH* co-exists in the background of the industrial site. This play of inversions between foreground and background, of nature and culture, art and industry is suggested in the very form of the *Broken Circle*, whose alternating and continuous arms of sand and water suggest the Taoist unity of yin and yang.

Returning to pataphysics and paraphrasing Jarry's description of the drowned body of Dr. Faustroll, can we "unroll" the body of *BC & SH* by the "saliva and teeth" of the many agents involved in its ongoing cycle of death and rebirth? Can we play it like a "musical score" in which "all art and all science are written in the curves.... with their progression to an infinite degree prophesied therein?" More background on Jarry's concept of pataphysics and, in particular, the term "syzygy" aide this approach.

Although *BC & SH* is generally recognized as Smithson's only successful land reclamation project, such a contention emphasizes the autonomy of the artwork. But *BC & SH* can equally be thought of as an ongoing art restoration project on the part of the quarry, which periodically must reclaim the artwork from the entropic forces of nature. According to Jean Baudrillard, it is this sort of reversal, this logic of turning things back on themselves in order to demolish illusory reality that underlies pataphysics (2007). Jarry defined pataphysics as "the science of imaginary solutions, which symbolically attributes the properties of objects, described by their virtuality, to their lineaments" (22). From this spiraling, winking, bird's eye's view, pataphysics launches its assault on science and philosophy through the death-defying adventures of Dr. Faustroll.

One of the key concepts in pataphysics is "syzygy," which refers to complementary active-passive, male-female pairs in Gnosticism. For psychoanalyst Carl Jung, this archetype symbolized "the communication of the conscious and unconscious minds: the conjunction of two organisms without the loss of identity" (Webster's Online Dictionary). In astronomy, syzygy is commonly used with respect to solar or lunar eclipses, when the alignment of the Sun, the Earth, and the Moon (or a planet) is such that one blocks the view of another by conjunction or opposition. As astronomical exceptions that can be elaborated by rules, such celestial accidents correspond to Jarry's basic tenets of pataphysics and they are central to the cosmologies of many ancient cultures and their earthworks. Such correspondences are particularly relevant to *BC & SH*, which has been referred to by Smithson scholar Ron Graziani as a "celestial observatory or an astro time machine" (125). Moreover, in the introduction to the English translation of Dr. Faustroll that Smithson read, Jarry scholar Roger Shattuck claims that the concept probably appealed to the author "because it suggests that something akin to crystalline form may emerge at intervals out of the random movements of the cosmos" (xvii). A general principle of complementary joined pairs can be seen in Smithson's site and non-site works and in his mirror displacements, in which the randomness of piles of salt (whose uniformly ordered molecular structure is crystalline) is juxtaposed with the apparent uniformity of mirrored glass (whose

disordered molecular structure is amorphous.) The particular ideas and rhetoric employed in Shattuck's claim would have appealed to Smithson's dual obsessions with randomness (entropy) and order (crystals).

Syzygy also is a useful concept for rethinking the relationship between the two sculptural forms that comprise the Emmen earthwork. Although Smithson apparently conceived of the elements as independent, autonomous works, referring to them as *Broken Circle* and *Spiral Hill*, he specified their creation in very close proximity to each other at the quarry and conceived of the former as a viewing platform for latter. The twin elements are now commonly referred to as *Broken Circle/Spiral Hill*, almost like a hyphenated marriage, but that convention makes an interpretive leap that must be questioned, as implied in my addition of an ampersand (&) preceding the slash (/) in the title, *Broken Circle &/ Spiral Hill*.

Regarding some of the "wild" accounts of *Spiral Jetty*, Smithson noted that "the force of the twister can get so intense that it breaks into imaginative, or fairy-tale results.... you're propelled into this central image ... in Technicolor" (Graziani, 119). Indeed, it is easy to get swept up in, or away by, the sublime aspects of Smithson's work and the artist might well reject an interpretation based on pataphysics and syzygy. At the same time, this approach offers a vantage not just for a rapturous reading but also for pointing out when the artist falls short of the mark. In contrast to the GSM, where the elliptical egg/eye/sun is distinctly connected by a continuous linear element through the coiled body to its spiral tail, the linear element of *Spiral Hill* begins (and returns) behind the mound, where *Broken Circle* is hidden (eclipsed?) by it. This sets up the biggest challenge to interpreting the two elements as a syzygistic pair. While ascending *Spiral Hill*, potential energy accrues as one gains altitude and is compressed by moving counterclockwise along the reduced radii. While the process and exertion of the ascent prepare one, like a pilgrim to a hilltop monastery, for the epiphany anticipated at the apex, the energy remains dormant. From the top of the hill one visually projects psychic energy to the circular altar, the intended object of one's gaze, which lies below (and to its surroundings), but one remains physically disconnected from it. While descending, the store of potential energy, combined with the desire for the circle, is released as kinetic energy. But Smithson's spiral leads nowhere. It ends abruptly at the base of the hill, slightly reversing direction and facing the woods.

How can one make sense of the energetic disconnect Smithson imposes between *Broken Circle* and *Spiral Hill*? Carl Andre, a self-professed Freudian, described Smithson as Jungian. (102). Following Jung's use of the term syzygy, perhaps it was paramount to the artist that "the conjunction of [the] two organisms [occur] without the loss of identity." Perhaps he intended to frustrate the viewer's expectations, to enforce a break between the viewer on the hill and the circle viewed below and between the syzygistic pairs that constitute the twin elements, to disrupt any Technicolor fairytale generated from the "force of the twister." Like the viewer of *Spiral Jetty*, the viewer perched atop *Spiral Hill* occupies a position not unlike that of Caspar David Friedrich's *Monk by the Sea* (1808-10) and *Wanderer Above the Mists* (c. 1818), so Smithson may have wanted to interrupt the sort of sublime reverie associated with the tradition of German Romanticism. Graziani interprets *Broken Circle* as a "disciplinary device in jeopardy ... a broken clock," with political implications regarding current ecological debates in which the circle figures as

a primary symbol and metaphor. Perhaps Smithson wanted to reinforce the broken state of *Broken Circle* – and by extension, the environment – by breaking the potential cyclical continuity between it and *Spiral Hill*. Andre described Smithson's writings as "incantations" that "follow like the lemmata [a subsidiary proposition] of an arcane and intricate theological argument" and he considered his major earthworks "less as signs to us than messages for the earth carved in her bosom" (102). Might Smithson have been practicing a form of artistic, pataphysical wizardry?

Smithson's work, like Jarry's "neo-scientific novel", creates a temporal lacuna in which past, present, and future seem to co-exist in the vast scale of geological time. The existence of Homo sapiens is but a blip in the course of geological events over hundreds of millions of years in the Earth's history. Perhaps it is Smithson's sensitivity to time, his awareness of continuity with ancient cultures, and his humility with respect to the planet's history that can offer the most useful insights for contemporary artists, particularly those whose work is engaged with the supreme virtuality of emerging technologies and social practices, desiring machines driven by market-driven cycles of ever more rapid development and obsolescence. Such technologies and behaviors are inseparable from the "large-scale death wish" that art historian Jack Burnham (1968) attributed to the ethos of rationalization that for centuries has dominated western civilization, all aspects of which, including science and art, necessarily were pulled into its seemingly irresistible undertow. Smithson recognized this social malady and his earthworks, including *BC &/ SH*, function as a palliative to it. In this sense, his works "shamanize us into realizing our true condition" Burnham 1974, 143). Following the logic of ancient cultural traditions, like those referenced in his earthworks, it is tempting to consider that Smithson's artistic, pataphysical, shamanic incantations "invert the evils of his tribe, and in doing so draw people away from substitute objects and back toward the ancient memories of life and productivity" (Burnham 1974, 144).

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