Perhaps the unknown is not a boundary, but a beginning.

This premise runs like a thread through the oeuvre of artist Alicja Kwade. With sculptures, photographs, videos and immersive installations, Kwade challenges philosophical and scientific concepts, calling our certainties into question. She exposes how we construct reality through cultural and political conventions, mathematical systems, measuring instruments, and language – models we often assume to be true, neutral and universal, suddenly appear to be far less self-evident.

For millennia, humanity has searched for answers to the fundamental questions of the universe. Yet with each question we believe we have resolved, new ones inevitably arise. Kwade regards these scientific and philosophical uncertainties not as obstacles, but as opportunities. She translates abstract concepts - like time, chance, and gravity - into tangible form, not to offer explanations, but to call them into question. For it is precisely in not knowing that wonder and imagination take root.

In 'Dusty Die', Kwade puts your preception to the test, shrouding the senses so that what you see and feel begins to waver. Massive stones appear weightless, mirrors open onto parallel realities, and time loses its direction. Solidity gives way to motion; the familiar becomes strange. You drift through a universe where the usual frameworks of rational thought falter, and the world – and yourself – come into view from shifting perspectives.

The title links *Dusty* – dust as both a residue of life and a sign of transience, as well as the microscopic material that obscures yet also enables our view of the cosmos – with *Die*, the dice as a symbol of chance, opportunity, and destiny. Dust can cloud our vision, but without dust particles scattering light, we would not see a blue sky. The dice remind us that the unknown must be embraced: the outcome of a throw is never entirely in our hands.

In this way, the exhibition encompasses the miniscule and the immeasurable, from the tangible here on earth to the unpredictability of the universe. 'Dusty Die' is an ode to the unknown and the undiscovered, to hesitation and reflection. Perhaps understanding begins with doubt.

ALICJA KWADE

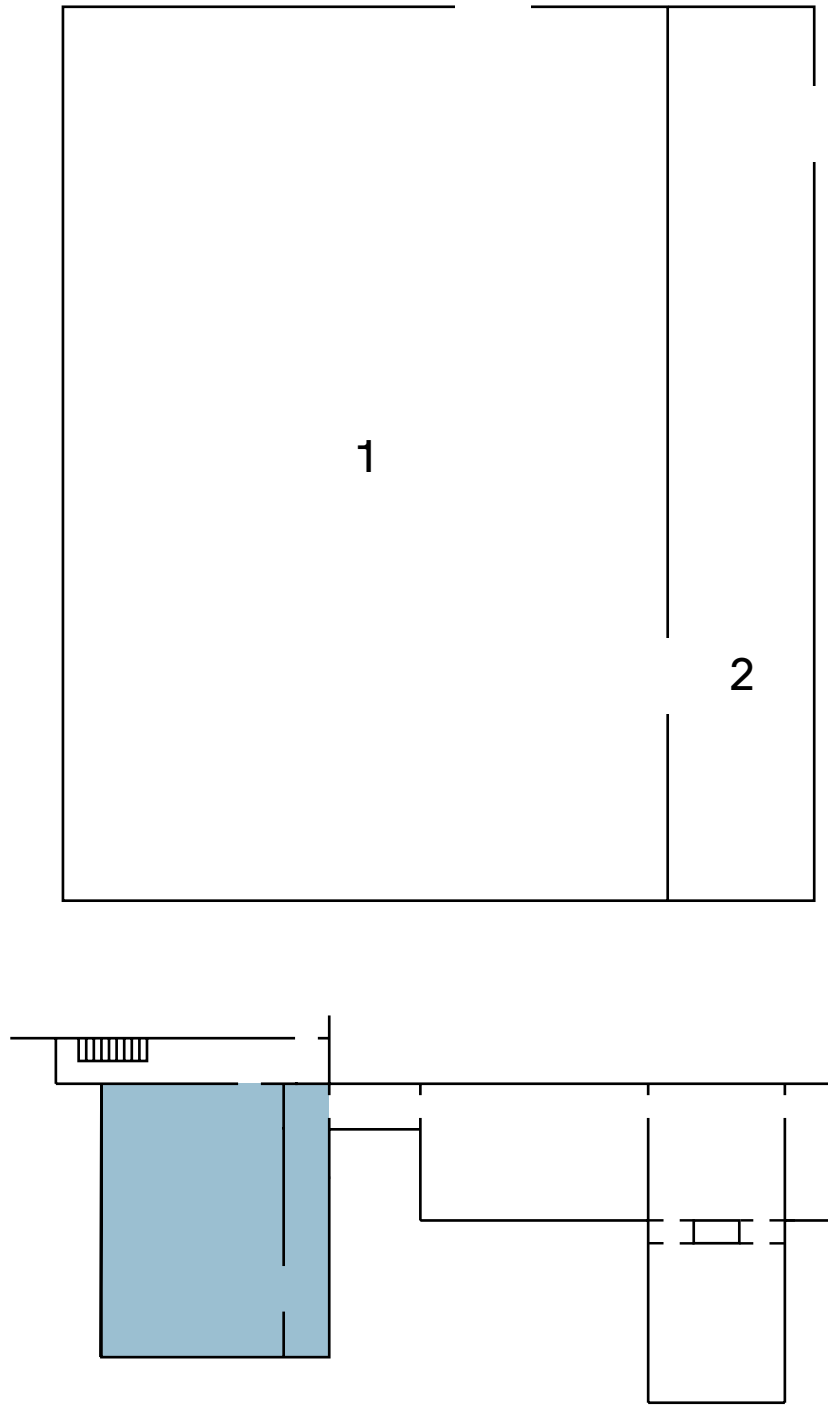
Alicja Kwade (b. 1979, Poland) lives and works in Berlin. Previous exhibitions include the Louisiana Museum in Humlebæk, the Whitechapel Gallery in London, the MIT List Visual Arts Centre in Cambridge (USA), the Hamburger Bahnhof - Nationalgalerie der Gegenwart in Berlin, the Espoo Museum of Modern Art and Haus Konstruktiv in Zurich.

Kwade rose to international prominence with her participation in the 57th Venice Biennale in 2017. In 2019, she also created the acclaimed temporary installation 'ParaPivot' for the roof of the Metropolitan Museum of Art in New York.

Kwade's work is held in numerous public collections, including the Centre Pompidou in Paris, the Hirshhorn Museum and Sculpture Garden in Washington, LACMA – Los Angeles County Museum of Art, Mudam – Musée d'Art Moderne Grand-Duc Jean in Luxembourg, and mumok – Museum Moderner Kunst Stiftung Ludwig in Vienna.

Portrait Alicja Kwade by Doro Zinn

ROOM 1



1 IN EWIG DEN ZUFALL BETRACHTEND

2014
HD video, sound, loop
Duration: 8’16”

In this dark space, five enormous dice float across the screen in slow motion, like planets or meteorites. Filmed at 10,000 frames per second, a fleeting moment is spun out into extended, almost eternal motion. Every reflection and imperfection becomes visible, as if the naked eye can suddenly see far more than usual. The dice are caught in an endless loop – the throw remains forever undecided. The video is accompanied by an overwhelming sound in a continuous state of becoming, like endlessly rolling thunder.

The video installation ‘In Ewig den Zufall betrachtend’ – ‘Forever Contemplating Chance’ – is deceptively simple. Dice are universal symbols of chance, doubt and unpredictability, yet here the result of the throw is perpetually withheld. The endless repetition forms a hypnotic loop in which the promise of an outcome is endlessly deferred.

The work reflects on the continuous flow of time and the infinite series of possibilities life presents. Each throw contains a potential outcome over which we have no control; we must surrender to chance. That fundamental uncertainty is an essential part of our existence, and it is precisely within that open space that new thoughts and possibilities emerge.

‘In Ewig den Zufall betrachtend’, Alicja Kwade, 2014

Worth knowing

“GOD DOES NOT PLAY DICE”

Albert Einstein (1879-1955) revolutionized physics in the early 20th century with his general theory of relativity. By refining Isaac Newton’s 17th-century conception of gravitation, Einstein provided what remains the most comprehensive theoretical framework for understanding gravity.

Yet some new ideas proved too radical for Einstein. From the 1920s onwards, quantum mechanics emerged – the study of the smallest particles in the universe. At that atomic scale, many classical laws of physics no longer apply. Quantum particles do not always appear to follow the fixed laws of nature; instead, a fundamental element of randomness shapes their behaviour.

For Einstein, this was an impossible thought. “God does not play dice,” he famously remarked, with “God” symbolizing the universe. Pure chance, he believed, could not be a guiding principle: everything must follow an underlying logic, a master plan, even if we have yet to understand it. Today, most physicists agree that the universe does indeed contain a degree of randomness. Perhaps God does enjoy taking a gamble after all...

‘In Ewig den Zufall betrachtend’, Alicja Kwade, 2014
© Alicja Kwade, courtesy of the artist

2 INSIDE LIGHT

2009/2025
Kaiser-Idell lamp,
lacquered stainless steel sphere

Whereas in the previous room, you felt as if you were at the centre of the universe, here you seem to view it from a distance, as an outsider. At the end of the corridor stands a lamp that appears to inflate a large globe – the universe itself. Light shines through perforated holes, like stars scattered across the night sky. The globe forms a map of the heavens as they appear on 13 June each year.

The lamp is a Kaiser-Idell model from the 1930s, a Bauhaus design that frequently recurs in Kwade’s oeuvre as a meaningful object. With its sleek, recognizable form, it carries a rich cultural and historical resonance. For Kwade, the lamp represents not only modernity, rationality and design, but also – and perhaps above all – light in both a literal and conceptual sense. Here, that light becomes the bearer of a universe, shifting the scale so that you stand as a giant, gazing from afar at a small yet all-encompassing world.

Can knowledge ever be truly neutral?

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STÉPHANE SYMONS

Philosopher, KUL

Did the laws of physics also apply in prehistoric times? And is 1 + 1 still 2 on Mars? The answer is obvious: yes. Scientific statements are universally valid and are not dependent on place or time. They are based on systematic research and meticulous proofs, and thus provide a reliable representation of reality.

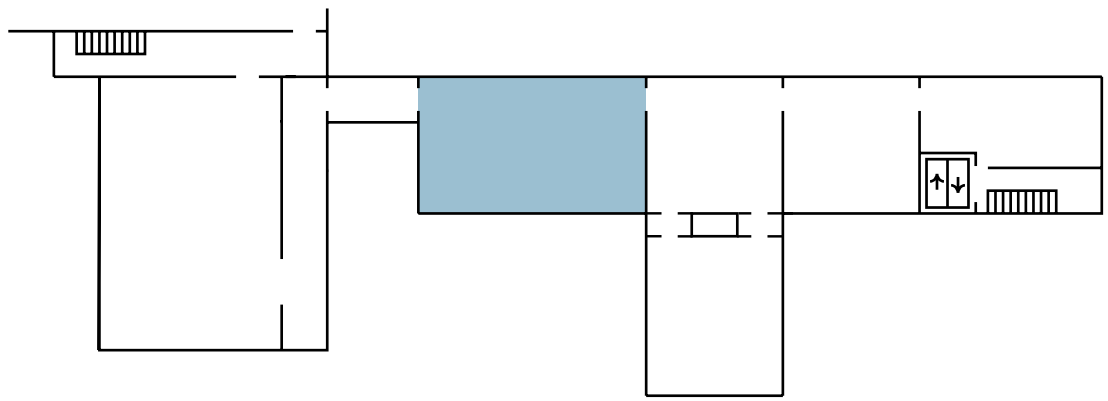
Yet even such seemingly timeless statements are embedded in historical and cultural contexts. Our number system, for instance, originates from the Arab world, which, in turn, adopted it from Indian scholars in the seventh century. Although 1 + 1 always equals 2 everywhere, how we record this knowledge – and reason with it – is a human construct. Even physics and mathematics – the very foundations of Western knowledge – represent specific perspectives on reality.

Moreover, science is never divorced from society. Research agendas are shaped by those who control resources and power. The development of nuclear energy during the Cold War, or today's focus on artificial intelligence, illustrates how political and economic interests influence which questions are scientifically tackled – and which are set aside. At the same time, scientific and technological innovations often reinforce existing power structures.

This insight does not diminish the value of science. On the contrary, its strength lies precisely in recognizing these contexts while striving to transcend its own interests. Is the scope of science limited? Yes. But is there a better instrument for achieving neutral knowledge? No.

ROOM 2

3



3 WELTENLINIE

2019/2025
Powder coated steel, mirror,
bronze, patinated bronze,
stone, petrified wood

In ‘WeltenLinie’, a carefully composed interplay of subtle transformations unfolds, in which natural materials gradually merge with human artefacts. The installation begins with a replica of a tree trunk; its volume and shape are reproduced with exact precision. Within a construction of steel frames fitted with double-sided mirrors, the trunk shifts, through a sequence of objects, into architectural elements from different stylistic periods – from classical pillars to sleek, geometric forms.

As you move through the installation, shapes and materials merge seamlessly through reflections: a fossilized tree trunk flows into stone; a wooden hemisphere becomes a perfect circle in the mirror. Depending on your position, the object and its reflection either fuse or disintegrate. This disorienting experience unsettles your senses – exactly the kind of optical illusion for which Kwade is known.

‘WeltenLinie’ leads you on a visual and conceptual journey from nature to culture, from organically grown forms to man-made structures. It also unfolds as a walk through architectural history, intertwining past and present. Kwade questions the boundary between natural product and cultural object: where does nature end and artificiality begin? What is authentic, and what is invented? The work is both a time capsule and an optical game, in which reality and illusion constantly intersect.

Exhibition view ‘WeltenLinie’, Alicja Kwade, 2019, in ‘Kausalkonsequenz’, 2020, Langen Foundation
photo: Roman März © Alicja Kwade, courtesy of the artist

Does the world exist as it truly is, or as you experience it?

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THOMAS HERTOG

Theoretical physicist, KUL

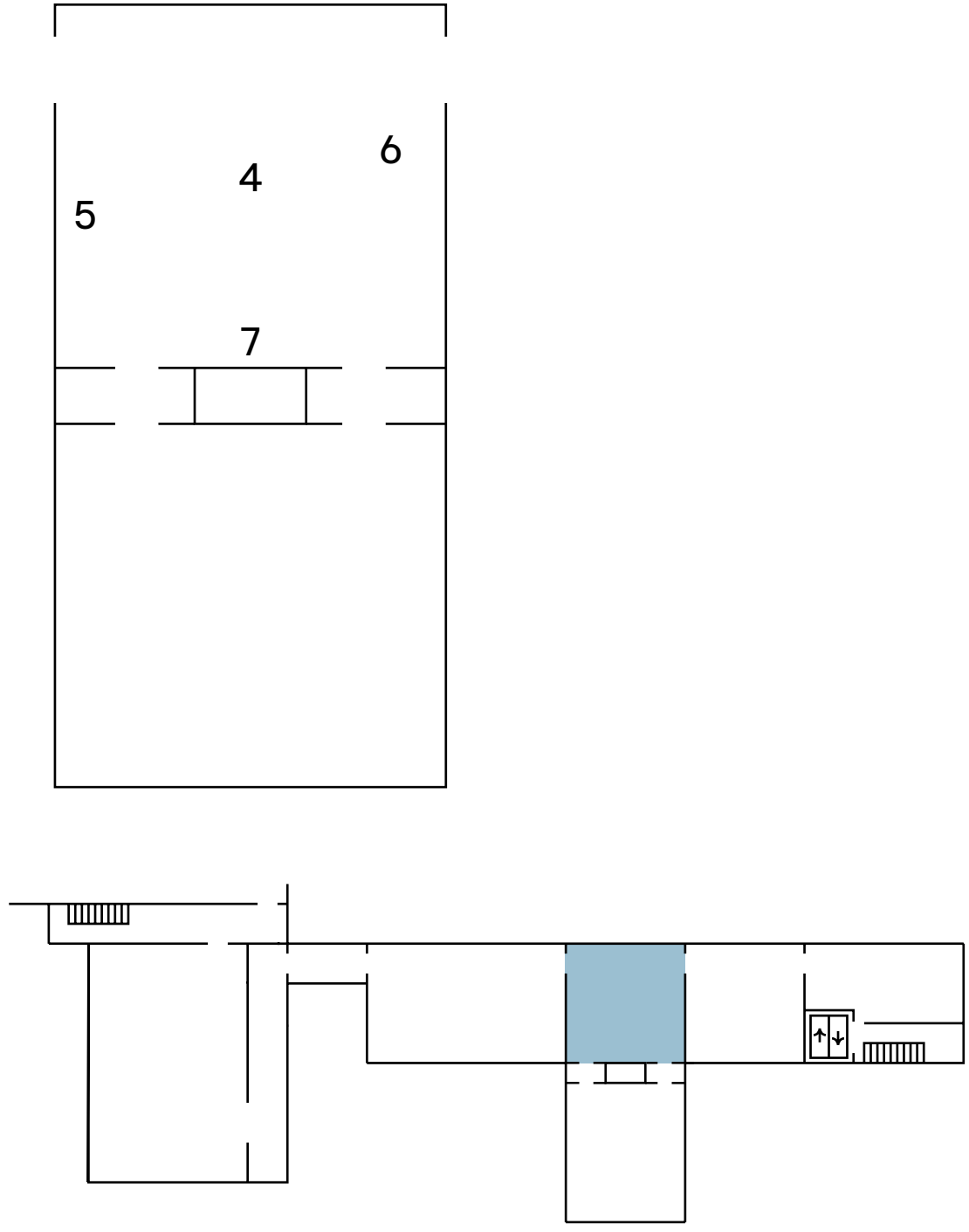
On the one hand, it seems obvious that the world possesses an objective reality, independent of our presence. The Moon shone before there were people to admire it; the oceans flowed before anyone measured their depth. Something seems to 'exist', outside of ourselves.

On the other hand, we never encounter reality directly. Everything we experience reaches us through our senses or through instruments of measurement. Where one person perceives order and structure, another sees chaos and threat. Observations – even measurements – are invariably filtered by context, interpretation, culture and language.

Modern physics brings this tension into sharp focus. Quantum theory does not describe the world in concrete terms, but as a haze of possibilities that only crystallize into tangible reality through continuous processes of questioning and observation. This act of observation – the interactive process at the heart of quantum theory that transforms what "can be" into what "happens" – assigns the observer a fundamental creative role.

So the world is neither simply as it is, nor merely as you perceive it. It emerges from the subtle interplay of the cosmos and the observer, of atoms and dream. The realm of countless possibilities holds the answers to an endless variety of questions, yet it only reveals itself through what is actually asked. The fabric of the world weaves itself whole.

ROOM 3



4 SUPERHEAVY SKIES

2025
Mirrorpolished stainless steel,
stones

In ‘Superheavy Skies’, massive boulders hang from seemingly fragile polished rods, connected in a meticulously balanced system of axes. The stones rotate slowly through space, their weight calibrated to the smallest fraction. What appears simple is, in fact, a complex balancing act: even the slightest deviation would throw the entire structure off balance.

The natural stones seem to float weightlessly, while their shadows glide slowly across the walls. It is akin to watching a miniature universe, with stones instead of planets – a cosmic system that can only exist in this form because, in reality, it would instantly collapse.

Here, Kwade reveals how perception is shaped by belief. Weight, balance and gravity are not fixed certainties but shifting concepts. The work points to the invisible forces that bind our universe: a fragile yet extraordinary equilibrium, above our heads and beyond our comprehension.

‘Superheavy Skies’ (detail), Alicja Kwade, 2022
photo: Justin Craun © Alicja Kwade, courtesy 303 Gallery New York

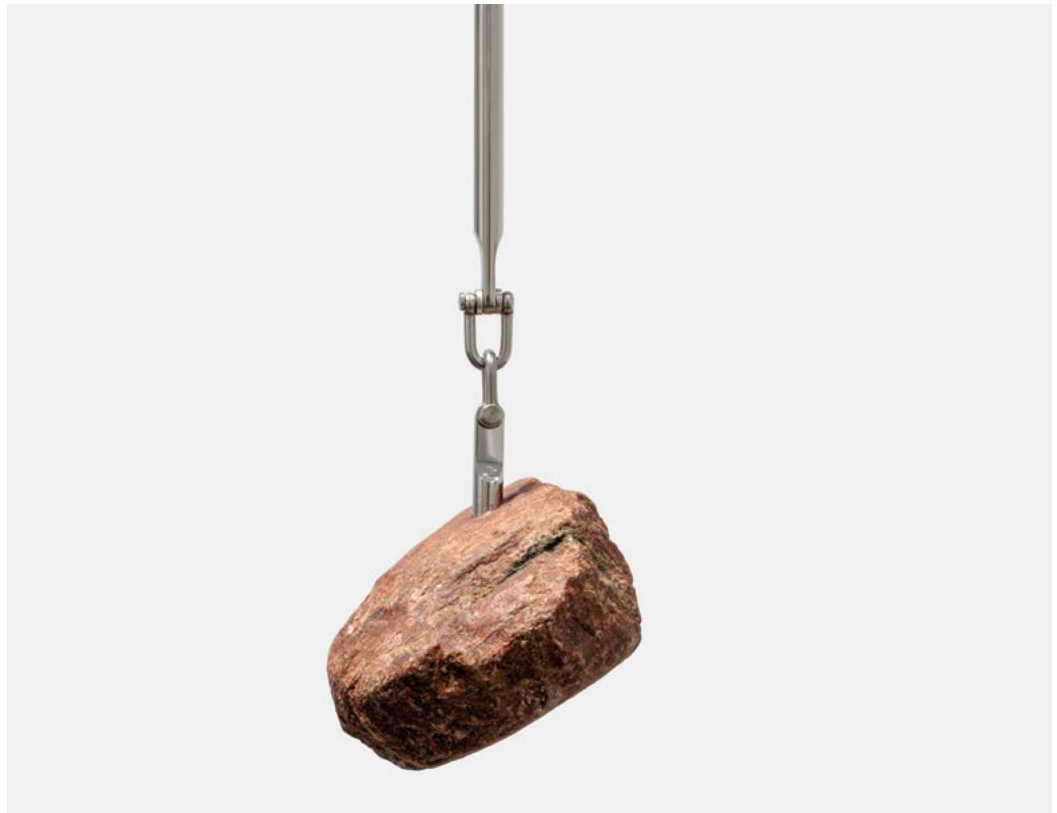
Worth knowing

THE THREE-BODY PROBLEM

Can you predict the trajectory of three objects – for example, three planets – if you know their initial positions and velocities? Isaac Newton (1643–1727) devoted his entire life to this question. Newton's gravitational formulas are foolproof when two objects are involved, allowing the motion of the Sun and Earth to be calculated, for example. But with three or more planets, things become infinitely more complex because the objects influence one another.

Today, we know there is no general analytical solution to the three-body problem. In other words, the orbits of three planets cannot be expressed in a single, simple formula, except in a few very specific situations.

But why is that? Aren't all planets governed by identical laws, such as Newton's law of gravity? Well, even the smallest change can make a huge difference. In 2009, scientists attempted to predict the orbits in our solar system for the next billion years. Shifting the position of Mercury by barely a millimetre led to a completely different outcome; in certain simulations, planets were even ejected from the solar system. No matter what calculations we use, there are simply too many mutual influences and unknown variables to capture such remote predictions in a simple formula.



'Superheavy Skies' (detail), Alicja Kwade, 2022
photo: Justin Craun © Alicja Kwade, courtesy 303 Gallery New York

5

1417+ (16.08.2013)

2013
Ink on paper (framed), stone

On 16 August 2013 – the day Alicja Kwade completed this work – NASA had registered 1,417 asteroids whose orbits and size rendered them potentially hazardous to Earth. All their names were transcribed by hand in calligraphic script, in a style reminiscent of the era before the printing press, when texts were copied slowly and carefully. Beneath the paper, Kwade placed a group of stones symbolizing the celestial bodies.

The list begins with Apollo, discovered in 1932, and ends in 2013 with 2013 QR1. Early discoveries were given mythological names – Adonis, Hermes and Icarus – while more recent finds were assigned neutral codes. The number continues to grow, with new registrations added annually. Notably, there is a gap between 1937 and 1947, when no dangerous objects were recorded. This absence does not mean asteroids ceased to approach Earth, but rather that the Western world was preoccupied with more pressing matters during the Second World War.

'1417+ (16.08.2013)' reveals the vulnerability of our systems for understanding reality. Knowledge is never neutral; it is shaped by the observer's perspective – by what they choose to see and what they seek to know. In a sense, the danger of asteroids exists only because we've searched for them. Kwade therefore raises the question: do things exist only when we observe them, or also when we don't? How does scientific observation shape our understanding of reality? What is true, and what makes it so?

Despite calculations and models, a margin of uncertainty invariably remains: predictions are based on probabilities, never on absolute certainty. Kwade makes this tension tangible, showing that – even in science – chance and unpredictability cannot be ruled out.

'1417+ (16.08.2013)' (detail), Alicja Kwade, 2013
photo: Volker Döhne © Alicja Kwade,
courtesy of the artist

6 SIÈGE DU MONDE

2025
Painted stainless steel,
Azul Macaubas

A perfectly spherical, planet-like stone rests on a replica of a simple Art Nouveau chair, rendered in stainless steel. Alicja Kwade unites two scales of reality in this work: the cosmic and the human, the intangible and the everyday.

The sphere alludes to the planets in our solar system – vast, abstract and beyond direct experience. Its blue surface recalls our own planet, as if you're gazing back at yourself. Carved from natural stone, it reveals layers formed over millions of years, a time capsule preserving an almost immeasurable temporal duration. Beneath it stands the chair: concrete, recognizable, made to human scale.

This juxtaposition marks our position in the universe and the limits that shape our perspectives and truths. The chair may nod to the reading, thinking and study that often occurs in such a seat – perhaps a futile attempt to comprehend the world. But whether it is truly possible to give the entire world a place continues to be an open question.

'Siège du Monde',
Alicja Kwade, 2025
photo: Roman März © Alicja Kwade,
courtesy of the artist

7 GEGEN DEN LAUF

2012/2025
Found clock, motor

In ‘Gegen den Lauf’ (German for ‘against the run’), Alicja Kwade has transformed a seemingly ordinary analogue wall clock. Its conventional functioning is completely reversed. While the second hand ticks forward as usual, the dial rotates anticlockwise. The result is an endlessly shifting interplay of numbers and hands that disrupts the stability of time. Remarkably, however, the clock still shows the correct hour.

Clocks are an externalization of humanity’s attempts to structure reality, making time physically present. Here, Kwade confronts us with its paradoxes: perceived to be linear and relentless, yet also dependent on conventions, devices and symbols. By doubling and distorting the logic of the clock, time is revealed not as a neutral given but as an absurd mechanical ritual, open to various readings and interpretations.

In ‘Gegen den Lauf’, the linear progression of seconds collides with an oppositional force that seems to yank us back into the past. In this collision, the present moment appears to vanish. The work thus highlights not only the mechanics of time but also our obsession with it, and the anxiety that arises when the accepted rhythm of its flow is disrupted.

‘Gegen den Lauf’, Alicja Kwade, 2012/2025
photo: Roman März

Who does space belong to?

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PHILIP DE MAN

Jurist International Space Law, KUL

Since time immemorial, outer space has held an irresistible allure. Yet alongside this sense of wonder arises a legal and philosophical question: who owns space?

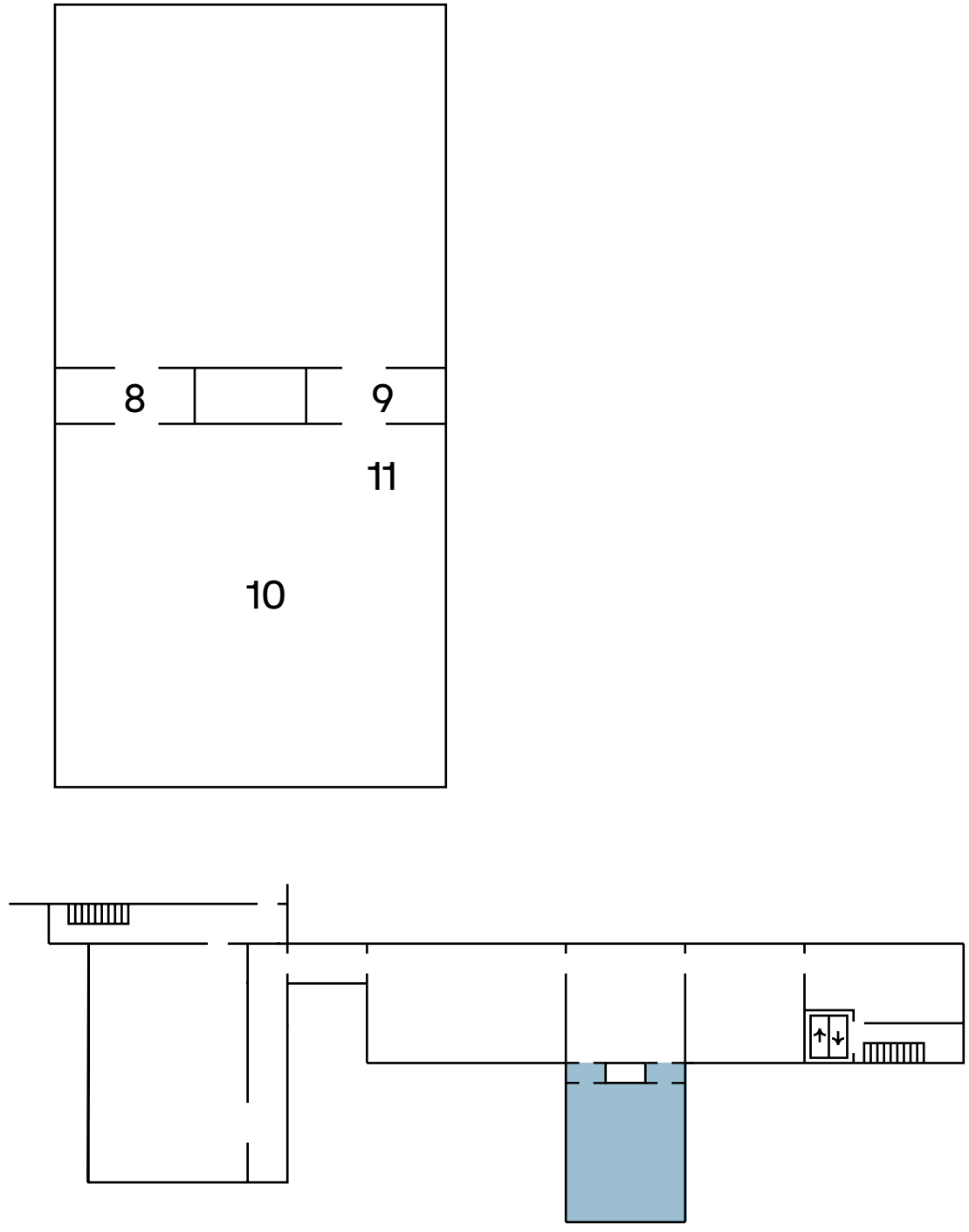
International Space Law offers a clear answer, grounded in two fundamental principles. First, all states enjoy equal freedom to explore and use space. Second, no one may claim ownership of space or any celestial body. Accordingly, neither states, companies, nor individuals may declare the Moon, Mars, or an Earth orbit as "theirs".

In theory, this means that space is a common good: a domain belonging to all states, and to which no one can deny access. For celestial bodies such as the Moon, the principle goes even further: they are considered the 'common heritage of humankind', implying that the interests of future generations must also be considered.

In practice, however, this is a fragile ideal. The proliferation of satellites in commercial constellations, such as Starlink, and proposals for exclusive 'safety zones' around future lunar bases, already suggest a de facto logic of 'first come, first served'. National legislation in the United States, Luxembourg and Japan likewise grants companies ownership rights over mined space resources – a development that places pressure on international consensus.

Formally, space belongs to everyone; in reality, it belongs chiefly to those with the means to reach it. The challenge for the future is to ensure that the cosmos – the ultimate shared landscape – does not become the playground of a select few.

ROOM 4



8 WO OBEN ZUM UNTEN

2015
Collection of keys to
unknown doors

A bunch of keys hangs inconspicuously from the ceiling of the gallery, small and far above your head. It looks as if someone has just dropped them, in an upside-down world where below is above. But to whom do the keys belong?

Alicja Kwade compiled this work over a period of ten years, collecting keys she found by chance – abandoned, lost, discarded. Together they suggest a fictive connection, as if they could unlock a coherent biography. Yet no one knows which doors they fit – not even Kwade herself. The keys promise solutions to unknown problems and imply the existence of inaccessible knowledge. Perhaps certain things will always remain beyond our comprehension.

'Wo Oben Zum Unten', Alicja Kwade, 2015
photo: Roman März © Alicja Kwade, courtesy of the artist

9

THE SUN

2022
Bronze, paint

‘The Sun’ (detail), Alicja Kwade, 2022
photo: Roman März © Alicja Kwade,
courtesy of the artist

10 PARAPOSITION

2024
Stainless steel powder coated
black, stone, bronze chair

Two slender, interlocking steel frames support an equal number of solid, natural stones, which seem to float in weightless equilibrium. A bronze chair stands directly under one of the stones. The construction appears both monumental and fragile – at once an invitation and a warning: will you sit down, or keep your distance?

With 'ParaPosition', Alicja Kwade creates a mini-universe where nature and human order converge. The rough boulders evoke geological time and primal forces, while the geometric steel frames symbolize human-made systems and structures. The work plays on contrasts: heavy, raw matter rests on a precarious-looking construction, seemingly defying gravity.

Behind the installation, a photograph of grey cloud cover ('Northern Sky', 2025) fills the wall, taken by Kwade on a dreary day in Berlin. The clouds obscure everything beyond – sun, moon, stars, and the universe. They suggest a horizon that blocks our view of the larger whole, evoking the idea of knowledge that always remains partly hidden.

The empty chair, with a stone hovering above it like a sword of Damocles, draws the viewer into this fragile balance. The sculpture invites contemplation yet carries an undercurrent of menace – a metaphor for our position in an unpredictable world. The unresolved questions of the universe hanging over us both fascinate and unsettle. As in much of her work, Kwade questions the systems we construct to impose stability on an inherently elusive reality.

'ParaPosition' (detail), Alicja Kwade, 2024
photo: Sebastiano Pellion di Persano

11

EADEM MUTATA RESURGO

2014
Wood, patinated brass, acrylic paint
Collection Gabriele & Peter Schwartzkopff, Reinbek

This room is separated from the previous one by four doors. Yet only three are visible in their frames. The fourth seems to have escaped: it stands freely in the space, tightly curled around its vertical axis. A robust, seemingly rigid object here proves pliable – and has lost its original function.

The curvature of the door is not arbitrary but follows a logarithmic spiral, a form that recurs in both mathematics and nature and, in principle, extends infinitely.

With this door, Kwade is not opening a room but gesturing towards another, infinite reality – a slightly imperfect world. As so often in her work, she takes an everyday, recognizable item and inverts its logic. The utilitarian object becomes a sculpture that plays with function, form and meaning, inviting the viewer to question familiar certainties.

Worth knowing

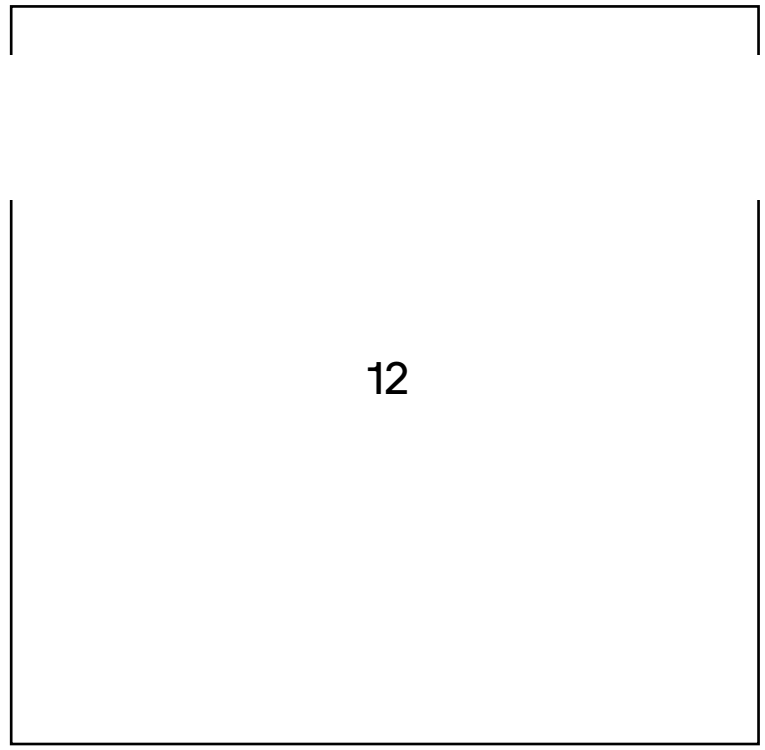
"SPIRA MIRABILIS"

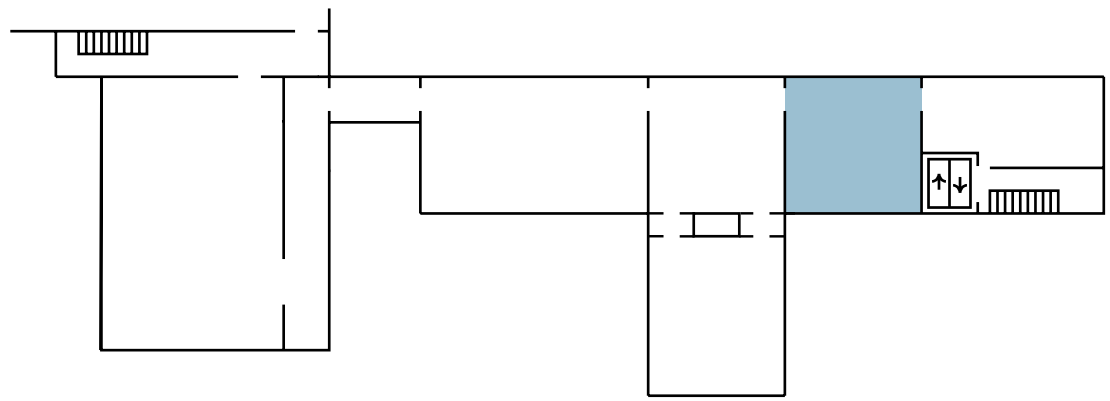
The title of Alicja Kwade's curled door, 'Eadem Mutate Resurgo', was also the motto of Swiss mathematician Jacob Bernoulli (1655–1705). It translates roughly as 'although changed, I arise the same'. Bernoulli used it to describe the logarithmic spiral, which he called the 'spira mirabilis', or the 'miraculous spiral'. A century earlier, Albrecht Dürer (1471–1528) had studied the same form, referring to it as an 'eternal line'.

A logarithmic spiral appears identical at any scale: no matter how far you zoom in or out, its curvature remains constant. Toward the centre, the spiral grows ever tighter, and, in theory, it continues infinitely. This form is not only mathematically fascinating but also frequently recurs in nature – in the curve of a snail's shell, the structure of a sunflower head, or the form of a cyclone.

'Eadem Mutata Resurgo',
Alicja Kwade, 2014
photo: Fabrice Seixas

ROOM 5





12 BLUE DAYS DUST (II)

2025
Lapis lazuli, paint

And then everything was blue.

Upon entering this room, you are bathed in intense ultramarine.
At the centre lies an imposing stone weighing almost two tonnes – a block of lapis lazuli. It is also the source of the pigment used to paint the walls.

Lapis lazuli, a semi-precious stone mined for thousands of years in places such as Afghanistan, reached Europe in the Middle Ages via Italian merchants. Artists ground the stone into ultramarine – from the Latin ultramarinus, “beyond the sea”. The labour-intensive process made it one of the most precious of all pigments, prized for its unrivalled intensity.

Only 20 to 30 grams of pigment could be extracted from a kilo of stone, making it as valuable as gold during the Renaissance. It was therefore reserved for the wealthiest patrons – such as the Vatican – and used only for the most significant painterly details, like the Virgin Mary’s cloak or the sky.

Here, too, you seem to float in the air, as if stepping into a historical painting. Yet the heavy stone at the centre brings you back down to earth. Both are made of the same material – rough and solid in one case, ground and processed into luminous blue paint in the other. Kwade plays with this duality: is this a sculpture, or a painting you can step inside?

In ‘Blue Days Dust’, Kwade connects the earthly with the cosmic. The stone, formed over millions of years, serves as a time capsule that confronts us with our own insignificance. At the same time, the artist questions the systems by which we assign value to materials: what makes this stone precious? Its value is not an absolute truth, but the result of cultural conventions.

The walls and the stone share the same origin but differ in meaning. The weight of the stone contrasts with the lightness of the blue walls. In this way, Kwade invites us to reflect on how matter, time and human perception shape one another, and how we assign meaning to the world around us.

‘Blue Days Dust (II)’ (detail), Alicja Kwade, 2025
photo: Roman März © Alicja Kwade,
courtesy of the artist

Does something only have value if you give it meaning?

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SOPHIE DE WINNE

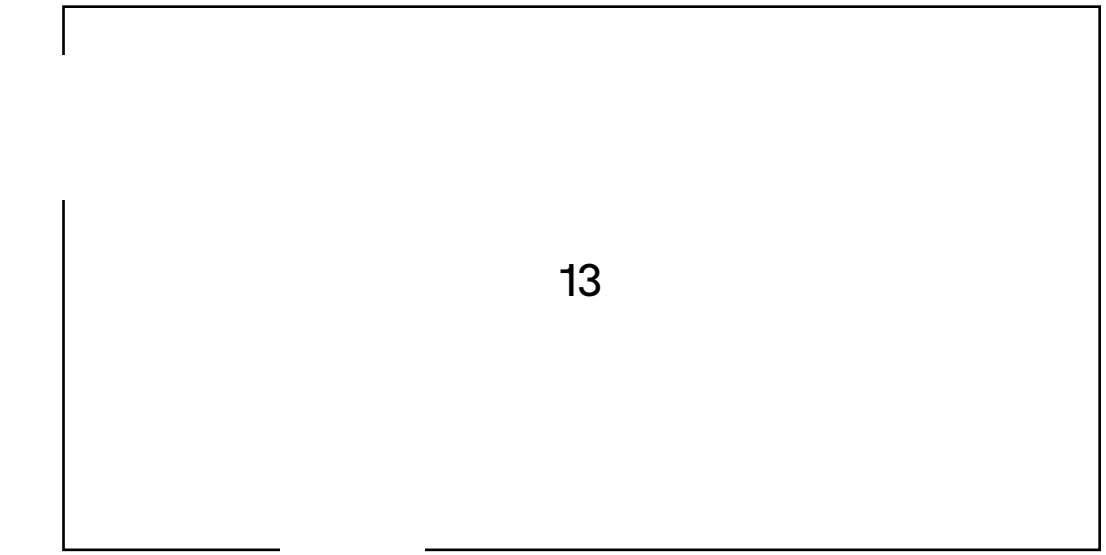
Economist, KUL

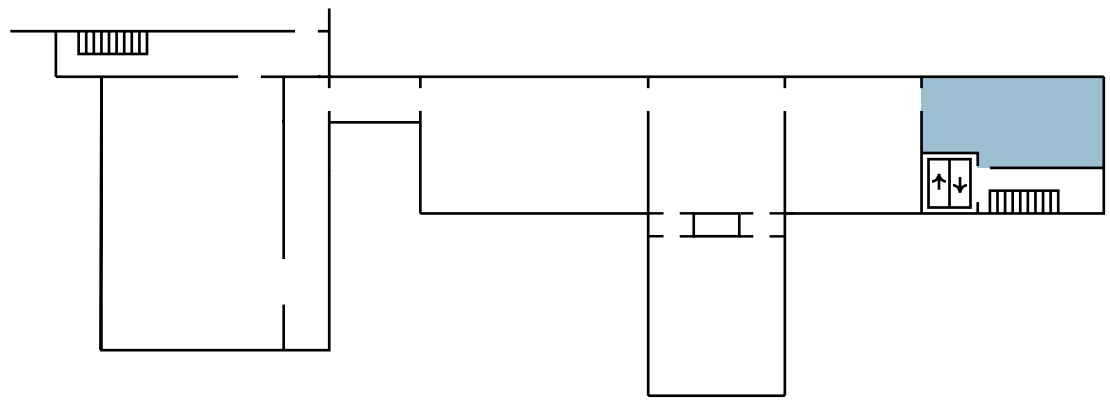
In economic terms, this is referred to as utility maximization: something acquires value when it contributes to an individual's utility. Utility is a measure of the satisfaction or well-being that a consumer derives from goods or services. A product or service, therefore, has value for an individual if it increases their utility. That value is subjective: what is useful to one person may be irrelevant to another. This shows that value is not an objective given, but something that arises from the meaning we give it.

A pebble, a book filled with notes, or an old photograph may be almost worthless to one person yet precious to another, owing to the memories, emotions, or symbolism attached to them. This applies not only to tangible things, but also to experiences, relationships, and ideas. Moreover, usefulness may change over time: a large family car might be indispensable when one has young children, yet far less so later in life. Meaning and value are thus subjective, contextual, and contingent upon time.

There are also objective forms of value, such as functional value, which exist independently of personal meaning. Water, for example, is valuable to everyone in the desert because it is critical to survival. The first two glasses are highly useful and therefore greatly valued. After five glasses, however, the value of an additional one diminishes significantly, and the sixth adds nothing. This illustrates the law of diminishing marginal utility, which holds that the additional value of each extra unit declines as the quantity already possessed increases.

ROOM 6





13 NACH OSTEN

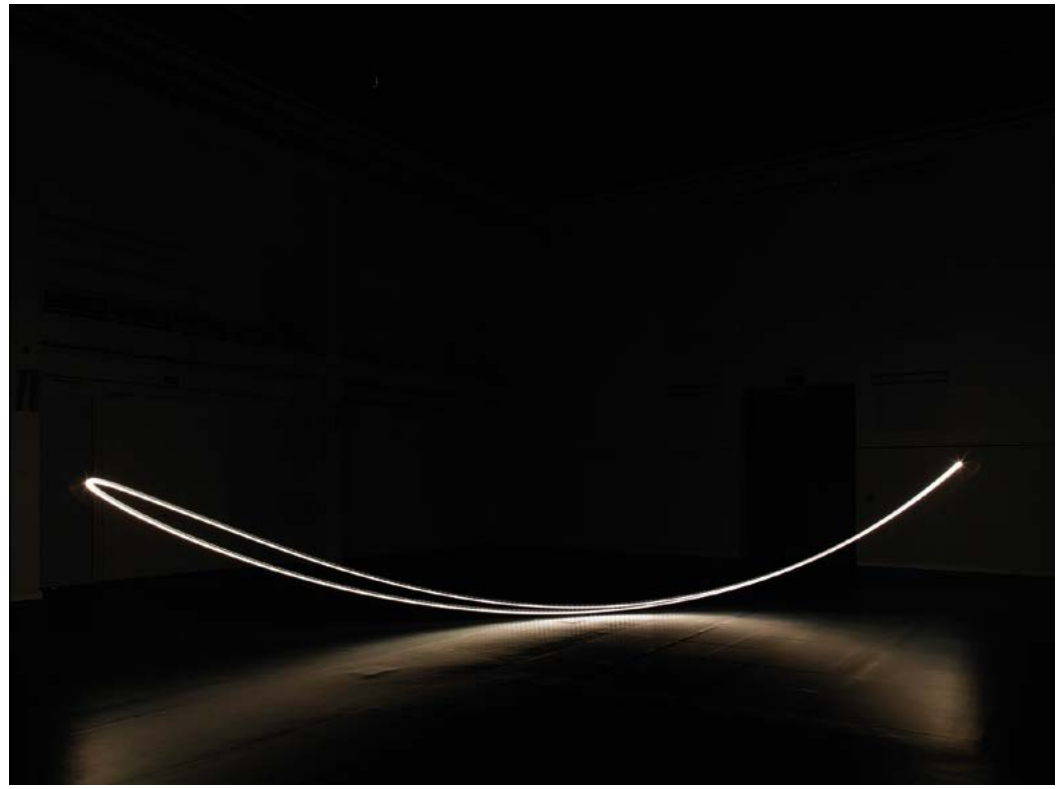
2011/2013
Five speakers, microphone, amplifier, electric motor, pendular, lightbulb
Boros Collection, Berlin

In this darkened room, a light bulb swings back and forth, casting dramatic shadows across the walls. An invisible microphone attached to the lamp amplifies the rush of air, making the rhythm of its movement almost tangible. The sound seems to drive the pendulum, like a breath filling the space.

For 'Nach Osten', Alicja Kwade drew inspiration from Foucault's pendulum. This is the famous device with which scientist Léon Foucault demonstrated, in 1851, that the Earth rotates on its axis. Kwade replaced the heavy metal sphere of the original model with a weighted light bulb, thereby casting – literally – a different light on this scientific classic.

The title 'Nach Osten' refers to the direction of the Earth's rotation: eastward, anticlockwise if you were looking from the North Pole. Like Foucault's pendulum, Kwade's version traces a circle over time; if you watch long enough, you will see the lamp gradually shift. A motor at the top ensures that it returns to its starting point after approximately 23 hours and 58 minutes – the time it takes for the Earth to complete one rotation at our latitude. Yet the motor also causes the pendulum to swing in the opposite direction to the Earth's rotation. While the title of the work points east, the lamp, in fact, moves west, as if deliberately contradicting the natural order.

With this intervention, Kwade transforms an icon of scientific certainty into a poetic disruption. Where science seeks to explain and prove, art allows space for doubt, interpretation and imagination. 'Nach Osten' thus hovers between model and deception, order and aberration, inviting us to reflect on how we understand the world – and on the systems we construct to explain it.



'Nach Osten', Alicja Kwade, 2011/2013
photo: Roman März

Worth knowing

FOUCAULT'S PENDULUM

Since the time of the ancient Greeks, one seemingly simple question has puzzled the greatest minds: is the Earth static, or does it rotate on its axis? For centuries, mathematicians, physicists and philosophers remained divided. In 1543, Nicolaus Copernicus (1473-1543) argued that the Earth not only revolves around the Sun but also rotates on its own axis. But he could not prove his own theory.

It was not until 1851 that the Earth's rotation was finally demonstrated empirically. French physicist Léon Foucault devised an ingenious experiment to make it visible. In the dome of the Panthéon in Paris, he suspended a 67-metre-long pendulum with a heavy metal sphere at its end and set it swinging in a straight line. If the Earth were stationary, the pendulum would always swing in the same direction. But what happened? With each swing, the sphere shifted slightly.

Over the course of a day, the pendulum completed a full circle. This could not have been caused by the pendulum itself, which moved only back and forth. The explanation was as simple as it was astonishing: it was the Earth rotating beneath the pendulum. The apparent rotation of the pendulum was an illusion. For the first time, the Earth's rotation on its axis had been proven.

Is there fiction in science?

This exhibition – in which science and wonder go hand in hand – is part of KU Leuven's 600th anniversary celebrations at M.

During your visit, you will find questions in different parts of the museum, inviting reflection and prompting you to think about what we believe we know – and what we don't. In this visitor's guide, several KU Leuven professors respond to those questions.

SYLVIA WENMACKERS

Philosopher of Science, KUL

Science focuses on knowledge about the real world, but more often than not, the path to this goal runs through the imagination. Natural scientists sometimes deliberately deviate from the truth in order to gain greater insight into everyday reality.

As early as Galileo, researchers used thought experiments to imagine how objects would move without friction. This led to the insight, for example, that a feather and a lead cannonball will accelerate at the same speed when dropped. In our atmosphere, of course, there is air resistance. Still, the fictitious thought experiment is scientifically valuable: a simplification that helps us better understand real movements (where friction is present).

Gravity alone would give the feather and the cannonball the same acceleration, but even a slight breeze causes the feather to deviate far more. Today, we can test the experiment without air resistance by using a vacuum chamber. If you release a feather and a bowling ball from the same height in the chamber, they fall to the ground at the same time. An astronaut once tested this on the Moon, where there is no atmosphere, using a feather and a hammer – with the same result. In this case, an imaginary scenario inspired real experiments. Today, scientists also use computer simulations to adjust properties that cannot, or can hardly, be changed in reality. This, too, is a form of fiction in the service of science.

ROOM 7

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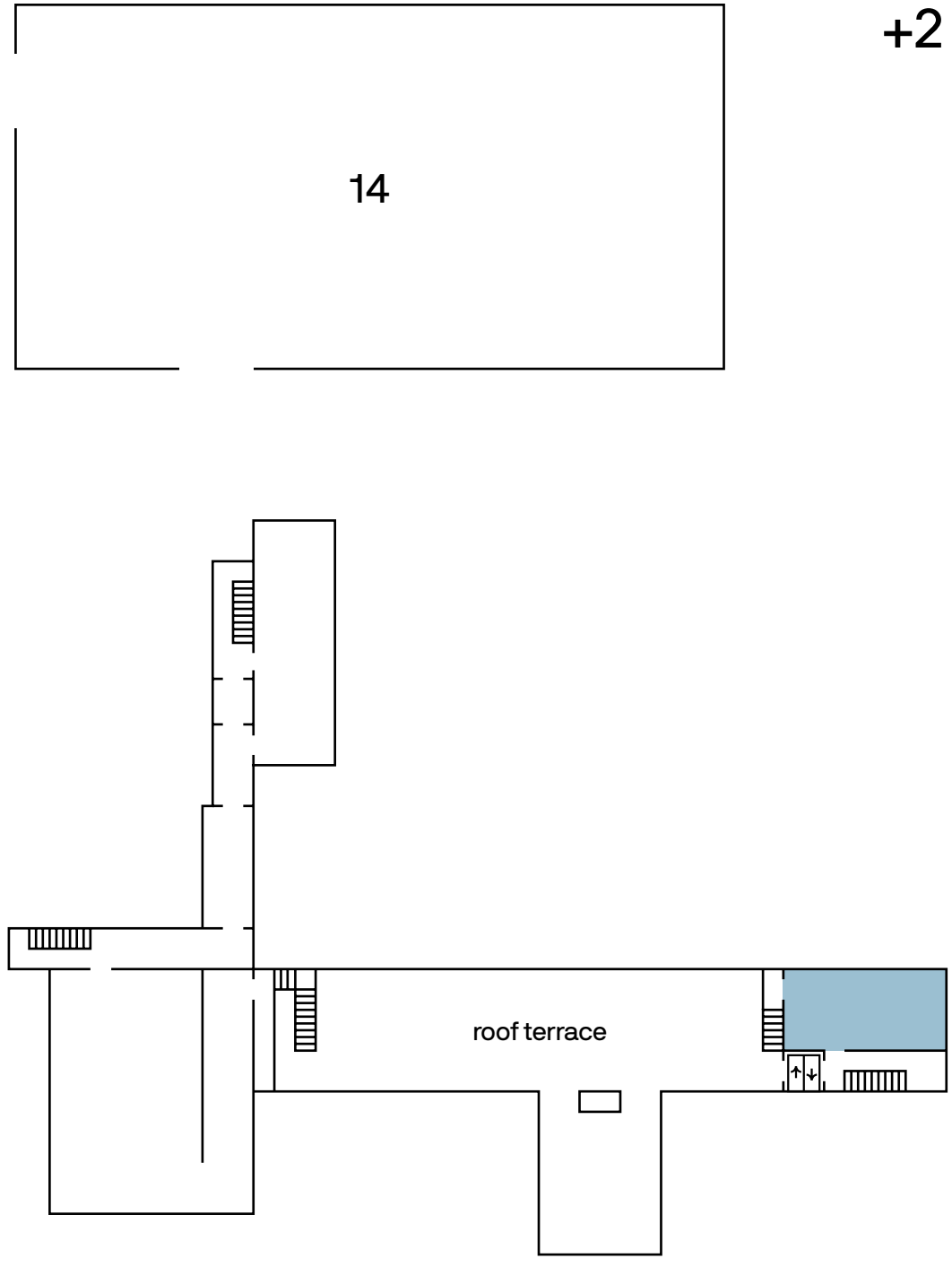

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HUBWAGEN

2012/2013
Lifting cart, acrylic paint
Collection Edition Block, Berlin

‘Hubwagen’ is the German word for a pallet truck or transpallet – a device commonly seen in warehouses, but also behind the scenes of a museum. Here, it appears to have been carelessly abandoned – until you notice that something is amiss: the forks are bent into a perfect circular arc.

This intervention renders the truck useless, forcing it to move endlessly in circles. Any attempt to use it becomes an absurd endeavour. As so often in her work, Kwade strips an ordinary object of its function, opening up a parallel logic in which things behave unexpectedly.

The circle refers to time without beginning or end, but also to our inexhaustible – and perhaps unattainable – quest for meaning and knowledge. The work can also be read as a parody of the one-dimensional, performance-driven thinking within today’s capitalist system. It seems to ask whether we always need to know where we’re going, or whether it might sometimes suffice to simply keep moving.

During the exhibition, ‘Hubwagen’ will be activated at selected moments in a performance. The endless circle then becomes literally visible – at once a playful final chord to this exhibition and a question mark about the demands we place on ourselves and our ultimate destination.

‘Hubwagen’, Alicja Kwade, 2012/2013
photo: Roman März © Alicja Kwade,
courtesy of the artist and Edition Block Berlin

MORE
ALICJA
KWADE

On the occasion of Alicja Kwade's solo exhibition, M has organized three 'Food for Thought' events in collaboration with KU Leuven.

Advance registration via the website is recommended.

WHO DOES SPACE BELONG TO? (NL)
20.11.25 20:00 – 21:00

We dream of travelling to other planets. But who actually owns space? In this 'Food for Thought' lecture, jurist Prof. dr. **Philip De Man** sheds light on International Space Law – an attempt to bring order to infinity.

mleuven.be/denkvoer

WHAT IS THE ORIGIN OF TIME? (EN)
18.12.25 20:00 – 21:30

Artist Alicja Kwade and Prof. Dr. Thomas Hertog in dialogue about time, space and perception

What if time does not exist as we imagine it, and the future does not simply follow the past in a straight line? And what if time itself began with the Big Bang – together with space and matter? In this 'Food for Thought' lecture, Thomas Hertog explores how contemporary cosmology is radically reshaping our understanding of time.

Afterwards, artist **Alicja Kwade** and Prof. Dr. **Thomas Hertog** will discuss the intersection of science and art, and how temporal, spatial and perceptual concepts acquire form in her work.

mleuven.be/denkvoer

IS THERE FICTION IN SCIENCE? (NL)
15.01.26 20:00 - 21:00

A philosophical look at the role of fiction in art and science

Both art and science begin from a place of not knowing. Science builds structures that can be tested and proven, while art opens space for doubt, interpretation and the imagination. In this 'Food for Thought' lecture, philosopher of science Prof. dr. **Sylvia Wenmackers** explores how mathematical and physical models can improve our understanding of the world.

mleuven.be/denkvoer

AND SO, CHANGE COMES IN WAVES

KU Leuven invited Alicja Kwade to create ‘Carriers’, a permanent artwork for the Sint-Donatuspark in Leuven. Responding to the anniversary theme ‘The Poetics of Not Knowing’ – the idea that science is not only about knowledge, but also about doubt, imagination, and the unknown – Kwade conceived an installation in which a boulder rests on a circle of chairs. These are replicas of the seats found in various university buildings and faculties. The work reflects the idea that knowledge does not stand alone but is supported by a diverse academic community: from students and researchers to professors and auxiliary staff.

‘Carriers’ is part of the art and science route ‘And So, Change Comes in Waves’, which opened in Leuven on 16 May 2025 and features sixteen new artworks and poems.

‘Carriers’, Alicja Kwade, 2025
photo: Marijke ‘T Kindt