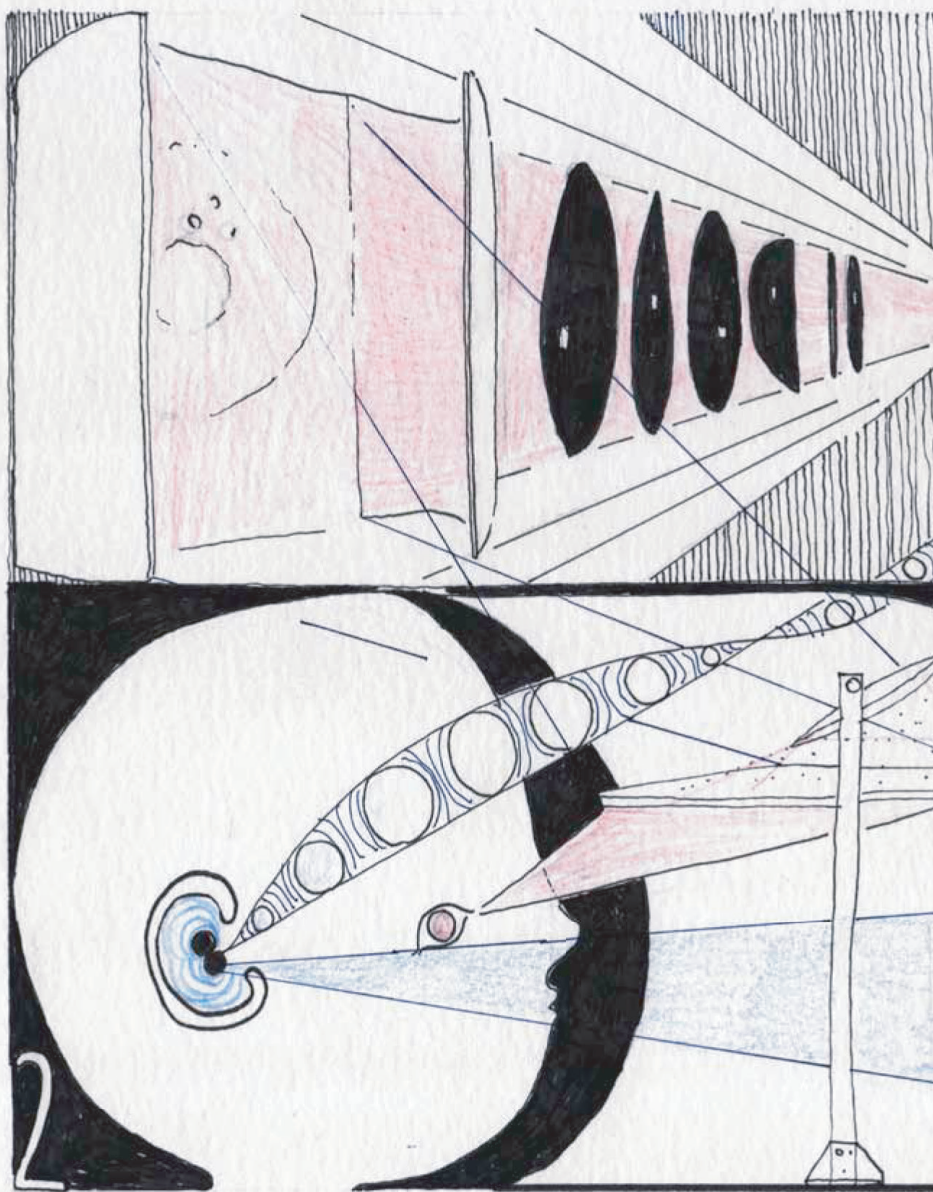


NATURAL MAGIC
Space 1



1.

But let's hear a story (another parable?):

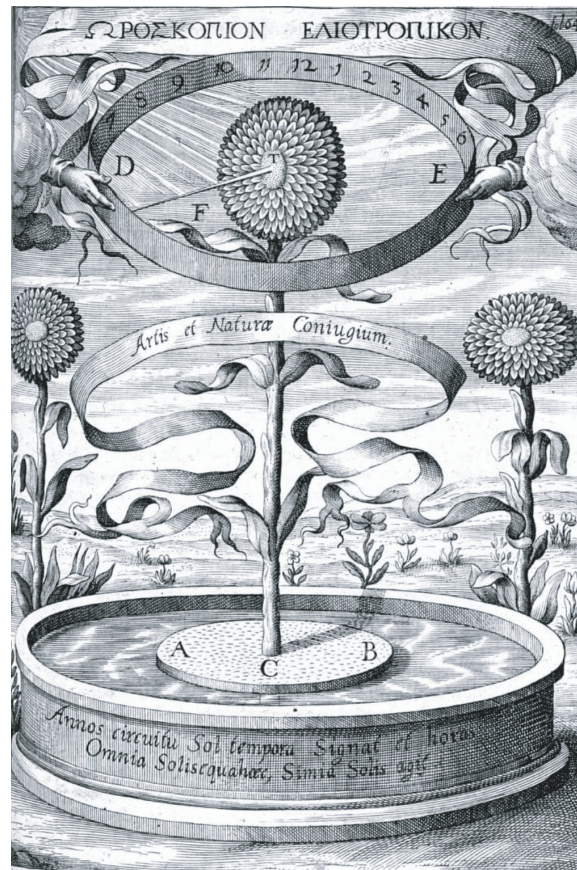
A hard man walks along a street
that ends at a forest just as in his childhood
he had walked through a forest that ended
at a street.

He looks around in all directions but avoids looking up
for someone had told him that human beings
only participate in events that occur
below eye-level,
and this phrase –below eye level–
grows as strong as that old phrase
–below, or above, sea level.

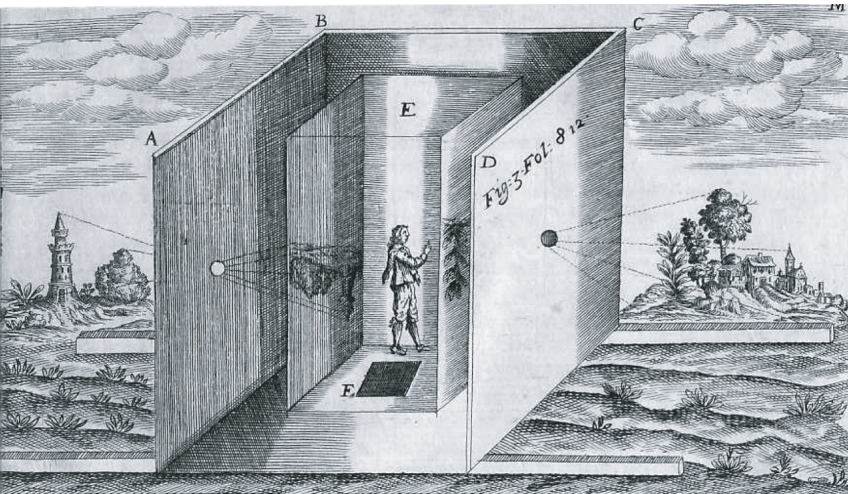


The journey begins in **Space 1** with a theatrical trick in two acts. The rotating pieces of lacquered metal positioned at the entrance contain small enamel paintings on pieces of glass overlaid with baked-on mineral powders. Mounted on tin, the paintings look like colored nebulae swept by heavenly winds. Inside the space, the film *The Sun Is Counting the Earth's Rotations* brings together two contrasting points of view that converge and influence each other: those of child and adult, analogue and digital recording, scale model and life-size scene . . . in short, those of the imagined and real worlds. The film is displayed on flexible, curved walls that multiply the images beyond the limits of the screen, enveloping viewers in different shades of color in a show in which they are the extras, background, and protagonists.

To a large extent, the dream logic of this dual space full of interrelated projections and reflections captures the paradigm of what comes next: its elements embody interests and forces that will be transformed—at times slightly, other times completely—in constant feedback throughout the next two rooms of the exhibition.



Athanasius Kircher, *Magnetica sive de Arte Magnetica* (Colonia Agrippinae: apud Iodocum Kalcoven, 1643), 644.



Athanasius Kircher, *Ars Magna Lucis et Umbrae* (Romae: Sumptibus Hermanni Scheus, 1646), 924. © Herzog August Bibliothek Wolfenbüttel

Magical Tricks, Cosmos, and Phenomenology

The Sun Is Counting the Earth's Rotations

Alicia Navarro



Etel Adnan, *The Arab Apocalypse*, 1989¹

It is crucial for media archaeology² today that we cease to think of the numerous magical devices operating in Western history as obsolete or obsolescent artifact-apparatuses. Let us follow instead the new materiality of dust that makes up the magical devices and the circular economy that opens out in ethereal space—the term used by Athanasius Kircher to refer to the area around the solar body in his 1635 observation chart.³ Let us enter into *Natural Magic*. According to Zoroastrianism, dust is the primordial matter of creation, as it has the capacity to alter both time and space. To paraphrase Jussi Parikka: let us take stardust.⁴ These particles forged in stellar winds are the origin of all terrestrial and celestial matter. Definitely nature's great mirror trick (macro-micro). Let us also take many of the instruments that were used to further explore the history of the Earth and the universe in its different stages, in order to look at the challenges of the Anthropocene today.

From the affective perspective stemming from her rejection of the humanist teleology of Etel Adnan, Donna Haraway, and Rosi Braidotti, Leonor Serrano Rivas explores new nonanthropocentric processes through the use of nonhuman objects (fabrics, technologies, transformations of chemical substances, wooden prostheses, reflective surfaces, etc.). She activates a Sun-machine (analogue-digital) that counts the Earth's rotations, thereby creating a personal

cosmos—an “endless theater,” according to the parameters of Frederick Kiesler and also of Athanasius Kircher—from scientific-magical and feminist perspectives. This new cosmos acknowledges the ongoing existence of secret places, of interactions to be restored, and of complementary and alternative inventions in the history of technologies. Which is directly and critically at odds with the false us (humans, hegemonic knowledge) / them (animals, plants, inanimate things) dichotomy. This cosmos approaches natural things in order to question how we interact with the world, or with the known worlds, and engage with other versions of the nature-culture continuum.

To move away from this hylomorphic fallacy is one of the suggestions of new materialism—understanding the various nonhuman components of nature as storage media for telling alternative stories of the world we inhabit. As Reza Negarestani argues in *Cyclonopedia*, each particle of dust is a crystallized database that contains a unique view of matter, movement, collectivity, and affect: “Xero*data, or dust, swarms planetary bodies as the primal flux of data or the Mother of all Data-streams in the solar system.”⁵ Thus, as the Sun-machine radiates its artificial life and we are flooded with the various nonhuman temporalities of the vibrations and rhythm it generates, Serrano Rivas decodes arts and knowledge of the past and present—using instruments or magical machines created centuries ago by philosophers, magicians, and scientists through their observations of the natural world. “I climbed the highest tower to look into the sun / My hair caught fire / My eyebrows burned! / But I saw tornadoes covered with flames storms viscera circles of magic / The sun put its head into its hands filled with tears / O yellow victory!”⁶

The first artifacts of the magical natural philosophers⁷ appeared in the West during the fifteenth and sixteenth

centuries.⁸ Interestingly, the experimental studies of Empedocles, Euclid, and Ibn al-Haytham—among other philosophical and practical principles from Asia Minor, the Near East, China, and India⁹—were the necessary seeds that allowed Giambattista della Porta to publish the first edition of *Magiae Naturalis* in Naples in 1558. This does not mean that there were no studies of natural things or “magical” processes in antiquity but rather that they had been understood as alternative practices and knowledge. Gnosticism, alchemy, kabbalah, hermeticism, and other philosophies of knowledge permeate much of the corpus that Rudi Visker, in the mid-1990s, called “anarchaeology,” or a collection of curiosities.¹⁰ These experimental practices coexisted harmoniously with numerous alternative religions and forms of spirituality until the advent of the ecclesiastical hierarchy, which laid waste to the development of certain forms of knowledge in the West by branding them diabolical. The Middle Ages were therefore a dangerous time for “magicians.”

Now, the idea of a “deep time of the media” directs our attention to the curious instruments of these scientist-magicians, inventors, and artisans. Machines, devices, and interfaces¹¹ that were used for both knowledge and play or entertainment. They distorted perspective, modified natural conditions, explored oceans and subterranean worlds . . . Interestingly, it was Athanasius Kircher, in *Mundus Subterraneus*, published in 1666, who created the concept of the “geocosmos,” which is the point of departure for the development of biogeography. In *Deep Time of the Media*, Siegfried Zielinski writes that history had to wait for the courage and shrewdness¹² of the scientist-magicians of the fifteenth, sixteenth, and seventeenth centuries. Later, this flame of experimentation burned in the hearts of the early Romantics and in the tumultuous spirit of avant-garde artists—both summoned up and gave rise to countless technical, artistic, and magical challenges. Now, in

contemporary artistic practices, we must once again become conjurors and “find something new in the old.”¹³ Feel the magical tricks that are still whispered by the apparatuses of the past.

Generally speaking, natural magicians or scientist-magicians had an attitude of respect and affection toward the world, a sense of wonder at the “miracles of nature” (the subtitle of Della Porta’s famous manual *Magiae Naturalis*), an extraordinary sensitivity to all branches of knowledge, and an unwavering taste for invention. In magical-natural practices of the past, both theory and practice were geared toward healing and positive knowledge. These scientist-magicians were usually not academics but rather independent figures in the spheres of knowledge of the time, but their instruments generated new explanations of the world—which, together with their research, gave rise to incredible revolutions. In fact, they were highly regarded, as long as they did not clash with the disciplinary matrices that had spread throughout Europe at the time (the state vs. the Church) in an all-consuming colonial expansion and co-optation of knowledge.

Scientist-magicians turned their research to the senses or sensory attractions (touch, taste, smell). Accordingly, theater was one of the key areas in which their magical and experimental contributions were revealed in the sixteenth and seventeenth centuries. Theatrical mirrors, expanding panes of glass, listening devices inserted or embedded in architectural structures, whispering galleries . . . these were just some of the instruments created by these magicians. While Della Porta founded the Academia Secretorum Naturae (Accademia dei Segreti), considered by scholars to be the first modern academy devoted almost exclusively to experimentation, Kircher carried out a large number of studies on topics ranging from Eastern knowledge to the exploration of volcanoes, to the construction of solar and



musical artifacts. He did this in order to organize knowledge about the phenomena of the world from a perspective of reciprocity.

Over the course of the sixteenth and seventeenth centuries, the concept of the “theater of the world”—which has its origins in the universal allegoricalness¹⁴ that governed medieval minds and their symbolic framework for understanding wonder and the supernatural—overlapped with the “world machine” concept used by Descartes, Juana de Asbaje, Isaac Newton, and geologist James Hutton, almost like a symbiosis of two natural organisms. In a sense, this overlap was also present in two of the greatest exponents of natural magic: Della Porta and Kircher. Many medieval concepts then underwent a radical change, and the theatrical view of the world as a natural and spiritual body (macro-micro) was replaced by the image of the world as machine, which became the dominant metaphor of cultural modernity. Later, the Earth became a prosthetic theater machine full of interfaces connecting its media (mineral, digital, human, plant, animal, etc.) in a quest for more sustainable realities.

However, it is also important to note that the attribute of continuous and infinite self-renewal is inherent to both visions of the world (as theater and as machine) in its earthly and cosmic realities—certainly neither posing problems of a future without natural abundance. These visions also contained both the infinite darkness and the creative composition that Reza Negarestani says remain present as story data in particles of dust. This idea of continuous progress was depicted in the books of natural magic—and in Robert Fludd’s occult engravings—by means of cones, rays, natural structures, triangles, ladders, and other symbols connecting man with the creative deities and the elemental and astral realms. Christianity must have been a considerable prop for natural magic, because the higher-lower versus

divine-human worldview regulated the entire rotational movement of the Earth, of life (human and nonhuman), and also of societies. A veritable trick of scales, reflections, and somewhat deceptive dualities.

It thus comes as no surprise that Renaissance and baroque theater was full of very real fires, clouds, specters, and winds, which were produced—site specifically—by magicians, for the amusement and amazement of the nobility. This theater created an experimental stage full of magical tricks and apparatuses constructed for the pleasure of the courts and palaces that requested it, albeit at great expense. There was and still is a relationship between the phenomenological realm and the instrumental objects of natural magic, insofar as they are staged or “displayed,” which is when they reveal hidden aspects of our reality. It is interesting to note that magical artifacts are inserted between the receiver and the world—as he or she knows it—in order to open up a sensorial space that differs from the everyday—although it is just as natural in terms of its material parameters. This requires a decentering from the anthropocentric magical attitude of the past toward a dissident, affective vortex.

Leonor Serrano Rivas’s critical and material reclaiming of these concepts through her artistic practice in *Natural Magic* shows that we are in the midst of a fruitful return to magical attitudes through media archaeology. And it reveals the enduring potential of past technologies for the creation of subversive optical and sound illusions. Magical artifacts are activated through a deliberate experimental, sensorial, and poetic shift, and at the same time the boundaries of human consciousness dissolve when they are shared with other material realities—which in turn tell their own stories against the Sun of the Anthropocene. Serrano Rivas, as magician, creates a world where many worlds fit . . . beings, machines, matter, stars, and stardust. A cosmic and earthly



place where all things (human, nonhuman) interact through interdiscursive connections—and have space and a voice of their own.

Giambattista della Porta and Athanasius Kircher are the scientist-magicians (astronomers, geologists, artists, zoologists, etc.) most relevant to Serrano Rivas's work of reviving obsolete or obsolescent devices. It is probably no accident that both men had experimental laboratories, wrote about theater, worked in library-archives—"a rich store of books and curiosities,"¹⁵ financed by an uncle in Della Porta's case and acquired by the Jesuit order in Kircher's—and ended up creating their own personal museums. Transfers between art and magical readings of natural phenomena are not new; they have been taking place for centuries, but technology offers us new challenges. Consider Leonardo da Vinci's inventions and the optical magic in the clouds in his paintings, the connections between Kircher's optical studies and the construction of Gian Lorenzo Bernini's Piazza Navona, Salvador Dalí devotedly reading Della Porta's writings, and the phosphorescent star and the celebration of nature in Serge Diaghilev's ballet *Ode* with its avant-garde apparatus.

To paraphrase Della Porta, only experimentation, with even the smallest things—if favorable, as is probable—opens the way to something greater.¹⁶ Meanwhile, Negarestani tells us that "there is no line of narration more concrete than a stream of dust particles. [. . .] Earth as a rebel disciple of the Sun is shelled with dust particles from within and without. For this reason, there is no fiction more original."¹⁷ It is clear that we are living in a time—the Anthropocene and Capitalocene—in which the Earth has rebelled, and many of us with it. But even while living in it, we can resist its exterminating powers and try to generate positive, affective, and respectful changes for future building. As Ursula K. Le Guin said, "resistance and change often begin in art."¹⁸ Based

on this conviction, Leonor Serrano Rivas asks: What worlds would have been possible if the machine-contraptions of natural magic had not fallen into the forgotten realm of obsolete objects? Are such worlds still possible?

We will now begin from a new solar star (*The Sun Is Counting the Earth's Rotations*)—a scientific, magical, natural, artistic, and theatrical mechanism-artifact, activated by Serrano Rivas on the basis of new parameters of natural magic. But before the Sun . . . there is darkness. Let us enter the magical trick.

KEY ASPECTS OF THE TRICK:

OPPRESSIVE FORCE: the Anthropocene — DISSENTING FORCE:
Kainos (in Donna Haraway's sense) — DARKNESS (CAMERA
OBSCURA—BLACK CUBE) — STARDUST — RED GIANTS — MIRRORED
SURFACES— THE SUN (LIGHT, SUN, PROSTHESES, STILTS . . .) —
THE MAGICIAN (CONJURER)

SPACE 1:

*and from the brain, now cleared,
phantasms had taken leave
and, being formed of lightest vapor,
converted easily to smoke or wind,
now late their shapes be dissipated.
Just so, the magic lantern [. . .]*

Juana de Asbaje, *First Dream* (vv. 868–873,
in reference to Athanasius Kircher), 1692¹⁹

Space 1 is a cosmic exhibition box. It is the basis for the discursive articulation of the other spaces in the exhibition—the Vaults Room and the Protocol Room—and for the various experimental magical tricks, sensible parts, and sensory

attractions. Like Frederick Kiesler's *Endless Theatre*, Space 1 explores the architectural possibilities of the Museum, aiming for a spatiality that is malleable, enveloping, and tactile, rather than static. Designed on the basis of different scales—cosmic, optical, theatrical, etc.—it creates the first magical space. The relationship between the nonhuman (objects, light, glitter, etc.) and human (museum visitors) elements is transformed and reinvented inside the box, in line with the implementation of the magical tricks. Our experience begins with one of the questions raised by Della Porta in book 4 of his first treatise of natural magic methods,²⁰ as we ask ourselves how we can see in the darkness that which is illuminated by the light toxicity of the Anthropocene Sun.

The *modus operandi* of sixteenth- and seventeenth-century scientist-magicians and their alchemy—Kircher's *Ars Magna Lucis et Umbrae* (1645–1646), the aforementioned *Magiae Naturalis*, and Robert Fludd's *Utriusque Cosmi* (1617)—reveals the starting point for the cosmic exhibition box and tricks of Space 1. Darkness fills the room, transforming it into a *cubiculum obscurum*—as Della Porta called the instrumental projection space of the camera obscura—while also diluting the narratives of the Anthropocene and their oppressive magnetism. The exhibition box or room becomes a space without words. Its darkness appears before us like Laurence Sterne's visual gesture in *Tristram Shandy* (1759–1767), when “night falls,” filling the text box or page of the novel,²¹ and also like the mystical and alchemical *Et Sic in Infinitum* presented by Fludd in *Utriusque Cosmi*, and Kazimir Malevich's suprematist *Black Square* (1915)—poetically and visually dissolving anthropocentric rhetorical loquacity in favor of the *cubiculum obscurum* that allows the trick to enter a nonanthropocentric cosmos.

Now, the “raw material” of magic—the stardust—appears in the exhibition box or cosmic apparatus. The magical



trick draws on the study of the two quintessential magic boxes: the magic lantern—which Kircher is believed to have created, and which was the icon of Czechoslovakian set design at Expo 58—and the camera obscura, used by scientist-magicians and also by astronomers Ibn al-Haytham and Maximilian Hell, architect Filippo Brunelleschi, and artists Leon Battista Alberti and Johannes Vermeer. It also draws on the alchemical process proposed by Robert Fludd to represent the origin of the universe. These magical-visual references shape the interior of the cosmic exhibition box. Six *Red Giants* or object-nebulae emerge, or are inserted, into the space, and the rotating of their nonhuman bodies is the alchemical metaphor of “a great Cosmic Dance,” which is how Carole Cusack described Rudolf von Laban’s perception of the movement of the different cycles of the universe in conjunction with nature and human beings.²² Interestingly, this vision was also present in early Western treatises on the art of dancing and in Rudolf Steiner’s avant-garde choreographies based on anthroposophical concepts.

The *Red Giants* are the chemical and poetic reflection of the universe, and their dance of rotation brings us into harmony with the heavens and the Earth. As astrophysicist Eva Villaver reminds us, “We often claim that we are stardust. In reality we are something much more ethereal: the crucible where its winds have mixed.”²³ Serrano Rivas is familiar with the circular economy generated in the planetary nebulae or in large nebulae such as NGC 3372 through the phenomenon known as stellar winds. In 1957, Margaret Burbidge and her research team demonstrated—publishing what is known as the B2FH paper—that biogenic chemical elements (oxygen, hydrogen, carbon, sulfur, and nitrogen, the future building blocks of life) are formed in the interior of stars at temperatures of millions of degrees. Like a vast alchemical

cauldron heated collectively and in unison by miniscule magnetic flares—we might recall Kircher’s 1635 *Schema Corporis Solaris* engraving, with its tiny flames and explosions.

Next, the stellar matter gathers around the surface of the heavenly bodies, and the dust joins the great dance of the universe as it is moved or pushed around by these winds (slight, explosive, spherical, etc.). Thus life is injected into interstellar movement—hence the importance that new materialism assigns to dust. Burbidge concluded, citing Shakespeare’s *King Lear*, that “the stars above us, govern our condition,” for we are made of stardust. This principle determines the configuration, as well as the material and chemical composition, of the six dancing nebulae, made up of a large surface plate (the macro) that encloses a small crucible of stellar-earthly life (the micro)—recall Asbaje’s lines inspired by Kircher: “Pyramidal death born shadow of earth aimed at Heaven / its proud point of vain obelisks pretending to scale the Stars / but these lovely lights—free always, always shining.”²⁴

This small piece was made with two glass plates subjected to high temperatures, which preserve a chemical history of altered pigments—their construction is a reference to the operation of the slides used in magic lanterns in the seventeenth century—in a kind of contemporary alchemy. Remember that alchemy, as we know it, was conveyed from the Arab world to the Christian West by way of Toledo in 1144, through the *Liber de compositione alchemiae*. This process of applied alchemical arts is a poetic and aesthetic reflection of the circular economy of space. The magician plays with chemical elements, such as the silicates²⁵ that are present in stardust and also in the human body and inside the solar mechanism-artifact (*The Sun Is Counting the Earth’s Rotations*). The magical trick materializes when the chemical evolution of the universe becomes a colorful abstraction—and the object-nebulae begin their rotation. As Vera Rubin

suggested, galaxies may be rotating around unknown centers. So let us follow the rotations of the object-nebulae in search of new unknown centers.

Mirrored surfaces are the next magical trick of Space 1. The human eye now activates the instrument that covers the walls of the room, functioning as a tactile, colorful phantasmagoria of reflections. As in John Bate’s engraving of a zoetrope in *The Mysteryes of Nature and Art* (1635), the viewers are inside the apparatus, feeling the spatial and sensory defamiliarization that results from the dance of the figures—or moving reflections—on their retinas. In the second scene of Federico García Lorca’s *El público* (*The Public*, 1933), the figure of the bells dances with the figure of the vine leaves: “If I changed myself into a cloud? I’d change myself into an eye”; “And if I were to change myself into a moonfish? I should change myself into a knife,”²⁶ etc. But let us return to theatrical mirrors and their history. Western studies of optics and the science of mirrors emerged tentatively in the third century with Euclid’s *Catoptrics*. It was then that scholars began to intuit that mirrored surfaces can function as transformers of the space we inhabit or the space that surrounds us.

The early avant-gardes are key to understanding the connections between today’s art and the immaterial, threshold, and hypnotic states of magic. But small mirrors—polished metal surfaces—have induced trance states and supernatural sensations since ancient times. And, of course, they were also a disturbing prosthesis that mimetically copied reality. It therefore comes as no surprise that Hero of Alexandria’s discoveries about mirrors would make them a permanent fixture in theater and the performing arts. Or that Seneca spoke of the use of reflective materials to cover walls or rooms—a desire shared by Marcel Duchamp,²⁷ who also pointed out their significance as an indicator of social and economic class.

A “theatrical mirror” is a device or an assemblage of mirrored surfaces, and its parts—the mirrors—form the liminal space that Gilles Deleuze and Michel Foucault spoke of. The uses of mirrors in natural magic are many and varied, ranging from using an optical trick to make the stage seem larger to transmuting the human body into an animal body (by means of a device consisting of flat, conical, and curved mirrors invented by Kircher), the cylinders that create anamorphosis, and Kircher’s *theatrum polydicticum*. Della Porta also invented an “infinite” catoptric machine by exploring the properties of materials—the construction of the apparatus is a visual marvel, as countless lights like sparkling stars are hidden in its interior.

The frontispiece of the *Magiae Naturalis* printed in Nuremberg in 1715 shows Della Porta in his experimental laboratory. Among other curiosities, we see the Sun heating an alchemical distilling device and a theater of mirrors. The rays of the Sun were a matter of utmost importance for scientist-magicians. In book 9 of *De Refractione* (published in 1593), Della Porta studied the optical characteristics of the Sun’s rays and their colors, so it is no accident that in the chapter “De Coloribus ex Refraction” he drew a stylized picture of the Sun reflecting its rays on the Earth. While Della Porta found that the colors of the rainbow were visible in a glass prism, in *Natural Magic* the rays of the solar machine-artifact flood the second room of Space 1. These rays appear before visitors, transmuting the space and casting their artificial light on human and nonhuman bodies—generating a visual, abstract symphony through the video’s chromatic study and its disruptions of the spatial medium. They bring to mind both the “color organs” of the early avant-garde and Kircher’s experiments with music and color described in *Musurgia Universalis* (1650). They also modify the optical perception of the new Sun—the video—created by the

magician, which is projected inside the cosmic exhibition box, beyond the boundaries of the screen.

In modern astronomy, the symbol for the Sun is the circumpunct (☉ U+2609). In alchemy too, as Basilius Valentinus shows in *Azoth*, published in 1659. The ☉ consists of a circle with a dot in the center and represents the relationship between macrocosm and microcosm. Its symbolism also includes a close correspondence between the heavenly and earthly realms, and between the human body and the surrounding space. According to astronomers, the Sun is surrounded by what is known as the solar corona, which is fueled by energy from the star’s own magnetic field, among other sources. Like all other stars and nebulae, the Sun holds within itself the secret of the cosmic trick. And as with the magician’s Sun, we must explore its core in order to understand it. Meanwhile, its winds blow lightly and quickly, making the stardust dance as they move, setting in motion the alchemical evolution of the universe.

Dust, dust, dust . . . colored dust is everywhere. Negarestani writes that “dust particles originate from dark corners never trodden before, different territories (fields of narration) and domains of invisible hazards.”²⁸ As the particles of dust-glitter dance harmoniously in the video in a series of gentle, slow, collective movements, we feel the ashes of past generations as a fossiliferous abstraction—the only matter that goes beyond the walls of Space 1 and into the Vaults Room. Something has changed. An unknown center creates a powerful nonanthropocentric rotational force inside us. Now *The Sun Is Counting the Earth’s Rotations*. This new machine functions simultaneously as a Kircher-inspired sundial, as a magic lantern projecting the video onto the various mirrored surfaces, and as a catoptric machine containing a whole cosmic and theatrical nonworld. The new Sun—or video—is a thaumaturgically constructed machine-contraption that

combines three cosmic-theatrical instruments to create a new critical and poetic scene. Like Kircher and Della Porta, Leonor Serrano Rivas places magic inside the technological mechanism, and the artifact is activated when visitors enter the *cubiculum obscurum*.

As a catoptric machine inside a cosmic exhibition box, the video functions as an intra-stage. In the baroque period, the machine or box—also called a catoptric theater—consisted of two elements: the mirrors lining the inside or sides of the box, and the stage or base of the box. As with David Brewster’s kaleidoscope, which was patented in 1817—based on the research of sixteenth- and seventeenth-century scientist-magicians—the play of reflections produced by the mirrors inside the box is one of the keys to activating the magical trick. Of course, as one of Erkki Huhtamo’s studies on kaleidoscopes and media archaeology suggests,²⁹ all the world’s a kaleidoscope! The world of the magician is no exception . . . a nonworld galvanized by her feminist implementation of reflections and off-center rotations. After the stardust, the video draws viewers’ attention to the earthly ground or the magician’s stage floor. Which, in turn, is constructed using two theatrical strategies: a model-object and the inhabited space of an installation.³⁰ Both are reflections of the physical world, which are now presented to us in (analogue-digital) cinematic language.

From an interdisciplinary and feminist perspective, Donna Haraway shows that the Earth is a commons inhabited by many living species and inanimate things, which need to coexist in harmony. In *Staying with the Trouble*³¹ she uses the term *critters* to refer not only to microbes and animals but also to plants, humans, and even machines. Adopting this political and personal stance, Serrano Rivas co-works on the production of the video with two cameras or ways of seeing, specifically an HD camera and a 16 mm camera. The magician

endows cinematic language with three different ways of seeing, in order to achieve a kind of creative alchemical psyche that operates with the intuitive parameters of the human-machine hybrid. Moreover, the two nonhuman components are understood as magical representations: the humanist Sun (analogue perspective) (oppressive and generative) refers to the solar spinner in the Charles VI tarot,³² and the Moon (digital perspective) (changeable and bearing secrets) refers to the lunar astronomer-chemist. Thus, the video or (nonanthropocentric) solar artifact is created by combining different realities and elements, which play out on the stage floor or cosmic world. “Thus in the dark of the moon, the sun is preparing himself to rise.”³³

Etel Adnan writes that natural elements are oppressors and oppressed.³⁴ Like the anonymous fifteenth-century artist who created the Charles VI tarot, the magician places the various figures—human, nonhuman, and hybrid—in a dreamlike theatrical space. The installation space is a cosmic and earthly world of reflective surfaces, changing and inverted movements, and organic or natural forms. All of which are references to key historical breaks with the Western stagecraft tradition, now transmuted into contemporary practice: Kiesler’s *Endless Theatre*, Lorca’s “theater beneath the sand,” and the triad—lines, curves, ellipses—of eighteenth-century playwright Heinrich von Kleist’s puppet theater. The beings move forward, turn, roam the stage, and activate processes of change and interruption, in a space of experimentation that also recalls the “Magia Puraftatica” illustration in Kircher’s *Ars Magna Lucis et Umbrae*—which portrays the magical instrument along with fossils, vegetables, linguistic terms, and a human figure—as well as Roger Caillois’s mimetic states, described by Joyce Cheng in “Mask, Mimicry, Metamorphosis.”³⁵ When people’s faces are painted, their nature and their roles are transfigured. Meanwhile, the analogue perspective distorts the world through reflections



and anamorphoses that allow the magician to break with artistic modernity and generate a new world of abstraction.

The theatrical cycle of the (nonanthropocentric) Sun-machine ends when the stardust returns to the viewer's retinas—revealing a powerful and poetic correspondence with the copper engravings published in 1788 by physicist and mathematician Georg Christoph Lichtenberg based on his research.³⁶ Here also, “Figures, which positive electricity brings forth, are different from those made by negative [electricity].”³⁷ And just as the goddess Nature lifts the veil of stars to reveal the magical tricks of the Cosmos to the alchemist—let us recall the libretto of the 1928 ballet *Ode*, based on a poem by the scientist Mikhail Lomonosov—Leonor Serrano Rivas, like a wayward Harpocrates,³⁸ unveils secrets that bring about new ways of looking at the world, or worlds—by creating a political and poetic space freed from the toxic magnetic rotation produced by the powers that be, in the times of the Anthropocene.

Endnotes

- 1 Etel Adnan, *The Arab Apocalypse* (Sausalito, CA: The Post-Apollo Press, 1989). <https://doi.org/10.7238/a.v0i12.1716>.
- 2 The development of media archaeology is closely tied to the concept of the archaeology of knowledge introduced by Michel Foucault in the mid-1960s.
- 3 Athanasius Kircher, *Mundus Subterraneus*, book 1 (Amsterdam, 1668), accessed September 28, 2022, <https://archive.org/details/A149134MC/page/n1/mode/2up>.
- 4 Jussi Parikka, “New Materialism of Dust,” *Artnodes*, no. 12 (December 2012): 83–88.
- 5 Reza Negarestani, *Cyclonopedia. Complicity with Anonymous Materials* (Melbourne: Re-Press, 2008), 88.
- 6 Adnan, *The Arab Apocalypse*, 62.
- 7 As Siegfried Zielinski refers to them in *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means*, trans. Gloria Custance (Cambridge, MA: MIT Press, 2006). Originally published as *Archäologie der Medien: Zur Tiefenzeit des technischen Hörens und Sehens* (Hamburg:

- Rowohlt Taschenbuch Verlag, 2002).
- 8 Although the first edition of *Magiae Naturalis* dates from the late 1550s, in the fifteenth century we already find figures such as Giovanni Fontana, the Venetian physician, inventor, and engineer known as “the magician.” As Javier Fernández Santos points out in his doctoral thesis “Magia y cine: del espectáculo mágico al cinematográfico” (2013), some scholars suggest that the concept of the magic lantern actually dates from 1420, specifically from Fontana’s *Bellicorum Instrumentorum Liber*, published by Bayerische Staatsbibliothek in Munich.
 - 9 Today, we must question the concept of “Western knowledge” and reflect on the supposed “Westernness” of what we think of as European knowledge. As far as natural magic is concerned, this knowledge is more often than not a kind of multicultural melting pot that has subsequently been absorbed by hegemonic Western historiography.
 - 10 Rudi Visker, “Fascination with Foucault: Object and Desire of an Archaeology of Our Knowledge,” *Angelaki* 1, no. 3 (1996): 113–18. However, the term was popularized by Zielinski, *Deep Time*, 17–53.
 - 11 Interfaces refers to the interconnection or common boundary between systems, concepts, and human beings. “A most important arena where the two sides engaged, both theoretically and practically, proved to be a specific area of media praxis and theory, namely, the handling and design of the *interfaces* between artifacts and systems and their users. Cutting-edge media theory and praxis became action at the interface between media people and media machines.” Zielinski, *Deep Time*, 10.
 - 12 This would consist of deliberately and consciously including in their method books and public demonstrations a playful aspect of magical tricks or certain theological subterfuges, in order to evade the Inquisition and other reprisals or retribution from the political and religious spheres.
 - 13 Zielinski, *Deep Time*, 4.
 - 14 Umberto Eco, *Art and Beauty in the Middle Ages*, trans. Hugh Bredin (New Haven: Yale University Press, 1986), 68–98. Originally published as *Arte e bellezza nell'estetica medievale* (Milan: Bombiani, 1987).
 - 15 Zielinski, *Deep Time*, 87.
 - 16 See preface to Giambattista della Porta, *Magiae Naturalis. Libri XX* (Naples, 1581).
 - 17 Negarestani, *Cyclonopedia*, 88.
 - 18 Ursula K. Le Guin, “Speech in Acceptance of the National Book Foundation Medal for Distinguished Contribution to American Letters,” November 19, 2014, <https://www.ursulaklequin.com/nbf-medal>.
 - 19 Sor Juana Inés de la Cruz (Juana de Asbaje), *Segundo tomo de las obras de soror [sic] Juana Ines de la Cruz* (Madrid: Imprenta de Ángel Pasqual Rubio, [1692] 1725), 180, accessed September 29, 2022, <http://bdh-rd.bne.es/viewer.vm?id=0000260616&page=1>. Sor Juana Inés de la Cruz (Juana de Asbaje), *A Sor Juana Anthology*, trans. Alan S. Trueblood (Cambridge, MA: Harvard University Press, 1988).
 - 20 See Zielinski, *Deep Time*, 126; Della Porta, *Magiae Naturalis*, 141. He describes “a system by which you can see, in their own colours, in the darkness objects outdoors lighted by the sun.”
 - 21 Marcela Labraña Cortés, “Curiosas páginas negras,” *TRANS: Revue de littérature générale et comparée*, no. 19 (2015), <https://doi.org/10.4000/trans.1108>.
 - 22 See Alicia Navarro, “Danzas cósmicas, entre lo terrenal y lo sideral. De los ritos místicos vanguardistas a los cuerpos bruñidos y sus conjuros” (lecture, International Seminar on Dance, Esotericism and Avant-Gardes, Museo Picasso Málaga, November 6, 2021); Carole M. Cusack, “The Contemporary Context of Gurdjieff’s Movements,” *Religion and the Arts* 21, nos. 1–2 (2017): 96–112, <https://doi.org/10.1163/15685292-02101004>.
 - 23 Eva Villaver, “Economía circular en el espacio: polvo en el viento,” *El País*, April 28, 2021, <https://elpais.com/ciencia/2021-04-28/economia-circular-en-el-espacio-polvo-en-el-viento.html>.
 - 24 See Bryce Maxey, “La iconografía de *Ars magna lucis et umbrae* en *Primero sueño* de Sor Juana,” *Anales de Literatura Hispanoamericana*, no. 49, (2020): 321–34, <https://doi.org/10.5209/alhi.73134>; Sor Juana Inés de la Cruz (Juana de Asbaje), *Segundo tomo*, 158.
 - 25 Stars eject dust grains (silicate or carbonaceous particles) in the interstellar medium. According to NASA’s Chandra X-Ray Center (CXC), 73 percent of the atoms in the human body were originally forged in the explosion of massive stars, 16.5 percent are from dying low-mass stars, 9.5 percent from the big bang, the explosion that created the universe, and 1 percent of the body’s atoms come from exploding white dwarfs.
 - 26 Federico García Lorca, *Lorca. Plays: Three. Mariana Pineda, The Public, Play without a Title*, trans. Gwynne Edwards and Henry Livings (London: Methuen Drama, 1995), 68.
 - 27 Almudena López Villalba, “Dentro del espejo. La máquina catóptica o espejo teatral,” *Acotaciones: Revista de Investigación Teatral*, no. 42 (2019): 13–34, <https://doi.org/10.32621/acotaciones.2019.42.01>.
 - 28 Negarestani, *Cyclonopedia*, 88.
 - 29 Erkki Huhtamo, “All the World’s a Kaleidoscope: A Media Archaeological Perspective to the Incubation Era of Media Culture,” *Schermi/Screens*, no. 55 (2014): 139–53, <https://doi.org/10.4000/estetica.982>.
 - 30 Leonor Serrano Rivas created both the *Endless Theatre* installation and the model at Intermediae Matadero Madrid,

from December 4, 2019, to July 19, 2020.

- 31 Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016)
- 32 *Triumphorum ludus o carte da trionfi*, which came to be known as *tarocchi* or tarot around 1500, began as an expression of humanistic culture. They were educational and sometimes initiatory or esoteric playing cards. Created by scholars, they were full of allegories, symbols, and emblems, thus spreading the principles of humanistic culture. Their creators sought a cosmic understanding of knowledge by means of visual language. See “Jeu de princes humanistes: le tarot dit de Charles VI,” Bibliothèque nationale de France, accessed September 1, 2022, <http://expositions.bnf.fr/renais/arret/3/index.htm>.
- 33 Sallie Nichols, *Jung and Tarot: An Archetypal Journey* (Newburyport, MA: Red Wheel/Weiser, 1980), 321.
- 34 Adnan, *The Arab Apocalypse*.
- 35 Joyce Cheng, “Mask, Mimicry, Metamorphosis: Roger Caillois, Walter Benjamin and Surrealism in the 1930s,” *Modernism/Modernity* 16, no. 1 (2009): 61–85.
- 36 Georg Christoph Lichtenberg, *De Nova Methodo Naturam ac Motum Fluidi Electrici Investigandi* (Göttingen: Jo. Christ. Dieterich., 1778), 19–21.
- 37 Zielinski, *Deep Time*, 168.
- 38 Visual reference to the image of Harpocrates in Athanasius Kircher, *Oedipus Aegyptiacus* (1652), accessed September 9, 2022, <https://archive.org/details/A027084>.



