

Mirror Magic

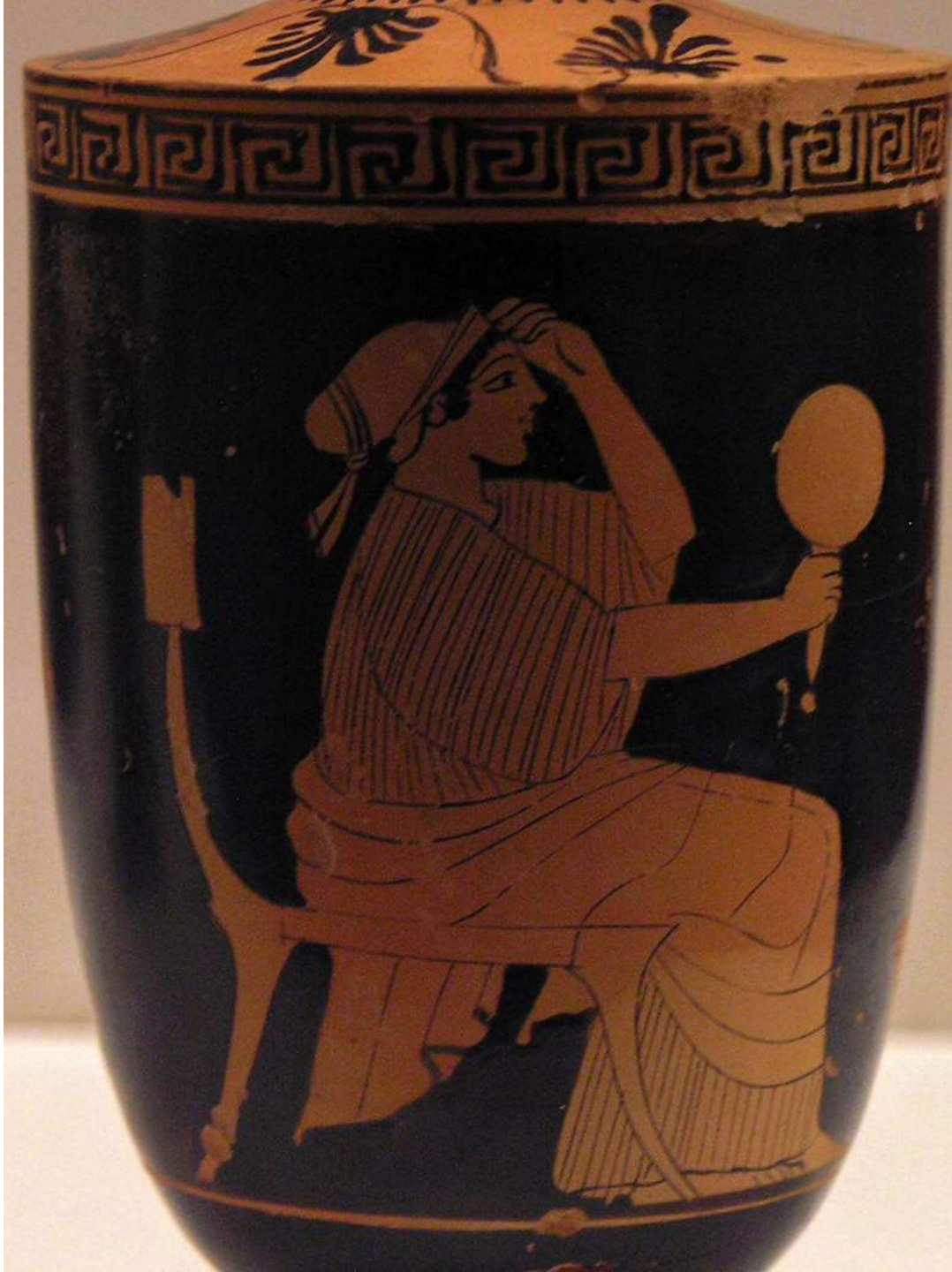
More Than Mere Reflection

History of Mirrors

The earliest manufactured mirrors were pieces of polished stone such as [obsidian](#), a naturally occurring [volcanic glass](#).^[5] Examples of obsidian mirrors found in [Anatolia](#) (modern-day Turkey) have been dated to around 6000 BC.^[6] Mirrors of polished copper were crafted in [Mesopotamia](#) from 4000 BC,^[6] and in ancient Egypt from around 3000 BC.^[7] Polished stone mirrors from Central and South America date from around 2000 BC onwards.[[]

<https://www.twowaymirrors.com/how-mirrors-are-made/> (8 mins)

- <https://www.youtube.com/watch?v=iUQN9TZEbXw> (3 mins—art—use this)
- <https://www.youtube.com/watch?v=3eTMNVwnxyg> (3 mins)
- <https://www.youtube.com/watch?v=kvNfmtPCltM> (art and mirrors)



人咸知備其容莫知飾其性之
不飾或爾禮心芥之絲之免念行
聖

出其言善千里應之而遠
同余以遊

Obsidian Mirrors in Ancient Mesoamerican Cultures

The peoples of ancient Mexico used polished obsidian mirrors, or *tezcatl*, as instruments of black magic. By gazing into a mirror's smoky depths, sorcerers traveled to the world of gods and ancestors. Obsidian mirrors are an apt metaphor for images of ancient Mexican sites and objects: they reflect the viewer as well as the object.

In Maya art, mirrors appear to be depicted as **hand-held objects**; sometimes they are depicted mounted on stands or held by dwarfs or servants in front of elite Maya individuals. Advances in the decipherment of Maya script have revealed the central function of mirrors as instruments for ritual scrying.

The obsidian mirror was the primary accessory of the supreme Aztec deity Tezcatlipoca, whose name means "smoking mirror." He is often depicted with an obsidian mirror on his chest, in his headdress, or replacing his right foot. Tezcatlipoca was the lord of the night and its creatures—above all, the jaguar, a powerful animal believed capable of crossing between the earthly realm and the underworld. Tezcatlipoca is sometimes represented as a jaguar, which was also a symbol of ancient Mexican rulers. Jaguar pelts were reserved solely for their use.

- https://www.youtube.com/watch?v=e_e0dMc6GkE (Aztec mirror)
- <https://smarthistory.org/mirror-bearer/> (Maya)

of human religious thought and belief.





la cruz con las dos coronas





John Dee



An obsidian “[spirit mirror](#)” used by [John Dee](#), an advisor to England’s [Elizabeth I](#), traces its origins to Aztec culture, a new study published in the journal [Antiquity](#) suggests.

A [Renaissance polymath](#) whose interests ranged from astronomy to astrology, alchemy and math, Dee advised the queen from the start of her reign in 1558 to the 1570s. As court astrologer and scientific advisor, he advocated for overseas exploration and the establishment of colonies.

Magic Mirror of Doctor Dee; obsidian; wood case covered in tooled leather with label in handwriting of Horace Walpole, quotation from a Samuel Butler poem.

This mirror was used by [John Dee](#) to contact angels. For ten years, Dee and his scryer Edward Kelley received messages through the mirror. Dee believed the messengers were angels, Kelley thought they were [demons](#), and begged to end the rituals...

Dee was a 15th-century scientist who, after a career of furthering academic thought and advising Queen Elisabeth the 1st, turned to the heavens in search of older wisdom. With the assistance of the scryer (and con man) Edward Kelley, Dee created a 'Holy Table' anchored by [hermetic sigils](#), upon which this mirror acted as a portal to commune with other worlds. But John Dee was not the first person to use this mirror to speak with the other side. The mirror itself was made by the Aztecs of South America to communicate with a god called Tezcatlipoca—*the harbinger of discord*.

<https://www.bbc.co.uk/programmes/p00rjxvp>



Chinese Magic Mirrors

Known as “magic” or “transparent” or “light penetrating” (透光鏡) mirrors, these types of artworks were first created in China during the Han dynasty (202 BCE – 220 CE). When light is projected on them, the mirrors appear transparent and reveal characters or a decorative design.

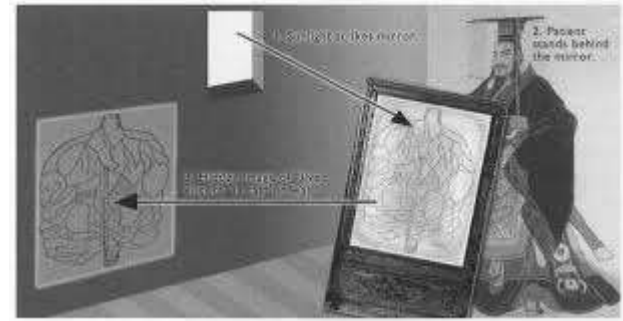
The **Chinese magic mirror** ([simplified Chinese](#): 透光鏡; [traditional Chinese](#): 透光鏡; [pinyin](#): *tòu guāng jìng*) is an ancient art form that can be traced back to the Chinese [Han dynasty](#) (206 BC – 24 AD).^[1] The mirrors were made out of solid [bronze](#). The front was polished and could be used as a mirror, while the back has a design cast in the bronze.^[2] When sunlight or other bright light shines onto the mirror, the mirror appears to become [transparent](#). If that light is reflected from the mirror onto a wall, the pattern on the back of the mirror is then projected onto the wall.

The trick was that the carvings on one side would indent ever-so-slightly into the mirror side that when struck by sunlight, they would appear on the wall behind. However the carvings were so dainty and shallow as to not disturb the mirror-like surface, so that people could still use it as a mirror.

<https://www.youtube.com/watch?v=A2SIMPmTgGY>

- <https://www.goodnewsnetwork.org/rare-chinese-magic-mirror-that-projects-hidden-image-of-buddha-rediscovered-after-decades-in-museum-storage/>







Leonardo Da Vinci—Mirror Writing

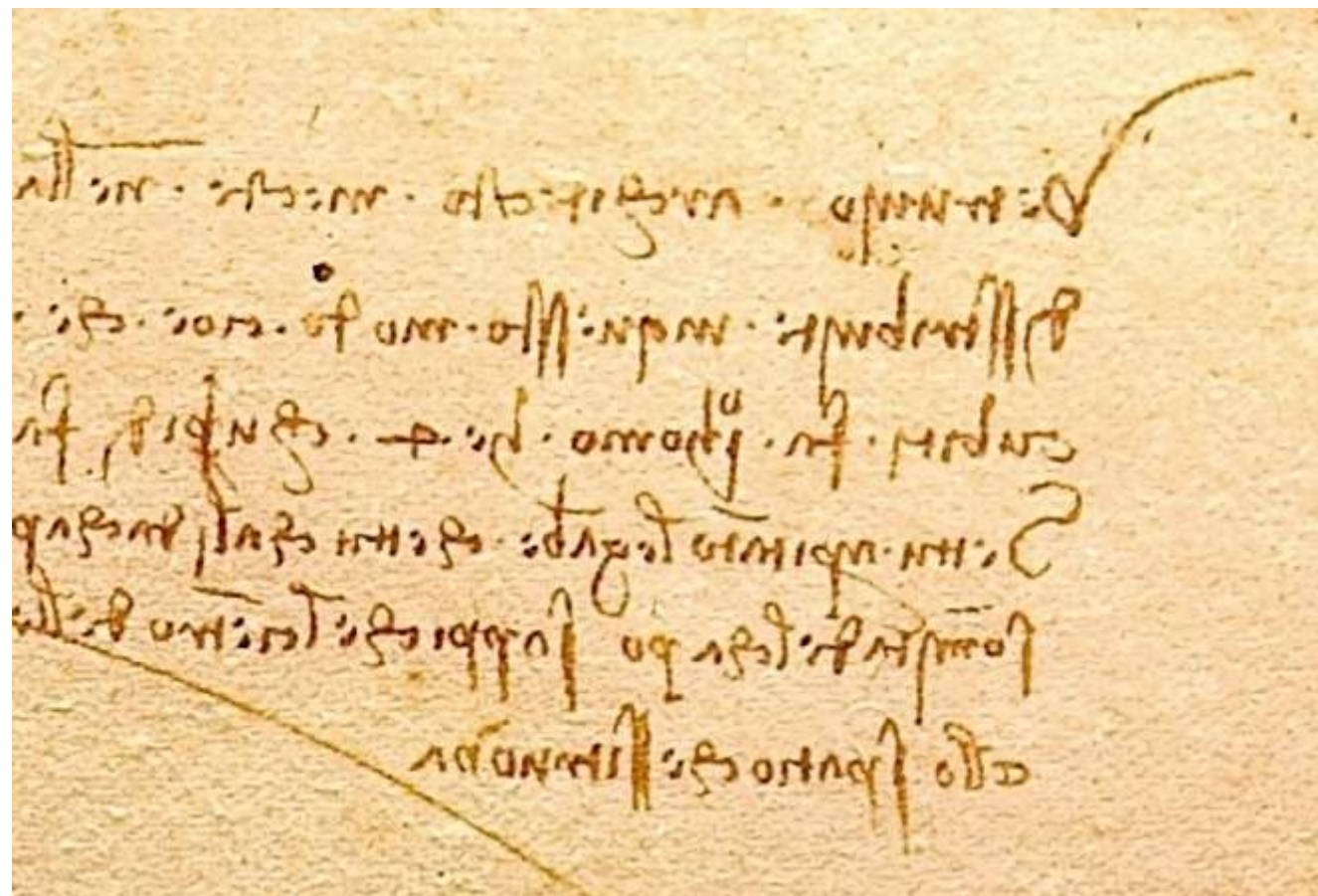
Not only did Leonardo write with a special kind of shorthand that he invented himself, he also mirrored his writing, starting at the right side of the page and moving to the left. Only when he was writing something intended for other people did he write in the normal direction.

The purpose of his mirror writing is unknown, but one idea is that it may have kept his hands clean. People who were contemporaries of Leonardo left records that they saw him write and paint left handed. He also made sketches showing his own left hand at work. As a lefty, this mirrored writing style would have prevented him from smudging his ink as he wrote.

<https://www.youtube.com/watch?v=xnNk-eX7sSE>

https://www.youtube.com/watch?v=JCdhLjo_ioc

<https://www.youtube.com/watch?v=hyTc84y9Yrl>



Las Meninas (1656)

There's no doubt that the most striking thing about *Las Meninas* is its unique perspective. We are immediately drawn in by the stares of the royal child, her dwarf, and Velázquez himself at his easel, brush in hand. At first glance, it seems that we are a component of the painting and that Velázquez is painting us, the viewers. But then, if we move our focus to the background, we see that King Philip IV and Queen Mariana are pictured on the wall, and we don't know if their framed likeness is just another painting or if it's supposed to be a mirror reflecting that *they*—not we—are the subjects of the painting. There's also a theory that the painting's "fourth wall" is actually not being broken at all—that Velázquez was just painting what he saw on a large floor-to-ceiling mirror, which could explain why so much space in the work is devoted to the ceiling.

Visually, it stuns us; are we in the work or are we not?

Rationally, we know we can't be in a painting from 1656. But through Velázquez's unprecedented self-reflexive (dare I say, postmodern) approach, *Las Meninas* becomes an optical illusion because onlookers can't determine where to place themselves in relation to it. This, combined with its realistic style, pulls us—almost literally—into a seventeenth century court painter's studio.

- <https://www.youtube.com/watch?v=liTtGENiVOA>
- <https://www.youtube.com/watch?v=ujmaPujawJI> (use of a mirror)



Convex Mirrors in Art

The uber-fashionable [Georgians](#) are attributed for popularising the decorative convex mirror in England. Nevertheless, the convex mirror has been a feature of interiors and art in Northern Europe since the 15th century.

And, for the artist at the easel, the convex mirror was so much more than simply a decorative object.

Regency Mirrors:

- <https://www.youtube.com/watch?v=mzJDWliWThM>

Arnolfini Portrait (1434)

The Arnolfini Portrait is a 1434 oil painting on oak panel by the Early Netherlandish painter Jan van Eyck. It forms a full-length double portrait, believed to depict the Italian merchant Giovanni di Nicolao Arnolfini and his wife, presumably in their residence at the Flemish city of Bruges.

Van Eyck used the convex mirror as a tool of perspective, allowing the viewer to experience a much more detailed and complex scene than if it had not been included at all. Viewers can see not only the principals, Arnolfini and his wife, but also two persons who look into the room through the door. One of these is believed to be the artist himself.

- <https://www.youtube.com/watch?v=wM6d9BOj4Ww>



A Goldsmith in His Shop (1449)

Celebrated as one of the most famous masterpieces of Northern Renaissance art, Petrus Christus's A Goldsmith in His Shop (1449), shows a goldsmith in a tiny shop outfitted with the wares of his trade.

<https://smarthistory.org/petrus-christus-a-goldsmith-in-his-shop/>



Parmigianino (1503-1540)

Girolamo Francesco Maria Mazzola, also known as Francesco Mazzola or, more commonly, as Parmigianino, was an Italian Mannerist painter and printmaker active in Florence, Rome, Bologna, and his native city of Parma.

- <https://www.khanacademy.org/humanities/renaissance-reformation/high-ren-florence-rome/pontormo/v/parmigianino-self-portrait-in-a-convex-mirror-1523-24>



Pre-Raphaelites and Convex Mirrors

Based on the exhibition alone, it would appear they *only* took from van Eyck a case of 'mirror mania'; this is only part of the equation. The theme was indeed important as the reflections of mirrors offered an exciting world beyond the real world of the Victorian interior. They were perfect for optical illusions, fantastical extensions of the visual space, and served as devices from which moral values and messages could be alluded and conveyed. The latter is perfectly in keeping with Pre-Raphaelite values to depict 'genuine ideas' and 'serious' subject matter (e.g. morally problematic issues in contemporary society), as recorded in 1895 – several decades after the Brotherhood had disbanded.

Mirrors became a fashionable staple in the modern Victorian home. Rossetti owned 24 mirrors in his Chelsea home at 16 Cheyne Walk, nine of which were convex: one of these is shown next to a circular painting (tondo) of his bedroom by his assistant, Henry Treffry Dunn. In another section of the exhibition, a convex mirror used by William Orpen features alongside two of his paintings – *The Mirror* (1900) and *A Bloomsbury Family* (1907) – both of which prominently exploit the mirror's ability to depict scenes outside the pictorial image.

- <https://www.youtube.com/watch?v=OoRhJTcamj0>

FordMaddox Brown—Take Your Son Sir (1851)





William Orpen The Mirror (1900)

The sitter in this portrait is Emily Scoble, a model from the Slade School of Art. Orpen was briefly engaged to her. The room is apparently an accurate portrayal of Orpen's lodgings, but the shallow pictorial depth and decorative, or 'aesthetic,' arrangement of objects is based on Whistler's famous portrait of his mother in profile. The circular mirror on the wall reflects the artist painting at his easel. This is a device which Orpen borrowed from a 15th-century painting by Jan van Eyck, *The Arnolfini Portrait*, which he would have seen on display at the National Gallery.





- Henry Treffry Dunn

Dante Gabrielle Rosetti's
Bedroom at Tudor House

Michelangelo Pistoletto

Beginning in 1961 Italian artist Michelangelo Pistoletto began making what would become his most iconic works, his Quadri specchianti (mirror paintings). At first Pistoletto used cut-out images of people painted on tissue paper, and applied them to sheets of stainless steel that had a reflective, mirror finish — but with time Pistoletto began to use photographs of his friends and family members, taken by a professional photographer. He would then enlarge these photographs to nearly life-size and copy them onto tracing paper — he ultimately mastered a silkscreening process and continued this series until the 1980s. By catching the reflection of the audience within the work itself, Pistoletto encourages interactions and creates face to face encounters harkening back to the artist's interest in performance art and the 'creative collaborations' he facilitated between himself and his audiences.

- <https://magazine.artland.com/upon-reflection-the-mirror-in-contemporary-art/>











Yayoi Kusama

Yayoi Kusama had a breakthrough in 1965 when she produced *Infinity Mirror Room—Phalli's Field*. Using mirrors, she transformed the intense repetition of her earlier paintings and works on paper into a perceptual experience.

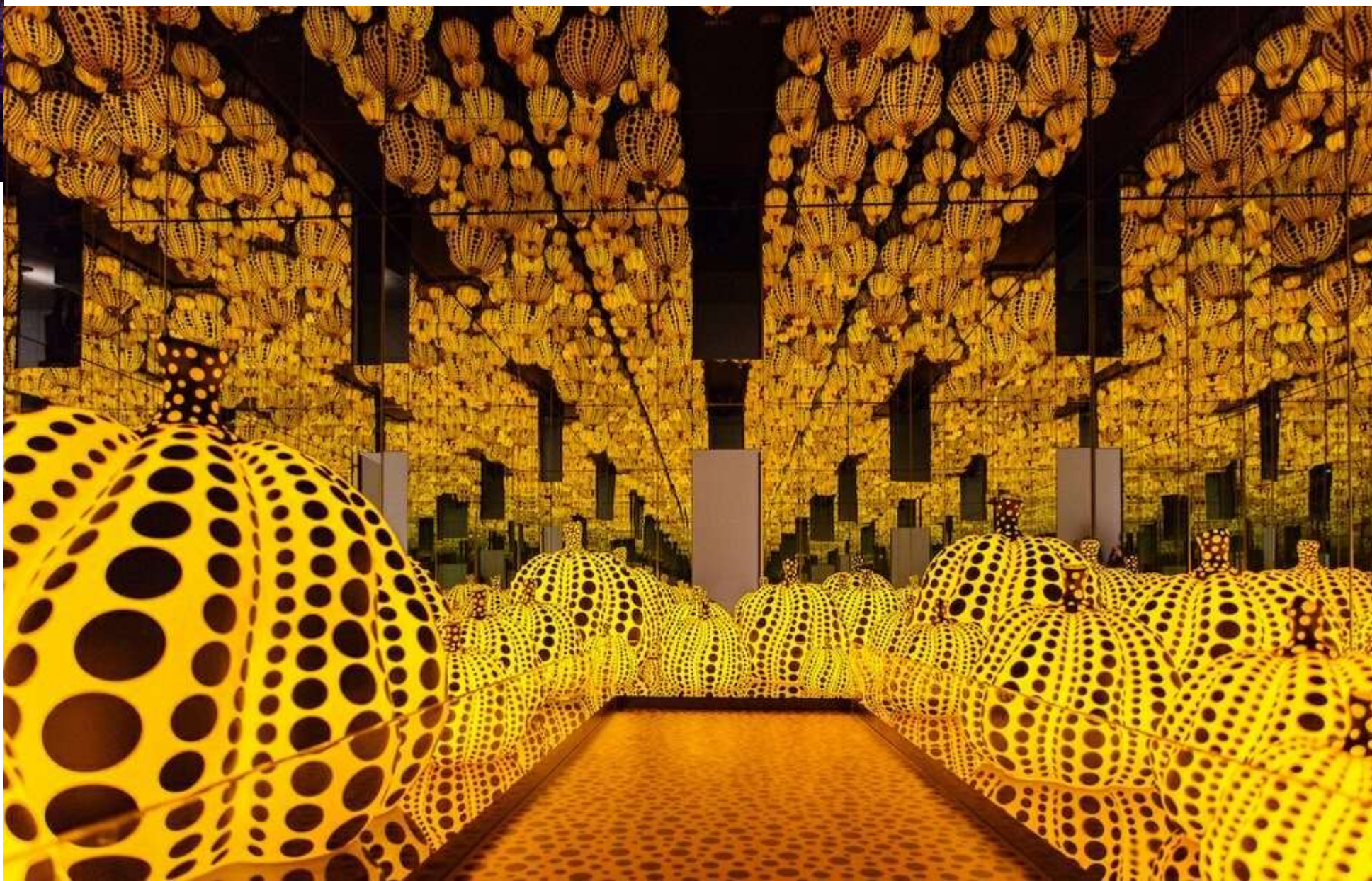
Over the course of her career, the artist has produced more than twenty distinct Infinity Mirror Rooms

- <https://www.youtube.com/watch?v=mFBI4cg3w>











Anish Kapoor

Sir Anish Mikhail Kapoor CBE, RA is a British-Indian sculptor specializing in installation art and conceptual art, born in Mumbai.

<https://www.youtube.com/watch?v=R1iXG5pb3YQ> (use this)

<https://www.youtube.com/watch?v=CG9WED0I8LM>

- Cloud Gate
- Sky Mirror





Olafur Eliasson

Near Doha, Qatar, a cluster of large mirrors and rings made of steel and fiberglass stand on the dry desert landscape amongst shrubs and the remnants of animals that have passed through. Towering meters above the sandy terrain, “Shadows travelling on the sea of the day” allows visitors to wander underneath the glass surfaces and peer upwards at their reflections and that of the landscape, shrouding each figure in an endless swath of dusty earth.

“It is a kind of reality check of your connectedness to the ground,” Eliasson says in a statement about the project. “You are at once standing firmly on the sand and hanging, head down, from a ground that is far above you. You will probably switch back and forth between a first-person perspective and a destabilising, third-person point of view of yourself.”

The remote installation also groups the mirrors so that they reflect their semicircular support structures in addition to those nearby, “creating a sea of interconnections,” the artist says. “Reflection becomes virtual composition, changing as you move. What you perceive—an entanglement of landscape, sprawling sculptural elements, and visitors—seems hyperreal while still completely grounded.” This connection serves as an urgent visual metaphor for humanity’s need to grasp its relationship to the earth as it confronts the climate crisis and attempts to find new paths for coexisting with the natural world.

- https://www.youtube.com/watch?v=hSX_kkJLVg











Alyson Shotz

Alyson Shotz (born 1964) is an American sculptor based in [Brooklyn](#), New York.^[1] She is best known for experiential, large-scale abstract sculptures and installations inspired by nature and scientific concepts, which manipulate light, shadow, space and gravity in order to investigate and complicate perception.^{[2][3][4]} Writers suggest her work challenges tenets of monumental, [minimalist](#) sculpture—traditionally welded, solid, heavy and static—through its accumulation of common materials in constructions that are often flexible, translucent, reflective, seemingly weightless, and responsive to changing conditions and basic forces.^{[5][6][7]} *Sculpture* critic Lilly Wei wrote, "In Shotz's realizations, the definition of sculpture becomes increasingly expansive—each project, often in series, testing another proposition, another possibility, another permutation, while ignoring conventional boundaries."

Mirror Fence is a permanent installation by Brooklyn based artist, **Alyson Shotz**, installed at Storm King Art Center in New Windsor, NY.

<https://vimeo.com/269709325>







Shirin Abedinirad

Around the world, artists have experimented with optical illusions. Amongst them is [Iranian](#) artist [Shirin Abedinirad](#). Born in 1986 in Tabriz, Iran, she started with a passion for painting, partially inspired by her parents. Both of them highly encouraged her to pursue art as part of her life.

<https://www.shirinabedinirad.com/portfolio/house-in-the-wind/>

Evocation

Mirrored Ziggurat









Jeppe Hein

Jeppe Hein is an artist based in Berlin and Copenhagen. His interactive sculptures and installations combine elements of humor with the 1970s traditions of minimalism and conceptual art.

- <https://www.youtube.com/watch?v=XMUFIYSwZKs>
- <https://www.youtube.com/watch?v=H2WzDp8RPNk>
- <https://vimeo.com/68760301>







Assignment Suggestions...

- Take a selfie in a mirror
- Practice drawing images reflected in a convex mirror
- Create an “infinity” artwork