ROBERT SMITHSON: TIME CRYSTALS

Exhibition dates:
21 July – 22 September 2018

Curators:
Dr Amelia Barikin (The University of Queensland) and Professor Chris McAuliffe (Australian National University)

About the resource

This resource has been designed to support students’ learning about and experiences of visual art through the exhibition Robert Smithson: Time Crystals. Learning activities can be undertaken during a visit to Monash University Museum of Art to view the exhibition, alternatively teachers can use this resource for pre- and post- visit activities.

This resource compliments the Victorian Curriculum: Visual Arts, VCE Art and Studio Arts studies, teachers can adapt the learning activities to meet their requirements for primary or secondary students. For senior secondary, art making activities can be used by students independently for individual folios or for teacher-led learning with class groups.

The catalogue, Robert Smithson: Time Crystals includes curatorial texts, images and extensive information about the exhibition. This resource can assist senior students in substantiating interpretations of artworks with reference to a range of additional resources.

Robert Smithson: Time Crystals
Curated by Dr Amelia Barikin and Professor Chris McAuliffe

Robert Smithson: Time Crystals is the first exhibition in Australia dedicated to the work of American artist Robert Smithson (1938–73). Best known for his radical land art of the 1960s and early 1970s, Smithson is now widely recognised as one of the most influential artists of the twentieth century.

Drawing on an eclectic array of ideas — from geology, crystallography, physics, optics, science fiction and philosophy — Smithson’s art was driven by a playful, labyrinthine imagination. The exhibition features sculpture, photography, film, drawings and texts, alongside archival material drawn from the Robert Smithson and Nancy Holt papers at the Archives of American Art, Smithsonian Institution, Washington, D.C.

As a young artist, Robert Smithson enthusiastically explored the museums, art galleries, cinemas and artists’ bars of New York City. He began exhibiting in 1959, showing expressionist, figurative works influenced by both European traditions (Byzantium, Dante) and contemporary literature (William Burroughs). In the mid-1960s, Smithson changed direction and became, as he later put it, ‘a conscious artist’. He returned to his childhood interest in mineralogy and developed abstract works based on molecular geometry of crystal structures.

For Smithson, crystals were a vehicle for aesthetic provocations, which he staged in artworks, essays, interviews and long conversations with his peers. Crystals, which grow without living and develop without evolving, also challenged the prevalent evolutionary model of art’s history.

Smithson’s annotated textbooks and notes are part of his body of work that creatively and critically investigates crystals and their relationship to time. For Smithson, crystals were symbols of non-linear time and he connected their imagery and physical structure with the emerging art movements of minimalism, particularly minimalist sculpture.
Smithson conceived of art’s development in terms of dislocation, fracture and displacement; crystalline time in place of chronological time. Interpretations of Smithson’s engagement with non-biological time have primarily focused on his interest in entropy – the tendency of all matter to gravitate towards a state of disorder. This exhibition suggests instead that many of his projects hinged on an anti-entropic modelling of time; time did not ‘run down’ but neither did it ‘go on’. In the work of his peers – artists like Donald Judd, Dan Flavin, Ruth Vollmer and Sol LeWitt – Smithson discovered a static, frozen time that embodied ‘motionless intervals’, creating ‘hideouts for time’.

Smithson’s interest in time that was static or frozen led him to explore the frozen landscape of Antarctica in his photographic collage Proposal for a Monument at Antarctica 1966 (see page 13 of this resource.) This place was in a timeless zone and yet connected to the earth’s history of the Ice Age, Antarctica is also an environment created from ice crystals.

In 1967, Smithson coined the term ‘time-crystal’ to evoke an endless, nonprogressive temporality in which ‘both past and future are placed into an objective present’.


Curatorial intentions
Key themes and ideas

> What do the curators say are the key themes and ideas in Smithson’s art practice that are the subject of this exhibition?

> What do you think is meant by Smithson’s art being driven by a playful, labyrinthine imagination? Find an example of an artwork from the exhibition to support your response.

Check that you understand the language used in this curatorial introduction. Add to the glossary at the back of this resource any definitions you looked up.

Personal response
Curriculum link: VCE Art Personal Framework

> How do you feel viewing Robert Smithson’s artworks? What atmosphere does the work create in the gallery space?

> Do the curatorial intentions for the exhibition resonate with you? In 1967, Smithson coined the term ‘time-crystal’ to evoke an endless, nonprogressive temporality in which ‘both past and future are placed into an objective present’.

About the curators
Curriculum link: VCE Studio Arts, Art Industry Contexts

Dr Amelia Barikin is an art history lecturer at The University of Queensland and Professor Chris McAuliffe is an academic working at Australian National University, they are the cocurators of the exhibition Robert Smithson: Time Crystals. Dr Barikin and Professor McAuliffe have studied and extensively explored the archives of Robert Smithson to inform the exhibition and research and write the accompanying catalogue.
> Add a definition for **curator** to your glossary.

> Which other roles at Monash University Museum of Art would be involved with putting together an exhibition?

> What preventative conservation measures would need to be taken to display archival materials such as papers, books and photographs in the gallery spaces?

**About the exhibition**

*Robert Smithson: Time Crystals* has been thoughtfully curated to give the audience insights into the artist's practice. The exhibition design includes artworks displayed with their source material in vitrines. This layout tells the story of Smithson's art making process from conceiving an idea and developing a concept to exploring materials and refining the final outcomes.

> How does the inclusion of source materials benefit artists and art students visiting this exhibition?

> How might the exhibition differ if only the finished artworks were on display?

**Folio starter: Archival collage**  
**Curriculum link: Senior Secondary Art Making**

The curators have selected materials from Smithson's archives, including drawings, annotated books and articles relating to his research.

**Create** an artwork from your own personal archives. This might be a collage using materials you have collected for an art folio or a subject you are interested in. You could look at your recent internet search history and use the text of your URLs as a starting point.

How will you display your research? What format might it take?  
A Wordle might be another way to begin.
About the Artist

American artist Robert Smithson was born in New Jersey in 1938. He studied at the Art Students’ League and the Brooklyn Museum School in New York in the 1950s. Early in his career he made expressionistic paintings and collages but from the 1960s his use of media diversified, and he drew inspiration from his childhood passion for mineralogy and geology. Smithson researched crystalline structures and areas of geological sciences intensively and these became the inspiration for his art making and writing. He created ambitious large-scale artworks using the landscape and changing the natural environment, to realise these artworks Smithson needed to collaborate with various stakeholders.

> He would need to seek permission from government agencies, such as the National Parks Service, for his artworks to be created and installed in public spaces

> Smithson developed relationships with philanthropists and gallerists who would provide support and funding for his artworks

> To make and install the final artwork Smithson would collaborate with fabricators and contractors, such as earth movers, on location.

Alongside photography, film, drawing and sculpture, Smithson was a published writer, contributing articles on his theories of time to journals including *Art Forum*. When Robert Smithson died in a plane crash in 1973 while working on a land art project in Texas, he was only thirty-five and still what might be considered an emerging artist.

Legacy and influence

Smithson is remembered as a radical artist who pioneered land art in the 1960s and 1970s. His ambitious multidisciplinary art practice has influenced generations of artists. Many contemporary artists have been inspired by Smithson's research and ‘have picked up where he left off’ to further explore concepts of time through their own art making and research.
Artist in Focus
Curriculum link: Respond and Interpret

> What relationship does the artwork have to the artist's life and experiences? What visual evidence supports this?

> Has the artist used a specific process or practice in creating the artwork that may reflect their personal philosophy and ideas?

> Research a contemporary artist (post 1990) who has been influenced by Robert Smithson's art practice

Case Study: Spiral Jetty

*Spiral Jetty* is an ensemble of works: a 457 metre long earthwork in Great Salt Lake, Utah (April 1970); a 16mm film of thirty-two minutes’ duration (1970); and an essay published in 1972. In addition, Smithson made numerous preparatory drawings, a storyboard film treatment and documentary photographs, as well as extensive research and project notes. At Great Salt Lake, Smithson found a concentration of many features he had explored in earlier works and texts: geological strata, industrial wreckage, historical narratives, tourist attractions and an eerie, other-worldly landscape. Space was immense and disorienting, light and colour became almost hallucinogenic; the deep time of myth and geology met the entropic time of a suffocated lake, choked by algae.

> How has Smithson taken the location into account when designing and creating the Spiral Jetty earthwork?

---

*Earth art* or *Land art* describe types of artworks that use the landscape as a medium. These artworks are *site-specific* which means that they are created to exist in a particular location. Land artworks can be *ephemeral*, existing for a short amount of time or changing over time with the weather or environmental conditions.

> How has Smithson taken the location into account when designing and creating the Spiral Jetty earthwork?
> Find a recent image of *Spiral Jetty* in Utah. How has the artwork changed from 1970? Would you describe this artwork as ephemeral? Why or why not?

Modelled on the successive dislocations that shape the growth of a spiral crystal, *Spiral Jetty* itself became a generator of crystals as the super-saturated water of the salt lake coagulated on and around it.

Andy Goldsworthy (b. 1956) is a British artist also known for his artworks within the landscape. A sculptor, photographer and film maker, Goldsworthy creates artworks in natural environments, often using the materials from the location such as sticks, leaves, ice and rock. Research some artworks and further information Goldsworthy’s practice.

**Artworks, ideas and values**  
**Curriculum link: VCE Art Interpreting art**

Robert Smithson and Andy Goldsworthy are artists who create unique work that utilises the environment.

> Discuss the approach that these artists have to their art practice.

> Critically analyse the ephemeral nature of their artworks and the impact that this has on their audiences.

<table>
<thead>
<tr>
<th>FRAMEWORKS</th>
<th>Robert Smithson (pre 1990 artist)</th>
<th>Andy Goldsworthy (post 1990 artist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>Artwork 1</td>
<td>Artwork 1</td>
</tr>
<tr>
<td></td>
<td>Artwork 2</td>
<td>Artwork 2</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contemporary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

> Draw a comparison between the artists’ practices to support your writing.

> Apply relevant aspects of the Analytical Frameworks across each of the selected artworks to interpret the meanings and messages.

A *Surd View for an Afternoon* is a diagram that Smithson created while being interviewed about his art practice in 1970. In this sketch Smithson includes drawings and notes about artworks that he has made and his research interests.

> Take a moment to closely look at this drawing, can you find visual references to Smithson’s artworks in the exhibition?
Collaborative art making
Curriculum link: Explore and Express

Create a site specific artwork as a class group in the landscape of your school.

Explore the school grounds considering different locations for your artwork. Take photographs to experiment with different ideas in your visual diary. Your school might have visitor’s maps that you could use in your design or you could look at the school from an aerial perspective using Google maps.

Explore your concept using a mind map, taking inspiration from Smithson’s diagram A Surd View for an Afternoon 1970. Use a full page of your visual diary and include drawings and notes to consolidate your ideas.

Materials use leaves, rocks, broken branches, string and masking tape.

Explore other artists who create artworks in the landscape: Andy Goldsworthy, Christo and Jeanne-Claude, Francis Alys and Kerrie Poliness.

Express How will the audience experience this artwork? If they visit the location where would they need to stand? Your documentation might include the original design and photographs from different points of view.
Crystals and Time Crystals

Rather than picturing time as a linear progression, an organic flow from the past to the future, Smithson built, wrote and filmed time as fractured, dislocated, displaced – crystallised.


Robert Smithson used the term **time crystal** to describe his concept of static and frozen time. Through his art practice and research he explored different notions of time and was particularly fascinated by non-linear timelines.

**Time exploration**

> What is your definition of time? Think of some phrases, sayings or slogans that reference time

> Make a list of words that relate to time

> Think about how would you design a new time sequence? How could we record time in a different way?

> Create a device, such as a calendar, to chart time.

Crystals are a hard solid materials with flat faceted sides. Diamonds and snowflakes are examples of crystals. Crystals occur in nature when a material cools, hardens or transforms. For example, think about what happens when salt water dries on your skin; once the water has evaporated, thousands of small salt crystals emerge. When viewed under a microscope, crystals have an intricate tessellated pattern of highly ordered atoms that are described as crystalline.

> This is what a crystal looks like under a micro-scope as it is growing or forming.
In 1966, Smithson made a number of photographic collages that suspended minimalist, crystalline forms in frozen, timeless zones. Proposal for a Monument at Antarctica 1966 features an illustration of crystal structure clipped from Charles Bunn’s Crystals: Their Role in Nature and Science paired with a photograph pulled from the cover of The Antarctic Challenged. On an icy shore, tiny figures appear to be hauling a boat towards land, dwarfed by a monument stack of rhombohedral modules that towers above the landscape like some weird alien intrusion.


Conceptualising, planning and designing an artwork
Curriculum link: Visual Arts Practices

Smithson was thinking about crystal growth when he created artworks with layers of glass cut to decrease in size and form pyramid shapes.

Which elements and principles make this artwork look like an Egyptian pyramid? What are the similarities and differences?

Many of the ancient cultures created artworks and monuments that have withstood the test of time and can still be visited today.

Research the Mayan temples, Stonehenge and the Pyramids of Giza, source images for your visual diary and include annotations.

Folio: Tessellation Sculpture

Create a three-dimensional artwork inspired by crystallisation and crystalline forms. Look at some tessellation patterns online or draw your own template.

Materials could include heavy weight colour paper, cardboard, perspex or transparencies and paper clay.
Turn your sculpture into a monument

> Take a photograph or make a drawing of your tessellation sculpture and insert it into a photograph of an environment, such as a natural landscape.

Science fiction writing task

As well as being inspired by his scientific research, Robert Smithson was also a science fiction fan. Your photographic collage is a great starting point for a creative response.

> What would it feel like to move around the monument that you have created?

> What time period does your artwork exist in or document?
Case Study: Non-Site

In July 1968, Robert Smithson, Nancy Holt and Michael Heizer took a road trip around California, driving from Las Vegas through Death Valley and up to Mono Lake, collecting geological material en route. The excursion was fieldwork for a series of ‘nonsites’ that Smithson exhibited at Dwan Gallery in February 1969. The minimalist, zig-zagged, fabricated steel bin in Non-Site (South of Death Valley, Chalk Collected Somewhere between Riggs and Silver Lake on Route 127) 1968 is filled with chalk gathered near the Mojave Desert. It is presented alongside a map with a photograph of the location where the material was found. The abstract container of the nonsite references both the grids of geological survey maps and the gridded geometric lattices underpinning the molecular structure of crystals. Rather than acting as a signpost to a physical location, Smithson saw the work as a marker towards an indeterminate zone: ‘the nonsite directs you out there, but once you get there, there’s no destination ... it’s a matter of losing your way rather than finding your way.’


Smithson collected materials on his road trips much like he enjoyed collecting rocks as a child. Going out into environments like deserts and swamps gave him the opportunity to collect geological materials as well as make films and photographs of these sites. Smithson would later create artworks that he called ‘non-sites’ by displaying his collected artefacts with maps and photos in a gallery space. This changed the...
context for these objects; they are materials from the outside, brought inside, they are natural materials removed from the regional environment and placed in a white cube gallery space in a metropolitan city.

The artwork existed in the here and now but was also an abstract map or mirror of a distant, unseen place or ‘non-sight’. For Smithson, the transplanted and contained minerals of a nonsite registered with the static time of the art gallery.


> Does the artwork Non-Site 1968 challenge your ideas of what art can be? How?

> Include your definition of non-site in the glossary

> Was it important to Smithson to exhibit works like Non-Site at art galleries in New York? Discuss

> Does the context in which a work is presented alter its meaning? Discuss

Investigating Studio Practice
Curriculum link: VCE Studio Arts

> Describe Smithson’s studio practice from what you observe in the exhibition and/or catalogue Robert Smithson: Time Crystals.

> What ideas and experiences influenced Smithson’s art making?

> Where did he draw his inspiration from?

> What concepts inspired him as an artist?
Enantiomorphic chambers 1965/1999 is a sculptural apparatus based on the mirrored symmetry of enantiomorphic crystals. A perverse modification of the stereopticon, its angled mirrors cancel out reflections of the viewer. There is neither deep, illusionistic space nor a viewer to gaze into it. Instead, the mirrored conjunction opens out towards void space, evacuating the viewer from the frame.


Audience Engagement
Curriculum link: Present and Perform

Smithson used the principles of stereoscopic vision in creating his enantiomorphic chamber sculptures. The stereoscope was a nineteenth-century invention that created a three dimensional image from looking at two separate photographs through a pair of lenses.

> Research the stereoscope on YouTube to see how the device works or you might have one at home.

> Design an artwork that challenges the audience's vision. This might be a sculpture that deletes or displaces the viewer when they are looking at it or a two dimensional drawing that includes symmetry.

Contemporary Australian artist Natasha Johns-Messenger employs stereoscopic optical illusions in her sculptures and installations. The sculpture Water-Orb 2018, can be found in the Ian Potter Sculpture Court, the forecourt of Monash University Museum of Art.

> Research http://www.natashajohnsmessenger.com/

> How does Johns-Messenger’s use of materials, techniques and concepts compare with Smithson?

Mirrors were another material that Smithson employed in his art practice. By taking photographs of landscapes that included mirrors he captured some of his ideas about timelessness and temporality. Mirrors were a visual metaphor for time crystals. The reflections in the mirrors pose questions about what is unseen in a photograph. What is taking place beyond the edges of the frame.

> Create a series of photographs using mirrors to tell a story about the environment, consider what you will place in the frame of the photograph and in the mirrored reflections.
Visual language
Curriculum link: VCE Art and Studio Arts

Visual language is an integral component of studio practice and refers to communication of ideas through experiences, images and objects. Artists use visual language to communicate the exploration, development and resolution of artworks.

> From the exhibition and catalogue *Robert Smithson: Time Crystals* describe the visual language Smithson.

Over the course of his career Smithson came to understand that all his life’s daily activities were a part of his studio practice and contributed to his artworks.

> From what you have learnt about Smithson describe how his experiences as an artist and his artworks are the same.
How to use the Glossary

Robert Smithson created his own definitions and developed language that informed his practice, this terminology is highlighted throughout the text.

Add to the glossary panel any definitions you look up while using this resource.

chronological time, chronology
| krəˈnɒlədʒi |
(from Latin chronologia, from Ancient Greek χρόνος, chrónos, “time”; and -λογία, -logia) is the science of arranging events in their order of occurrence in time. Consider, for example, the use of a timeline or sequence of events.

crystallography
| krɪˈstəˌlɒɡrəfi |
noun [mass noun] the branch of science concerned with the structure and properties of crystals.

deep geological time
The geologic time scale (GTS) is a system of chronological dating that relates geological strata (stratigraphy) to time. It is used by geologists, paleontologists, and other Earth scientists to describe the timing and relationships of events that have occurred during Earth's history.

enantiomorphic, enantiomorph
| ɪ ˈnantɪə(ʊ)mɔːf, ɛ ˈnantɪə(ʊ)mɔːf |
noun each of two crystalline or other geometrical forms which are mirror images of each other.

ephemeral
| ɪˈfɛm(ə)r(ə)l, ɪˈfiːm(ə)r(ə)l |
adj adjective lasting for a very short time: fashions are ephemeral: new ones regularly drive out the old | works of more than ephemeral interest.

entropy
| ˈɛntrəpi |
noun [mass noun] lack of order or predictability; gradual decline into disorder.

faceted, facet
| ˈfastt, ˈfasht |
noun 1 one side of something manysided, especially of a cut gem: a blue and green jewel that shines from a million facets. 2 a particular aspect or feature of something: a philosophy that extends to all facets of the business. Faceted and multi-faceted having many sides: the diamond's multifaceted surface. 2 having many different aspects or features: his extraordinary and multifaceted career.

minimalism
| ˈmɪnɪməˌlɪz(ə)m |
noun [mass noun] a movement in sculpture and painting which arose in the 1950s, characterised by the use of simple, massive forms.

optics
| ˈɒptɪks |
plural noun [usually treated as singular] the scientific study of sight and the behaviour of light, or the properties of transmission and deflection of other forms of radiation.

science fiction
(abbreviation SF) noun [mass noun] fiction based on imagined future scientific or technological advances and major social or environmental changes, frequently portraying space or time travel and life on other planets.

temporality
| ˌtempəˈralɪti |
noun (plural temporalities) [mass noun] the state of existing within or having some relationship with time: like spatial position, temporality is an intrinsic property of the object.

site
| sɪt |
noun an area of ground on which a town, building, or monument is constructed: the proposed site of a hydroelectric dam | the concrete is mixed on site.

stereoscopic
| ,stərəˈskɒpɪk |
adj adjective relating to or denoting a process by which two photographs of the same object taken at slightly different angles are viewed together, creating an impression of depth and solidity: stereoscopic 3D vision

Robert Smithson: Time Crystals is a partnership between The University of Queensland Art Museum and Monash University Museum of Art.

This exhibition is made possible through support from the Terra Foundation for American Art.

The exhibition has been developed in cooperation with the Holt/Smithson Foundation.