

ArttallKelle

ArtFormer



THE ANATOMY LESSON OF DR. TULP

1649

Rembrandt van Rijn, René Descartes and Baruch Spinoza

—hereinafter “the trio”—
examine Rembrandt’s 1632 painting of an autopsy,
The Anatomy Lesson of Dr. Tulp.

Descartes asks Rembrandt
if the good doctor has found the man’s soul yet.

Spinoza retorts that:

“Soul and body are one.”

(Continues on the back cover)

Art4Former

ArtFormer

Anttal Kelle

CREATION AND CONTINUITY

It is no secret that Hungarian constructivist-geometric art did not end with the work of the activists Kassák, Moholy-Nagy, Kepes, Schöffer, Vasarely and others, but continued in the sixties, and there are still young people working in this non-representational, editorial-researcher style. The Open Structure Art Society (OSAS) is made up of prominent representatives of constructivist-geometric art, mainly Hungarian, as well as art historians, institution managers and collection builders. The society was founded to organise, preserve and carry out research into the work of its members, their collections of art and documents, and to present them from time to time in different contexts.

Antal Kelle ArtFormer has been participating in joint international and national exhibitions since 2013 as an invited guest and since 2017 as a full member, especially at the Vasarely Museum, Budapest, part of the Museum of Fine Arts. Informative illustrated catalogues are produced for the exhibitions, but we have also published a book of essays on the themes, titled *The Interaction of Color* by Josef Albers, as well as publications on the beginnings of Hungarian concept art and other artists.

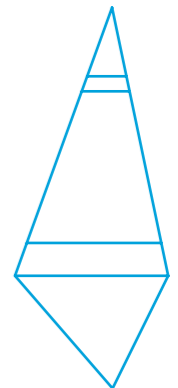
This book is part of the same series, presenting the experimental works and kinetic sculptures of Antal Kelle ArtFormer, with images and video tutorials. The text is written by recognised experts in their fields, as well as by Antal Kelle himself.

It is interesting to read what the works suggest to a physicist, poet, network researcher, ethologist, photo historian, hydrologist, literary translator, mathematician, composer, museum director, science historian, philosopher, writer, psychologist, fellow artists and to the artist himself.

Dóra Maurer

Written in Budapest, 2021, for this present volume.

Dóra Maurer is a graphic artist, painter, filmmaker and a prominent representative of the Hungarian new avant-garde. She is the president of the MTA – Széchenyi Academy of Letters and Arts, and of the OSAS – Open Structures Art Association.



ASPECTS

AND COMPARISONS

Does the phrase “I saw it with my own eyes” contain any significance? Can we deceive others and ourselves with this?

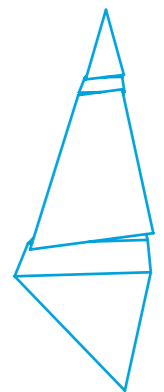
Sometimes we project objects, ideas and other things onto people that do not exist or do not exclusively exist, while we often miss other existing things. Because of this superficiality we could inadvertently easily become subject to manipulation; we should therefore accept that we often cannot even believe our own eyes.

Classical science seeks to become familiar with and understand the world. It will contribute to the way the world is presented, but—usually—it does not seek to change it. It has a strict methodology: drawing conclusions from observations, then trying to find and formulate regularities from those conclusions (e.g. formulae, rules). It examines its scope of validity, then, if its conclusions prove to be universal, creates the respective laws.

A hang glider forming seemingly regular circles, if observed from the ground, is actually following a special, corkscrew-like, distorted spiral. It is not only in physics that relativity and comparison are important or indispensable.

Can an object be a sphere and a cube, can it be attractive and repulsive at the same time? Can we retrieve various symbols from it simultaneously? The same work of plastic art can show distinctively different forms if observed from a different perspective. These forms can be symbols that are regarded as well known and at the same time as abstract solid figures.

In the history of science, laws considered valid are duly documented, and then further recognitions and higher-level, universal laws follow them. Superficiality is even more typical for our everyday human relationships, where we strive for some misconstrued efficiency but as a result prevent ourselves from deepening our relationships. Were we not familiar with a Rubik’s cube, we could claim that it is multi-coloured, but looking at it from one side only, we could come to the false conclusion that the cube is yellow, red or green. We could tell more about it if we saw two or three sides simultaneously, but for complete familiarity, we need to know about all six sides. In real life, we usually find it hard to admit that other people might be right—at least to some extent. We can claim very different things about the same object in honest, true belief. It is not that we make fully contradicting statements based on merely a highlighted part of the phenomenon discussed, but that things actually seem more diverse and can be interpreted in a variety of ways.



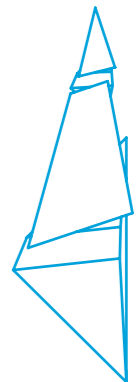
MODEL

I regard my works as sculptures that are 3D models at the same time, i.e. they do not simply represent the depiction of an object or its presentment in my own style, but rather a black box that you put objects into and when you take them out again you will get a different thing as a result. These sculptures could also work as models to demonstrate economic and biological structures, but they are especially suitable for studying human behaviour and opportunities. Their purpose is to identify, decode and to shape similarities, and the common nature of the living and the inanimate world in various areas of life. Many similarities can be found in motives; the content and visible “gestures” of human behaviour, which lend themselves well to illustration. Someone that turns in stooping on himself becomes apparently closed, since he cannot leave his own problems behind and he is merely nagging away at himself and at his environment in a perpetual cycle. On the other hand an upright, self-confident, conscious approach can be symbolized by an outstretched, extended shape.

It may sound strange, but models and their subjects are in a way similar, in fact, they can also be considered each other’s models. However, models can also illustrate a number of subjects at the same time and any subjects can be described by various models. The aspects of comparison can be adjusted as desired, which offers a fundamental opportunity in art.

Depending on the postures they assume or the series of movements they perform, sculptures can symbolize a variety of conditions. Yet if these sculptures and models are placed in a different environment, their meaning and the questions they raise might also change. My works titled *Daydreaming* (p. 214) and *Facing The Mirror* (p. 228) illustrate this well: I sometimes exhibit them by themselves, and sometimes supplement them with a mirror or a monitor/display representing the virtual world.

My works are often given a new title at exhibitions, while they keep their opus number, i.e. their date of origin is identical, but since they are flexible and complex while functioning like models, in another situation or in a different exhibition concept they can illustrate different things as a result of their substance.



CONCEPTUAL AND OPEN NUMERICAL TROMPE-L'OEIL NOTES ON THE ART OF ANTAL KELLE

András Szöllősi-Nagy

András Szöllősi-Nagy, after working relationship with Antal Kelle, was one of the moderators of the *Artificial Emotions* conference. He wrote the above essay in 2019.

András Szöllősi-Nagy is an engineer, hydrologist, art collector, Doctor of the Hungarian Academy of Sciences, and Vice President of the OSAS – Open Structures Art Association. Co-founder of the Modern Art Gallery – MOMÜ.

To use dictionary shorthand: a *trompe-l'œil* is an optically deceptive work in which the artist presents a possible reality in a misleading or seemingly impossible way. *Trompe-l'œil* is therefore essentially nothing more than a work that seeks to mislead the eye, to deceive vision. In a *trompe-l'œil* work, the presentation of content is deliberately designed to deceive the eye—presumably this is what the viewer gets when he sees Kelle's objects. "Unbelievable, it can't be done, it doesn't exist! But how did he do it? Why does it all turn so smoothly? Can it be calculated?"—numerous questions come up when looking at his creations.

Well, although it may seem deceitful, there is nothing hypocritical about Antal Kelle's works—on the contrary, he brings together with enviable clarity and logic two areas that have hitherto been somewhat tangibly in contact, but which, with few exceptions, have only just been in contact, but have not necessarily and mutually been part of each other.

These two fields are science and art, or to be more specific: mathematics or geometry and elementary 3D shapes such as cubes, spheres and cones, and their segments and sections. It is natural to describe Kelle's work with two terms: conceptual on the one hand, and open on the other. Sol LeWitt, in his seminal 1967 paper *Paragraphs on Conceptual Art*, introduced the following definition of conceptualism: "In conceptual art the idea or concept is the most important aspect of the work. [...] When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. When the artist creates a conceptual work, all the decisions about the work have been made, and its execution is a loose thing. [...] conceptual art is only as good as the idea."



Kelle's idea, on the other hand, is perhaps best captured by a variety of auxiliary adjectives in dichotomy, including playful/serious, intuitive/calculated, empirical/theoretical, time/movement, space/movement, space/time, admirable/inviting to touch, stable/mobile, simple/complex, and some other "single" adjectives: interactive, thought-provoking, mathematical, minimalist, dynamic—and of course *trompe-l'œil*. (Just a cautious, parenthetical note: Ben's one-sentence canvases or Manzoni's *Merde d'Artist* tin can are presumably adequate concepts of a social sentiment, but they are by far overmatched by the aesthetic value and scale of Kelle's work.)

So much for the conceptuality of his works.

Kelle's works, which are interactive, reversible in space and time and have a high level of freedom also meet Umberto Eco's definition of an open work (*opera aperta*), since on the one hand they demand creative autonomy from the recipient, and on the other hand, as a result of the creative recipient's intervention in the work—for example the way they turn and twist cone slices in different directions and to different degrees—, instead of a clear and necessary sequence of events an ambiguous situation characterized by probabilities, i.e. an open work is created.

Kelle's art is not an illustration of differential geometry and topology, the observer does not even need to know these subjects (although the artist undoubtedly does)—what remains is the miracle of shapes, the smoothness of the sliding surfaces, the new visuality and the shared amazement of the viewer and audience at how these mutable forms could have come into being. Of course, the engineer's need for formal purity and precision are apparent, but not at the level of "DIY-science", but in the context of a new, created world. By defining the shockingly simple and beautiful, non-differentiable new Y(es) N(o) I(ndifferent) surface, he is, in fact, defining a basic element, using which he then performs operations to construct new spaces—thus defining a new language and interpreting grammars to his heart's group theory content. A new link between semiotics and information aesthetics

—Max Bense would clap his hands in joy, since the resulting works are open, their movements "unpredictable", and thus satisfy the Bensean requirement that "art is based on the elusive nature of surprise". Surprises abound in Kelle's *œuvre*—almost always and everywhere.

Suffice to look at *Opus 333, Neverending Story*, the evolution of the infinite and the male/female, or *Opus 33I, Holy Land* (p. 124), intertwining inextricably the major monotheistic beliefs, even if they are sometimes highly incompatible and hate each other. The real *trompe-l'œil* is *Opus 320, CHAOS* (p. 137), illustrating what becomes order, and the other way round, what becomes chaos—depending on your point of view. The purest conceptualism at its best.

And *Opus 250, Geometric Pantheon XII/Sphere* (p. 094) is an orgy of pure, beautiful geometry.

Many people, and for a long time, did not understand a lecture given in Brussels in 1960 by François [Ferenc] Molnár, a prominent art theorist of the 1960s, and a painter who lived in France, in which he explained that "...topology, game theory and combinatorics allow us to create a much wider range of forms than intuition. We want to use the discoveries of these sciences. [...] If information theory works with the notion of order and chaos, then that's exactly what we need, because a work of art is born precisely between these two extremes. Just where exactly, a new aesthetics, the science of art, will tell us."

This is what the art of Antal Kelle is all about.

The first Kelle-shock for me occurred in 2015, in connection with the Malevich exhibition of OSAS at the Vasarely Museum in Budapest.

The exhibition was not a reflection of the well-known works of Malevich that had a profound influence on the 20th century artistic approach, only on a single painting of his; the hundred-year-old *Black Square*. Kelle's hanging luminokinetic mobile and the moving shadow it cast seemed amorphous until a brief moment when a black square on a white background suddenly appeared. Then it disappeared into amorphousness again. I then experienced the same moment as Malevich, about which his close student Anna Leporskaya wrote: "[Malevich] did not know, did not understand how the black square came into being. But he was so much aware that this was an extraordinary event in his artistic career that he could not eat or drink for a whole week."

I didn't get that far as a participant, but I certainly didn't eat anything that night. I had had enough.



EXPERIEN AND OWN ING ART

I have no intention of questioning the importance of original, high-standard works of art. If an artwork is truly outstanding I do not think there is reason for concern about its subsequent use becoming hard to control, like the fact that when using the technological opportunities available contemporary artists or members of generations X, Y, Z... remix music and films, and transform pictures. Countless examples can be found on the internet that come dangerously close to plagiarism. This type of creativity can also be observed in the elite, highest-ranking spheres of art, and in adaptations of paintings, literature or music, as well as by taking photographs of existing photos. It is a matter of business, rather than a matter of art.

The confusion created is sometimes further complicated by approved, signed multiplications and by indecent forgery for financial benefit, as well as by the fact that traditional copyright practice that seemed to be working well for a long time no longer functions effectively. A new concept is taking shape: "If you can't make it exclusive, share it with everyone!" A good example is the system of Creative Commons, which seeks, to some extent, to bring solace to individual, artistic vanity by crediting ownership of the original content but allowing a specific degree of editing and processing.

Whenever new technologies became common property in the past, it aroused fear in artists and affected creative experts who had been lulled into the delusion that their livelihoods were secure (see, for example, the relationship between painted images and photography, then the appearance of films, of digital recording, copying and variations). We are still at a very early stage of using another revolutionary option, 3D printing in creative art. Most artists—especially figurative sculptors—have an aversion to making their works available for free download in a way that these works they consider "well-shaped" can be reproduced or transformed by others.

Yet it is a fact that the multiplication, i.e. "screen printing" of images is also something that artists would normally outsource to a subcontractor rather than carefully, and very much inspired, manually implement themselves. It is obvious that this gesture forces us to reconsider artistic attitudes in relation to the theory and practice of originals and replicas, as well as variations and modulations in regard to the idea of plagiarism. Perhaps even more importantly, in alignment with the changes it may make increasing participation and competition in the forming of culture possible by taking the practice of the art industry as a basis. It is my considered opinion that the time has come for me to gradually make my works freely available in a digital format.



ArtFormer

HELIX

Opus 124

This statuette that I created around the turn of the millennium has, in the meantime, become emblematic. It is an unusual object, reminiscent of a cone at first glance, or in its rotated condition of a spiral shell of a snail.

But what is it really? How could it attract professional interest and win awards both in art and mathematics circles? These days it forms parts of collections such as MoMath in New York, the Kinetica Museum in London and the international Mobile MADI Museum in Vác, Hungary.

My statuette consists of rotatable elements. As we twist and rotate its modules, it assumes figures of different characters—stiff and geometric, or subtle and organic. It has a peculiar feature that rotations never result in protrusions or indentations on its surface, its modules pass from one surface into the other smoothly, with no stages in between. From a mathematical perspective it is a unique, “impossible” object that is not a solid of revolution, and at least not a regular cone, since it does not comply with any fundamental requirements thereof, according to which conic sections should be ellipses. The rotating sections of my work are, in fact, circles!

Its title, *Helix* means a spiral line, most frequently used to describe DNA molecules, in the meaning “double spiral”. I find it very important not to present them standing alone, if possible. I prefer to exhibit them in pairs or to create small groups to form an installation. It is especially impressive if two or more cones are present simultaneously, and making a connection with each other. The conceptual use of such installations elevates these groups of objects from the field of design to the sphere of creative art

In the interactive installation called *Modern Folk Tale – Opus 267*, I made a chessboard-like base for the *Helix* statuettes and I arranged and rotated them in such a way that they could symbolize chess figures: the stooping Pawn, the Knight, the Bishop as a submissive clerk, the embracing, protecting Rook, the elegant Queen and the puristically clean, conoid idea of the King.

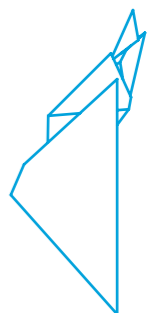
Visitors can rotate and adjust them; therefore, these chess figures are permanently transforming and exchanging roles. An inexorable condition of chess is to keep the rules. Yet, in this installation, anarchy seems to reign. First, we only have one side, where the battle is within the team, second, Pawns can become Bishops or even Kings, hence: “Rise, that you may also become a King!” Of course this also applies the other way round: Kings can also become Pawns. Since rules are impossible to keep, we cannot do anything about situations where nobody wants to be a Pawn, but there are many Kings and Queens at the same time. We do not even need an opponent to be exposed to group-internal tensions and shrewd practices.

Helix inspired an eponymous animation film directed by Karoly Kasa Papp. In addition, this was my first statue, a copy of which was stolen at a foreign exhibition.

I also created versions of *Helix* that anyone can access through my homepage, download within the framework of conditions set by the Creative Commons system and implement in three different ways. They can print its stretched out surface made of paper, which can be printed, then after cutting, folding and gluing, reproduce its modules. They can also choose to 3D print it out of plastic. Finally, they can rotate a *Helix*-type cone virtually, using an application, draw various three-dimensional curves with its tip and modify it using program settings. This conoid, emblematic object inspired several of my subsequent statues and installations, for example: *Soulmates* (p. 039), *Uniforms* (p. 032) and *Nexus* (p. 108).



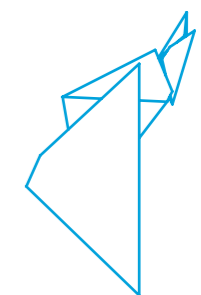
videos, 3D, pictures





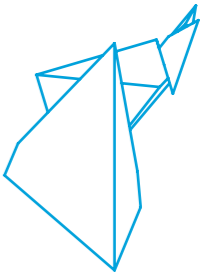
1999 | polished wood with special connecting element | 13 × 13 × 25 cm

ArtFormer HELIX – tableau



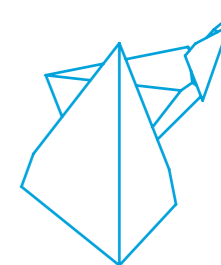


ArtFormer HELIX – positions





ArtFormer HELIX – MODERN FOLK TALE | Opus 267



New York
UNITED STATES OF AMERICA

NATIONAL MUSEUM OF MATHEMATICS

2017



AS WE LEARNED AT SCHOOL...

Holding the *ArtFormer Helix* in my hand, twisting and turning it around, I am enjoying its “behaviour”, its ability to be transformed into different positions with glee, and I have a lot of things running through my head. If a sentence begins as indicated by the title, its continuation can be anything from a simple, well-known fact or opinion to the biggest discoveries of humanity. In any case, it is largely through schooling that people acquire much of their knowledge. However, our knowledge is also the result of our experiences, our thinking and our creativity, in addition to the things we learned at school. We will now examine this profound but rather superficial observation through the example of this unique cone. We learnt at school that if we cut a straight circular cone with a plane that intersects all the cone’s generators but which is not perpendicular to the axis of the cone, the resulting plane section will be an ellipse. It takes a good teacher, or a creative student who processes the information given to them in a clever way, to realize that while the geometric figure consisting of the cone and the intersecting plane has one plane of symmetry, their intersection, the ellipse, has two. This means that if we “cut” a cone turned from, say, wood with such a plane, we can also reinsert the cut part in a “wrong” way: that is, so that the cone’s generators break along the line of intersection. It requires even more thought that if we “stretch” it in a direction perpendicular to the plane of symmetry until we get a circle from the ellipse, and thus an ellipse from the base circle, then we can rotate the cut and reinserted part of the cone along the plane section. Here I strongly wondered if I perhaps went into too much detail concerning the background, the mathematical and

Lajos Szilassi

Lajos Szilassi was one of the first to study *Helix* scientifically, and then he created a three-dimensional, movable computer model of it. He wrote a description of the *ArtFormer Helix* in 2020.

Lajos Szilassi is a mathematician, university lecturer, and associate professor at the University of Szeged. His research areas of interest including projective and non-Euclidean geometry. He is credited with the creation of the *Szilassi polyhedron*.

scientific aspects as a teacher, but perhaps that is what others think less of. The technical content and novelty are just as important as the artistic aspects, but only very few people can see that.

What we learned at university, a mechanical engineer might say, is that a straight cone with an ellipse base has a circular section with two intersecting planes in different directions. That is already a very fine professional skill, and it’s one that’s typically easily forgotten unless we need it. And most of the time we don’t. Unless... Unless a sufficiently creative mind, both in its ideas and in their implementation, pulls the question out of some hidden corner of knowledge.

What can this be used for?

This must have been the main question in Antal Kelle’s mind, as a result of which we, the visitors and admirers of *ArtFormer* exhibitions, can take a closer look at, sometimes even touch, move and shape the constructions that the artist presents to us.

What can this be used for?—we ask ourselves too. A question always generates more questions. What does “use” mean? Is art useful? Who is the artist? What is art? How does it affect us, the recipients? Sooner or later, questions emerge that, in most cases, cannot be answered in a few sentences.

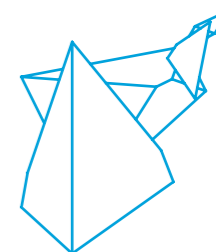
Not even in a longer study. Perhaps it is not even necessary, though.

A personal experience: the first time I had the opportunity to move two *ArtFormer* cones placed side by side, they suddenly came alive, took on human qualities, affected each other—and me. It is a piece of cake, setting up two cones to take on different characters. For example, one suggesting an arrogant, haughty superiority, the other one showing servile, self-humiliating, submissive traits. The astonishing realization is that the same object—just like the same person—can be both.

This is the lesson I have drawn from the cones—and they have brought a quatrain we also learned at school to mind:

**“My hat is a top hat,
That’s no mere bagatelle:
When worn, it gives me height,
When not, it gives depth as well.”**

János Arany: *Top hat* (1860) – translated by Leslie A. Kery.



PERFECT IMPERFECTION

There are two objects on my bookshelf that generally tempt my guests to touch them: Ernő Rubik's cube and Antal Kelle ArtFormer's spiral. Both objects are magic in my eyes, and as I am neither an art historian nor even a trained art analyst, I can afford to say so. I was enchanted by both as soon as I saw them, and this "love at first sight" has not faded a bit over the years, but rather deepened.

The behaviour of my guests is a clear indication of the fundamental difference between the two objects. Their attitude to the Rubik's Cube depends on whether it is in its original state, neatly arranged on my shelf, or mixed up. If it's neat, they twist it around two or three times, but they soon realize they might go too far and quickly undo the turns while they still can, and put the lucky cube back on the shelf.

If, on the other hand, the cube is mixed up on the shelf, they keep turning it happily for minutes, with obvious enjoyment. Then they have no fear of ruining it, perhaps forever. Apparently they do not want to solve it, they just keep turning it around aimlessly, enjoying the way the object responds to their movements, and after each turn it is intact again, its structure being exactly as it was initially.

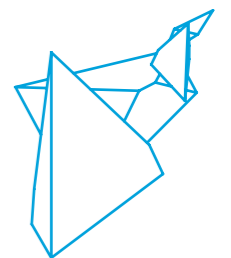
My guests also start to turn Antal Kelle's spiral, but they never get scared in the process, because it is obvious to them that it can be reset and straightened at any time. However, the turning is not without purpose, they are always watching what kind of shape they created, and when they find a shape they like, they refine and embellish it by turning it yet again.

It is no coincidence that the Rubik's Cube has found its place in the world as a puzzle, and an extremely difficult one at that. One disorderly state of the Rubik's Cube is just like another, the richness of the colourful pages is imperceptible. They are so irregularly varied that we cannot attribute any meaning to them.

László Mérő

László Mérő opened the first exhibition of Antal Kelle. He called the *Helix* sculpture an object of meditation. He wrote this essay in 2017.

László Mérő is a mathematician, publicist, psychologist, economic psychologist, professor emeritus of the Institute of Psychology of ELTE and Babeş-Bolyai University, a member of the Academy. He was involved in the work of the Rubik Studio.



The Kelle spiral is also fun to fiddle with, because it shows a kind of unexpected regularity all the way through, and at the same time a variety of exciting irregularities. This object is not particularly interesting as a puzzle, but despite its ostensible simplicity, it has a fantastic richness of form that makes you want to turn and shape it again and again. Turning Rubik's Cube *l'art pour l'art* gets boring after a while, and when you put it down, you don't even look at the distribution of the coloured squares. With the Kelle spiral, on the other hand, we usually stop turning it when we see a shape we particularly like. The interesting thing about the Kelle spiral is that we inadvertently attribute some meaning to the variety of shapes. For example, I usually see some kind of bird in it, I even call the object a spiral bird in my mind, but that says more about me than the artwork itself.

That said, these two subjects have something very much in common.

Both objects are beyond the limits of perfect, pure mathematical possibility. A Rubik's Cube can only be made of a somewhat elastic material; a Rubik's Cube made of a very hard material could not be moved. Rubik's Cube cheekily abuses the deformability of the material, and this is what makes it so good, what gives it that lovely rattling sound and makes it respond so delightfully to your hand.

Rubik's Cube as a mathematical object does not exist.

In a conversation once upon a time, I asked Ferenc Jánosy, the eminent mechanical engineer and economist, to design a mechanism that would be able to rotate in all three directions. The engineer replied indignantly that it was impossible. I showed him Rubik's Cube, which was at that time still very new. He spun it around for a while, and then, holding it very theatrically in his hand, he said:

"Gentlemen, this object does not exist."

The Kelle spiral is also an object that does not exist mathematically. Unlike the Rubik's cube, this object does not rely on the elasticity of matter, but on the fallibility of our perception. We do not want to notice the imperfection of the Kelle spiral because it is not apparent enough to catch our eye, and the richness form we receive in return amply compensates for this.

No one would say that the Kelle spiral "doesn't exist", perhaps only that this particular example is not quite perfect. But that is exactly its catch: it couldn't be perfect. It is like life. Life could only develop

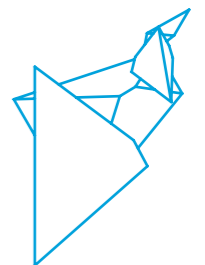
because the DNA strands were copied imperfectly, and so there were copying errors that allowed new forms of life to emerge.

Something that is perfect cannot be alive. I don't know if there is an exception to this, but if there is, there is only one: God. But in any case, art is a human thing.

Of course, this doesn't work the other way around: something that is not perfect is not necessarily alive. If it is, it is either something biological or something artistic. To be more precise: there may be other forms of life besides these, but for us only these two are of interest right now. Both biological life and art can fascinate us because they are both alive. Perfect imperfection is magic, created by the human mind, more or less consciously.

Ernő Rubik defines himself as a designer, Antal Kelle as an ArtFormer. And indeed: a Rubik's Cube is always a Rubik's Cube, however it is rolled. Even for me, the Kelle spiral is always a different kind of bird, for others it is something quite different.

This made the fundamental difference between the two wonderful objects clear to me: the Rubik's Cube is a pinnacle of functional design, while the Kelle spiral is a *par excellence* work of art.



UNIFORMS

Opus 324

When can we say that two or more things are identical? Do identical objects even exist? If we take two cannonballs, we may consider them as being identical as long as we are only taking their shape, material and size into consideration. Yet, a destructive iron ball flying at high speed and an innocent object exhibited in the display case of a historical museum are quite different. One of these cannonballs may hide an explosive charge, a protected database or a marzipan chocolate smuggled into it. Based on our survival instincts we typically assess the circumstances quickly, contemplate the consequences based on our previous experience and react: based on the assumed danger or pleasure we either flee or stay, and then even enjoy the situation.

My works are hard to define by their appearance, although they might seem easy to judge by the fact that they are in a museum or some other exhibition space, they are moving things in space, so they must be geometrical, kinetic sculptures.

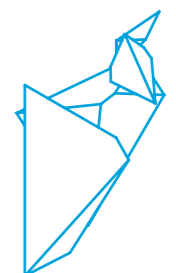
Looking at its composition, my group of sculptures *Uniforms* is made up of three conoid figures that seem identical in their basic, straightened out state with their surface decorated by large, deformed rhombuses reminiscent of jesters. However, if we turn the sculpture joints at the cuts also marked by the intersection of the patterns, we can recognize that they do not behave in the same way, they move differently. Since they are interactive, i.e. visitors can control their various positions, they can observe that the turning planes or cut surfaces (e.g. the spherical cap) are designed differently or set at a different angle, accordingly if we turn them, they take up completely different, fragmented or bent positions. The only sure thing is that they are unable to imitate each other, because

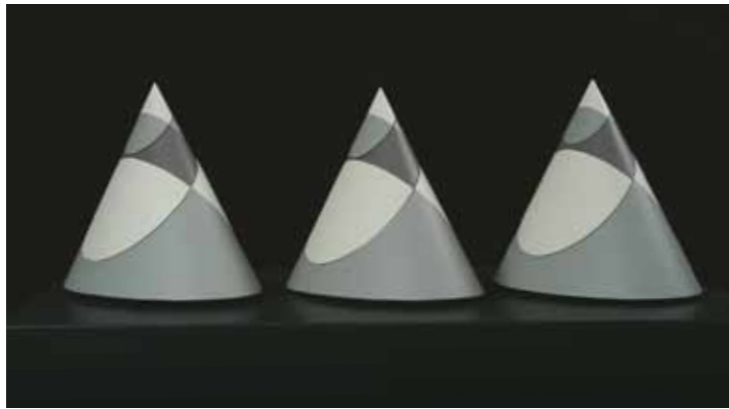
their structural characteristics are different. The title I used most often for this work is *Uniforms*, since in a specific moment, setup and from a simplified perspective they certainly do seem identical. In fact, however, they can assume an infinite number of conditions and positions, just like soldiers or other persons in uniforms, whose heart beats differently under their identical outfits and have different hobbies and personal characteristics.

We are dealing with the duality problem of the suspicious “prejudice” and “presupposition”—as the starting point for getting to know something in detail. That is what we need to get information about, and what we normally refine during the learning process. If this is lacking, prejudice can emerge. We like to simplify things, but deeper understanding requires more and deeper observation. Living creatures and inanimate things are neither practical, nor appropriate to schematize. My abstract cones can symbolize arbitrary quantities, how parts are linked, and even statistical masses of data.



videos, 3D, pictures





UNIFORMS – interactive sculpture ensemble



2005 | composite with moving mechanism | 150 × 100 × 165 cm



Kalocsa
HUNGARY

COLLECTION OF NIKCOLAS SCHÖFFER

2012





SOULMATES – interactive sculpture ensemble

SOULMATES

Opus 325

My work *Soulmates* was meant to be the counterpart of *Uniforms* (p. 032). It consists only of two figures that do not seem to be similar in any way. One of them is tall and graceful, while the other is somewhat diffident, and loose, with a rougher surface and a darker colour. At first glance, visitors would never think they have anything in common, since their primary visual appearance is not at all alike. However, if we consider the mechanics and kinematics of these two pieces, the situation is different. The cuts you can see on their surfaces and the intersecting planes are in fact each other's reflections. The drive behind their movements, their rotations per minute, and their turns are all identical, the same input will produce the same output. Consequently the two figures of this group of sculptures are technically and symbolically identical inside, they share their soul, desires and thoughts as it were. Yet we just cannot disregard our first impression, we cannot say they are identical, soulmates or monozygotic twins, since their first appearance, a shallow impression suggests the opposite. In spite of their formal appearance, and their looks the two sculptures work similarly, i.e. they are each other's operational models.

During scientific research, we often use the term *black box*. Practically it means that we do not know, do not want to know or consider it irrelevant exactly how a specific process takes place. It is only the beginning and the end that we are interested in.

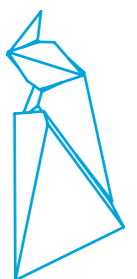
In the case of my sculptures, I consciously use this cover-up, making their operation mysterious, and universal in the philosophical sense, as opposed to artists such as Jean Tinguely or Alexander Calder working as representatives of the *white box* approach that reveals and exposes the construction in question.

I think that analogously to our attitude towards the composition of *Soulmates* we tend to approach other people inattentively, often with prejudice, even though we may have a lot in common, share similar feelings, and can be happy or sad about the same things.

In the Kinetica Museum of London, in Kunsthalle (Műcsarnok) Budapest and at various other exhibitions this work of mine was called *Appearance*, *Rivalry* or simply *Two Cones*, because they can also be interpreted from other perspectives, since visitors, who typically stand opposite the figures, can control the operation of the sculptures according to their own individual narrative or mindset using the manual driving wheel by the pedestal.

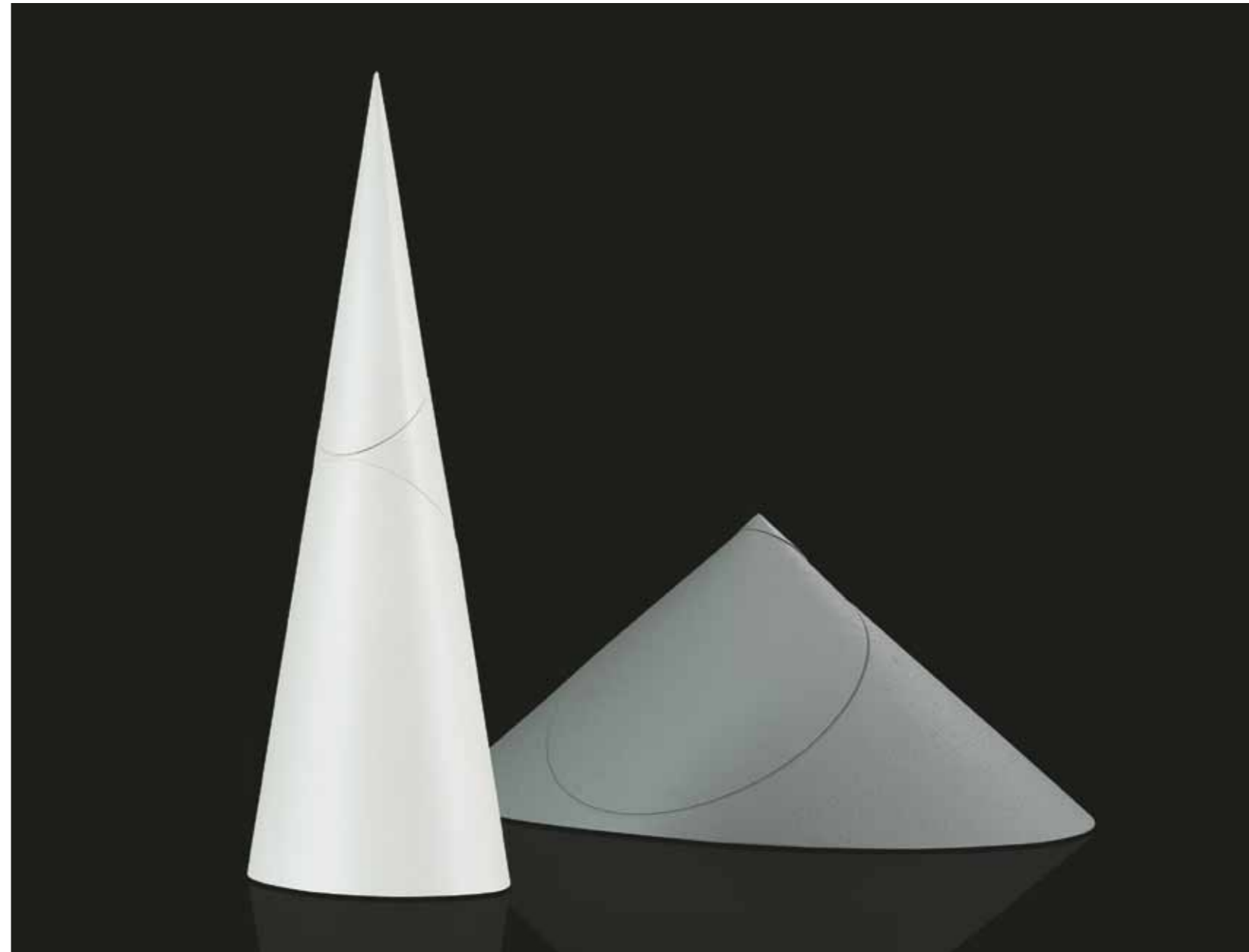


videos, 3D, pictures

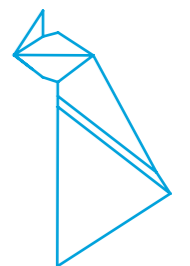




SOULMATES – interactive sculpture ensemble



2005 | composite with moving mechanism | 100 × 100 × 165 cm



London
UNITED KINGDOM

KINETICA

SHOW

2017



A MOVING
AND
UNIVERSALLY
APPEALING
ARTWORK

Dianne Harris

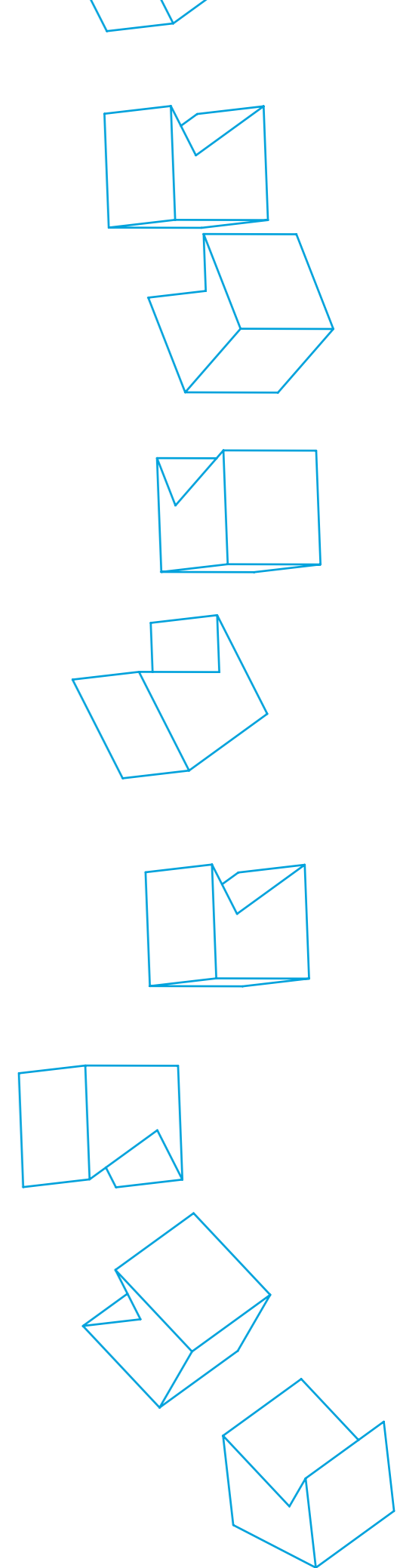
Excerpt from Dianne Harris' 2019 video message to the participants of the two-day panel discussion on the exhibition *Our Artificial Emotions*.

Dianne Harris is an visual artist and multidimensional media artist, curator and founding director of the Kinetica Museum in London.

"...A few years ago, Antal generously donated a piece of his wonderful Helix series to the Kinetica Museum, which acquired a major place in our exhibition.

I worked with it for a while, and associated the spiral twist of the artwork with a slow-motion piece of film footage on plant growth made with a time-lapse technique. The Helix moves in exactly the same way that plants twist as they grow. In the movement of his work, Antal has put the wonderful Fibonacci sequence and the golden ratio at his service,

creating a work that moves with incredible grace and is universally appealing..."



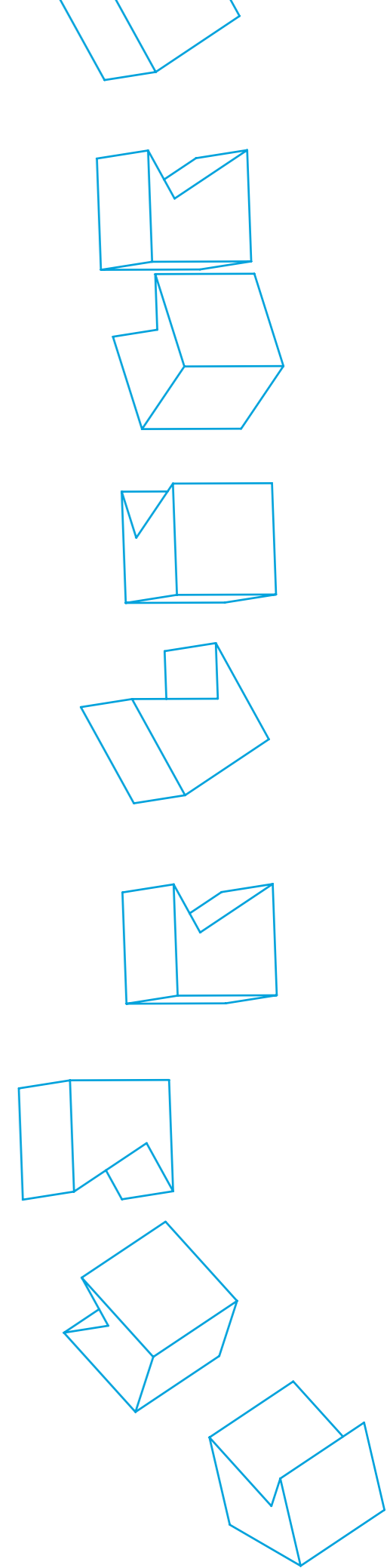
RUS TING

DEC AY

Things transform. In nature, too. There are events recurring in cycles and there are singular happenings. This, however, is also a matter of perspective. Just like the seasons change, there will always be children and there will be old people who pass on. There are numerous examples to be found for the passage of time both in nature and in our artificial environment. Ideas and feelings are also in constant flux since there are always tasks to solve and questions to answer, and there is pain and there is joy. While technical progress, the facilities and gadgets to increase our comfort are important to us, it is still the unitability of human relations that matters most. We do not find it hard to tear down buildings, demolish objects or even pieces of art that we are not connected to. Their uniqueness simply does not matter to us. We do not feel attached to them, or, to be more precise, when we are connected to other things, desire other objects, we just let the old ones go and replace them. That is why it may make sense to accept reality and create things that matter only in our own lifetimes and not for forever, i.e. to plan and to build for a finite period in the first place. This approach is demonstrated in log cabins or in tools that are left to rot and decay. Another example of this philosophy in art is the Buddhist mandala, the coloured sand circles of which are returned to nature by the wind or by a broom.

From a scientific perspective, it is all about entropy, the measure of molecular disorder, about the levelling of intensive quantities. These are spontaneous processes of nature that are “disrupted” from time to time by the orderliness of living creatures or even inanimate things by the creation of some local order, some artificial arrangement.

Still, even these are destined to fall into decay, eventually. This is why I think iron is a great material, which through its oxidation and its gradual material deconstruction, perfectly symbolizes and expresses the ruthlessness of time.





PART AND WHOLE | Opus 739



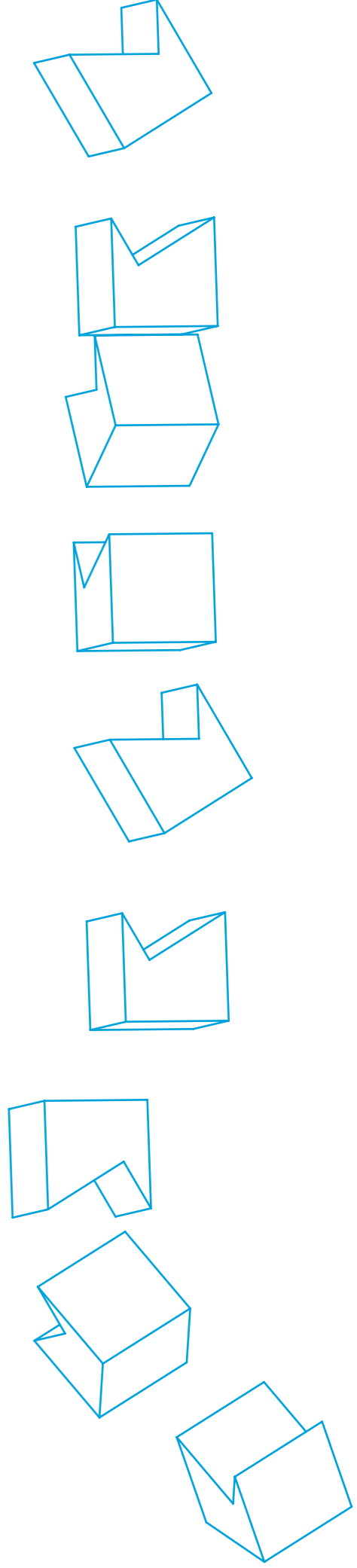
ACCORDING TO | Opus 611



TRANSFORMATION | Opus 310



LABYRINTH | Opus 912



PILOT BROADCAST OF KELLEVISION

Antal Kelle knows at least twice as much about art as I do, and about a hundred and ten times as much about himself as I do about him, so it is quite obvious that I am talking about art and about him. That's how it is in our little country...

To my credit, I have already told the person in charge when he asked me to open his exhibition, but he replied, very politely, that he was perfectly sane, that he was in his right mind, and that if he wanted me, then so be it. And so it is.

My story began a long time ago. I didn't even know he was an artist decorated with all sorts of awards, honours and scholarships when I already knew him and recognized him as a man. As an altruistic, out-of-this-world person rather keeping to himself (and some of us). It happened, sometime towards the end of the last millennium that I persuaded my workmate and partner, who after that died very young, to write her thesis on the subject of *Showing Images* for her degree in photographic museology. I won't go into the detail, but Magdi Kolta and Antal Kelle were incredibly attuned to each other, both of them had all the software set in their heads for the arts and a sensitive way of thinking that constantly reflected on the world. Ostensibly, they were inventing and making games, but it was really much more than that, if there is anything more than games. Let each of us turn this over in our minds and confirm it, I refuse to go on any further before that happens.

In addition to toys, optical and visual imagery devices, and artistic objects, Antal Kelle has constructed something that is perhaps even more important than these are.

Károly Kincses

Opening speech of Antal Kelle's *Refractions* exhibition at FUGA, 2013.

Károly Kincses is a museologist, photo historian, and founder of the Hungarian Museum of Photography. Curator, writer and editor, holder of the Rudolf Balogh and István Szóts Awards.

He created Antal Kelle and invented an artistic form and status that is most (or only?) appropriate to his existence. ArtFormer. Hmm, what the hell is that? Don't worry, he did all the thinking for us, then defined and positioned himself. He has defined his self-made creation as a category of fine and applied arts in which art, natural and social sciences and play are constantly present, supporting, reinforcing, complementing and explaining each other. Anyone who approaches his objects and creations from one direction only, who walks through only one gateway into Kelle's realm, is sure to exclude himself from other possibilities of interpretation. And that person deserves for yours truly to be sincerely sorry for them.

We need to know how to handle his exhibitions and works. If possible, they should be observed with the same openness, playfulness and thoughtful seriousness that he used to create his works with. Luckily enough, though, there is no dictatorship here, so how would I have the courage to tell how visitors should view the works on display here... So let's just leave it at that: I told you, but you can do as you please.

So, you can marvel at the perfection of organic forms created, well, if not by God, then at least by Kelle. You can wonder about the wider context of the artistic creations seen here.

You can search for the twists of thought that Kelle has hidden in his works.

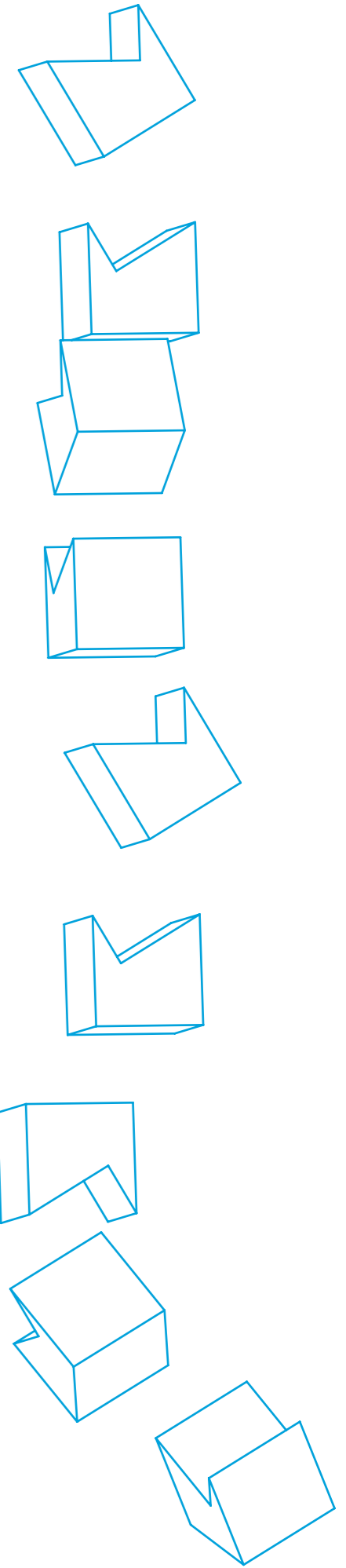
You can JUST LOOK casually.

The works can also be touched, because they also offer a tactile experience.

You can let your fantasy, your creative, constructive imagination run wild, and you can also continue to think about Kelle's visions.

I bet you he wouldn't be offended if someone came up to him and said, "I think that would be even better like this..."

You could also observe the exhibition in a snobbish way, but you don't want to do that, do you? There are countless other ways, but I'll stop now, and leave you to go ahead and try.



What is this? A communiqué? No, in our noisy world a soft whisper may hit the target and resonate in receptive ears better. “Vari” is an abbreviation of the word “variation”, while “art” is a formal solution borrowed from the internet, from the format of websites. Its intended meaning is the opportunity for interaction within art. Ever since creative art existed, almost every artist has produced variations of their studied subjects for themselves, although what the public typically sees is only the final result. There are artists who are also willing to show interim versions or personal favourites, while others never manage to complete the selected topic even after decades. However, why should it be a problem to leave the creative process open? To provide other people with the opportunity to become part of the creative work by demonstrating their emotions, moods and environment. We should perhaps produce objects that inherently—through their structure, their appearance and their functioning—carry mobility with themselves, i.e. the attribute that their shape can be modified, and rearranged in many ways so they can adapt to their environment and to the ones dealing with them flexibly, while being able to preserve their own character.

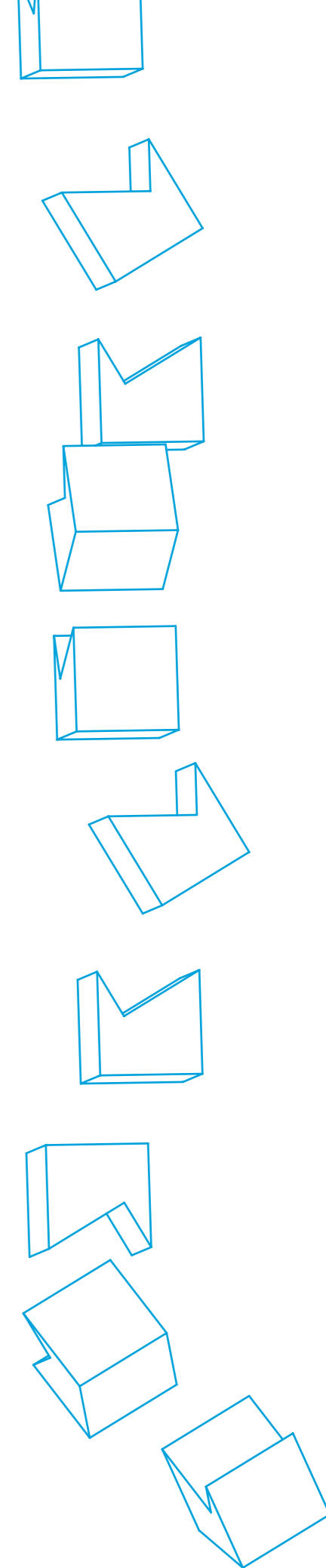
I think this openness and—to use a somewhat redundant term—interactivity are necessary, since it is an issue of topical interest and apparently contradicting the attitude of “There you have it, marvel at my great work!”. Should these thoughts represent the arrogant communiqué of another “-ism”, it would certainly be appropriate. I think that in addition to the existing and permanently emerging traditional artistic values there is also a need for something else.

Under the subtitles *vari.art* I wish to round up and reinforce a movement consciously dealing with this topical issue. That is why beside my instinctive urge I try and simplify my thoughts—often illustrated by mathematical abstractions—in the matter endlessly, hoping to provide my audience with a clearer understanding. Personally, I found this path through a trail of meditation games, which might offer some encouragement. I hope that soon enough, a growing number of people will also feel the necessity of mobility and interactivity.

In related arts—for example in the field of music—these endeavours are significantly stronger. Just think about improvisations or about works that require the creativity of musicians that only prescribe the sound duration, atmosphere and variations of the various musical instruments (e.g. Pierre Boulez, Steve Reich, Philip Glass, etc.). This could work similarly in creative art. The most beautiful and exciting postures for my artworks belonging to the *vari.art* series have been created by my artist friends. Releasing these types of works to the public the question does not arise whether it is “good”, “beautiful” or “up-to-date”, but rather if it is personal, relatable and not “entrenched”. It is not about descending to or lifting up something, much rather about some joint and by no means final outcome. This approach intends to reinforce the common part of human virtues produced by hope, opportunity and humility. To me it represents a new and exciting area, a natural impulsion. Come and join me!

DIVERSITY

vari.art



DIVERSE CUBES

Opus 175

videos_3D_pictures



There are very few things that we do not disagree about, be it art, truth or ethics. The definition of “cube” is probably something we would not normally challenge, school has burnt it into our minds. We also use the term in our everyday lives for any object resembling a cube, from sugar cubes through cubic furniture to cube houses. These are typically angular objects, the outlines of which are usually not rigorous squares, but surfaces with various protrusions and indentations.

This is the part where science and practice separate and this is also where it gets exciting. Where is the dividing line when something is called a cube or something else instead?

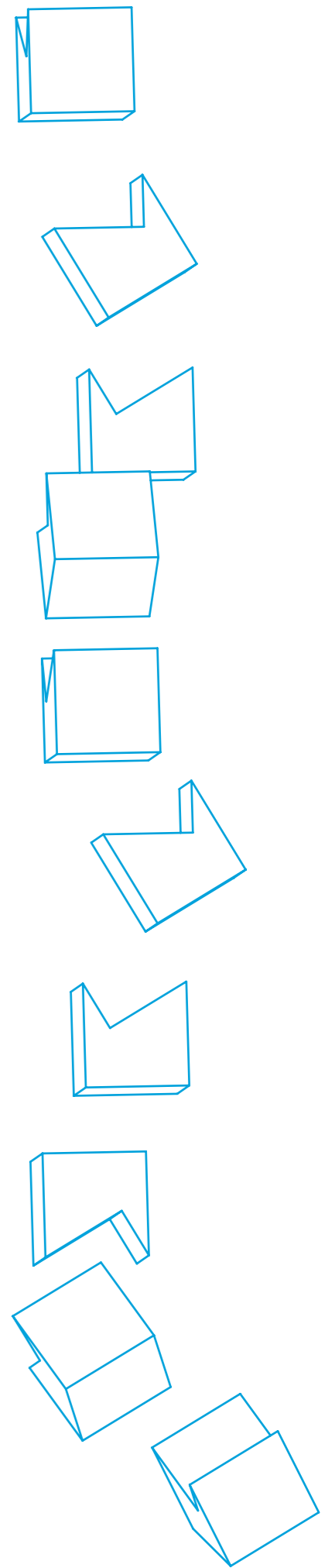
My cube has seven sides and because of its unique excision, in a physical sense it is a lot less than that. To me, however it also means much more, since it can be assigned new opportunities, as well as different physical and philosophical associations.

If we put regular cubes on top of each other, like building blocks at a kindergarten, turning this one or the other now and then, it typically does not represent anything more than piling up objects. If I use cubes that also have excisions or tilted side planes, then on the one hand it makes building a bit more complicated, since it is unusual, but it also provides new opportunities because of their concave character. The resulting clamps might prevent the cubes sliding apart, I can use them differently, I can even turn them and build not only in plane, but actually in space too, and in three dimensions. The result resembles a cubist formal vision.

It provides me with more options to philosophize: from the artistic point of view the term *white cube* is not a white mathematical cube but an emblematic exhibition space, and, moreover, the ideological field of Western modernism. So this seemingly deficient, incomplete, different cube with a “disability” is simultaneously a cube experiencing this not in a depressive manner but making the best of it. Just as we are not “perfect”,

neither is my plane or my cube. If I can recognize and utilize any of my unique characteristics for my own pleasure or somebody else's, produce a smile, invite others to join my train of thought, I can bring beauty to our lives. I think there are important analogies between the sociological issues affecting our everyday lives and the geometrical formulation of my objects. I do not mean an item-by-item correspondence (like in the case of isomorphism, congruity, etc.), because I do not suggest that a particular object symbolizes this or that, they will much rather refer to things I consider important through their shape, their otherness, their deformity.

I have extended the world of my seven-sided cubes to other basic geometrical solids like cylinders and spheres too. I make installations using these irregular objects. Their most frequently used titles were *Diverse Cubes*, *Creative Construction*, *Acceptance*, *Opportunity*. For the 100th anniversary of Dadaism, I made a composition called *Dada Geometry*, then developing it further the artwork *First 3 Titles – Opus 683*. Some of the initially suggested titles included in the inscription of the pedestal (*Uncertainty Range of the Idea*, *Stigmatizing Disability*, *A Hymn to Otherness*) represent different approaches, inviting the observer to search for further analogies. It is a provocation: what is still acceptable according to our standards and what is not. We often make judgements based on our preconceptions or manipulate others according to our interests. Are there any limits? And where are they?

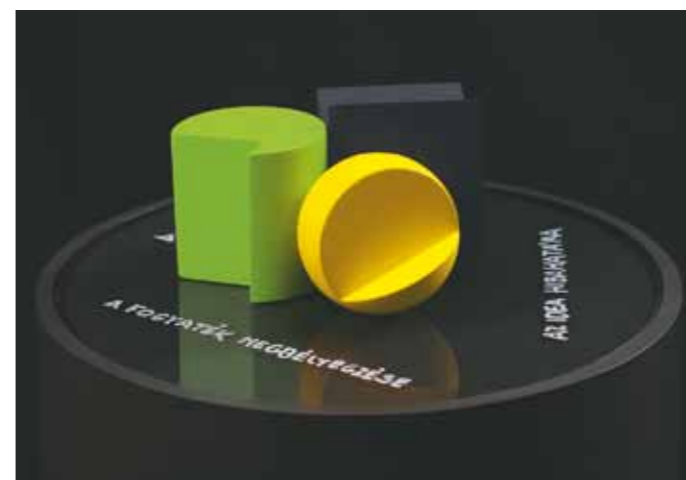




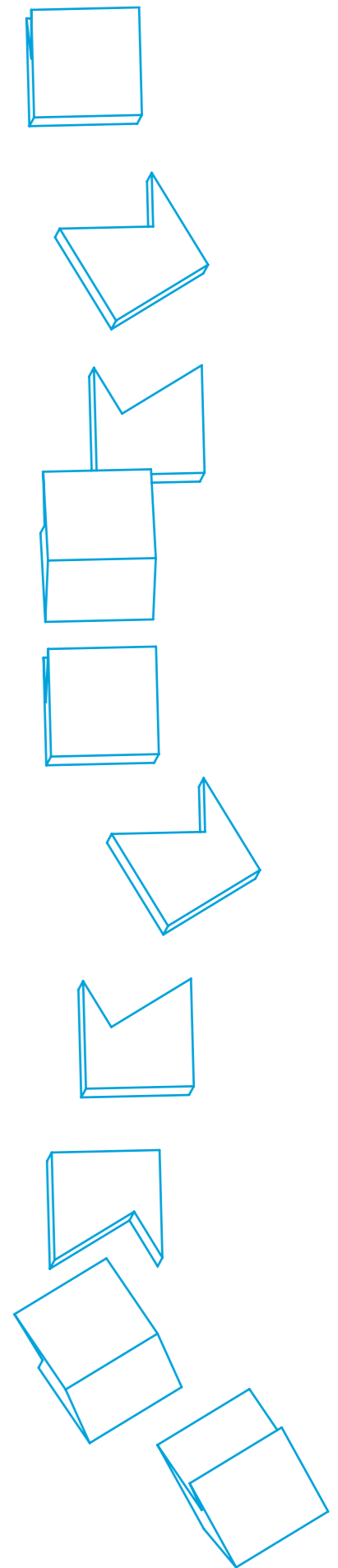
1999 | structure painted wood | 6 × 6 × 6 cm elements

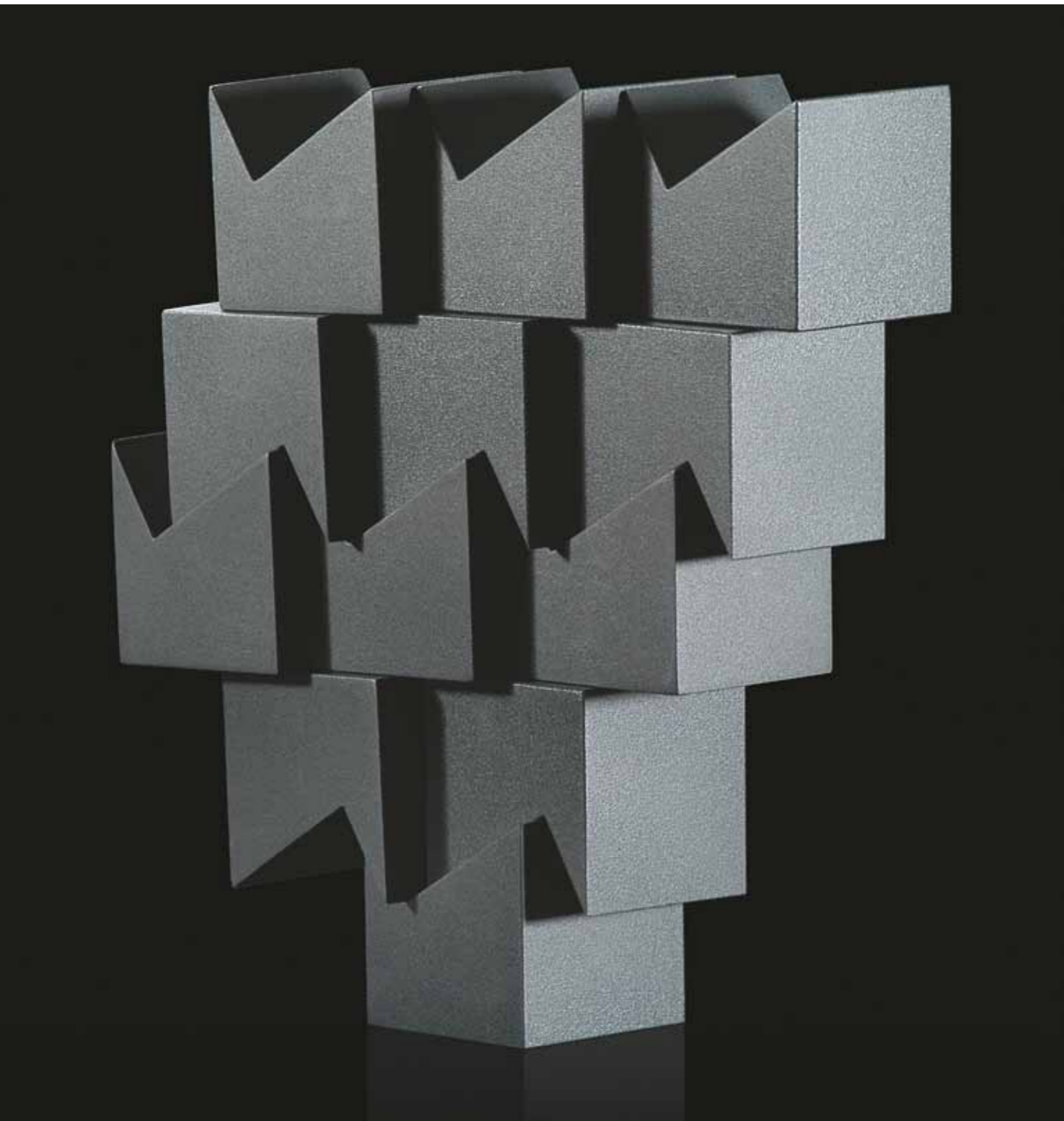
DIVERSE CUBES – composition

A HYMN TO OTHERNESS
STIGMATIZING DISABILITY
UNCERTAINTY RANGE OF THE IDEA



DADA GEOMETRY, FIRST 3 TITLES | Opus 683

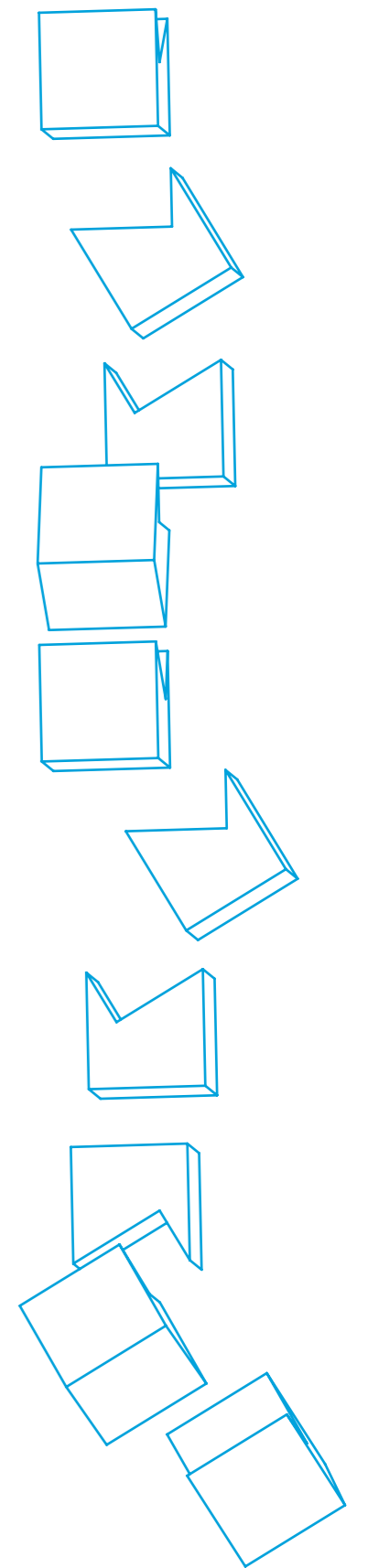




DIVERSE CUBES – variations



DIVERSE CUBES – addition



A SUBJECTIVE DESCRIPTION OF ANTTAL KELLE'S WORK OPUS 123

Ádám Nádasdy

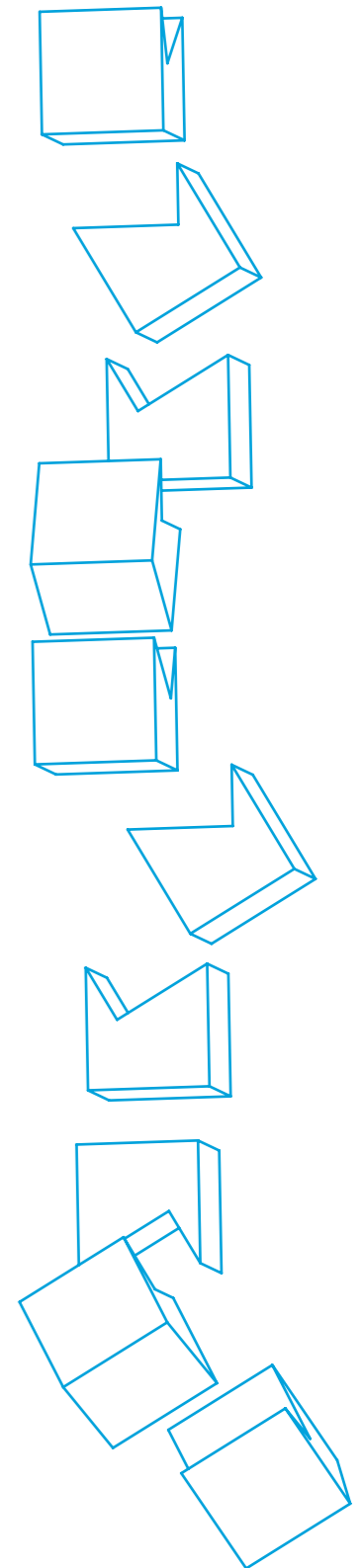
A personal meeting and the resulting invitation at a reading night led to the writing of this essay in 2018.

Ádám Nádasdy is a linguist, poet, literary translator, essayist. Academic, full member of the Hungarian Academy of Sciences and Humanities (MTA-SZIMA), lecturer at the English-American Institute of the Faculty of Humanities at Eötvös Loránd University.

The figures created by Antal Kelle are both complete and incomplete. Like the moon when it waxes or wanes: not complete, but we couldn't call it incomplete either, because its naturalness is somehow convincing. "Seven-sided cube", the artist called one of the objects—is a contradiction in terms, I thought, since a cube has six sides, as the ancient Greeks carefully counted. It can't be a regular solid, because there are only five of them: four, six, eight, twelve and twenty-sided. No seven in sight. What, then, is it? I suspected a Dadaist poem, an absurd and irresponsible game. Then I was very surprised when I looked at it: I had to admit that it was a cube, because the human spirit completes and adjusts. It is the same reason why children (and adults represented in information icons, for that matter) draw the human head as a regular circle, even though no one's head is geometrically round, but we feel and know that its shape points in that direction. Antal Kelle's seven-sided cube also points towards the cube, at first—I might say—shyly concealing its imperfection by saying, "Please, I am a cube, too".

Then the artist begins to build from it, and it turns out that the incomplete, imperfect cube (incomplete because a piece of it has been bitten out) is capable of much more than the standard, ideal hexahedron bounded by six square tiles.

As one of the installations demonstrates, the indented cubes can be used to build an exciting, beautiful tower, lively and varied, breathing, almost moving before our eyes. And how well it feels with its companions: the imperfect sphere and the battered cylinder! They dance around, sometimes laughing and touching each other, other times menuetting around each other with subtle politeness. Their infinite variety is precisely the result of their imperfection—or should I say near-perfection? But this is not the right expression either: they are perfect in another way than the ideal shapes of geometry books.



SKIPPED STATIONS

Opus 117

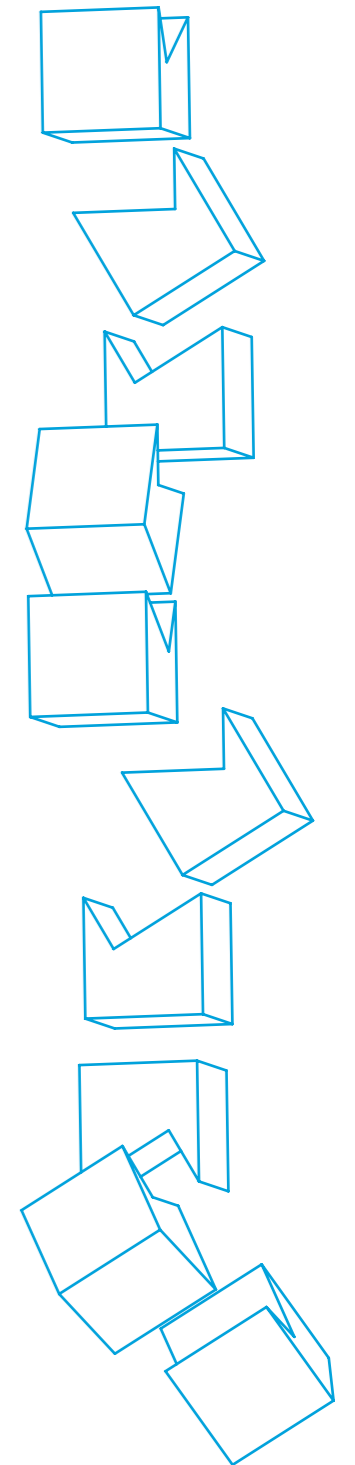
videos, 3D, pictures



Piet Mondrian was an artist who walked a great and consequential path. Observing the stages of his creative career and giving them some thought in retrospect, there would also have been other logical paths to develop his art. These include the full abstraction of beautiful arches or a more daring move into space. With my artwork *Skipped Stations* I was searching for the answers to these challenges.

I wanted to explore how Mondrian got from the arborescent, seemingly disorganized, emotional impression in his famous *Grey Tree* to his rigorous, grid-like compositions filled with brisk basic colours.

In the fundamental composition of the resulting interactive statuette I made, many observers claim that they recognize a tree or a tulip that could represent references to the Dutch origins of the artist. I actually intended to refer to the playful creative wings of Mondrian, as I also suggested in the collage created in connection with the artwork. The bottom part of the composition reveals some of the important information and stages of my creative process, i.e. the initial sketches, then the purification of lines and shapes, including not only the arched, but also the rectangular and triangular versions of partitioning. I have created abstract, practically unattached three-dimensional Mondrian-independent shapes that borrow some characteristic features from both styles (such as arches and the use of colour) but because of the high variability of their composition, they provide the opportunity for many more variations. All the arches inside the sculpturette consist of circles with the same radius to enable variability, i.e. any element can be connected to or slid apart from the other.



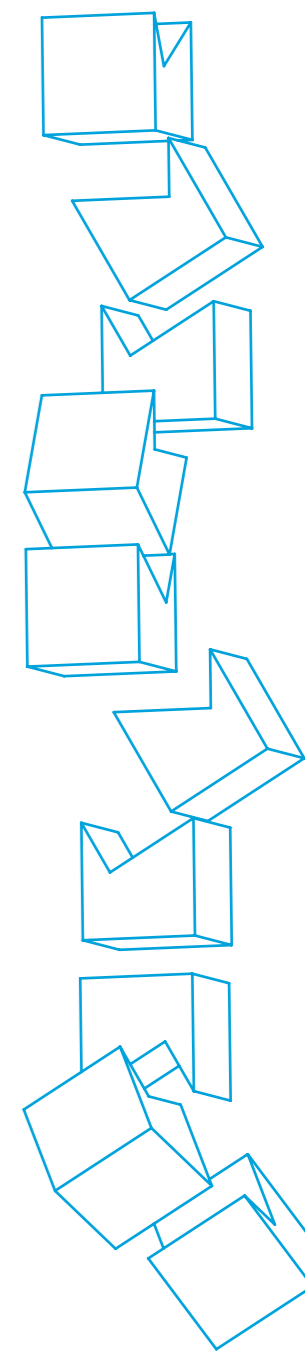
SKIPPED STATIONS



2003 | structure varnished wood | 30 x 30 x 6 cm



SKIPPED STATIONS – variations



LAPIS PHILOSOPHORUM

Opus 192

videos_3D_pictures



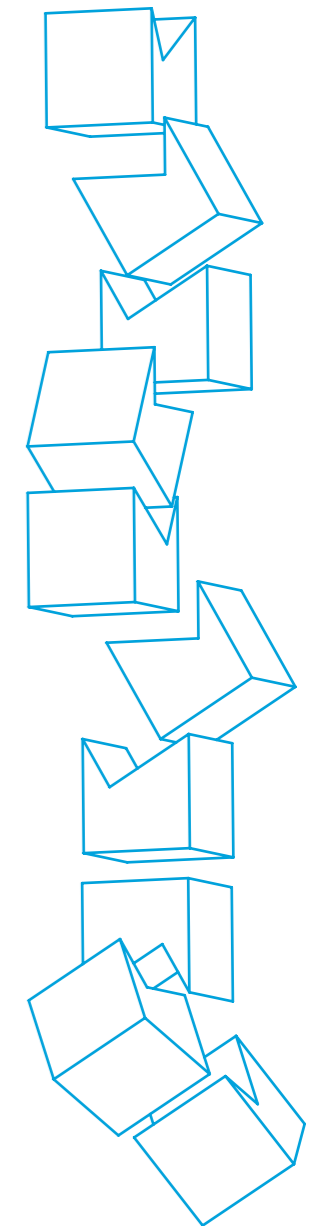
Many people think we already know everything about the rationally constructed, precise drawings and wood engravings of M. C. Escher. I am certainly not one of these people. I tried to explore his secrets and tricks with the devotion and zeal of an alchemist. I have examined his works and examined philosophical phantasy worlds one by one, his way of presenting “impossible objects” in two dimensions, his symmetries and—in a technical terminology “tiling”—figures filling the plane with turns in a tightly fit manner. While his works are still treated by art historians with somewhat of a distance, the playful public, perceptive to illusions and geometrical miracles seems to think otherwise. I figured out that in a significant part of the pictures Escher uses a special grid, a system made up of equilateral, regular triangles. Often keeping barely the corners of the triangles, and continuing/bending these points to the left or to the right he infuses life into them with his figures and building parts. I thought of simulating his pictures, to implement that which I was looking for; a universal building element. Because of their regularity and perfection, I found equilateral triangles as basic elements too boring and simple, so I replaced one side with a wavy line. Through this move I cut a small piece out of the triangle, but with the protuberance of the wave I immediately made up for the loss. This is how I came upon the simple shape that I ironically named *Philosopher’s Stone*, or in Latin: *Lapis Philosophorum*.

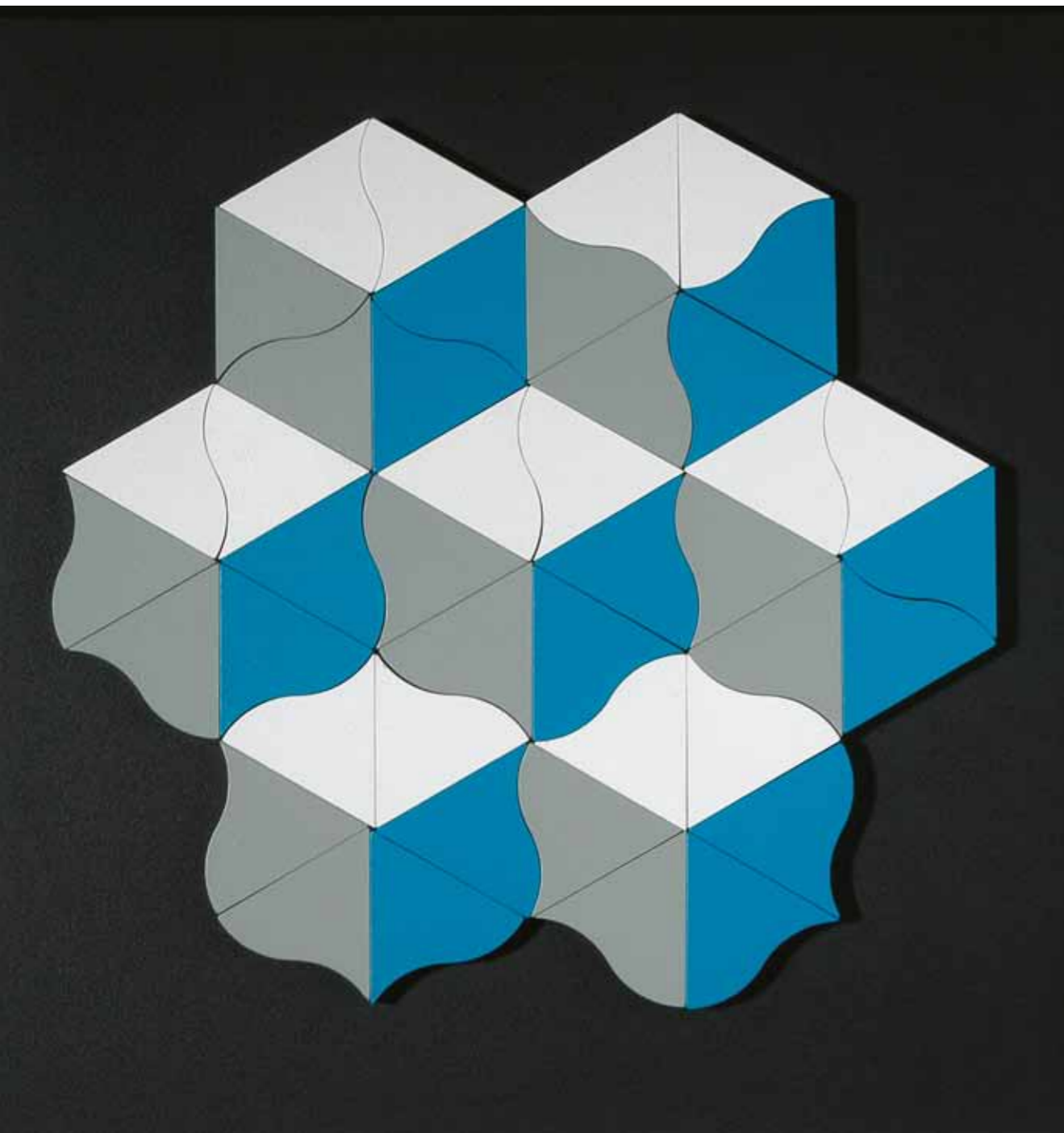
It is its asymmetry that lends this shape its uniqueness, because similarly to *Diverse Cubes* (p. 054) it adds a character and a direction to the elements. Turning them around will also change their circambulation, i.e. by themselves, they have a right or left version.

Accordingly, they can be slid along both their straight and their wavy side intermittently, while they simultaneously preserve the feature that they will point towards the opposite direction and they can be tilted. The *Philosopher’s Stone* is a two-dimensional macro-pixel, at which it is not the shape itself (losing its importance because of miniaturization anyway) that matters, but rather the exploitation of the opportunities provided by the shape. Because of the organic nature of the undulation and the geometrical construction of the straight lines, it is of course also suitable for the imitation or abstraction of images made by others. Beyond all of this, however, the main objective was to create an independent basic element unfolding within its own unique existence. The *Philosopher’s Stone* is in fact the two-dimensional predecessor of the 3D pixel implemented later, of the *YNI Surface* (p. 164).



LAPIS PHILOSOPHORUM – compositions

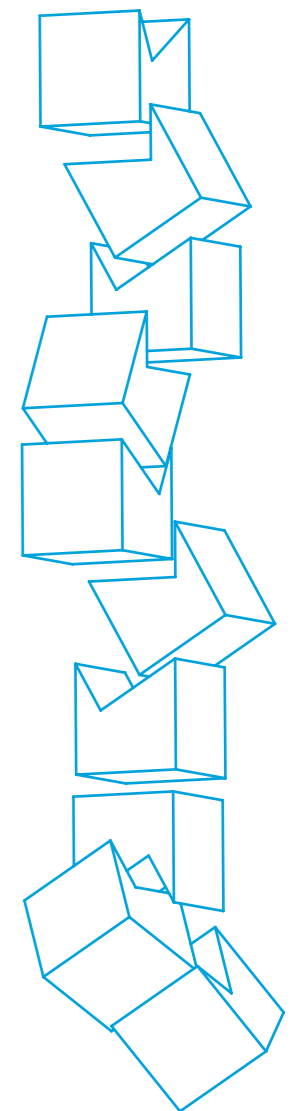




2004 | structure varnished wood mosaic | 1 × 6 × 6 cm elements



LAPIS PHILOSOPHORUM – compositions



STEPS

Opus 271



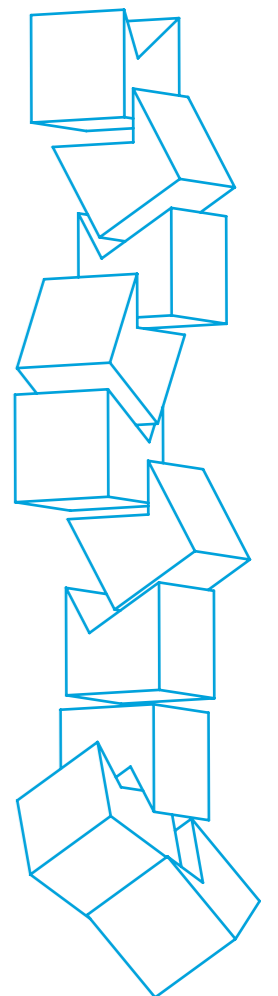
STEPS

In many of his wood engravings representing building interiors, Escher used the kind of “overturning”, positive/negative way of depiction that can be interpreted both ways, in which it is often hard to tell if certain details represent protrusions or indentations. In the case of stairs, we often return to the starting point, while we seem to move consequently upwards or downwards. Sometimes we do not know what is up and what is down, or which side is which. Combine these effects with stairs and it will utterly confuse the observer. His emblematic graphic is *House of Stairs*, featuring lizard-like creatures wandering about in a twisted space. In the sketch of this work, we can examine his complex, perspective way of depiction running towards two particular points.

I took a fancy to creating interactive plastic artworks in this world of illusion using three directions of space that suggest gradualness, while through their twisted nature—like a fraction of a spiral staircase—making a transit to other perpendicular planes possible. This is how this abstract shape system, my work *Steps*, was born, the uniqueness of which derives from the stairs positioned on the top of static prisms of various heights that could also be interpreted as ornaments. We can set up, lay down, slide or turn the individual elements in a variety of ways, we will always find forms arranged in a traditional or fanwise manner that will offer transitions to the imaginary intersecting network of planes. As a complementary, the system also required a dynamic, active element, to which end I used one of the perfect shapes in physics and geometry. This is why the ball, representing the moving element, appears—primarily not as an analogy of Escher’s lizards, but rather because I have felt an incomprehensible attraction to the sphere as a shape ever since I was born.



videos, 3D, pictures

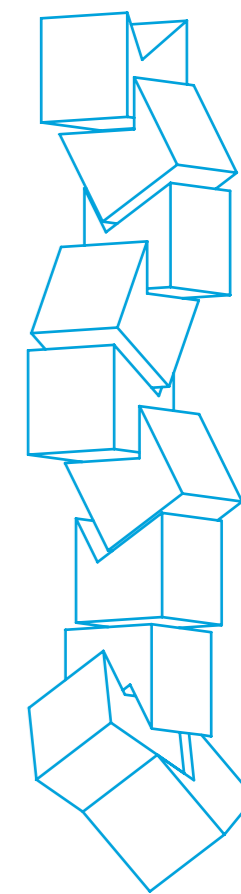




2003 | polished wood | of elements of variable length 6 × 6 cm each



STEPS – variations



CORRELATIONS

Opus 1278

videos, 3D, pictures



In 2005, a film called *Libretto* was made about my group of sculptures *Geometrical Pantheon* (p. 080). Although 3D modelling was used—according to the technological limitations of the time—the film was eventually completed in the form of a 2D animation, and directed by József Fülöp.

It was often said of my works that they could also have been realized on a bigger scale, in the form of *public art*. Of all my works, my 24 metre-high sculpture *Indian Desire – Opus 427*, designed in 2007 for the artificial lake of the city of Ahmedabad in India was the closest to being realized. I have equipped this huge, deformed, stainless steel construction made up of six cubes both with local and remote, internet-based interactivity.

Since then, the idea of implementing this change of scale has arisen often, from micro-worlds to kinetic tower buildings. While the realization of these are not entirely out of question, the required expenditure could involve amounts exceeding moral standards.

Virtual design, however, has practically no scale limitations. We can up- or downscale works arbitrarily, only limited by recognisability. We can model the hypothetical behaviours of subatomic particles, the superposition absurdity of quantum theory also known as the thought experiment “Schrödinger’s cat”. However, it is also suitable for abstracting other micro- and macro-mechanical constructions and for creating an illusion of universal scale, even exceeding the size of our planet.

I have created a 3D world where visitors can take a walk through my kinetic works in their usual size in a virtual environment using VR glasses. With the tools held in their hands they can zoom in or out, grab things, get inside the sculptures or fly out of the building-like interiors containing these works, reaching worlds of another scale. In the meantime, they can

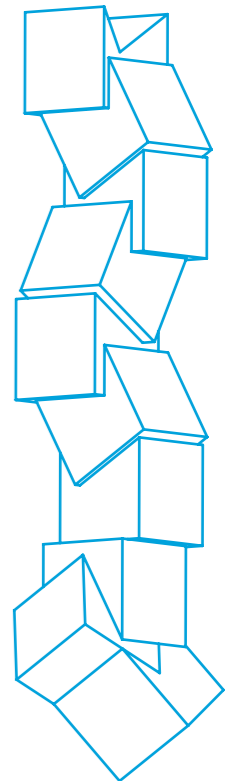
check out, observe and move these pieces of plastic art, walk around them, transgress edge planes, rotate and relocate them.

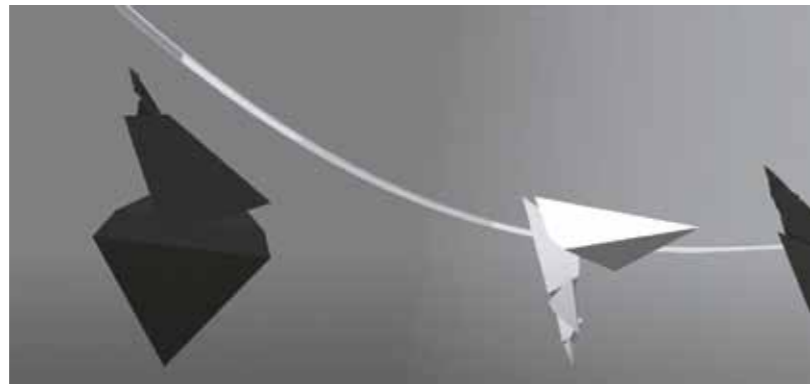
It is easy to recognize the equivalent horizontal correlation of the elements of an arbitrary system with an identical function and level, just like in a hierarchical inter-segmentation and order. We can find local optima of coexistence, where things get on well together.

Virtual reality creates abstraction from mass and inertia; therefore, it lifts off and leaves stick-in-the-mud attitudes behind. The VR technology tool enables us to see the sculptures “as if they were alive” and to move lightly, at diverse speeds. Not as a film upgraded using a “stereo viewer”, but as a dream world existing and breathing “in the same space” with the visitor, where we can experience many similarities with the components of the world that we assume we are familiar with.

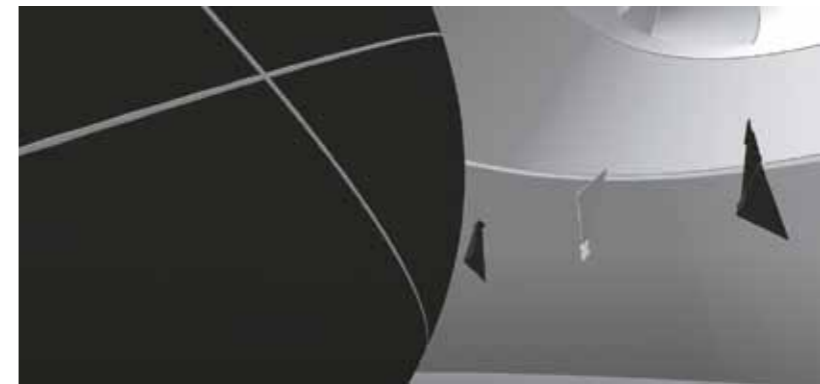
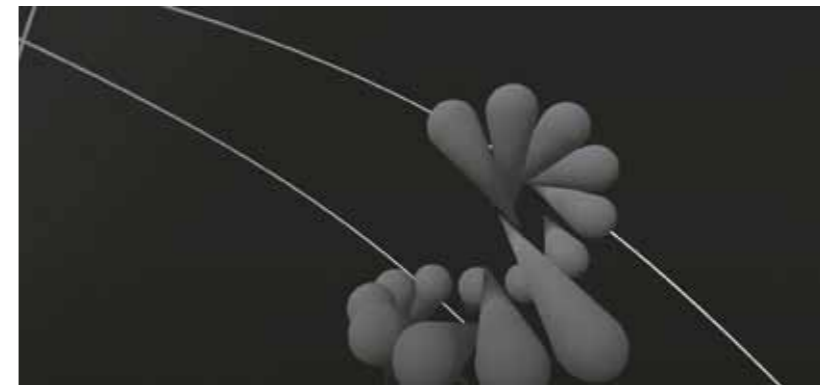
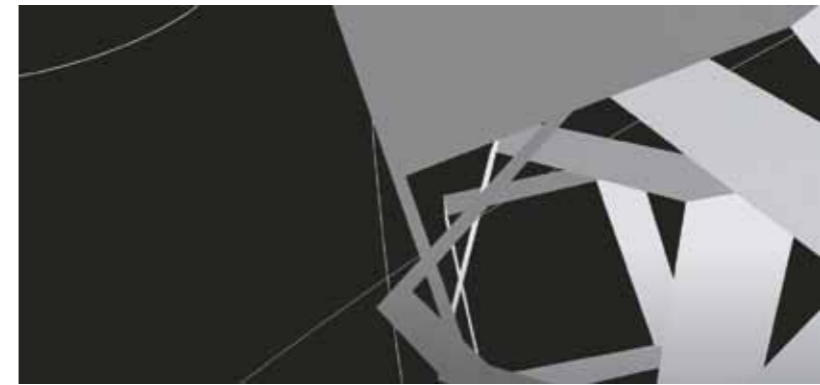
We assigned a specific sound effect to each of the sculptures, accordingly the music composed by Péter Mátrai is more than just a kind of background, it also suggests the special characteristics of the individual sculptures. Like in the “Promenade” motive of Mussorgsky’s *Pictures at an Exhibition*, in the virtual installation *Correlations* there is also a “cosmic” base pattern that we could call “harmony of the spheres” or simply just “background noise” that the rattles, creaks, swishes, dances, etc. of the displayed objects are built upon.

This is a virtual, kinetic composition introducing the working elements of an imagined utopistic-complex world with their behaviours and connections, suggesting correlations. We have also made a trailer about it, simplified into a 2D animation that enables us to perceive the players and extreme values of the universe.





2021 | HD | 3D virtual reality | VR installation | animation film

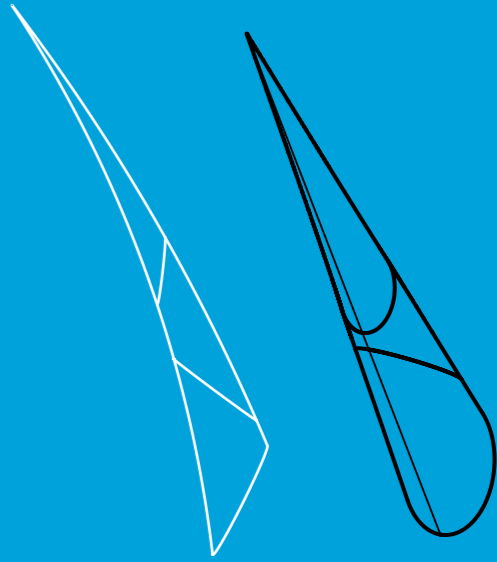


CORRELATIONS | Opus 1279 – video image captures

Ahmedabad
INDIA

NID AQUARIUM GALLERY

2021



GEOMETRICAL PANTHEON

Opus 212-250

Around the turn of the millennium, I collected those of my works that deviated significantly from the typical artworks of that era under the collective name *vari.art*. These can be defined as variable sculptures with multiple conditions, the constituting elements of which can be moved against, twisted or replaced with each other.

Visitors were not merely observers; they were also able to participate interactively in shaping the objects. Since it was an unusual opportunity that was not in line with previously acquired traditions, it evoked their curiosity. The symbolic, but simultaneously practical gesture I made was supposed to facilitate a deeper understanding of my infinitely simplified, abstract works.

I have always had a problem with the almightiness of culture that can only be read, watched, consumed in a one-way manner and is distributed with a top-down approach. I feel far more attached to the concept of people participating in creating and recreating culture. Works belonging to this concept take a special position in the common subset of creative arts, science and play.

As a result of perfecting and organizing these objects, a series of works was developed, the elements of which—in a particular position—seem like well-known, regular geometric solids, while their cutting planes are fundamental plane figures such as triangles, squares and circles, but there are also solids with cylinder and spherical surfaces. As orientation shapes, they include almost-cubes, almost-cylinders, almost-prisms, -cones, -pyramids, and even almost-spheres. Instead of giving them mathematically exact, plain names, we are forced to paraphrase their description, for example a regular, polygon-plane, inclined and truncated prism or a square-based, truncated prism with a partly arched component; an arched cylinder surface, all cutting planes of which are circular discs taking different places and positions in space.

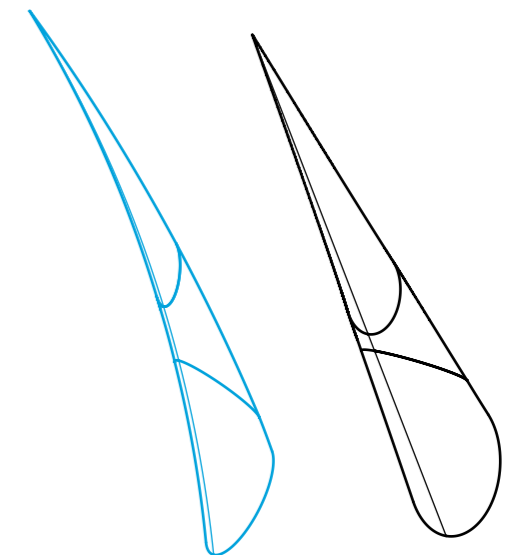
In the creative process, there were two correlating considerations of equal importance. One was the special placement of driving planes in space in such a way that the covering surface containing their edges establish characteristically new solids. The other was to split the existing initial shapes by driving and twisting planes. These are the objects making up the members of the *vari.art* series. Out of these, I have picked twelve works of linear stringing, naming them the sculpture set *Geometrical Pantheon*. Each of them were assigned an individual opus number. I have placed the members of this basic series made of polished wood onto special pedestals that extend the character of the statues like a trunk complements branches or twigs complement buds. Their human-sized scale, depending on their presentation at exhibitions in a scattered or a group setup, enables visitors to roam about as if in a grove, to walk around the figures and shape them at will.

It was also from the *vari.art* concept that the set of sculptures *Divergences* (p. 154) grew out of, where the stainless steel model designed with a technical approach builds a more complex, both parallel and linear matrix of connection.

A somewhat separated member of the *Geometrical Pantheon* without a pedestal bears the title *Sphere – Opus 250* (p. 094). A characteristic contemplation resulting therefrom is the composition *Part and Whole – Opus 737* (p. 048), where not only the primary shape is a sphere, but also the cutting planes are spherical caps. Apart from its basic position, the components of *Sphere*—because of the eccentrically located fixed centres of rotation—can only form fixed and gradual shapes. As opposed to this, the *Part and Whole* composition does not have any mechanically fixed joints, only an alignment onto each other. Consequently, the elements can be freely slid, turned and twisted, and therefore the sphere can be set up in a variety of positions. The changes and transience of this complex, yet simple work is emphasized by the gradually rusting iron surface. This piece won the first prize of the 1st National Sculpture Quadriennale of Hungary (in 2015) and it was also included in the selection of the *Aesthetica Art Prize 100* in England (in 2018).



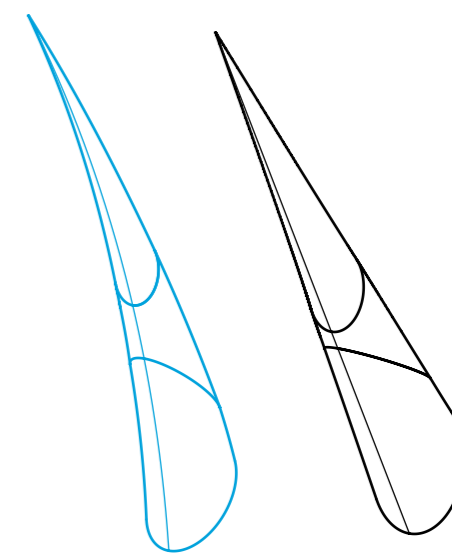
videos, 3D pictures





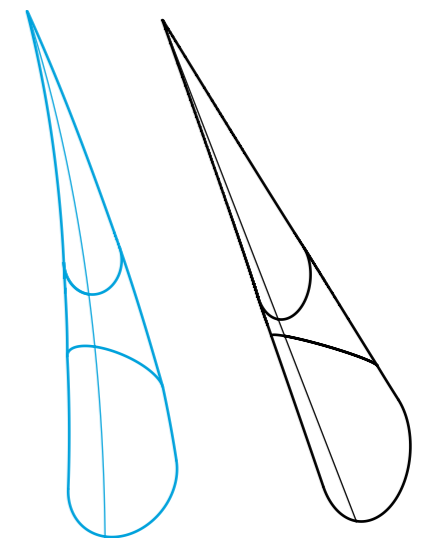
2003–2004 | polished and painted wood | units 50 × 50 × 200 cm each

GEOMETRICAL PANTHEON | Opus 212–250



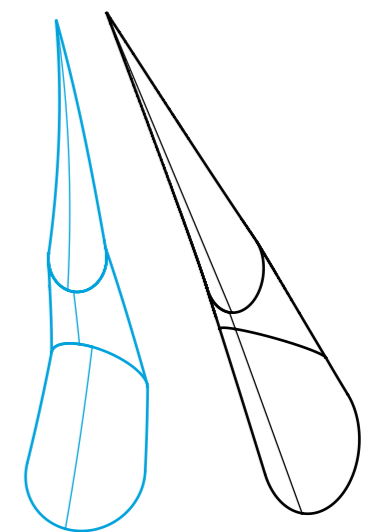
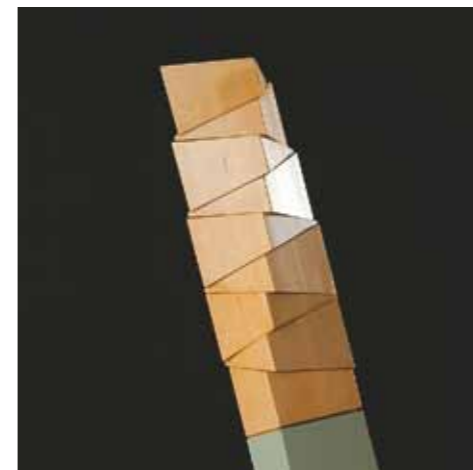
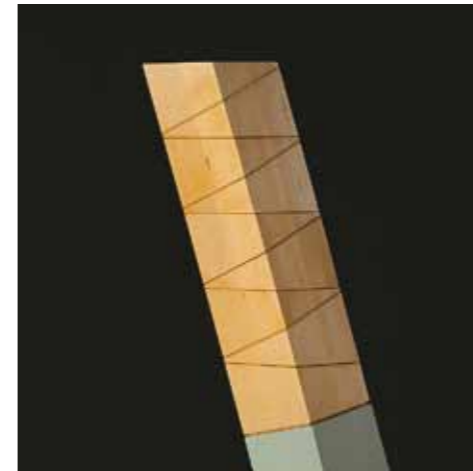


GEOMETRICAL PANTHEON | Opus 212 – interactive sculpture



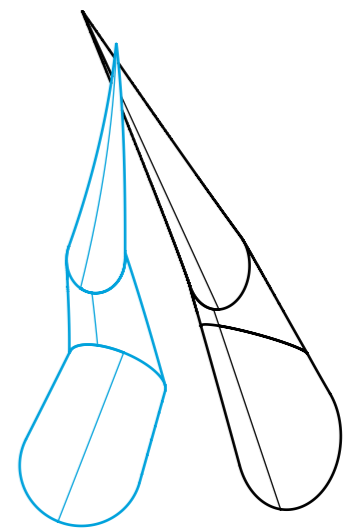


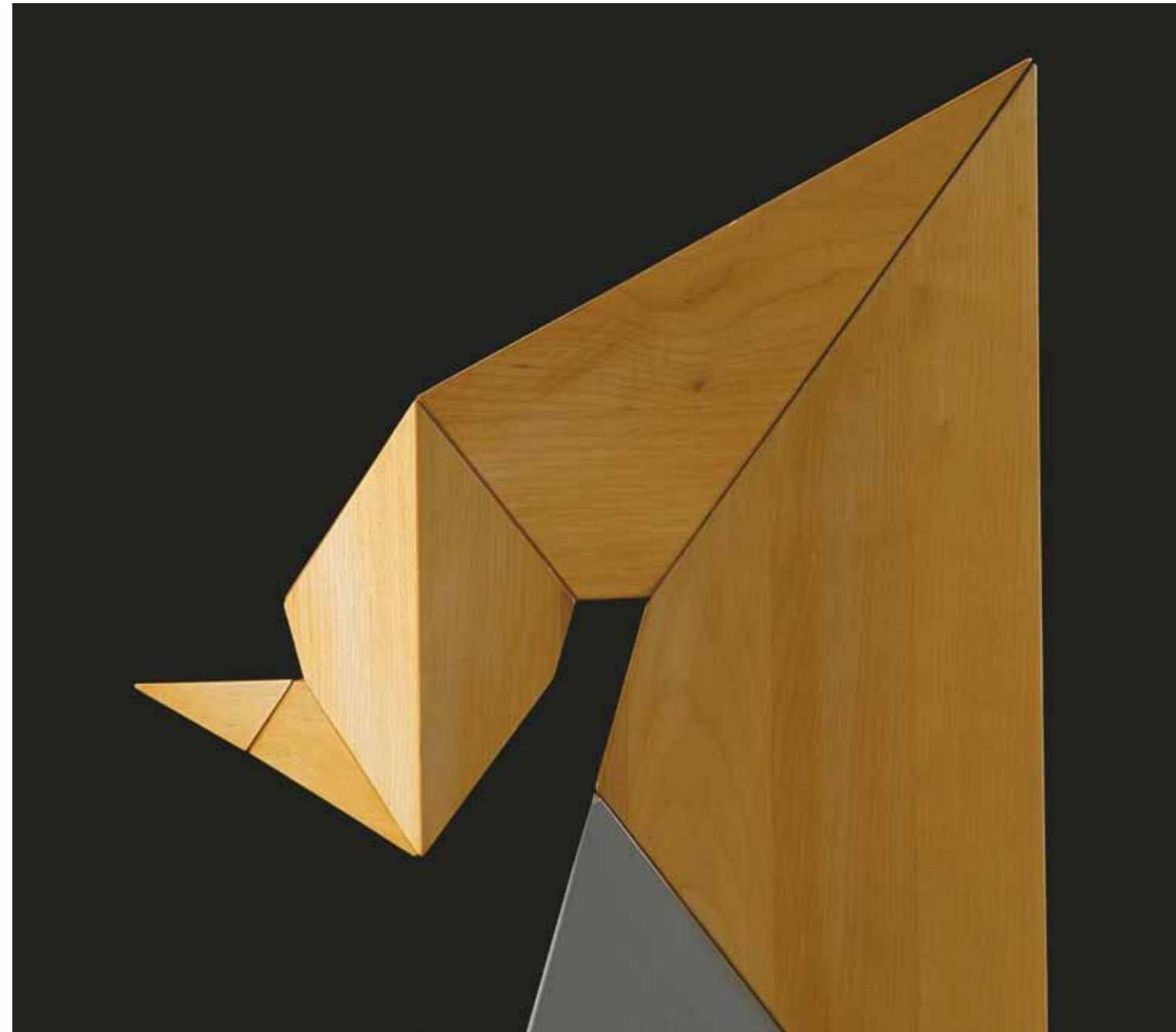
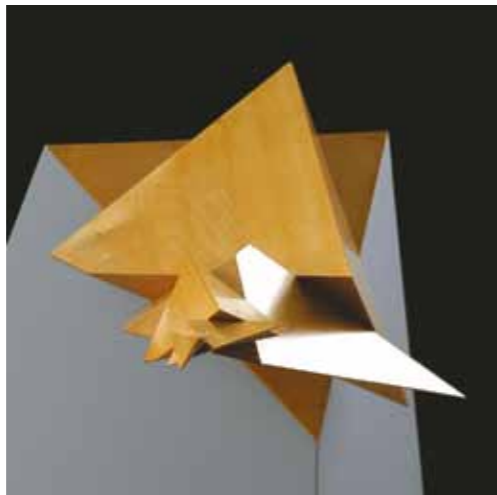
GEOMETRICAL PANTHEON | Opus 215 – interactive sculpture



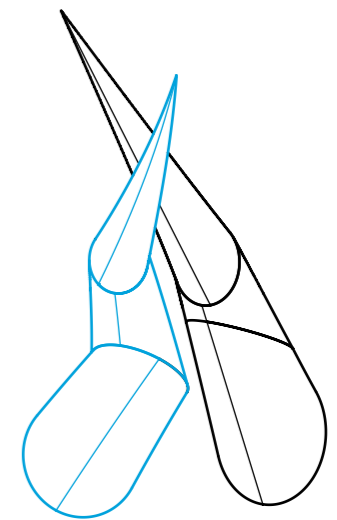


GEOMETRICAL PANTHEON | Opus 216 – interactive sculpture



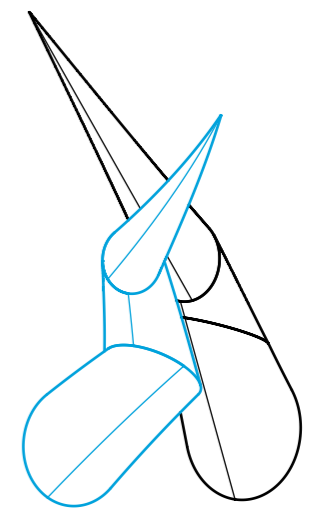


GEOMETRICAL PANTHEON | Opus 217 – interactive sculpture





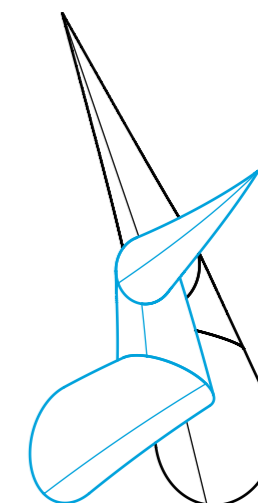
GEOMETRICAL PANTHEON | Opus 220 – interactive sculpture





2004 | polished wood | 30 cm diameter

GEOMETRICAL PANTHEON | Opus 250



REGULARITY AND IRREGULARITY

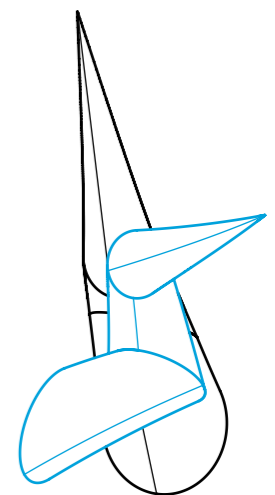
My works can be approached purely in respect to appearance, operation and model, although I often add comments with various comparisons and narratives. In fact my works are abstract, mostly mobile/movable compositions that provide an opportunity and a framework story for a variety of interpretations and emotions.

There was that widely known set theory learning aid for primary school pupils that comprised of circular discs, squares and triangles in various colours and sizes. This could be used to learn to organize things, establish identity and difference, and make categories according to shape, size and colour. Statements could be made about the elements of a set such as in what sense they are identical; we could create sets, the elements of which were different in all of their attributes.

As in the case of any decision, upon establishing the true value of something it is also important to accept the initial conditions—in mathematics the axioms—as the fundamental truths of the system. However, just as there are no identical leaves on a tree, there are no identical industrial objects either.

Let us take the technology of injection moulding as an example: it takes longer for a dark coloured plastic item to cool down, it can shrink more and eventually become smaller than a lighter coloured piece produced by the same machine tool. What's more, if we look at the flash emerging at the inlet of the injection, we could also ask whether that slight difference is good or bad. And based on what considerations? Such flash defects could be helpful when scratching off ice from a windshield but they could also cut our hands.

Just like in many other areas of our lives and in the aforementioned set theory learning aid there are considerations that we apply, while we simultaneously ignore others, because we may not even be aware of their existence. Life is far more complicated than any game of rules. My objects are abstracted geometrical figures, for which “trivial” attributes that could be considered easy to recognize and “differences” are not easily distinguishable. Regular figures are deformed, while “defects” constitute the visible part of the form, and of the system. In my works perfection and deficiency, regularity and irregularity represent equal aesthetic and substantive values, they are by no means inferior to their respective counterparts.



MATERIALS AND TECHNOLOGIES

I have a tender relationship with materials, one which is simultaneously respectful and curious. My first sculptures were made of wood. In addition to its being easy to work, the fact that through my uncle I represent the 5th in a generation of woodworkers may also have had a role to play, although unfortunately I failed to continue this tradition. It made a strong impression on me that not only living trees are manifold, but also wood, as a raw material. I knew that its “butt” and its side is different. They absorb water and cracks differently, and even their hardness is different. There was a phrase I have always remembered: “wood is a living material”. It moves, it is deformed and warped, if soaked in water it swells to an extent that if we use them as wedges in stone cracks, we can even split huge rocks into regular blocks.

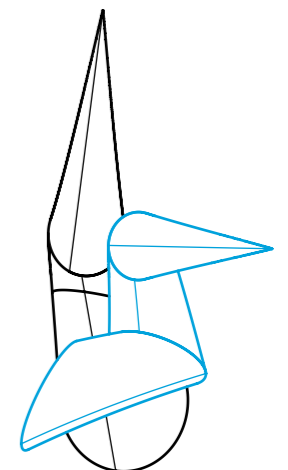
“Deficiencies” of a wooden board like resin and knars show that in reality, things are not perfect. By reference to annual rings even its age is revealed. (Unless it grew in a tropical forest where there are no distinct seasons, so the growth and structure of trees is practically unbroken.) Wood comes in a variety of colours, from off-white through yellow and in a range of browns to ebony black. The bark of trees is even more astonishing, just think about the sycamore tree, with its entire range of earthy colours. The old masters who built Venice in Italy knew how to burn the surface of the larch tree to make it resistant to decay in seawater. My grandfather knew that secret and had the tools to drill a rectangular/square-shaped hole, to draw an exact ellipse and to bend Thonet furniture too. My mother was a dressmaker and acquainted me with knitting, woven textiles, how to obtain silk thread from a cocoon, and how to produce wool-felt. I was very lucky, since I could absorb these skills while I was still a child.

At a later stage I was similarly fascinated by stones regardless of how they came about, through volcanic activity, as sediments or through transformation, what environmental impacts had caused their colour, their multitude and their physical attributes. I was also interested in the formation of limestone, granite and marble. In respect to crystals it was primarily their defined geometrical shapes that captivated me, polygon-based prisms of quartz, pyrites made up of perfect cubes or haematites with their hemispheric finish often called the “iron noodle”. I have always been fascinated by the irregular regularity of the desert sand rose, the structure of its rigid “petals” and the way it is formed. Still, out of all the materials, I am most familiar with metals, thanks to my university studies. That is when I learned that I could make “anything” from the same raw material, using the right technology and composition metals, as well as when I started dealing with the structure of materials more seriously: how to tell bronze and copper apart, how

many thousand types of steel can be produced from iron, including stainless steels. There is a Hindu column in Delhi as tall as four men that has been standing there for fifteen centuries without getting rusty. When heating up steel, and watching the splendour of the “temper colours” on its surface we can observe that when increasing the temperature at 10 centigrade at a time the following oxidation colours appear, then subsequently darken: yellowish white, yellow, dark brown, reddish brown, purple, violet, dark blue, cornflower blue, light blue, ash-blue, grey, and slate green. The change continues at higher temperatures with the “ignition colours”, but then in reverse, going from dark to light: blackish brown, reddish brown, various reds, orange, yellow, and then only the colour of “white heat”. All these can only be experienced in their progress and barely for a couple of moments; they are hard to freeze, much like the fleeting moments of our lives. Only a few people know that not even the structure of steel is perfectly homogenic. It has its irregularities, inclusions, and flaws like knots in wood. Moreover—for technological reasons—it may even have fibrous threads.

I like all materials, if they are not fake—glass decomposing light into a rainbow should not want to become an agate, neither should gold want to become copper! They should not appear like anything other than what they actually are! They should instead use the opportunities provided by their own uniqueness, or rather, people should not force them into a different role. The most unworthy praise is when they say that a certain plastic looks “just like” wood.

Plastic has its own place, “honour” and many advantages if we use it moderately and for the right purpose. If we put a plastic vacuum suction yogurt cup into hot water and take it out again, it will flatten and approximately reassume its initial state. It will “remember” and wish back its original self that it was before processing. When we imagine a ball, we typically think of its material as rubber or soft plastic, although in the past it was made of numerous natural materials (such as bladder or wattle). It is interesting and thought provoking that this list of materials even included rice paper, with a pinkie-sized hole in its side at that. If this crumpled ball of paper is thrown into the air and hit by a hand it will suck in a bit of air upon each push and gradually inflate. Rice paper knows its physics—we should follow its example and keep observing and learning. When I created my kinetic works I started using newer materials like fibre-composite resin more frequently, while information and control technology is also acquiring an increasingly important role. Still, I do not feel the urge to race against these, I am perfectly happy to stick to polishing wood and rusting iron, and to studying and sketching geometrical and organic shapes.



ArtFormer

RATIONALITY

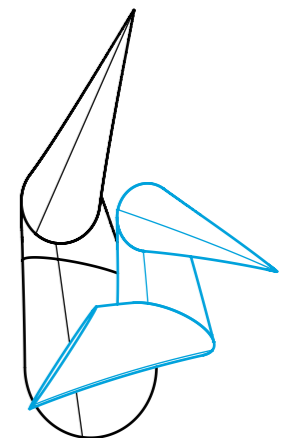
A rational attitude is often described as an “engineer’s approach” that is dominated by technology, functionality and professional routine while providing specific solutions. In art, doubting things and asking questions are more important to me. In science, it is very common to set specific conditions and stipulations, which, should they apply, we consider to be empirical laws and formulae describing processes both true and functional. It is suffice to consider the difference between mass and weight, or the acceleration generated by the rotation of constant speed, which initially seems absurd. Physical formulae are made up of numerous components. We often use various factors of multiplication and constants. We constantly question explanations and theories that have always been considered trivial, while observations and measurements that are more exact provide an opportunity to describe the world anew in a more generic manner. It does matter how superficially or deeply we intend to get to know it. How much attention do we pay to the world, to ourselves and to each other? What kind of mental state are we in and what are the conditions that allow us to trust each other? While we cannot contemplate all of this, our everyday lives are just as complex and hard to comprehend. In my works some phenomena that may seem to be otherwise in conflict often appear simultaneously. For example, something may both be rising and sinking, i.e. it grows in the same way as it shrinks at the same time. Rational and irrational elements are of equal importance.

Being an *ArtFormer* is a concept I adopted that can be best associated with creative art. In its system of thoughts or in the way it raises questions it is characterized by contemporary sensibility,

formally by solutions inclining towards minimalism. This is what I blend with various effects, kinetic movements, changes, deformations, omissions and inaccuracies. As a result, my art cubes are not regular, cylinders are often not solid revolutions, and globes are incomplete or consist of multiple pieces, i.e. nothing is what it seems.

My works are typically characterized by precision and a careful finish that applies both to their appearance and their invisible inner functioning, therefore they are often hard to comprehend, and mysterious. They make the observer curious, inviting him to wonder how exactly they work.

The aspiration for simplicity is a guiding principle for me; I typically reduce the number of connected components as long as the model can still be interpreted according to my original intentions, i.e. when I cannot take anything else away from it.



MAKING

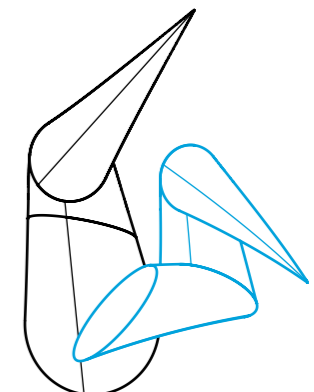
POSSIBILITIES VISIBLE

The immortalization of the visible requires a high level of craftsmanship, often a virtuoso performance that has always been appreciated by the general public. Artists can present and depict reality realistically, or, at best, filtered through their own unique style. Other creative artists may prefer conceptual works, perhaps painting the invisible, visualizing creation or reproducing dreams in a surreal manner. My approach, however, is to focus on the exploration of non-trivial possibilities and on shaping them into sculptures. I do not attempt to achieve this through an endless series of variations or by creating fine art sequences, but rather by enabling specific sculptures to be moved and set up in various situations and positions.

The overall majority of my works are made up of abstract, geometrical components of shapes. The structure, the logical and network connections of these strings define the analogous possibilities of constructions that can be regarded as visual models. We have become accustomed to visualizing thoughts and correlations primarily in two dimensions, in line sketches, or, in a projected manner, through diagrams. What I do is help them transgress into space, and enhance them by adding shape, in which subjectivity

and intuition both have a major role to play. It is never the illusion of a single, all-inclusive, universal model that I aspire to create, I am willing to settle for observing those “common parts” in set theory where things work in a very similar fashion.

This is the basis upon which I compose my works of art, in which observation, intuition, atmosphere and possibilities can take shape. They offer themselves for a closer study, which is always influenced—and consequently shifted into a different situation—by the recipients’ past, their eye for detail and/or their interactivity, and furthermore by the dislocability and movability, the acquired, pre-programmed self-mobility of my objects. These factors also suggest the growing sophistication of the “independence” of artificial intelligence (AI), as well as triggered artificial emotions (AE). Placing the same work of art into a different environment or concept may require a different atmosphere or even new, unique titles that often deviate from the traditional spelling.



STUNTS IN COGNITIVE THEORY

József Mélyi

Opening text of Antal Kelle's exhibition *ArtFormer* in 2009, at the Exhibition Hall of the Hungarian Patent Office, Budapest.

József Mélyi is a curator, art historian, art critic, economist. Head of the Theoretical Department of the Hungarian University of Fine Arts. In 2009 he won the "Curator of the Year" award (AICA Hungary).

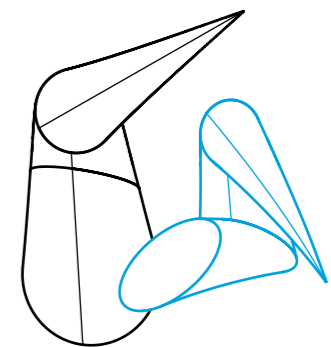
The most bewildering thing about Antal Kelle's works is the genre. Scientific aids, small works of art, toys, geometrical visual aids, meditation objects—all of these definitions could apply, yet each of them misses the point, if used exclusively. Of course, the confusion is probably the result of a weird compulsion to classify: everything has to be defined and labelled in order to be understood. There's nothing wrong with that, it is what at least half of our civilization is built upon.

But what happens when something is so simple and elementary that it cannot be put into any particular box? It simply exists, it rotates, it works, it can be looked at, touched, taken apart, put back together. Then the incurable labeller stops for a moment, looks around, and before continuing, wonders about the point of labelling here.

Wouldn't it be better to sit down and simply turn an object into another position as an opening? That would be the great opening gesture, everyone would understand what it was about. Of course, it would take a great artist to make the audience believe in the simplicity of the gesture.

I wouldn't try that, and they wouldn't believe me anyway. Our concept of "great art" may vary a lot, but if we think about the many different contexts we have seen the human figures of Bauhaus artist Oskar Schlemmer in—as "high" art, design illustrations or simple toys—we can see that our confusion is not unjustified. In fact, Antal Kelle's objects (in brackets: his animations, mobiles, objects, works of art, pieces... brackets closed) can be viewed from at least two, if not three, different perspectives.

We can look at them from an artistic point of view, since Antal Kelle's objects, which can actually be rotated and viewed from several sides, in some ways resemble some of the sculptures of one of the most famous artists of our time, Antony Gormley. Famous for his human figures exhibited in strange places, strange quantities and in strange positions, Gormley, whose work was also exhibited at the Ludwig Museum once, has recently become famous again for placing living people on the single empty column in London's Trafalgar Square,



where they take turns to spend an hour high up on the pedestal, as living memorials. In regard to Antal Kelle's works, however, that is not what is interesting to us, it is another one of Gormley's sculptures,

Quantum Cloud, which is exhibited on the Thames in London, not far from the Millennium Dome. In fact, it is a cloud of sticks, of thin steel elements cleverly fitted together, the central condensation of which reveals a three-dimensional human figure. There are several studies on the internet about the scientific preparations, software and the various mathematical models that have been used to create the 30-metre high cloud of a sculpture. If we approach Antal Kelle's work from the artistic perspective, the most useful key concept could be that of densification, the moment when basic geometrical shapes suddenly condense and coalesce into meaning. At some point, Kelle himself called his works creative meditation objects, and what is that if not a kind of condensed definition of art?

Densification is of course not only a useful concept from the perspective of art, but also from that of applied graphics, to use a very profane association. I must admit it was the first thing that came to mind in connection with Antal Kelle's playful objects, which is why

I mention the introduction reel of the TV news magazine *A Hét* ["The Week"] from my childhood. Some of you may remember, the letters floated in to the music of Led Zeppelin, and I actually watched the beginning of the programme just to find out what the system behind the letters falling into place was. Here and now, it was not actually those floating letter elements that came back to me, but the childhood magic, still linked in my mind to geometrical games, to the still rectangular but well-rounded shape of the television set and the unfamiliar, but exciting music.

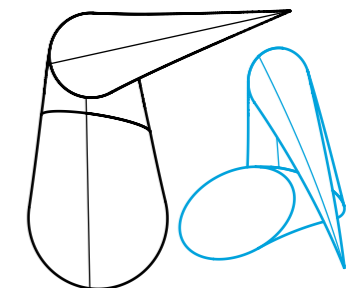
It is hard to tell when the game ends and the art begins. Or where science can be rounded off. When Marcel Duchamp writes about the three-dimensional projections of four-dimensional things and their two-dimensional representation in connection with one of his key works of the 20th century, *The Large Glass*, he is drawing on the scientific theories and interests of his time—while making the point that we usually talk about the fourth dimension without knowing what it means.

Duchamp and the scientific problem of dimensions occurred to me only because, if we take Antal Kelle's work, it is also about projections finding shape, a theory made playfully tangible.

Speaking of theory, the works on display here could be seen as epistemological spectacles. It seems possible that, in order to illustrate a rather complex analysis of a phenomenological work on perception by Husserl or Merleau-Ponty, one could simply lift and present an object.

Phenomenology digs deep into things and breaks down the world into basic forms. Looking out from this box, I think of the work of a somewhat forgotten photographer, Karl Blossfeldt, who was born in 1865 and died in 1932. Blossfeldt was both a sculptor and a photographer, searching for the archetypes of art. He studied plants, classified their geometry and similar forms, and tried to draw conclusions about the origins of organic and artistic forms. From the pieces shown here, it is almost obvious that Antal Kelle is also searching for these archetypal forms, not along Platonic geometry, not even in nature, but by combining basic geometrical forms and making small, calculated distortions. Still, what he does is all very plant-like, at least in the sense of Blossfeldian geometrical and serial vegetation.

At the same time, it's also as if it's not organic, but just the opposite, a game of machines, a kind of Transformers game for peaceful uses, a game for the peaceful little transformers themselves. Of course, these transformers—coming from organic existence and in the process of transforming—are also us. In Antal Kelle's works, the artistic and the playful, the mathematical and the object-shaping imagination are so simultaneously present, and it is all so simple and obvious that I can't help but place it in a cloud of associations that, I hope, thickens recognisably in the middle. Finally, as a brief gesture, that is all I wanted to say about classification and presenting things.



NEXUS

Opus 400

This interactive installation introduced in 2009 was set up in the Renaissance Hall of the Museum of Fine Arts in Budapest. Imagine two six-meter-high marionette figures swimming in the air. One of them is graceful, in a curved position, the other one is a straight, black figure. Visitors were given the chance to control the movements of the figures using a terminal according to the choice of the server: they were able to control the black one or the white one in turns, though only one at a time. This resulted in an airily effortless movement, a veritable technical dance in the air. It often seemed as if the figures were connected with each other, while dancing they turned, bent and gesticulated towards each other. In fact, the indirect connection was established between the persons controlling the movements of the two marionettes. This project, however, was much more extensive and on a larger scale than this, since two additional locations in Budapest (the Moholy-Nagy University of Art & Design and the museum of Applied Arts) also each hosted a terminal. The visitors at those locations could also follow the events taking place at the Museum of Fine Arts in the form of projections in real time. This means that visitors No. 2 and No. 3 at the remote locations could also control the figures indirectly using other terminals, just like the on-site visitor at the Museum of Fine Arts. Nobody knew who his or her partner was in this unique connection. We could also regard it as an indirect way to get acquainted and get in touch, since there were nodding and waving gestures that were repeated by the other side immediately, which means they represented active reactions and signals. But what if the figures do not return the other party's advances, and perhaps even turn their backs on them?

The *Nexus* installation was about the most important thing to me, human openness. We posted in huge letters: *"Please note, the server will hack you every now and then and instead of another person you might come into contact with artificial intelligence!"*

AI, artificial intelligence sometimes repeated the movements controlled by humans by a couple of seconds' delay, which may have created the delusion that another person reacted rather than a machine.

I think this group of cybernetic sculptures is about trust.

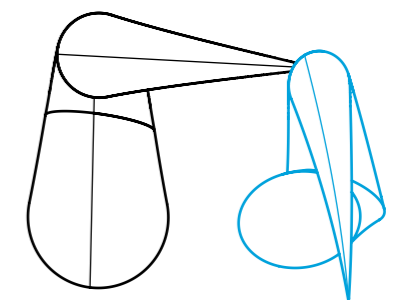
If we are aware that often (every third or fourth time on average) we are communicating with artificial intelligence rather than with another human being, we face the dilemma of whether we should open up and enter a new relationship at all. Because of the relatively high probability that it's all an illusion, we could end up making fools of ourselves, still, our—perhaps only—chance is to trust.



[videos, 3D, pictures](#)



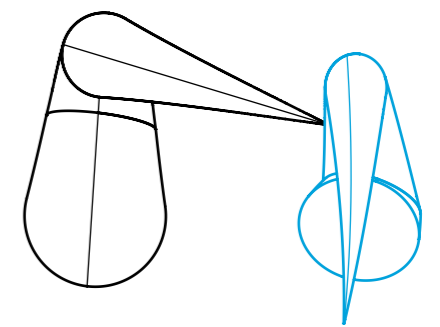
NEXUS – simultaneous performance in three different locations





2009 | composite, mechanism, interactive AI control, projectors, terminals | 600 x 1200 x 900 cm

NEXUS | Opus 400 – snapshot



Budapest
HUNGARY

MUSEUM

OF

FINE

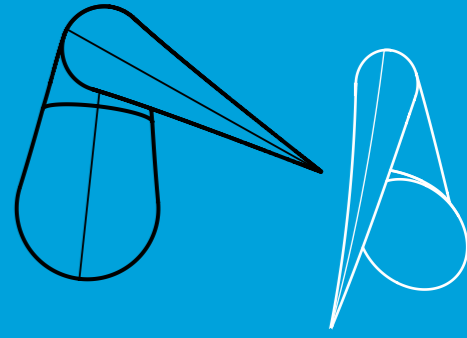
ARTS

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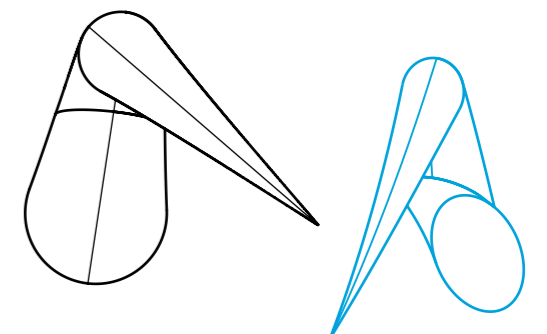
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NEXUS – snapshots



FLIGHT INTO A HUMAN REALM

Zsuzsa Dárdai

This opening speech was presented at Antal Kelle's exhibition *LATENT TOLERANCE* at the Érd Gallery in 2016.

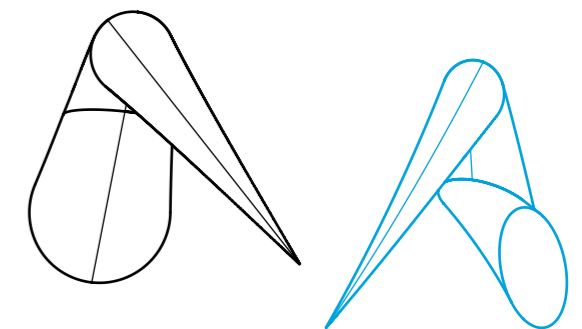
Zsuzsa Dárdai is an independent artist and art organizer, co-editor of the international art magazine *MADI Art Periodical*, co-founder of the International Mobile MADI Museum.

I am a bit confused. For years, I have been organizing exhibitions, to which I regularly invite Antal Kelle.

These exhibitions, usually international, are all about geometric art, showing specific works that have been created on the fringes of MADI and art and science. We all know that the MADI manifestos proclaim an essential exclusivity of content, that the work represents nothing, tells nothing, has the same meaning as itself. It is what it is.

None of this is typical of Antal Kelle's work, so at first glance we can say that although Antal Kelle works with the formal characteristics of geometric art, he is not a concrete artist and not a MADI artist. However, he does comply with the third specificity of my exhibitions: he works with the tools of geometry on the borderline between art and science.

In the last two decades, the camp of those balancing on the interface of art and science has expanded considerably. In this camp, there are scientists, mathematicians and physicists who use the basic elements of geometry with artistic ambition to explain their scientific theories, sometimes creating genuine works of art (for example, the American-Indian Haresh Lalvani). More often, however, the result of the mapping of scientific theorems is merely a model or illustration. At the same time, there are artists who, with scientific ambition, wish to intervene in the matters of the universe, but who present their philosophical, mathematical, physical ideas within a strictly artistic framework (for example, Vyacheslav Kolejchuk, John Hiigli, Kelle, Saxon, Erdély, etc.). With about a decade of experience behind me, I would like to mention two major art-science festivals where Antal Kelle has been among the invited artists: one is the Bridges mathematics-art conference in the US, the other is the International Symmetry Festival, an event organized in Budapest every two or three years. On these occasions, I am pleased to see that scientists are interested in the scientific assumptions of artists and vice versa.



It was not always like this. For a long time, science was put before art, even though the giants of Renaissance painting and architecture, for example, have played a major role in the scientific achievements of the last five hundred years.

Consider, for example, the Italian artist Leon Battista Alberti, who was an architect, painter, poet, archaeologist, philosopher and musician in one, or the polymath Leonardo da Vinci, who was a painter, scientist, mathematician, military engineer, inventor, anatomist, sculptor, architect, composer, poet and writer. And in the field of contemporary art-science, one of my favourites is Buckminster Fuller, the self-taught American designer, engineer, architect, poet, writer and inventor.

To me, these examples justify the validity of holistic thinking, which “perceives and explains the world as a whole, and its various things as interrelated, dynamically co-evolving and inseparable”. I strayed into an area dear to my heart, but not by accident. Antal Kelle’s career, and the diversity of his creative fields show a similar complexity to the examples mentioned above: mechanical engineer, mobile sculptor, toy designer and maker, university lecturer, specialist book author, expert in robotics and... something ELSE... Kelle’s geometric forms completed on the basis of mathematical and physical laws take us back into the human realm, into the diversity of analogies.

I don’t know which part I should be more pleased about—the geometric, abstract design forms based on the laws of physics, mathematics and descriptive geometry, or the tales, analogies, teaching and educational intentions, social sensitivity and religious tolerance woven into and mediated by them?

Combining his expertise as a mechanical engineer and his artistic vocation, Antal takes to the stage of life, and together with his objects, sculptures and mobile gadgets, he invites the audience, and everybody interested, i.e. us—to think.

All the works exhibited here are, as he puts it, about multiple accessibility, simultaneity, acceptance and self-esteem—about our lives.

He does all of this—and here is a word, a concept that should be a cornerstone in all of our lives—in the language of humility. Humility (‘humilis’) comes from the word humus (‘earth’); it is a virtue that enables one to live and act in accordance with one’s truth, and with one’s created nature while being aware of one’s fragility.

Surrendering ourselves to the Creator, compassion, willingness and actual measures to help people.

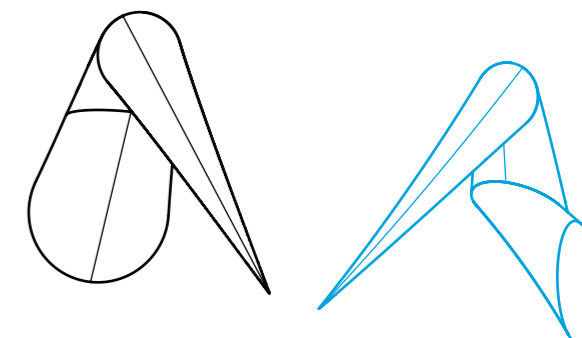
At the same time, respect for the raw material to be processed, the material to work upon. I think these are the main characteristics of Antal Kelle’s personality.

Having worked in many countries of the world with different cultures, Antal has experienced human values, acceptance, rejection, idleness and, of course, the will to do something. He has been involved in several UNESCO programmes to design objects for the needy, the sick and the disabled. It was then that he decided to speak to the present-day world by creating special interactive sculptures. Thanks to him for that.

I could go on at length about the diversity of the works in this marvellous exhibition, but I won’t. I will choose just one, perhaps the most topical at this historic moment, titled *Art from the Holy Land* (p. 124). The sculpture (which is presented here for the first time in white stone) is about Jerusalem, the holy place of the three monotheistic religions: Christian, Jewish and Muslim, the city in which the three religious cultures are present simultaneously. But the spiritual/notional Jerusalem is part of our lives at every moment.

In the *Book of Revelation*, St. John introduces us to the heavenly Jerusalem, open to the four corners of the world and with gates open to the four winds. This image is obviously about the church of tomorrow and the humanity of the future. Unfortunately, we are far from that today. Religious intolerance, the inability to accept difference, the prevailing hatred instead of helpfulness and the stoking up of this hatred are typical around the world. We have only one means of calming emotions and dissolving fears, and that is the gesture of love. “It is the simple manifestation of the human heart,” wrote Henri Boulad, “which opens itself to other people, opens its house to them, shares their misery, and sympathises with them.” My feeling, my opinion, my hope is that this is what the life of Antal Kelle, the artist, the creator, the man of action, is all about. His works are sources of light that help us to turn our attention towards another person with good intentions.

So let us take this message with us and let us do the same, wherever we are and in whatever we can.



ETHICS AND AESTHETICS

Creative artists tend to focus more on aesthetic considerations than ethical values. My work is often categorised under geometric art, but the abstract approach is averse to hiding considerations into works pointing beyond themselves. Still, it is exactly this area that interests me: I think I can complement our everyday lives through this and ensure that my works are interpreted by those who view them, and that my art induces thoughts and ideas.

I try to create works that may not be important only to people living in the present age, but—like sprouts of utopia—to subsequent generations too, since they also suggest other possible or desired alternatives of human coexistence. Perhaps they will become a part of the way my children and grandchildren or other attuned souls look at the world. It is not my person that matters, but my work.

I deal with fundamental symbols only in a couple of my works—we could regard these as models that have settled and become clear enough for some reason. Of course, all such icons and symbols depend on time, place and context, and it is suffice to think of the various meanings of the swastika and the hooked cross. Using symbols, I create objects that simultaneously contain symbols that may seem to contradict or accomplish

each other at first sight (*CHAOS* [p. 137], *Holy Land* [p. 124], *Desire – Opus 332*, *Neverending Story – Opus 333*). These works are forerunners of the *YNI Surface* (p. 164), representing the settled abstraction of my *Aspects* cycle: beginning with symbols and the textual display of terms, they approach a higher-level of integration by achieving pure mathematical and physical forms. I honestly believe that these works of art, which I have created on an ethical basis, shall survive for a few generations before returning to nature or decay.

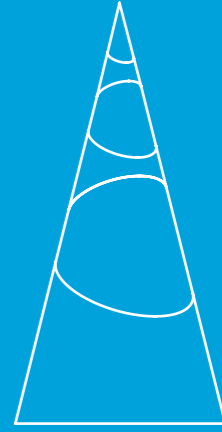
We can formulate clean, honest statements “in holy conviction” about the same things that are fundamentally different. My objects not only question fundamental statements and dogmas but also illustrate through numerous examples, and using abstraction suggest that the world—including our human relationships—is more colourful than we experience in our everyday lives affected by our prejudices.

With the shapes I create in three dimensions and the thoughts I record, I intend to draw attention to the diversity and beauty of the world. In my art, beside the visual representation of the world and the aesthetic realization of my works ethical and human considerations are just as important factors. That is why I often create conceptual works and installations.

Budapest
HUNGARY

HUNGARIAN NATIONAL GALLERY

2010



HOLY LAND

Opus 331

videos_3D_pictures



The meaning of symbols is never exclusive, i.e. they have no unambiguous, clear-cut definitions and their respective meanings also vary depending on the cultural or geographical location. Moreover, several simultaneous, different statements may be true and valid for the same object or thing. My artwork *Holy Land* explores how much we can compress into a block that which we call a sculpture. Walking around the object we will soon recognize the symbols of the three monotheistic worldwide religions, Christianity, Judaism and Islam. To be more precise, this sculpture represents a unique, inverted 3D kaleidoscope containing a lot of fragmented shapes that—falling into place—will add up to suggest those symbols. The reason why I use the term “suggest” is that it is not the shapes that will make the symbols visible, but rather the lack of them. We are looking at something that is not there, while failing to notice the things that actually are.

The issue of religious symbols is a particularly sensitive area. I have no intention of labelling, connecting or clashing motives or symbols into objects, I only wish to offer the opportunity of simultaneous presence for meditation. It is not about painting various patterns onto an object or cutting symbols out of an object. Out of the synthesis of symbols and a new, integrated object, a new, superior entity is created.

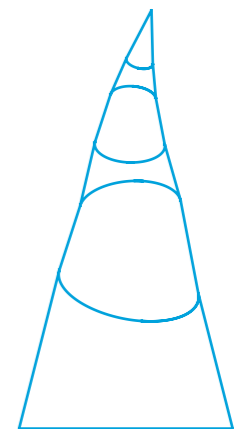
We observe the events happening around us, living creatures and objects with a practical routine, i.e. casually. Those that we find more attractive or closer to ourselves we not only notice sooner but are also inclined to regard as exclusive and we then treat them as the only thing worth dealing with.

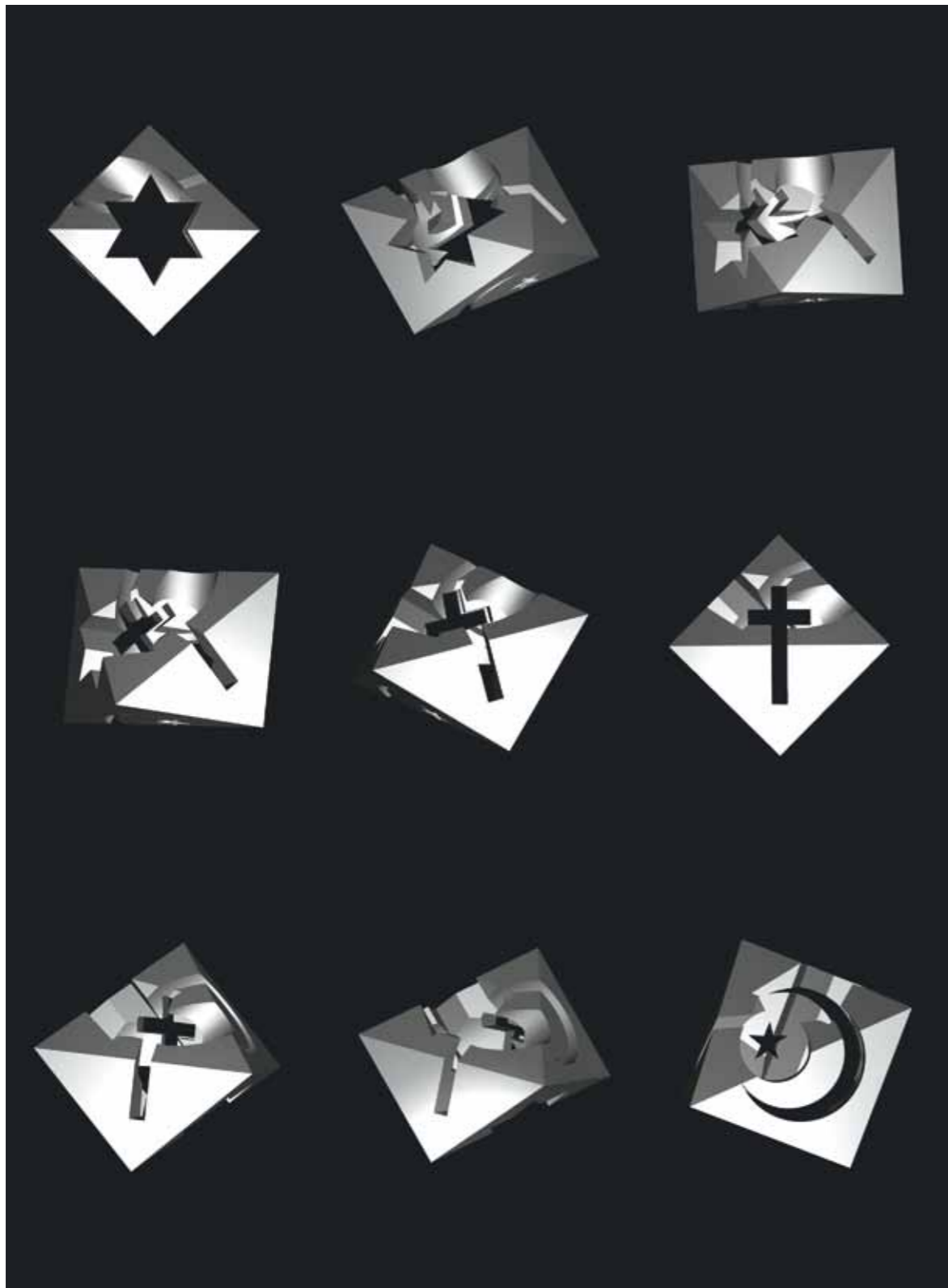
This was the reason why I created a series of objects under the title *Aspects*.

It includes objects that deal with actual symbols such as *Holy Land*, the bronze version of which I exhibited at the Hungarian pavilion of the Venice Biennale in 2012 but also artworks that set the agenda of full visual abstraction, such as *YNI Surface* (p. 164).

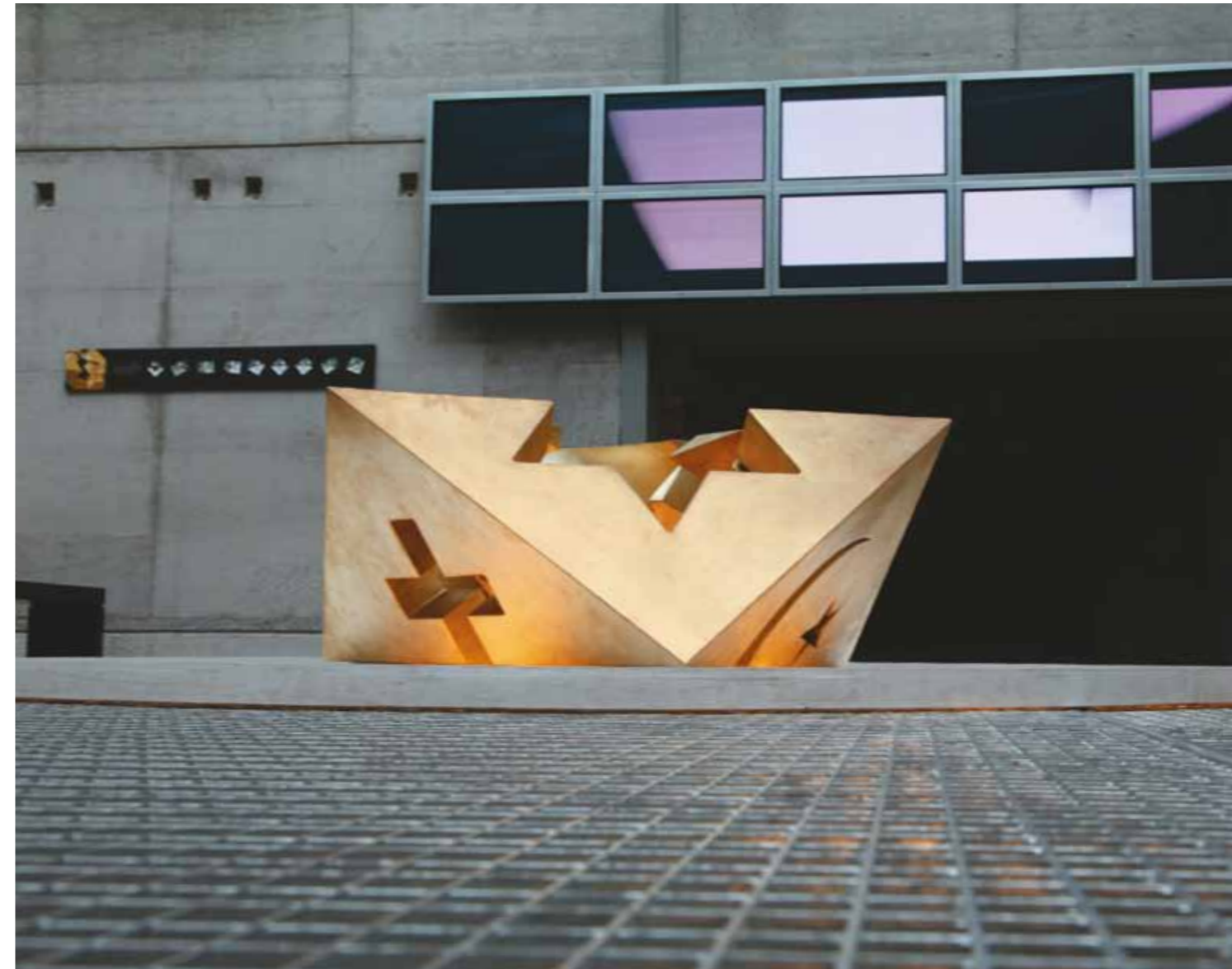


HOLY LAND – space sculpture detail

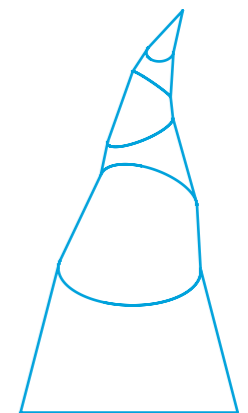




HOLY LAND – electrographic views

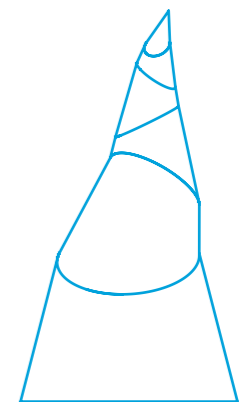


2005–2009 | bronze | 120 × 120 × 65 cm





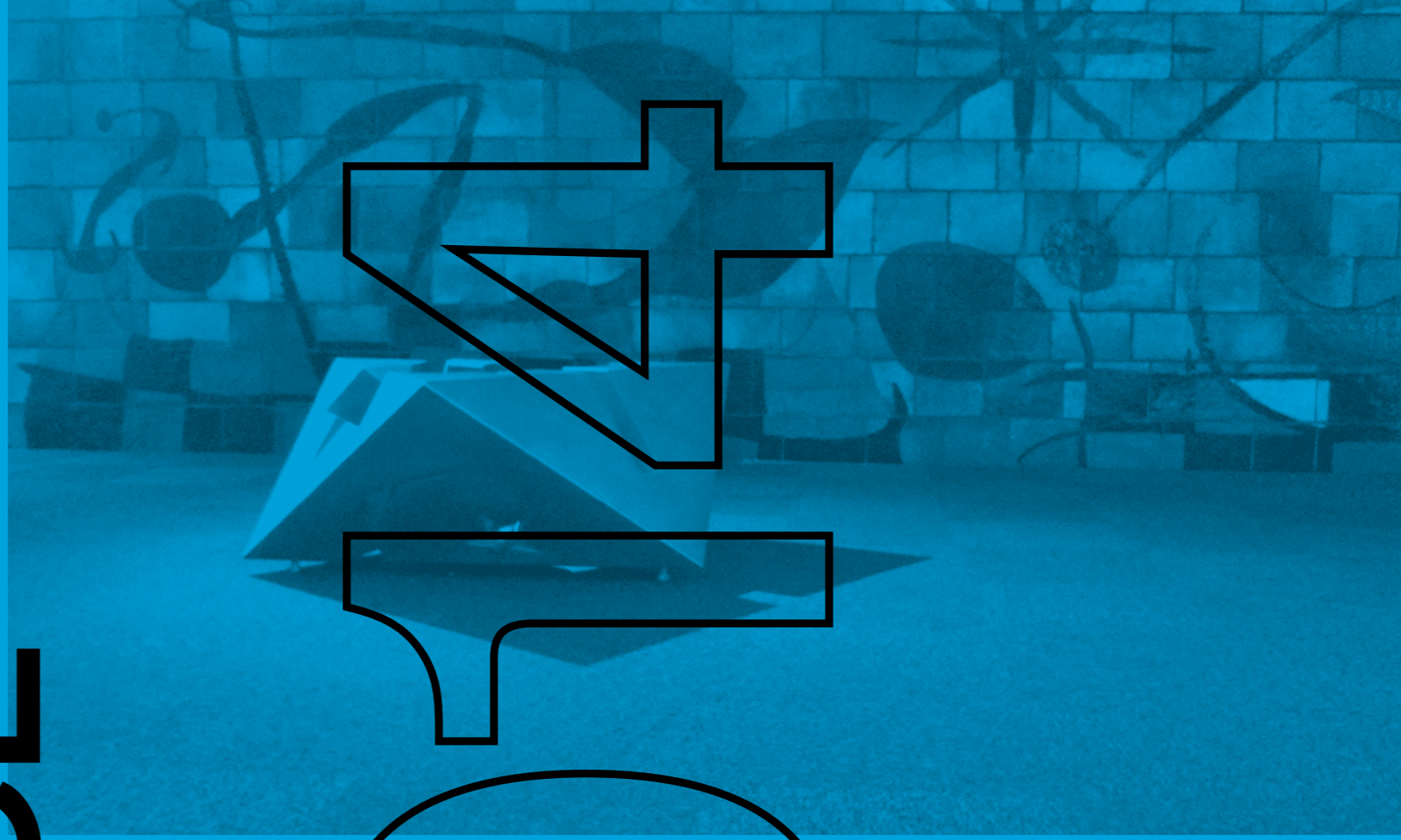
HOLY LAND – views



Paris
FRANCE

MIRO GALLERY UNESCO PALACE

2014



ONE WHO
WATCHES
THE WATCHERS'
WATCHERS

István Orosz

E-mail from 2005, in regard to the exhibition *Aspects* at the Ponton Gallery.

István Orosz is a graphic artist, animation film director and writer, as well as a member of the Academy. Member of the Alliance Graphique Internationale, Kossuth Prize winner, Artist of the Nation.

Dear Anti,

Now I know for sure why some people grow moustaches.

It is to smile comfortably underneath.

Of course, that is the reason why you wear it.

And then, to have something to smile about, you create something like your sculpture Holy Land, and watch the visitors bowing and scraping in front of it.

The poor things, of course, think they are nodding just to find the right angle to find the crescent moon, the cross and the Star of David, but

those who watch them see them circling the mysterious object (on that great pedestal) and bowing their heads three times before it (like in folk tales).

Well, what can I say:

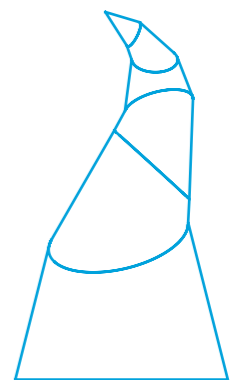
it is a treat for those who watch.

Or for the one who watches the watchers.

And for those who watch the watchers' watchers...

Anti, if it means anything to you, I will bow my (moustached) head to you too.

István



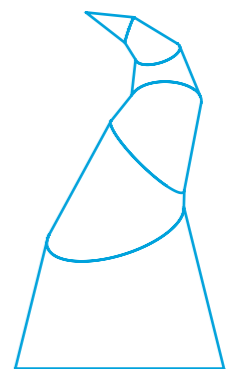
SPROUTS OF UTOPIA

I like to observe whatever surrounds me exhaustively, and that includes physical principles, since I perceive many similarities between them and social phenomena. We may not pay attention normally, but we cannot only examine this multitude of human behaviours from a biological perspective, as we can also compare and model them. Many of the terms we use to describe our characteristics are borrowed from physics: soft-hearted girl, flexible man, boiling crowd.

I find crystallization (that we can experience the formation of frost and hoarfrost, or the solidification of metal, as when it melts it goes through a transformation of state) a spectacular and exciting process. This process can be broken down into two parts, the first one being the often random appearance of crystal nuclei in several places at the same time, and the second being their respective growth. Complete solidification may require suitable, time-dependent circumstances. These short- and long-term orders can also be recognized in social and artistic processes. Artistic trends rise, then sometimes they evolve and spread, but more often, they fade away.

For quite a while, the working title of this book was *Sprouts of Utopia*, as a reference to my model-like works, which like sprouts and seedlings, could contribute to the deeper understanding of things, to the realization of a higher-level, more human coexistence, and to the convergence towards an ideal.

It certainly does make me think how one can participate and become perceptible at the leading edge of creative art without using the practical, self-induced economic and messenger solutions of the art industry.



CHAOS

Opus 320

For me, the development of the settled *YNI Surface* (p. 164) has been a long maturation process based on experimenting, and it is very hard to tell from its shape that it is more than a simple shape study, it rather represents the product of a deeper, multi-aspect abstraction. That was the reason why I felt it necessary to also reveal some major stages of this process. This is how the non-abstract objects of the *Aspects* series were created, to which I also use terms, inscriptions and symbols. My work *CHAOS* fits into this series rather well too. If we connect the stars, snowflakes or the elements of any other assemblage of points of high numerosity—regardless of their scale—with lines arbitrarily, we can make practically any kind of spatial drawing, it will inherently possess the opportunity to compose any pattern, text or symbol of it, like an initial block of material has the chance to be a completed sculpture. This object represents the second member of the series, in which I compare the contents of various terms with each other. Using laser engraving, I produced amorphous solids seemingly not resembling anything in a glass cube, that are positioned statically in a fixed place in relation to each other.

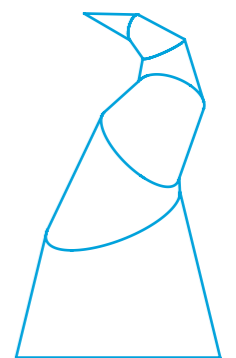


videos, 3D pictures

These amorphous solids levitate in an apparently impenetrable uncertainty like constellations, suggesting the status of disorder and order simultaneously.

Walking around the object, we think we notice more and more signs, just like we do when we imagine motifs, mythical animals and creatures in wall cracks. Feeling the insufficiency of all our previous experience we can try and browse in this chaos, from which regular, well legible letters seem to appear from time to time. Suddenly, from the special perspective of our narrow scope we might notice ME, giving us the selfish, gratifying realization of existence. From another perspective, another dimension, there is the slightest hope of identifying something through US, but there is also THEM, which, unfortunately, we most often use in a limited meaning, suggesting the assumed necessity of exclusion.

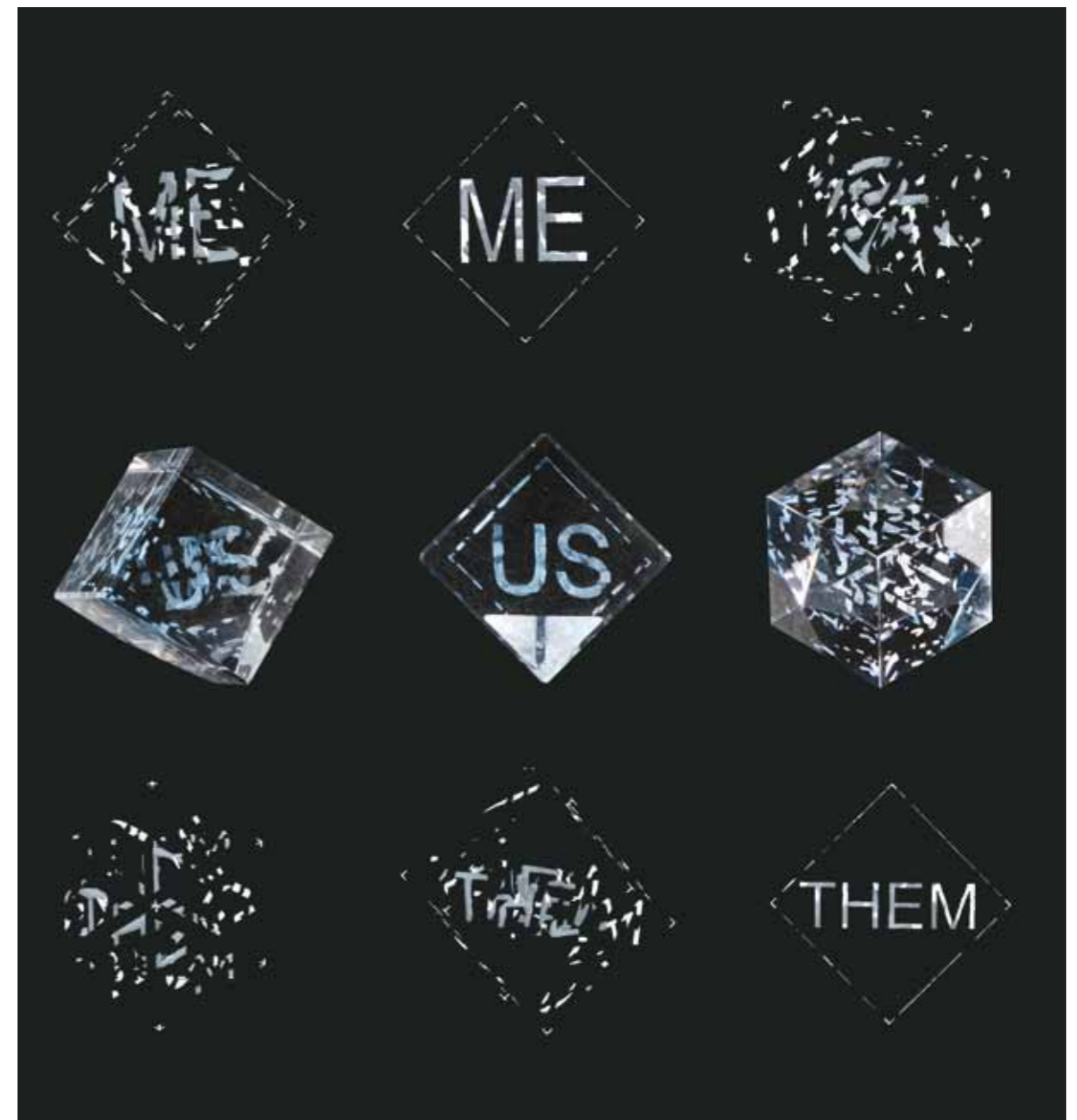
A very important idea about this cube is that should we intend to hurt THEM and take out a few of its tiny components, the term THEM will not fall into place, since the letters will have certain parts missing. That's all very well, but the forms located in this space, making up this chaos, not only affect one aspect of things but also the rest, therefore US and ME will also become slightly deficient. By hurting THEM slightly, we might also get hurt. If we destroy THEM, however, it will empty and destroy US, too.



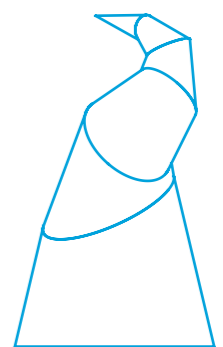
CHAOS

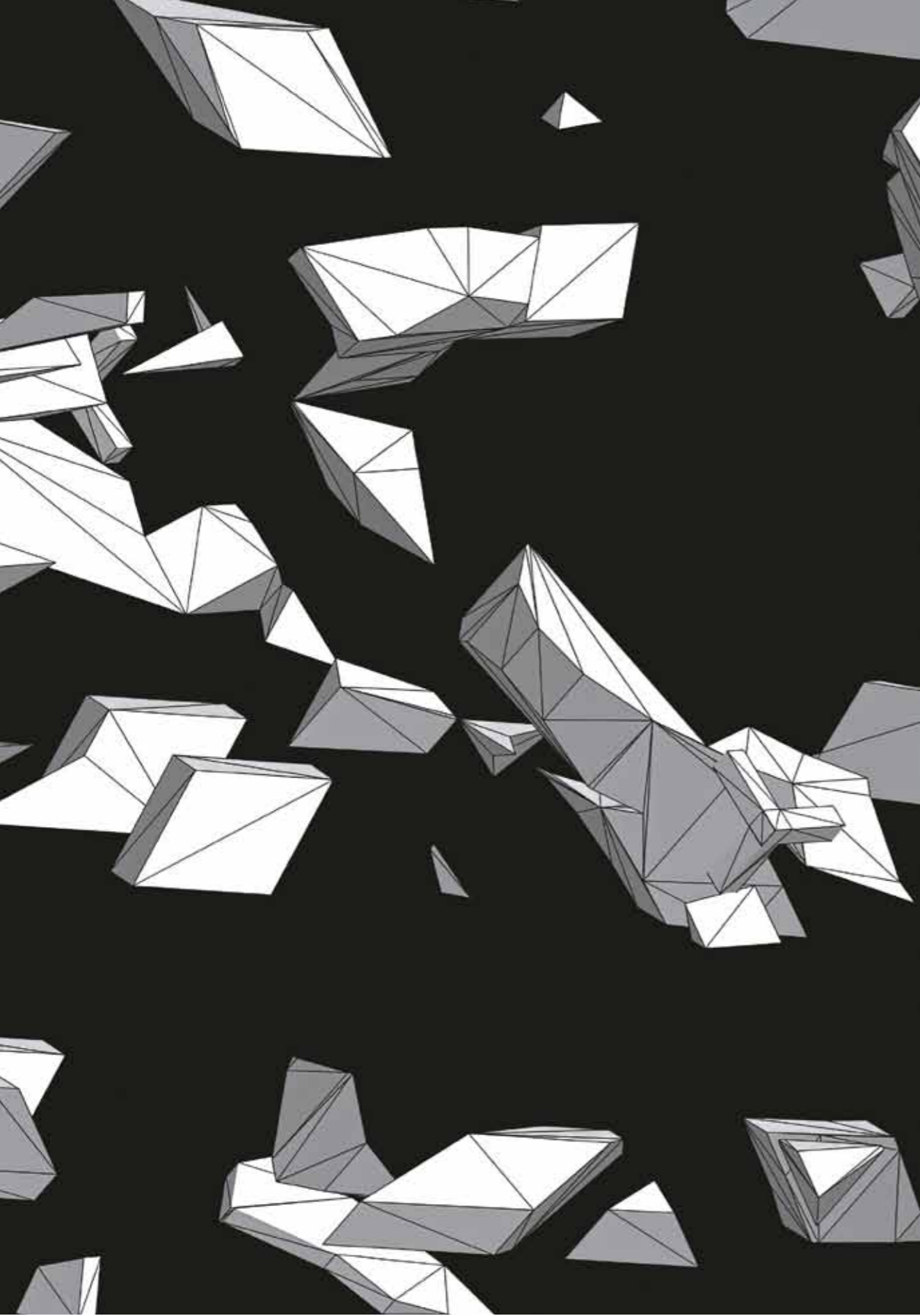


2005 | laser-engraved glass sculpture | 12 × 12 × 12 cm

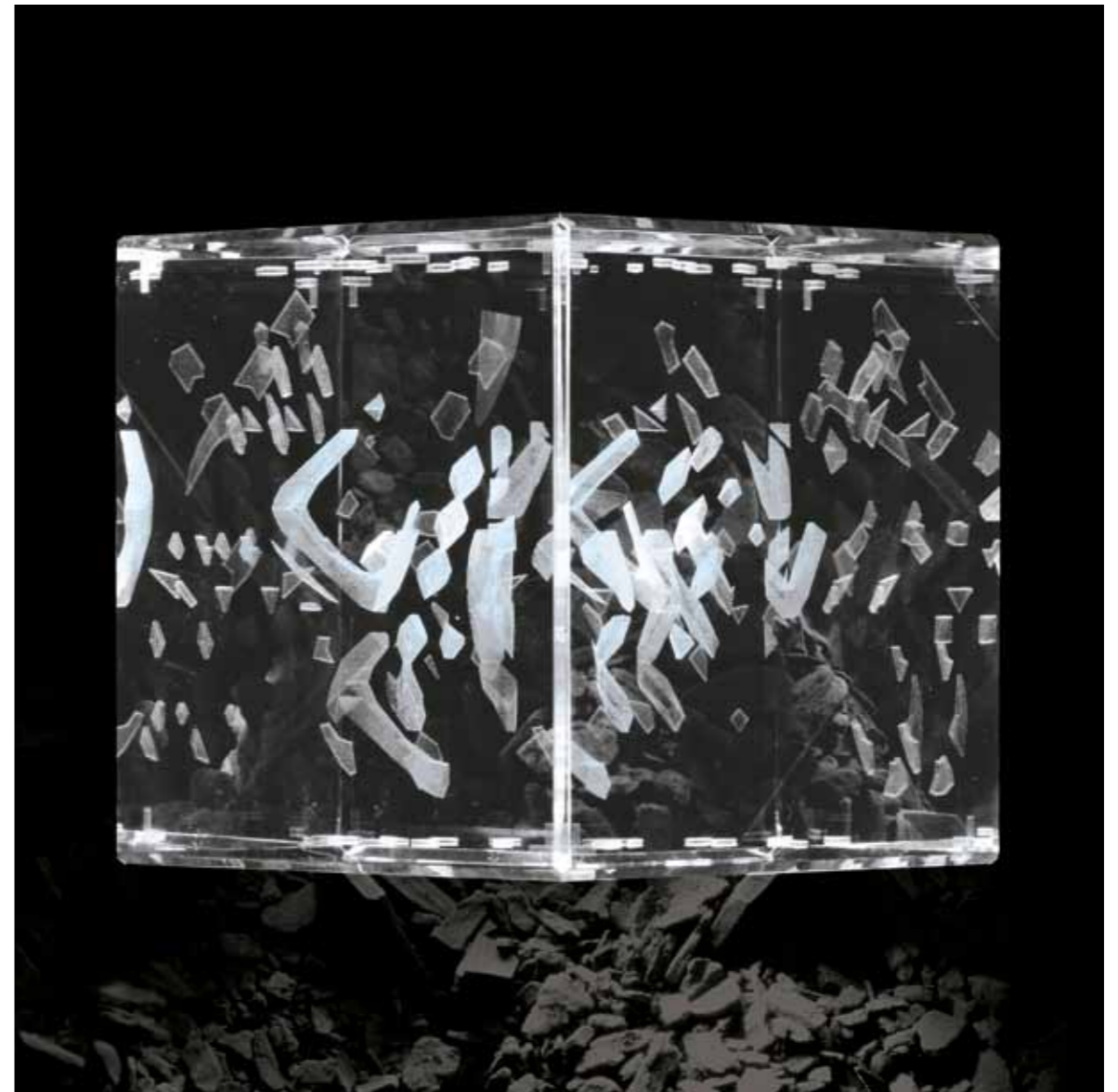


CHAOS – views

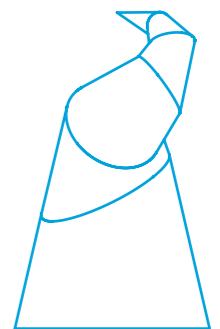




CHAOS – electrographic detail



CHAOS – view



THE ATMOSPHERE OF PERSONAL PRONOUNS

András Lukácsy

My fatherly friend András Lukácsy has been following my work for a long time, and at my request, he wrote an opinion in 2020.

András Lukácsy is a writer, critic, cultural historian and literary translator. He is a member of the board of the Hungarian PEN Club, a founding member and doyen of the Literary Players' Society. He was the first recipient of the Pro Ludo Award.

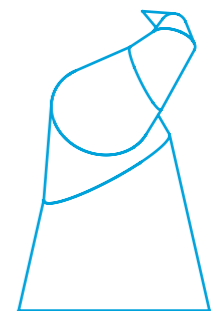
My artist friend Antal Kelle ArtFormer asked me to take a scale model of one of his works in my hand and give him my opinion.

The object itself is a solid, transparent glass cube the size of a palm, $4 \times 4 \times 4$ centimetres, with the outlines of various other geometric solids appearing inside. In the outlines of these inner bodies, depending on your perspective, three terms, three personal pronouns, are taking shape, in this order: ME, US and THEM. What I am interested in above all, of course, is how to classify it.

I have already learned as much that avant-garde and contemporary art are more concerned with the substance, the idea behind the work than traditional art, which is primarily accessible and articulated through the senses. That will be my starting point in this case too. So: let's try to define the philosophy, the substance and the atmosphere of the work.

The first personal pronoun is ME. It is perhaps the most important concept in our lives, defining our personal existence. If I am an idealist, it represents the essence, the soul, but even if I am a materialist, it represents the most important personal trait. It is a collective term for those individual characteristics that distinguish the highest-ranking living creature from those below it; anthropoid animals.

At the same time, it is a double-faced concept, on the one hand indicating the ego that defines, and which delivers the positive aspects of one's life, on the other hand it is very close to the extremities that are well described by the term "selfishness": the uncontrolled ME gets excessive easily and takes on adverse qualities. If we go overboard and have no control, the ME can turn against its environment and end up in the arrogance of power. This may simply be the desire to dominate a group, but in the worst case, coupled with negative intent, sooner or later it might lead to dictatorship. Every dictator—take any example from the previous century—suffers from a ME-eutrophy, trying to impose himself into a leading role by force, even if the content he delivers is against the community. There are psychological and physical reasons for this. Physical reasons may include some bodily disability of the dictator (the source of most psychopathic phenomena), which he tries to compensate for. It is interesting to note that most dictators were short men, from Caligula through Napoleon to Mussolini, who preferred to mix with people while wearing some form of headgear to emphasize their position. Hitler was not too tall either, while Stalin was no more than 163 centimetres, and he wore shoes with raised soles to make a taller impression. He was only allowed to be photographed from below. I could go on to include Franco, Perón, Duvalier of Haiti and so on. Mentioning all these examples is important because it indicates that dictators are in all probability mentally ill, their selfishness leading to an excess of ME, which cannot be controlled any more.



The second term, US, is a more appealing one. It indicates a sense of belonging, which is the natural driving force of love. It could represent a loving couple, a mother–child relationship, a family, but it can also be a community of ideas, or a larger group of a nation. But the threat of extremities also prevails in this case. Inherent in US are hostility, the overvaluation of community, nationalism and its negative form, populism, where the community in question is considered superior to others and in the worst case it is coupled by violence.

I think of THEM as a distancing term, indicating those who do not belong to us. It can be a simple distinction with only an informative function, but it can also have a negative connotation suggesting discrimination, dissociation, hostility. We could say the great conflicts of the world typically develop out of the opposition between ME and US, but perhaps even more so out of the discord between US and THEM.

Let's take a very obvious example. As I write these lines, it is one hundred years since the treaties of the Paris Peace Conference (including the Treaty of Trianon) formally ending World War I. It is not my place to assess them now, but there is no doubt that they were so politically misguided that they caused difficulties not only for the defeated but also for the victors themselves. These treaties very soon had negative consequences, which were felt within a decade, from the early 1930s. New wars broke out between US and THEM. First, although we often seem to forget about it, in Asia, dictatorial Japan attacked China, only to continue its aggression for a decade and a half. In the middle of the decade, violence continued in Africa: Abyssinia was invaded by Mussolini, who by then had turned into a dictator. Then it moved on to Germany and Spain, where Franco, with the help of the fascist countries, subdued the republicans, despite the sympathy and sometimes active support of the progressive countries.

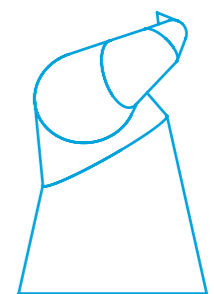
However, in contrast to the passages in the peace treaties that forced the idea of revenge, it was mainly the racial superiority (the overabundance of US) and the excessive personal will (the eutrophy of ME) of a violent, expansionist approach, i.e. Nazism, that took over with Hitler taking the stage. (The situation was similar in Hungary, except that Horthy, because of his inherent Anglophilism that he acquired as a naval officer, only gave in to reluctantly.)

The pathological excess of the concept focusing on US, i.e. nationalism, followed the end of World War 2. Bolshevism, for all the inherent beauty of the egalitarian principle of socialism, lost all its potentially positive content at the very start and fell into dictatorial excesses. This provoked fierce opposition on the other side, in the United States, now armed with the arrogance of world domination, to the dangerous excesses of the US concept, including the total catastrophe of nuclear war. There is no doubt how much danger there is in the extremities of the concept of ME, and even more in the overabundance of the concept of US. The process continued at the end of the 20th century, after 1989, a year that was significant not only in Eastern Europe but also in other parts of the world. It abolished communism and tempered American aspirations for exclusive leadership. It did, however, bring about conflicts in other parts of the world, this time religious ones. Behind the process of the so-called Arab Spring we could see the violent aspirations of Islam. Like most religions, Muslims also sought exclusivity initially. Christianity, however, as opposed to Islam, went through a reformation process, in which religious excess and violent uniformity were broken down. For the Muslims, however, there was no reformation, only conflict between the various sects that continue to this day. The Shiite-Sunni discord represents the ongoing process of an unsettled, unfinished reformist endeavour.

The Arab Spring has ultimately led to endless feuds and wars, the direct consequence of which is the need to flee, in other words migration, with all its negative impacts. If we think about this process, we have to reconsider every European consideration (based on some phoney humanity). Today we live in a world in active turmoil that started with the overabundance of the ME and the excess of the US and the use of the term THEM all too often with a negative connotation. This situation is further complicated by the present worldwide epidemic, the end of which is not yet in sight, but we can already see how the overabundance of ME is leading to a dangerous lack of discipline at the expense of US.

In Antal Kelle's cube, then, these three terms are hardly incidental. When I picked up the scale model of the original, larger and more internationally travelled glass cube, I did not know what he himself thought of it. I asked him on a subsequent occasion if he had already given his work a title. He said: "Yes, I did: it is *CHAOS*, in capital letters."

I'm not going to chew the rag, it seems we were thinking the same thing.



OBSERVATION AND MEDITATION

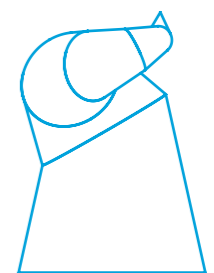
Turning inward through meditation is a widely used way to manage our frustrations, but it is not only ourselves but also our environment that we can observe in this peaceful manner, i.e. we can extend the ME towards the US and keep looking around that way. I have a story from my childhood that burned deeply into my memory. My sister and I got a single orange that used to be a rare treasure in Hungary in the 1950s. We tried to divide it into two equal parts but were not satisfied with the result so asked our father to deliver justice. He asked us which part we thought was bigger, then took a sizeable segment of that part and ate it. The proportion challenged by the original "victim" turned around. Dad readily acted again and took a segment from the other half this time. I think we had another go, then understanding the situation and each other's point of view we decided we would be better off if we came to an agreement between ourselves.

Instead of the "truth" of the countless artistic concepts, I am rather interested in their driving forces, in the difference of their respective points of view. In the field of art, provoking with a different aspect probably brings more benefit than loss.

I believe in the thorough observation of objects and in multiple aspects. A drop falling into water generates waves. Snails build spiral shells, things are transformed as a result of external and/or internal impulses. We humans like to ponder such matters actively, and compare new experience with our earlier knowledge. Some of us brood philosophically, others seek rational explanations or simply just enjoy the pleasure of recognition or the rhythm of movements produced by motor skills. The thorough, meditative approach to objects and occurrences will elevate us out of our everyday lives. This is how Pythagoras came to his well-known geometrical theorem on the proportions of right triangles.

Because of their unusual nature, my kinetic works (that can also be interpreted like models) offer themselves for cognition or reevaluation. They do not set rules for their observers.

In real life, we need things to hold on to so that we can live according to certain rules, neither hurting others too much, nor becoming losers ourselves. We can make various statements about the same thing simultaneously, and this will not mean that either of them is true or false, merely that jointly they can cover a bigger part of the entire picture.



FEATHERLIGHT SPECIFIC FORMATION OF CONCEPTUAL CONCISENESS

Júlia N. Mészáros

Opening speech of Antal Kelle ArtFormer's exhibition *Mobility*
(Collection of Nicolas Schöffer, Kalocsa, 2012).

Júlia N. Mészáros is an art historian, exhibition curator, museum collection manager and researcher of contemporary Hungarian art and a member of the OSAS – Open Structures Art Society.

The dance choreographed to Schöffer's music for the opening of the exhibition is Antal Kelle's tribute to the highly influential Kalocsa-born master of kinetic art, whose approach he says inspired him.

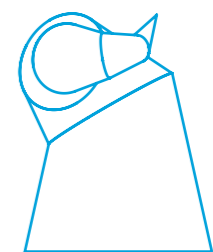
The choreography is about the birth and shaping of an idea, which fills the artist's every thought until it comes to life.

Antal Kelle did not only want to commemorate the centenary of the artist's birth with this dance piece combined with light effects of kinetic origin. The exhibition now opening is also organized in the spirit of the location, which, alongside the characteristics of the space, was an important factor in the choice of works. This double gesture alone says a lot about his way of thinking and artistic commitment.

The common essence of the two artists' approach is that they consider the interrelationship of things to be the basis of truth, i.e. they believe that reality is not merely what we see, experience or imagine, but a multitude of relations that contain contradictions and often transcend themselves, in which a change in a single moment can even take a new form for the whole.

The artist's task is to find an exact form to capture this permanent change—the simultaneous diversity, and the multiplicity of interpretations of the same thing—as a fundamental truth, the most important tool being deep theoretical reflection based on analogies and systematic analyses. From this perspective, Antal Kelle's art can be seen as a direct continuation and completion of what Miklós Schöffer, who worked on the lessons of constructive avant-garde art, initiated and represented with kinetic art. If we were to look for a concrete example of the intellectual relationship between the two, I would mention the first double sculpture group by Antal Kelle created with the intention of generating synthesis titled *Divergences* (p. 154), as a work that directly links, but also in every way transcends, Schöffer's art, and Schöffer's *Spatiodynamic Constructions*, made between 1949 and 1953, which, in addition to a new definition of plastic space, for the first time attempted to define the relationship between space and time as a "series of events", a "correlation of multiplicity and order".

The approach of both artists is interdisciplinary, and both groups of works create a world without subordination or superimposition, in a way that separating and connecting are taking place as happening, as change, or, to put it differently, movement and vivification happen in pure form.



What they have in common is analogical thinking, the impregnation of form with movement, a new approach to the space of sculpture, the transubstantiation of material and open thinking, but the vocabulary and the use of tools are different, linking Schöffer rather to the generation before him, while Kelle's is set in a technically more advanced world, in an age of total paradigm shifts generated by technology.

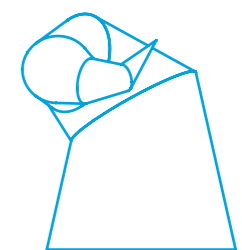
The rigorous geometric language, which in Schöffer's case is a consequence of his embrace of the technical possibilities of constructivism and the consistent principles that create an industrial aesthetic, is no longer exclusive to Kelle, which may seem paradoxical given that his formal language is much more precise and elementary than Schöffer's. Coexistence in his art is not linked to a geometric construction, but to a form crystallized in a purely conceptual order, which can be geometric, organic, or a synthesis of the two. The most important linguistic difference between these two groups of works is that Schöffer first "dresses up" his rectangular constructions (with coloured and mirror-like shiny sheets, with movable elements) and then strips them of their original physical characteristics by moving the elements, Kelle strips down his concept of form to its elementary essence already in the thinking phase, the imminent essence of which is movement, so that at every stage of the process of unfolding and assembly, the sculpture retains its sharp contours, the physical and aesthetic properties of its material, and its transubstantiation takes place without illusionistic effects. Kelle thus makes the geometric concept of form consistent, rationalises movement and, by starting from the technical requirement of movement upon defining form, deprives the work of illusion. As an artformer sensitively reflecting upon his own time, his aesthetic space also includes aspects foreign to Schöffer, such as sublimity or movement as substance, the diagonal dissection of form, the distance between sensuality and the creator, all of which lead to the exploration of forms never before experienced to the degree of freedom made possible by today's technology. The most distinct example in this exhibition is the *YNI Surface* (p. 164), the multiplication of which, in combination with light and shadow effects, has been used to create the photographs on canvas on display here, as well as a new film composed for the projection screen, which gives a foretaste of its infinite possibilities.

***YNI Surface* is a particular shape of conceptual compactness, of subtle delicacy, a form phenomenon so unknown that we have no adequate word for the spatial forms and structures created by its rotation, so we will just use the adjective "abstract" for them as well.**

The shape called *YNI Surface* is not flat. It does not have a single point to which any other point in the projection models we know can be mapped, yet it does not fit the definition of "abstract" because it is not the result of a formal or conceptual abstraction, nor is it the three-dimensional equivalent of a new mathematical function. It bends into space and also turns, its edges are bound by convex, concave and straight lines, its rotation describes spatial shapes characteristic of the organic world, and its transposition onto a plane is represented by three essentially different triangles or the variations of those triangles.

This mysterious formal element, which assumes at least four dimensions, is certainly a historic discovery by Antal Kelle. (By historic, I mean that it opens up new dimensions in art, philosophy, mathematics, and probably many other disciplines.)

I believe its closest antecedents can be found in the work of constructivist artists who explored the spatial movement of curved planes and the physical laws of spatial formation, such as Naum Gabo, Tatlin and the Pevsner brothers in their experiments with form exploring radically new phenomena, or Brâncuși, who sought to capture the substance of organic life in his sculptures by exploring natural laws empirically and transforming them into individual formal concepts. We can also find them in the work of conceptual, minimalist and concrete artists who sought perfect forms other than the regular and experimented with the synthetic capture of the direct movement of life based on the dynamic contrasts between geometric and organic qualities, such as Calder, Richard Serra, Eduardo Chillida in some aspects, or Katalin Hetey in her first period of sculpture, and Anish Kapoor, who has worked mainly on a monumental scale over the last two decades. Antal Kelle's *YNI Surface* is the synthetic element of a new totality, which was hidden in the instinctive formulations of the artists above (see the plaster molds of Katalin Hetey in the late 1960s), but never consciously realized by them, neither was it derived into the form we see here, pure like a formula. Existing in the space between philosophy, art and science, this objectified surface of essential compactness that some day may materialize as a language, is the zero setting of a hitherto latent, unconscious but possibly new mode of formation, the building block of many small sculptures and plane transformation prints to come.



As one of the earliest incarnations of Kelle's movement concept, the work presented near *Divergences* titled *Single-branched – Opus 149* (p. 037), despite its lack of direct artistic connotations, is closely related in form to postmodern architectural sculpture, such as Alexander Lieberman's monumental pipe compositions and Katalin Hetey's sculptural visions of pipes that only survived as sketches. The works of these artists are born of pure perception and imagination, while

Antal Kelle's essential form stems from interdisciplinary thinking, which strives for consistent and conscious simplicity, universality, interactivity, as well as a synthesis of form and technique.

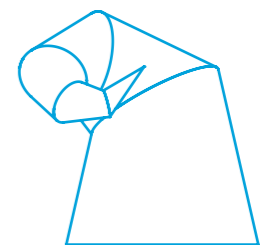
The pieces in the *vari.art* multi-phase sculpture series shown here are not spatial equivalents of geometric abstract patterns, physical and mathematical scientific theorems combined with movement and movability, as we see in the case of most kinetic artists, but rather shapes that have been refined through a long process of analysis, form reduction, abstraction and reflection, where technical knowledge is as important a base as the metaphysical vision that backs up artistic expression. Their further development has helped him to create monumental works such as *Nexus* (p. 108) and the planned 25-metre sculpture *Indian Desire*, the former of which is included in the exhibition among the projected works and the latter as a photographed scale model. Among his intellectual antecedents, it is worth mentioning the poetic spatial forms created by the kineticist Takis between 1974 and 1980 that became known as *Signals*.

Each of Antal Kelle's works is a unique synthesis of philosophical, aesthetic, physical and mathematical space, fertilized by high-tech techniques, which, through systematic work, is materialized in a perfection of thought, aesthetics, kinetics and art. These works can be interpreted both as symbolic and objectified, as signals and complex space/form units improved into design, as questions, statements and reflections, as a current perspective and a given formal state of the interpretation of an ever-changing, multi-layered context. Through their movement, their variations of form, their multiple material appearances, his works confirm that they are not part of the artist's formal world, consolidated in a closed system of thought, but that they reveal and are able to convey different meanings through their changing relationships with the environment and with us. Antal Kelle's approach is in many aspects in contact with the thinking of pioneers of structuralist philosophy and architecture, such as Louis Kahn, who, with his ideas of growth, change, flexibility and the interchangeability of formal elements, created the theoretical basis for expandable architectural structures. The *vari.art* series (p. 052) is the

result of similar thinking, in which the artist offers the viewers the possibility of modifying forms, of expressing emotions and moods, thus reflecting the environment and directly expressing their reflections. Kahn and his followers interpreted time as a continuous present, which takes different forms from age to age. They emphasized the need to decentralize the ego, focusing on the community and the world. Metabolist architects used a raster or grid-raster structure to express temporal continuity, aiming to liberate and enrich the structure. Schöffer was not untouched by the thinking of the structuralists, who began by deconstructing, seeking and attempting to create a new synthesis of the world, as he was already dealing with time within the sculpture in his *Chronos* series, and in his later works he explored the impact of the changing factors of the external world on the sculpture. The *vari.art* series is also an important work from another perspective: in it, the artist explores the problems of "everything is the same in a different manner" and "everything is equally different" by providing the conditions for mobility. Playing with sculptures helps us to understand that man is only a component of the world, but that he has a moral responsibility towards the environment, the community and the world, even if they are unaware of his existence. Antal Kelle's art, his thinking and his vision of the world are based on reciprocity, which he expresses through infinitely simple forms, their variability and movement. To this end, he explores, collides, presents and incorporates different perspectives and interpretations into his vision, thinking and formal world. He leaves it to us to develop his conclusions, to keep thinking about them, while at the same time willingly doing his utmost to allow us to find him with our questions and to respond to his call. His new insights, his high-tech, interactive solutions, his holistic integration and his extreme formal reduction, all of which result from his thinking beyond age or space and time, make his art independent of kinetic, cybernetic findings and all known art

setting the foundations of a radically new art, which refines our sensibility, broadens our horizons, our knowledge, stimulates us to a deeper understanding of reality, to a multi-aspect approach and to the expansion of our tolerance.

He constantly encourages us to form opinions about his works, the world or any phenomenon, because recognition of the essence can only come from the diversity of perspectives, which also helps us to control the resulting new assumptions.



DIVERGENCES

Opus 251

videos, 3D, pictures



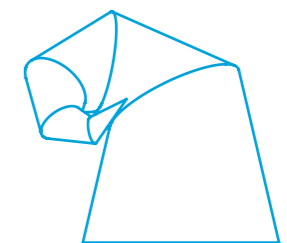
What happens when parts of an object can perform various permissively and optionally different moves and twists? What is the impact on a specific element if we change the position of preceding elements that are in direct and indirect contact with it? How exactly can we estimate the development of twists in cuts of an unusual direction, and the impact of their repercussions on the entire system?

Divergences can be examined from a topological or from a network perspective, but it can also be compared to visual prototypes. It is no coincidence that visitors consistently simply refer to it as a “tree”, obviously because of its most frequent presentation—standing on its foot. Those figures illustrating the connections between ancestors and descendants that have major significance in respect to socialization and genealogy are also called “family trees” in many languages. In the visual plan of my exhibition at Künstlerhaus in Vienna, however, I pictured it hanging upside down from the ceiling and from that point on, the curator started calling it *Roots*. I prefer to use *Divergences* as a title that embraces the essence of both interpretations. This was also the title it was exhibited under in the Hungarian pavilion of the Venice Biennale. There I presented the five, in their closed initial status identical stainless steel statues in five different positions, providing each of them with an individual setup.

The peculiarity of the composition comes from the realization that strings considered identical in their logical chain from a scientific perspective can create a wide variety of atmospheres and symbolic meanings. After all, the initial shape is a geometrically pure, fully closed prism that I multiply in various sizes and setups. This is a partly fractal-like construction, but because of its peculiar details, it is neither monotonous, nor easy to predict. From a psychological perspective it could symbolize both negative, isolated seclusion and a positive sense of belonging. It could be regarded as an accomplished status, but also as an initial or temporary condition. As we start opening and turning the various parts, we can

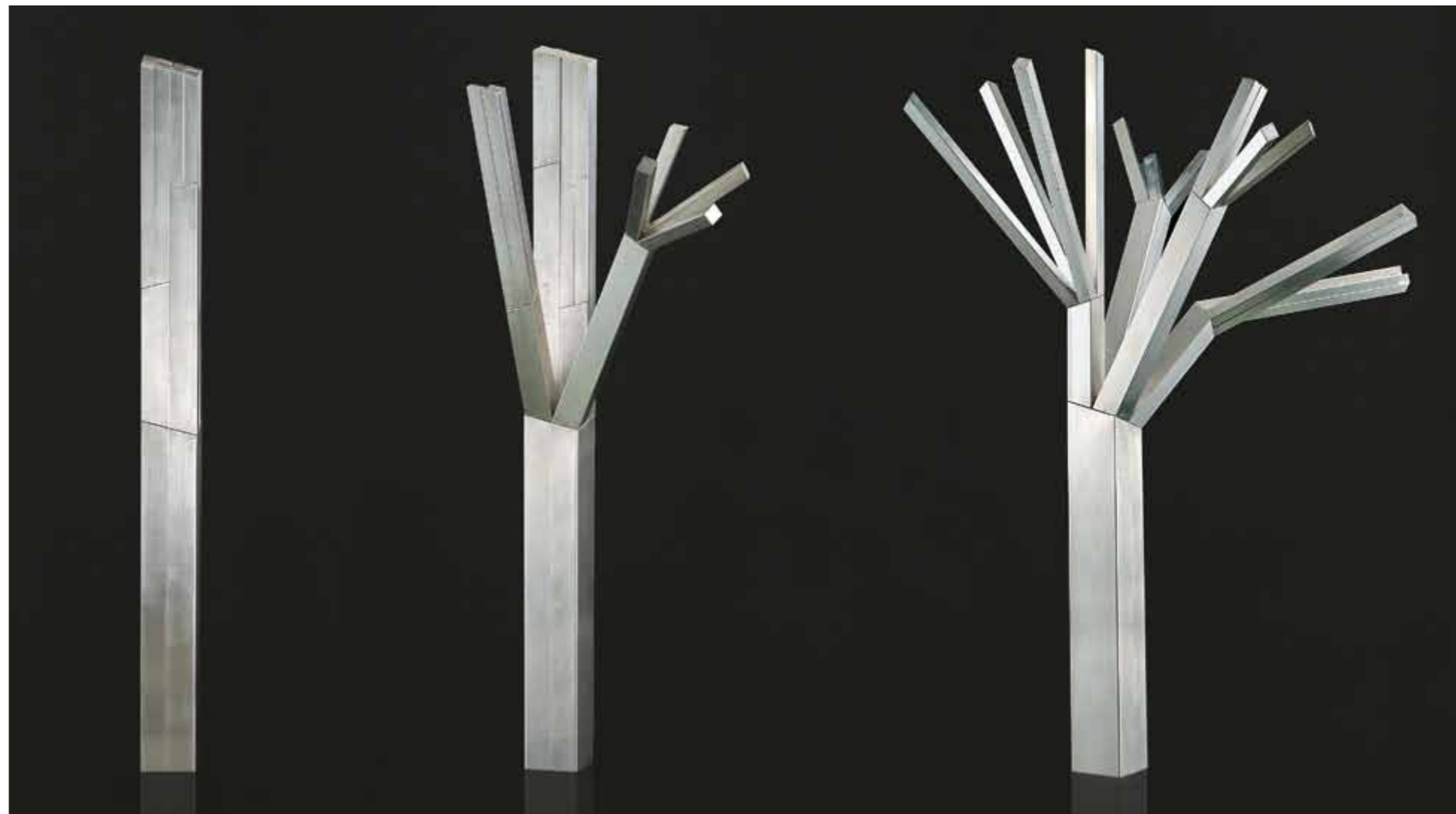
enter a very rich world. Any twists along the inclined axes will increase the complexity of the form. It has a special feature that the elements—as opposed to simplified logical models—are not equally predominant. Depending on the direction of observation, they have an increasing or decreasing volume, suggesting an internal hierarchy. We could also regard it as an examination of the components or various depths of any—biological, economic or technical—area. In spite of the restrictions, there are many opportunities: break off or stay, return and close ranks, perhaps use the various methods of separation.

Because of this multitude of interpretations, in different exhibition environments and concepts not only the way of their unfolding, and the number and distribution of units but also their titles may vary. (*Divergences, Roots, Connections, Scope, Choices, Options, Conditions, Relations, Constriction, Joining Forces, Closed, There Is Always Another Way, Frittering Away, Persistence, Transformation, Distribution, Integration, etc.*)

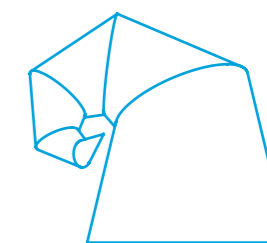




DIVERGENCES – adjustable sculpture ensemble



2004–2012 | stainless steel | interlocked in units 20 × 20 × 220 cm



Venice
ITALY

LA BIENNIALE DI VENEZIA

2012





DIVERGENCES – exhibition interior

SIMILARITIES

Ever since the age of cave paintings and up to the present, formal similarity has had an eminent role in creative art, be it the motives of two-dimensional paintings or the figures of three-dimensional sculptures. It has not changed much either when further functions joined the initial objective of illustration: expressing mood, emotions, desire or the contemporary approach that artists permanently strive to convey. The problem of the illustration of time, the “fourth dimension” created more problems in interpretation. From this type of art, perhaps objects changing in real time, mobile sculptures and kinetic art are the easiest to absorb. For a long time we could have thought that the “incomprehensible” imprints of abstraction cannot be enhanced any further, but then soon reached the “end of art” as a professional, ethical and art industry conclusion.

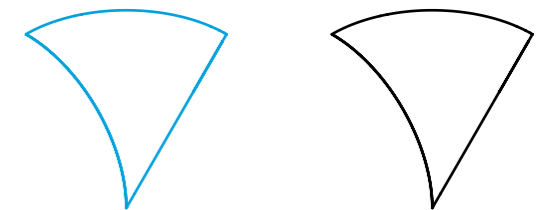
In the territory between boring routine and the forced pursuit of novelty, new values are constantly produced. Their reception mostly depends on the canon but in the end, it is always receptiveness, sympathy or in a less fortunate case the manipulated state of the individual, that will form the decisive factor.

What do the contents of a water tower, an athlete reaching a summit, a balloon full of air, the roll of fat covering our bellies and a button cell for a watch have in common?

All of them store energy, regardless of the original intention, of the way it emerged or of the motivation for the action. The energy of water secures permanent pressure in the pipe system, the athlete is ready for a downhill slide with a snowboard or for a hang-glide into the valley, if squeezed, the air in the balloon will produce jet propulsion, the roll of fat will secure the energy required for the proper functioning of the body, while the button cell will provide electrical energy. As a young man, I found it hard to understand how electricity works, and what its fundamental laws suggest, since I could not see the electrons. As an expert in electricity, my father told me to imagine a circuit as if it was a water system, in which the tank stores water like a battery stores electricity. He illustrated the voltage of the battery with the height of the water tower, and its amperage with the diameter of the water pipe that affects the flow of the liquid. I later faced the fact that electric, hydraulic (liquid-based) and pneumatic (air pressure) systems mostly work in an analogous manner.

There are more similarities in the control, energy, motor, pump, pipe and water technology aspects of these systems and the brain, energy, muscle, heart, vein and blood functions of the human physiological system. The evolvement of interdisciplinary areas in science certainly did not take place by accident. Just like iron, people’s hearts can also be hardened as a result of frustration caused by their environment. Yet both of them can be softened too. We could compare drops of water flowing in a river with the drifting of people in a crowd, drifting to the edge of it, into a vortex, or just experiencing a joyful flow of moving along together. We could talk about the expressive relationship of planets with other planets and with their moons and compare these to the bonds in a family.

It is similarities in the mathematical, geometrical sense that we find the easiest to understand, since in these cases we only have to agree upon the similarity transformations that the most of us are supposed to have acquired back in school. It is much harder to recognize partial resemblance that we usually approach using a set theory. When we need to find undefined similarities between two or more things, we often become unsure of ourselves.



YNI SURFACE

an intelligent pixel in space

Opus 302

Early newspaper images were printed using a screen of various dot densities; today, in digital imaging we use square-shaped pixels. However, if we wish to step out into three-dimensional space to depict solids with surfaces, we need to find a new 3D building block. I created a surface that is nothing but a pixel in space. First, I tried using a deformed triangle, i.e. apparently not a plane, but rather a form reminiscent of an undulating saddle surface that I named *YNI Surface*.

It has special sides and edges, of which only one is straight, symbolizing impartiality (I), the affirmative side is a convex protrusion representing positivity (Y), while the third is concave, suggesting withdrawal and negativity (N). I used these three edges as a frame to stretch a surface out upon, which is the copy of a naturally developing membrane—similar to a deforming soap bubble—optimized by physical tension conditions. Upon defining the characteristics of its shape, uncertainty might seize us, as we cannot make any simple, simultaneous statements, since it will always depend on the focus of the observer in time and space, as well as on the direction of the observation. Of all the works making up my *Aspects* series, this object is of special importance to me.

In addition to the geometrical point of view we can also examine the *YNI Surface* from a “hereditary” perspective. We can consider it as a special building element, through which we do not merely imitate the future shape or system since it already has a range of formal information and options such as seeds, cells, genes and memes do. Conceptually, I have projected positive and negative infinity and the interim straight neutral line—according to a non-Euclidian geometry—to the edges of the *YNI Surface*. Using this element I can create a flexible micromechanical system (I elaborated upon this in my book *Útban a mikromechanika felé* [On The Way To Micromechanics] published by Magvető Kiadó in 1987).

From the various options, *YNI Surface* flirts with such a discovery since it does not create the usual automatically created mesh consisting of a multitude of triangles, like illustrative painting software or 3D design sculptures suggesting modernity, actually confined by planes do, but



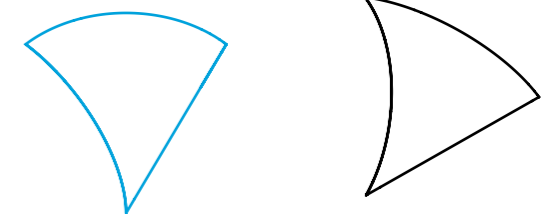
videos, 3D, pictures

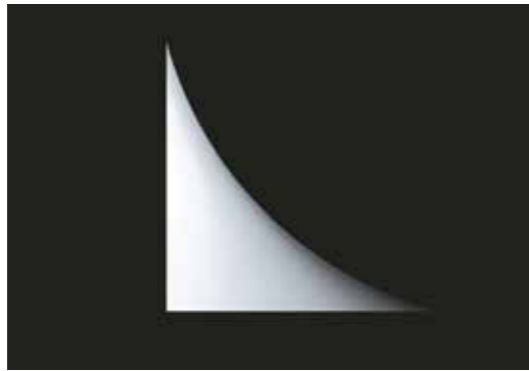
rather represents a consciously developed, integrated building element that can be used to build a “new world” on a fractal-basis or according to some other logic.

From this surface and its mirror image, analogously to the biological division of cells, for example by binary construction, unique, simultaneously organic and geometric statuettes can be created. It is suitable for covering both a Descartes-type right-angle coordinate system and a 60° coordinate system building tetrahedron-like upon triangulation. Therefore, after refining the *YNI Surface* basic body surfaces like a tetrahedron, a cube or a globe can be modelled. With the use of several *YNI Surface* elements we can also build solids that appear like a regular circle from one angle, and like a regular square or a star from another. The *YNI Surface* can be distorted, and projected the same way as creating an ellipsis from a circle or a parallelogram from a square. We can finally implement the squaring of the circle, or even the “non-squaring of the non-circle”.

Nature does not care that people differentiate physics and chemistry from, say, biology. Not even about what we call living or inanimate. Crystals grow and are reborn, passing on their structure as a heritage. At the dawn of the third millennium, we are still unsure about the systematic classification of artificial intelligence (AI). We sometimes regard it as an indirect creature of God and at other times as some kind of evolutionary milestone that we are setting with curiosity, feeling both thrilled and fearful at the same time.

Being an “artformer” artist, *YNI Surface* is my favourite *Aspects* work. For the simple reason that while in the case of *Art About The Holy Land* (p. 124) I use symbols, in my work *CHAOS* (p. 137) I deal with conceptual definitions and their respective representation, in this case we do not have anything definite, only full abstraction created from simple geometrical forms. This surface has a projection, a shadow of a regular right-angled triangle, of a regular right-angled sector or of a shape complementing a sector to a square. This means that depending on where we observe it from, this abstract work of art can produce both very soft, organic, amorphous shapes, but also rock hard shapes with a proper geometrical definition.

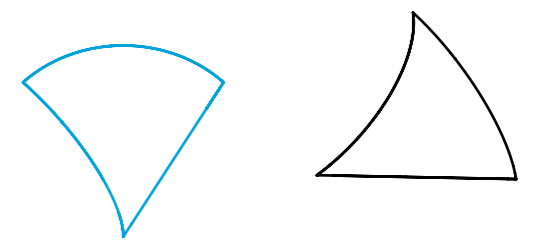


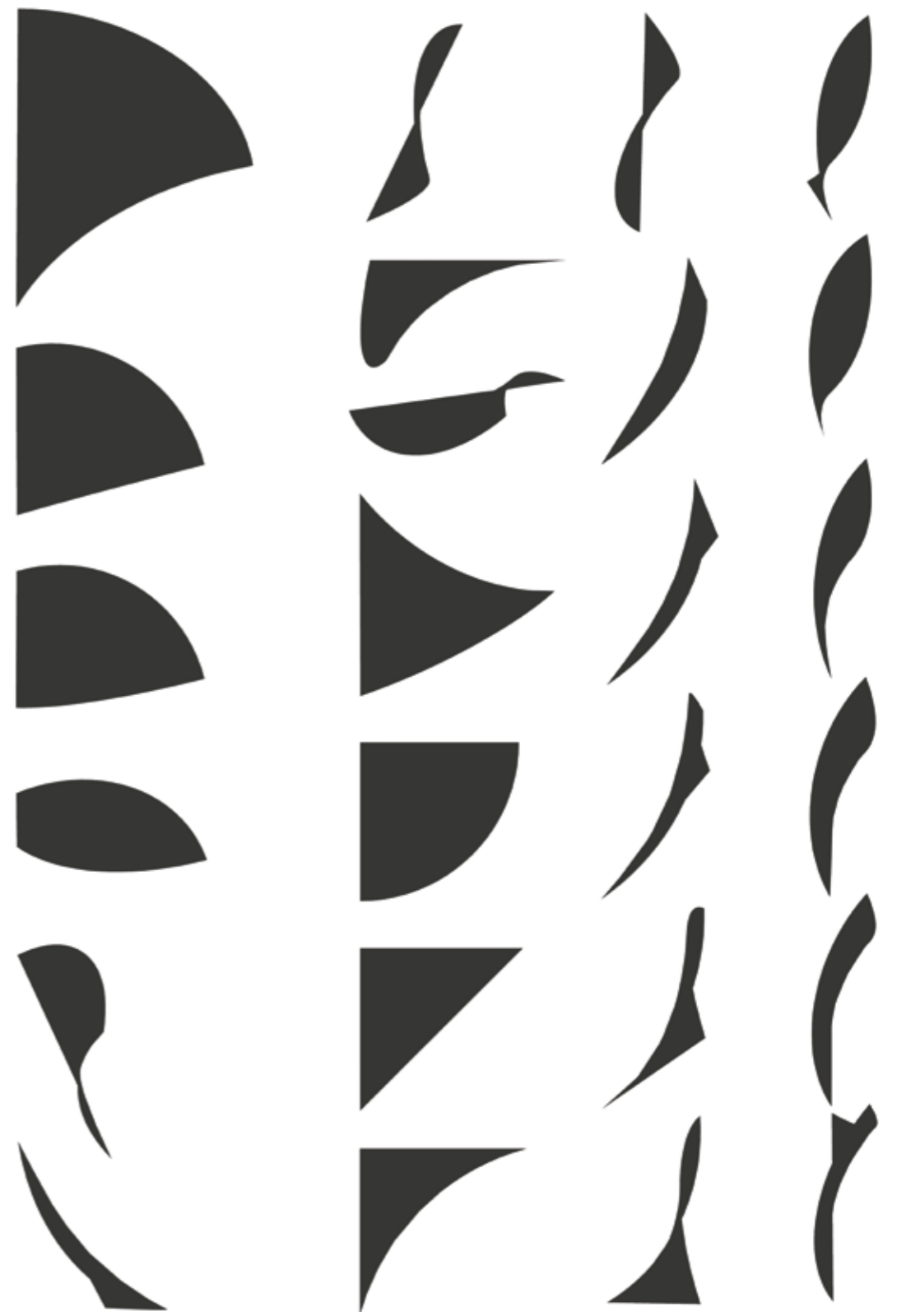
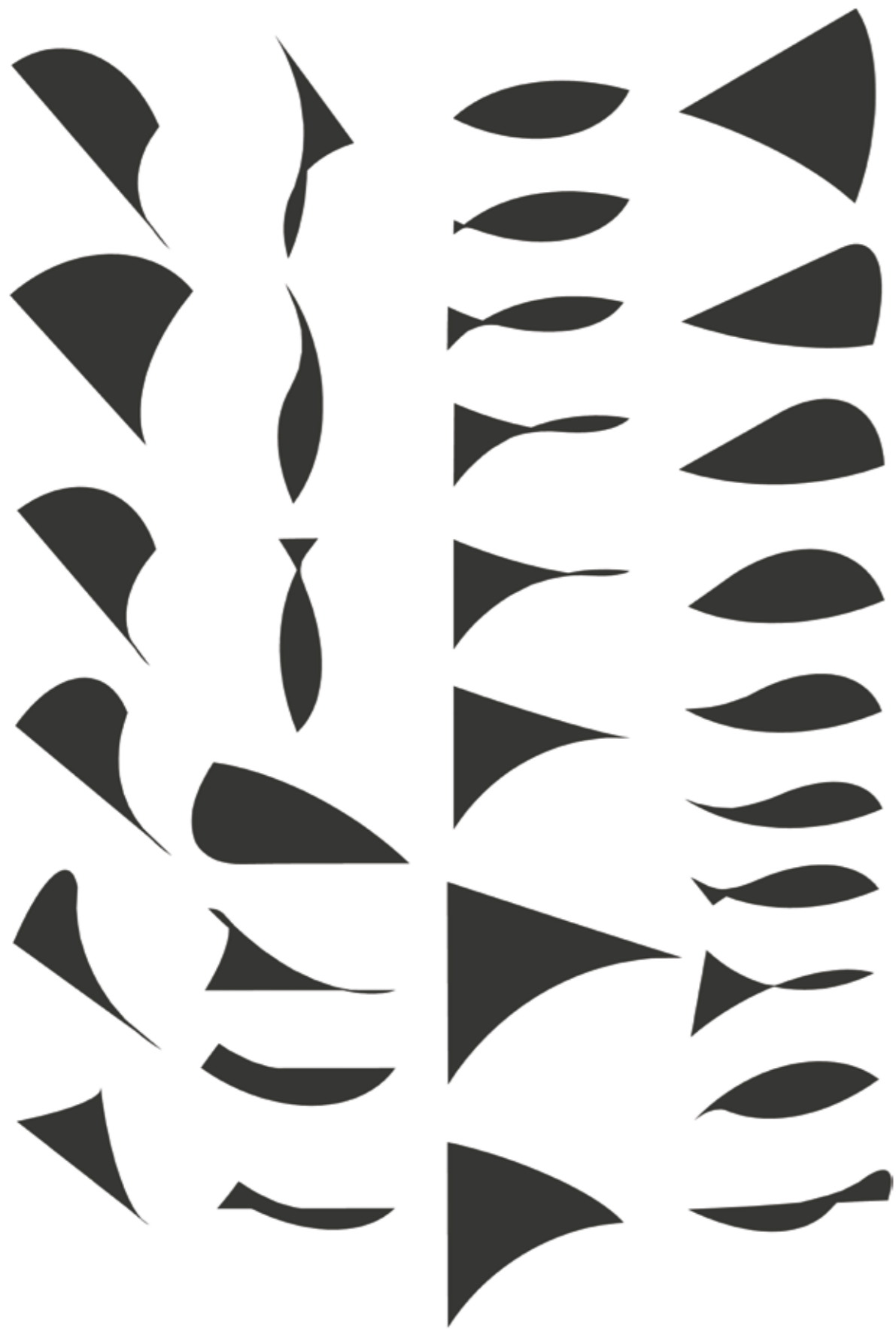


YNI SURFACE – different views

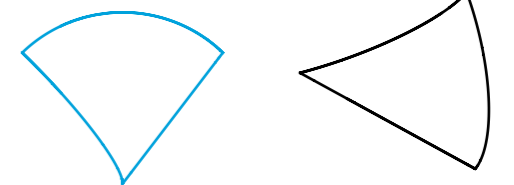


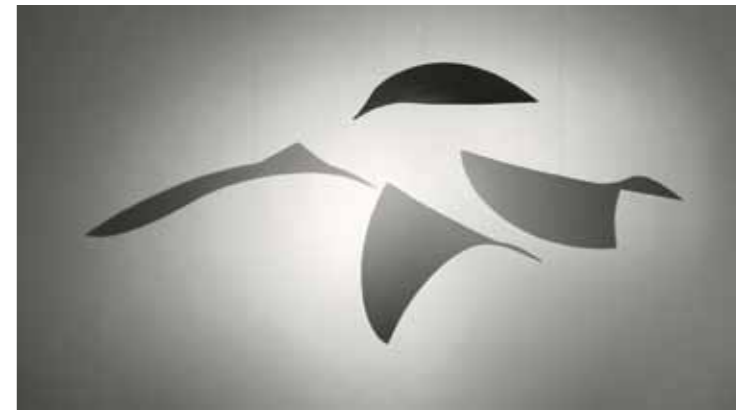
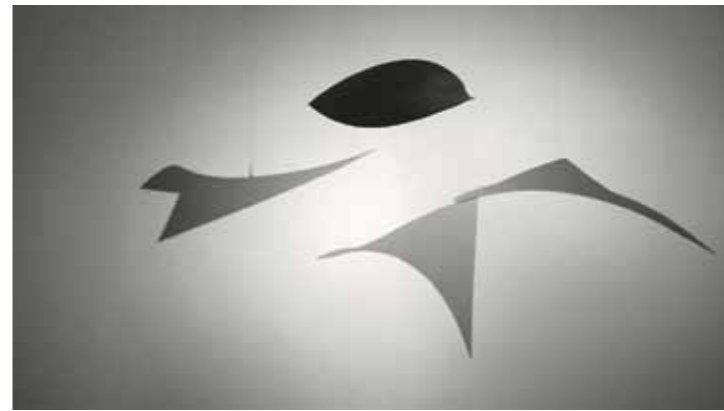
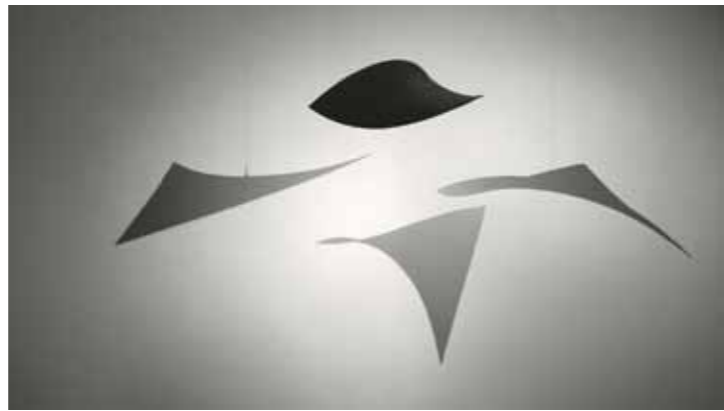
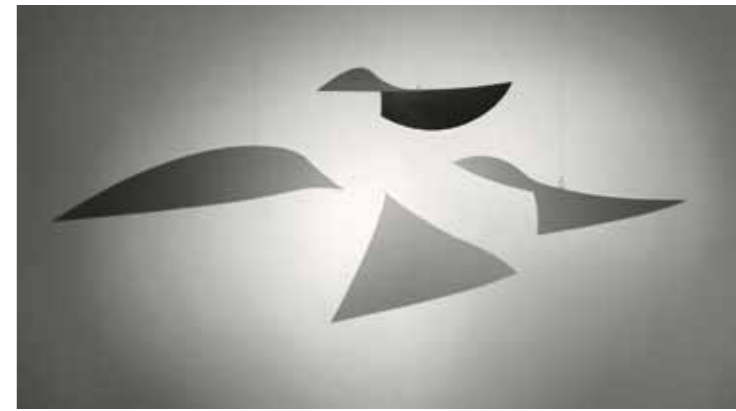
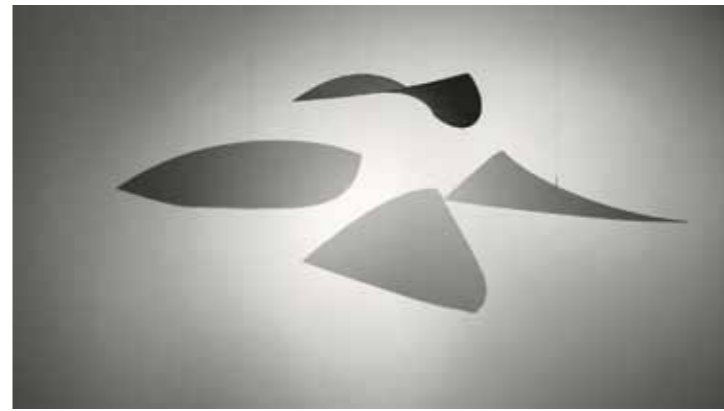
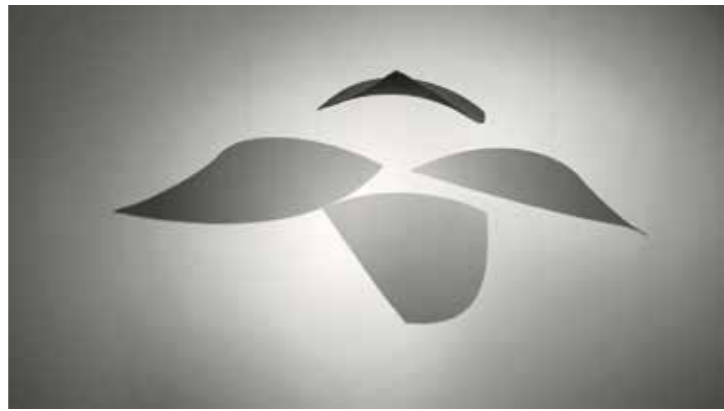
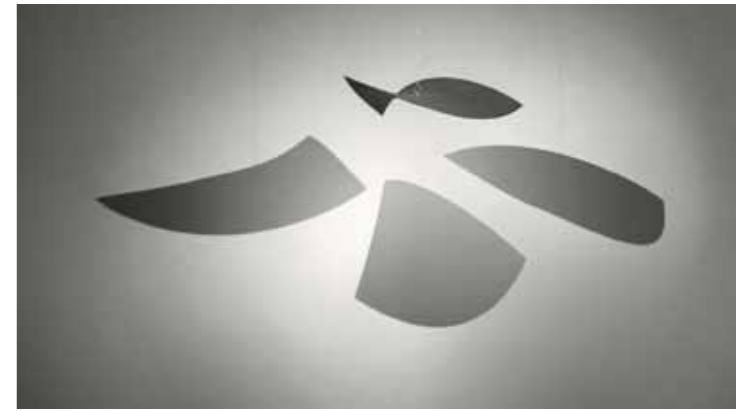
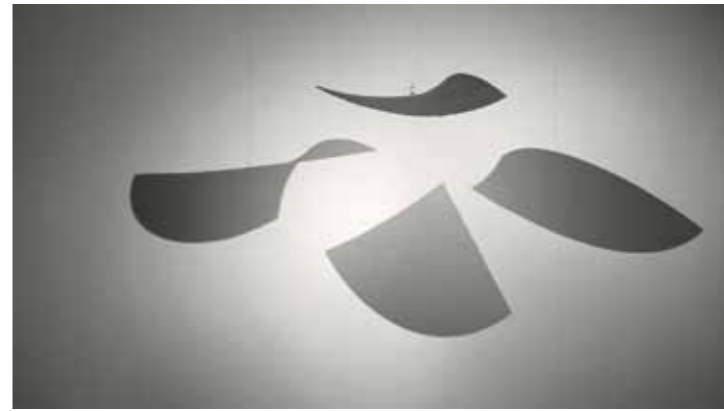
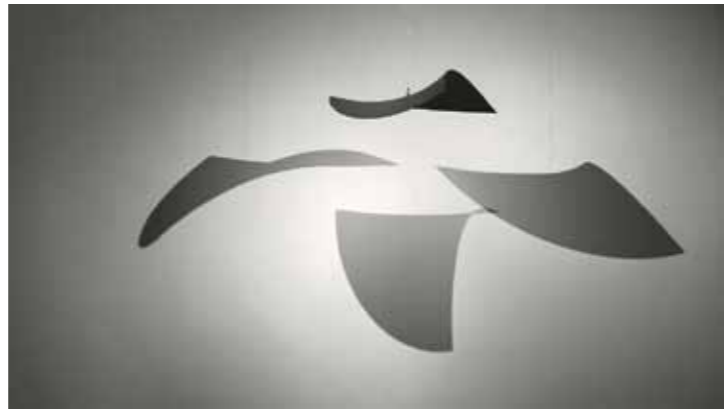
2002–2015 | composite with moving mechanism | 100 × 100 × 40 cm



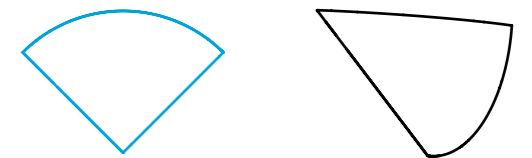


YNI SURFACE – shadow images





YNI SURFACE – with its shadow images



THE CONTROLLED IMPROVISATION

Barnabás Dukay

A free reflection made on request after making friends in a group of acquaintances.

Barnabás Dukay is a composer, teacher, university professor and jazz musician. He is a lecturer at the Liszt Ferenc Academy of Music, and a full member of the Széchenyi Academy of Letters and Arts of the Hungarian Academy of Sciences.

Anyone who knows a bit about 20th century sculpture will think of the Romanian Constantin Brâncuși and Hans/Jean Arp from Alsace, or the Sibiu-born Miklós Borsos, and a few philosophers like Meister Eckhart from the 13th–14th centuries as well as Zhuang Zhou from the 4th century BC.

For those who are more familiar with the history of mathematics, C. F. Gauss, G. F. B. Riemann and Bolyai from the post-Euclidian era will spring to mind.

“I created a new, a different world out of nothing”—which means that they paid attention to something that was not usually paid attention to, and consistently followed the path that emerged.

It is clear from this work—but also from Antal Kelle’s other opuses—that every form can be transcended.

Antal Kelle has an imaging process in his head that is capable of playing through the possible variations quite quickly.

But let’s not believe it’s easy.

You have to live with that and with yourself.

What is it really all about? A general approach to the world or something else?

It is what it seems to be. An object that becomes this and that when I twist and turn it this way and that.

If the artist, applying the method in reverse, upon himself, asked the question:

“Who am I really?”

—I would be curious to learn about the answer myself.

The WORK travels through “eco-friendly” and naturalistic forms, simultaneously retaining its unique immanence.

Some musical associations come to mind:

Johannes Ockeghem: *Missa Prolationum* (15th century)

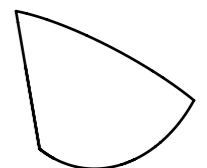
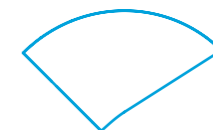
Charles E. Ives: *The Unanswered Question* (20th century)

And controlled improvisation has, for good reason as a coincidence, entered the new mathematical Walhalla.

Pale silkworm threads, I would prefer not to unravel them any further.

Analysis eventually destroys the work.

The question here is the receiver, the soul of the receiver.



YNI ETUDES

Opus 423–426

videos, 3D, pictures



I have always been fascinated by the kibernetic art of Nicolas Schöffer, so when I got the opportunity to present my work in the exhibition room of the Collection of Nicolas Schöffer in Kalocsa, I also wanted to reflect upon Schöffer as a composer. The basic idea was to create a music–sculpture–movie etude using the music of his 1979 album *Hommage à Bartók* and one of my works. It was supposed to be a visualisation, in which a kinetic sculpture, as a transforming object enters sound and its visibility.

This is how the first *YNI Etudes* video was made in 2011.

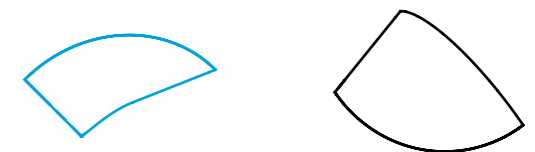
In exhibitions, I often present the *YNI Surface* (p. 164) in a suspended form, a rotated installation illuminated by several spotlights, where we can see the rotated object itself and its unlikely different moving shadows simultaneously. In the case of other exhibitions, for example the ones in Bauhaus master houses, we were able to see its projections as a result of three *YNI Surfaces* suspended next to each other differently.

I have performed exciting electro-graphical experiments with Mátyás Kálmán that included the digitalisation of the outlines of a rotating object–shadow installation recorded by a camera and using it as a control data sequence deforming its virtually generated backgrounds. The backgrounds were simple but very characteristic: stripes, grids, dot rasters. The colours allotted to these are footprints of our experimenting mood and the impressions that the music evoked in us.

The dance choreography made specifically for the opening event of my 2012 exhibition, *Chronosonsor performance and video etude* is a homage to the maestro and is about creation, the emergence and the forming of an idea in general. Creation fills every move and thought of an artist until it is complete, but then the new work of art makes itself independent, leaving its creator.

We recorded the dance among the sculptures in one take, then using a program, through the feedback of reflections and movements, as well as the assignment of video effects we composed an independent play of light. The idea itself is hardly new: in 1956, on the roof terrace of the building La Cité Radieuse in Marseille (designed by Le Corbusier) a production featuring the ballet choreography of Maurice Béjart and Schöffer's kinetic sculpture *CYSP 1* was staged. Of course, the cooperation between the dancers and the sculpture that was pre-programmed using the rudimentary, mainly relay-controlled technology of the time rather remained a beautiful but symbolic concept.

The experience gained during the creation of *YNI Etudes* and new software tools take the interaction between man and machine, the subtleties of human dance much more into consideration, providing a softer and—because of the enhanced accuracy—more attractive real-time perception and a very fast transformation of the vast amount of parameters.

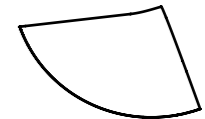




2011 | HD | electrographic videos | mobile shadow processing

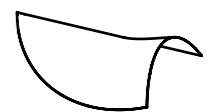


YNI ETUDES – video image captures





CHRONOSONSOR VIDEO ETUDE – video image captures



IS ANY NEW TO SAY IN AN ABSTRACT GEOMETRIC WORLD

József Készman

Excerpt from the opening speech of the exhibition *Shadows and Projections* of Antal Kelle ArtFormer, held in September 2020 (video film transcript).

József Készman is an art historian, curator, educator, former curator of the Kunsthalle in Budapest, and then head of the Exhibition and Science Department of the Ludwig Museum.

Antal's previous work, as well as his art presented here, show that he is following a path of equal sensitivity in two directions. On the one hand, the path of pure geometric forms not symbolizing anything, not necessarily representing something else or other entities than themselves. It is plain speech, pure language. On the other hand, this visual sensitisation shows that an object or a form may have different meanings if observed from different angles. Let's assume that they hold the symbols of three world religions. Then we have to say that this visual demonstration also has links to, or even connects things beyond art. Antal once said that "I believe in multiple aspects of things", and this can be used both literally and figuratively, if we accept that different aspects also generate different meanings.

The form presented here, the *YNI Surface*, is extremely simple, and still it can symbolize very complex things. It raises the question of whether something new can be said or shown in an abstract, geometrical world. It is very interesting that Antal's works represent liminalities, transitions and, in fact, inflection points where change and transitions can be monitored.

Antal Kelle's work is not only visual art, but also visual education, enlightening its viewers, enabling them to "truly understand and see".

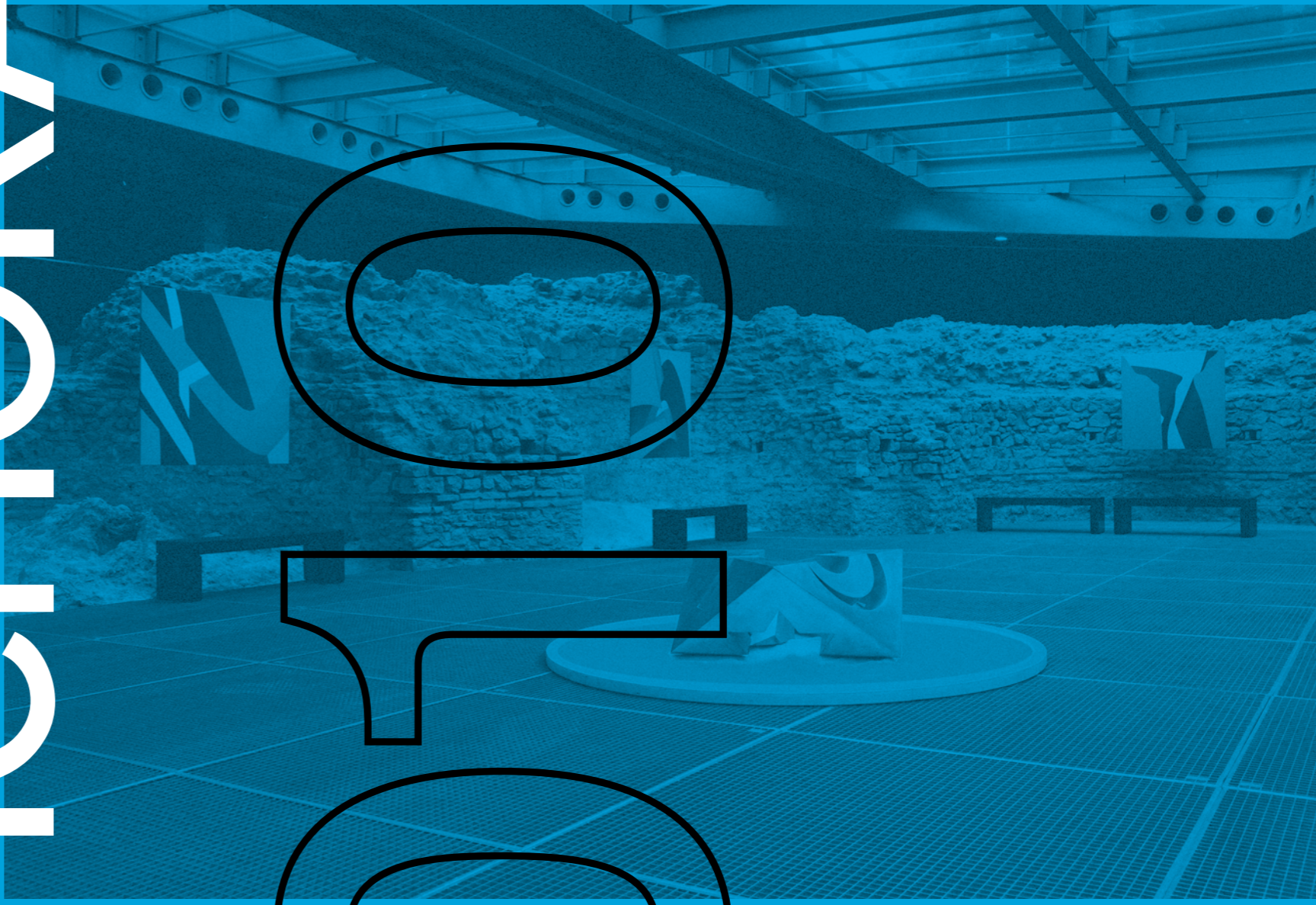


Pécs
EUROPEAN CAPITAL OF CULTURE
HUNGARY

CELLA

SEPTICCHORA

2010



YNI DERIVATIVES

Opus 312.1–312.17

videos_3D_pictures



Using many *YNI Surfaces* (p. 164) as elements, I am building a practically new geometry that is closer to everyday reality than geometric surfaces based on strict, abstract axioms. Why can I claim this is so? Because, for example, they can be lined up like pixels, which makes the creation of an unbroken, organic surface possible, and in spite of its waviness can be regarded as practically even. If I compose it using a lot of elements, then shrink it, the waves will gradually become smaller, it becomes like a rough piece of paper that actually flattens out completely at the end. Using this method I build planes, cylinder-, cube- and spherical surfaces, then I highlight close-up partial images and create wall pictures. I call these 2D works *Derivatives*.

Reality is never as simple and theoretically perfect as represented in mathematics. If I create a cube using six of these “planes” and close them, but in such a way that each of the surfaces has hundreds of small 3D pixels, then I can create interesting images. The wall image consisting of the multiplication of a protracted rectangle raster sample represents a part of a cube. Another part of the cube: like a partly crested pattern from another image. At best, we can imagine that the structurally lined part on top is comparable if observed from a different angle and using a different scale. If I extract a bigger part and use a different light, we can finally accept that the two images perhaps do represent the same thing (*Change of Scale, Macrosystem*).

This, of course, is not far from manipulation, since I am telling the truth (or a part of the truth, at least) but simultaneously editing out the essence. Take this picture that seemingly does not contain anything cube-like and still actually represents a cube.

Using this method, I am not only able to create plane-like polyhedrons, but also cylinder surfaces or other hard-to-define surfaces. There is also this other image showing a more dynamic, undulating surface that is in fact a part of a sphere also made up of *YNI* pixels.

Therefore, the question is not what an image represents, but rather what I claim of something. To what extent is that statement true or false? What are the points of reference and axioms, and to what extent are they based upon a general consensus? Uncertainty is not a privilege of quantum physics, but of reality that is present in our everyday lives.

When I perform transformations in space, I call their tracking in several steps and generations *Transformations* (p. 191). They are represented in my bronze statuettes and I use these to explore how the shapes generated as a result of intentional and random interventions are losing the characteristics of the initial status step by step. Another parallel question might be, to what extent new elements and technologies prevail in my works, or to what extent they dominate them. If we extrude a projected amorphous shape, i.e. we turn it into a rod, its character, its nature in space will change immensely. I consider this as a first generation intervention. As in the second generation step I cut crosswise basic forms out of this rod, the character of statuettes will be dominated by the circle, the square or the triangle. From other views we can even recognize the outlines of the *YNI Surface*.

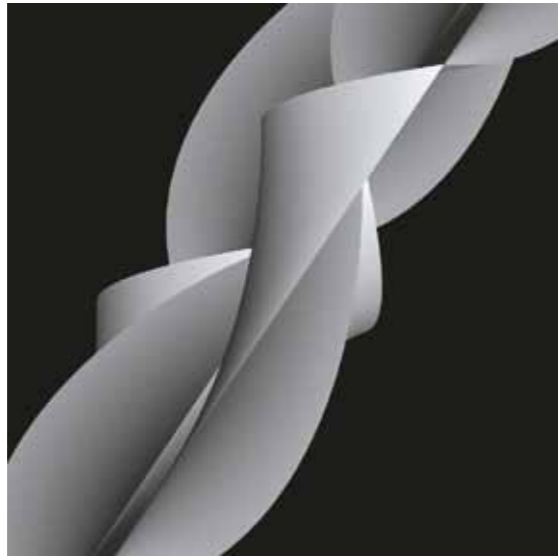
However, what if we do not perform these cuts with regular shapes, but with the same shape that we performed the extrusion with, i.e. we amplify the effect? We could regard the latter intervention as natural evolution and the one using regular geometrical shapes as an artificial technology resembling genetic engineering.

(It is very exciting to observe family trees, ancestry lines and the actual similarity of the umpteenth generation to ancestors picked on an arbitrary basis. See also my work *Divergences* [p. 154].)

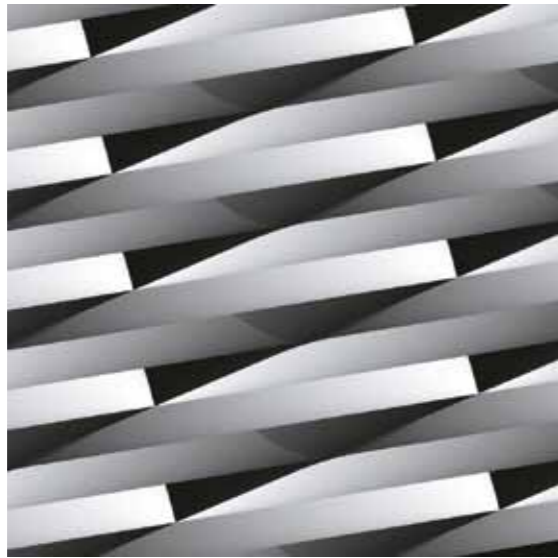


videos_3D_pictures

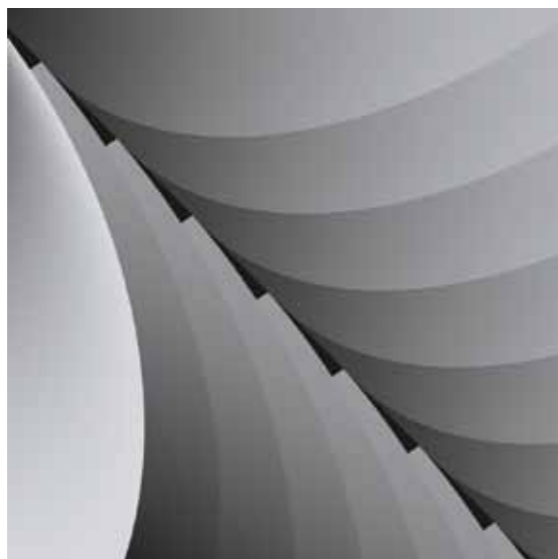




Opus 312.1



Opus 312.2



Opus 312.13

2004–2017 | canvas prints | 130 × 130 cm

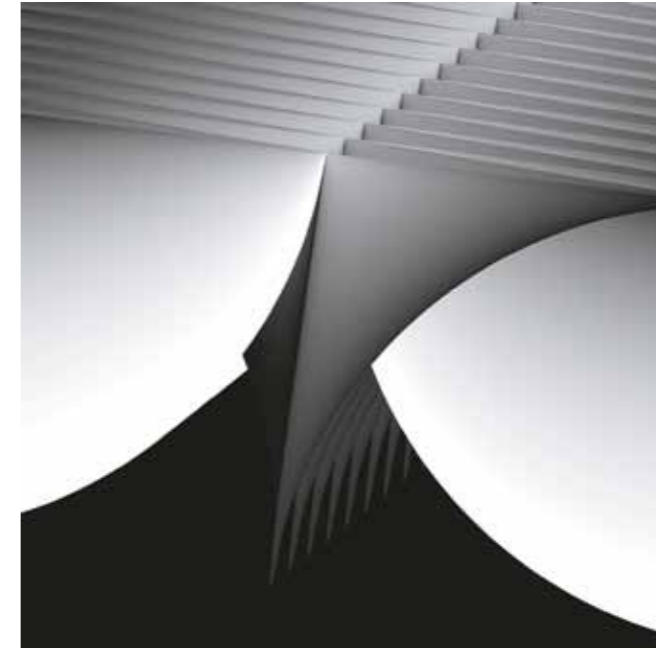


YNI DERIVATIVES | Opus 312.14

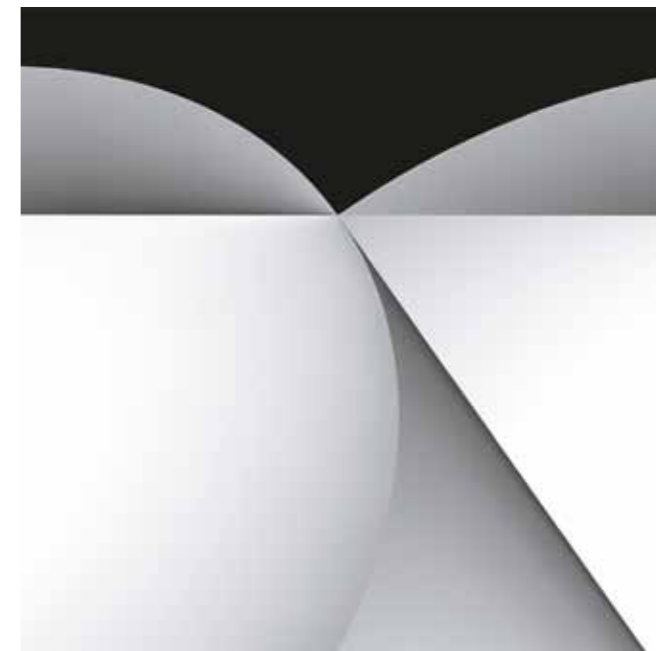




Bauhaus Meisterhäuser – exhibition interior



Opus 312.5



Opus 312.16





YNI TRANSUBSTANTIATIONS/TRANSFORMATIONS | Opus 315



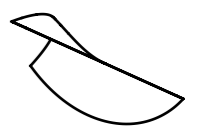
Opus 316



Opus 317



Opus 326



AN INVENTOR- ARTIST

László Beke: Here you are, Antal, who I can feel is very sensitive and

doing very important work that has a huge theoretical impact.

And I'm standing here, and it's my vocation to say things about your art that no one has noticed yet.

That is what I got to know you for, this *Helix* type of work. For a long while I said, what's so interesting about this subject? Because look at it! It's a cone with all kinds of grooves engraved into it. There's nothing special about it. And then you hold it absentmindedly, oh, how interesting, you can twist it and it turns. You can make anything out of it, but in a way it is also well invented what you can do with it, because at the same time its world is also very limited. It can take on the most amazing shapes, and there is a lot of playfulness in it, too. [...]

It reminds me of the very basic theological question whether geometry was invented by humans or it was already coded into them.

Antal Kelle ArtFormer: You said I was a "discoverer- and inventorartist". Not just an inventor, because we usually think of them as engineer-type persons who develop something technical. An "inventorartist" also includes an artist's characteristics to the same extent. A kind of sensitive curiosity that is as "all-encompassing" as possible, with the hunches and the—non-exclusive—formal responses to them, the model.

László Beke: The use of models in theory and practice makes a lot of sense that may have become obscure by now, yet they remain valid. Your work *Holy Land* has brought to mind many things formally, sculpturally and in respect to modelling, the way you unite three forms in one body, with three perspectives. Why? Haven't there been attempts to represent the Holy Trinity before? We can find three-faced heads from the 17th and 18th centuries too.

Antal Kelle ArtFormer: I think we can mean several things when we talk about models. I prefer to distinguish between a scale model (or mock-up) and a model. Free models can also exist, for example, which are like a black box that you put various things in, and then something different comes out, so the output depends on the input.

László Beke: If this is the input and that is the output, guess what is in the middle? It's a riddle. [...] It has been repeatedly shown that you are a deeply ethical person. Ethics and art very rarely go together, even though they share a common source.

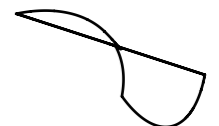
Antal Kelle ArtFormer: I am driven by curiosity towards a kind of learning, a recognition directed at people, at coexistence and at the phenomena of our environment. Obviously, there is no closure to this process; there simply cannot be an end to it. At the same time, it is quite difficult to decide what belongs to science, what belongs to art and what belongs to ethics. What do our usefulness and our authenticity mean?

László Beke: Once you say a word, you can't take it back. That is why taboos are a very wise invention, because once you break them down, there is no going back.

László Beke

A transcript of a conversation in connection with the exhibition *Our Artificial Emotions* and the related roundtable discussions at the Vasarely Museum in 2019.

László Beke is an art historian and university professor. He was formally the Director General of the Kunsthalle, and for ten years he was Director of the Research Institute of Art History of the Hungarian Academy of Sciences.



Dessau
GERMANY

BAUHAUS MEISTERHAUS KANDINSKY KLEE

2003



LABOUR

Opus 867

What is the correlation between an object and its shadow? In the case of familiar objects we have a presupposition, we are aware that cubes also have a square-shaped shadow and cylinders a circular one. Looking at a cylinder from the side, however, it can also have a square-shaped shadow. To complicate the issue even further: cubes cast square-shaped shadows only in very specific cases, their shadow is often a rectangle and typically rather a multitude of hexagons.

It may be even harder to trace back the original object from a shadow image: we can be almost sure that we will be wrong. Shadows have one less dimension than solids, so while we may have partial recognitions or assumptions, objective assurance is definitely out of the question.

Hanging up and illuminating the *YNI Surface* (p. 164) I created, we can observe the correlations and similarities between an object and its shadows. Taking experimentation further, illuminating the object from other angles we can also examine and compare shadows. It will become immediately obvious that they may vary a lot. Rotating the object will produce an animated shadow play displaying a variety of shapes. Let me refer to my series *Aspects*, where I explain in detail:

what we see actually depends on our respective points of view, our preconceptions. Objects may have two or more different projections or shadows, yet all of these can be classified as true. This idea can also be interpreted in the figurative sense, i.e. reality may have a great many appearances.

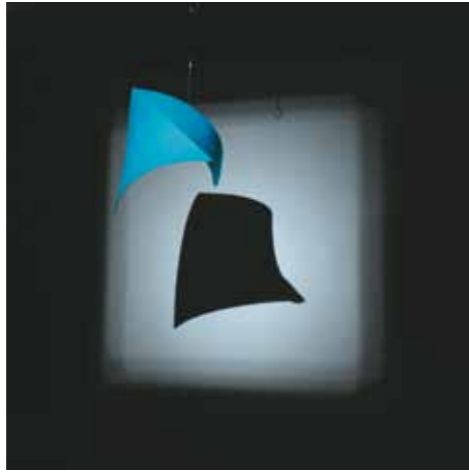
My artwork *Labour* has even more complex projections in a multitude of shapes. This kinetic mobile sculpture was created for the exhibition organized to commemorate the iconic painting of Kazimir Malevich, *Black Square on White Background*. The object itself is a duplicated *YNI Surface* held together by its straight edges, the projections of which chiefly represent a multitude of organic convex or concave amorphous shapes. Watching the black formations turning into each other for minutes, suddenly—and for a moment only—a regular quadrangle, the square will appear.

Turning and tilting the sculpture in various ways, I move it into different positions. Just like the shadow of a *YNI* element can produce a right triangle, two *YNI* elements can produce two right triangles and there is a special setup when these two triangles can merge to form a square, so the joint shadow will represent a perfect square. It would take a genius to trace back the original element(s) from this shadow image. Plato's allegory of the cave comes to mind. In our case, life symbolized by the blue sculpture is Reality that meets Appearance, i.e. the shadows we can interpret. If we only see and try to interpret the shadow images (i.e. Appearance), then we can only set up a theory on what the object itself (i.e. Reality) could be like. People usually try to settle this phenomenon by resort to religion or science. Some say it is a matter of God; others have a material approach, while there are those who may well pick some of these for themselves to use them as symbols, like a semicircle or a black square.



videos, 3D, pictures



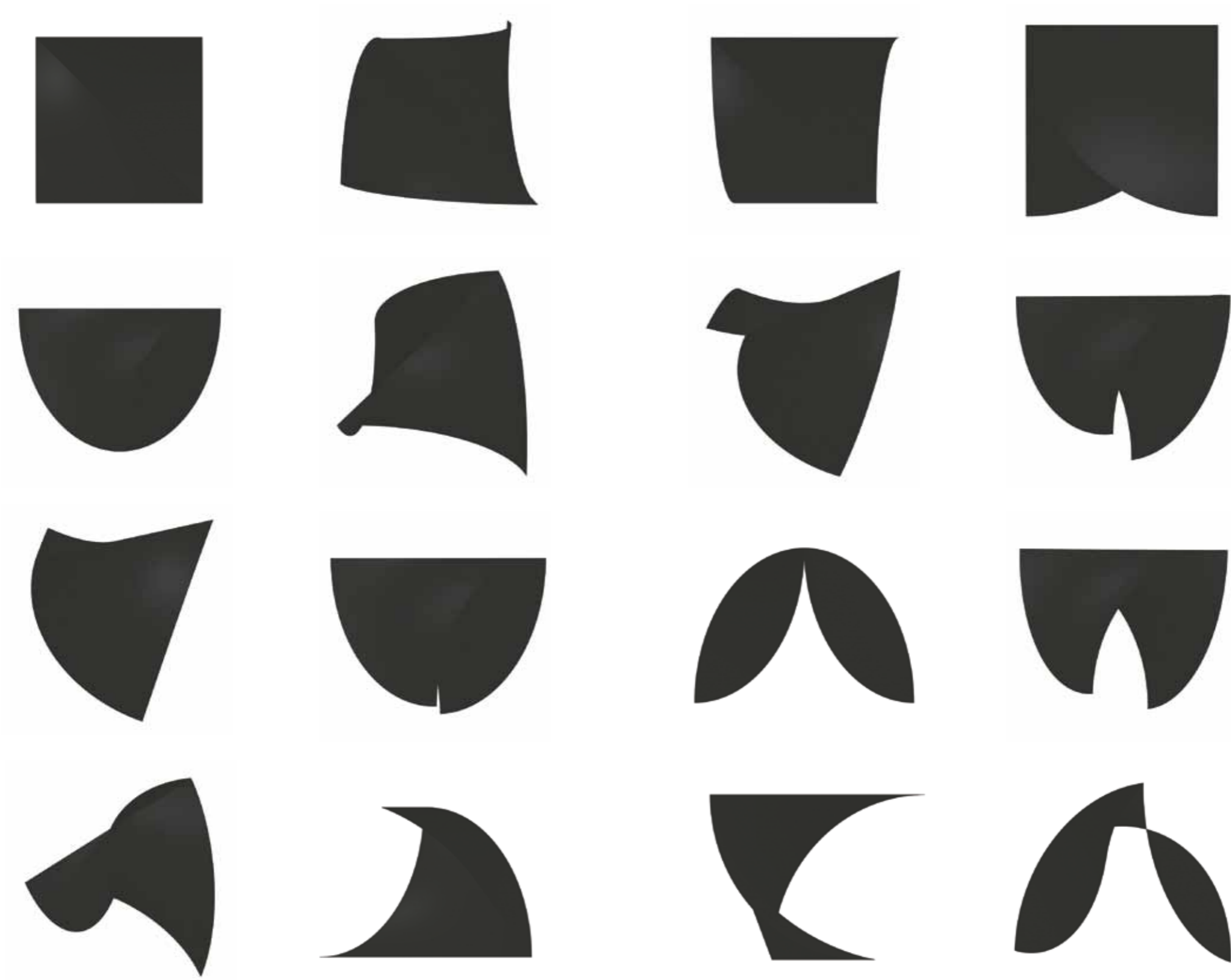


LABOUR – snapshots



2015 | moving, illuminated duplicated YNI Surface with control | 300 × 200 × 300 cm





LABOUR – shadow images views

HOW
PLATO WOULD
HAVE LOVED
TO SEE IT

Vilmos Csányi

The email was sent in 2019, after Vilmos Csányi visited the exhibition *Our Artificial Emotions* at the Vasarely Museum in Budapest.

Vilmos Csányi is a biologist, ethologist, writer, university professor, full member of the Hungarian Academy of Sciences. His research areas of interest include animal and human behaviour, as well as biological and cultural evolution.

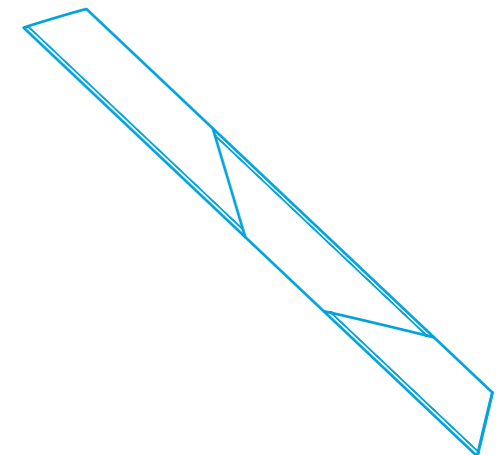
Dear Anti,

Your Labour construct nicely models the relationship between human understanding and reality.

Our senses show only a slice of reality, and true, complete understanding is not possible.

We have models of reality, but the model is barely an approximation, not reality.

*Hugs,
Vili*



SOUL

Opus 1001

videos, 3D, pictures



I made this kinetic artwork for my exhibition in 2019 at the Vasarely Museum called *Our Artificial Emotions*. A golden yellow silk flag is hanging from the ceiling, yet not only hanging but also flapping as if blown by the wind. Sometimes very gracefully, with dignity, at other times in a slight vibration, perhaps quivering or twitching, with the light deflecting from it.

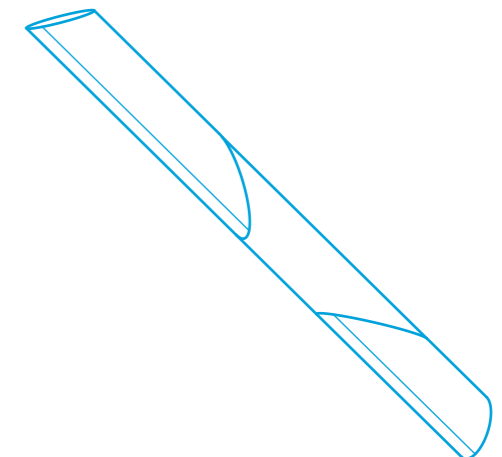
Not only was this artwork interesting from the perspective of shape and appearance but it also matched the exhibition concept perfectly. The works presented at the exhibition discussed the question of just how far artificial intelligence (AI) could develop. Could it ever reach a level when in addition to its intelligence it could also possess independent artificial emotions (AE)?

We can interpret the term “artificial emotions” in two ways. On the one hand, we can link it with technical creatures, since at a particular point of their progress they might also develop this ability. On the other hand we could link it to people, since we, people, often decide to use (or abuse) learnt, expected and false emotions, and even manipulate others through them, rather than relying on our instinctive, natural emotions.

The waving of the flag is controlled by a high-tech driving mechanism, vibrating it slightly, then accelerating, with wide swings. Sometimes it takes a break, and moves it periodically, then starts shaking it like a lunatic only to return to fine waves, quivers and rotations. We can see poetically effortless forms of movement, making the impression that it was a person making it dance or as if the artwork itself is able to enjoy its own moves. We may wonder if artificial intelligence will ever reach the level when it does not simply execute orders planned by humans or by itself, but also enjoys the actions taken. Is there a chance that artificial emotions will get that far? So far, we cannot see any scientific signs of it, and this assumption is purely based on our human selves. From our human perspective we can only hope that it will never happen, but we still cannot exclude its possibility, its actuality. The ethology of robots might be another issue worth raising.



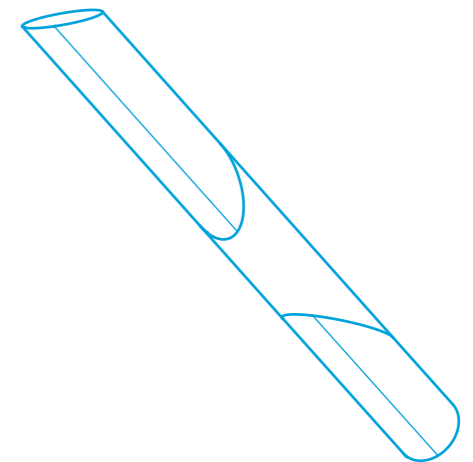
SOUL – snapshot





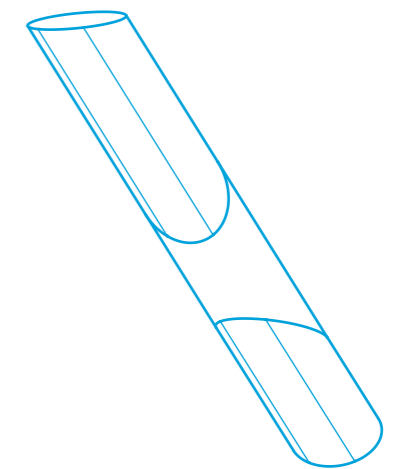
2019 | controlled silk sculpture with mechanism | 200 × 200 × 450 cm

SOUL – series of movements





SOUL – snapshots



Budapest
HUNGARY

VASARRELY

MUSEUM

2019



I have been coming across more and more with Antal Kelle's work lately, but I prefer to talk about the sculpture *CHAOS* (p. 137), because in many ways it is the one I feel the closest to. The place for such engraved glass objects is not in museums or galleries, because they are usually used as a cheap spectacle, as kitsch. So there is a general consensus about their function and their meaning in society.

What I find exciting and important is to take this sculpture out of the context of kitsch, of being a souvenir object and to saturate it with a content that breaks with the ordinary that is very distant from that. The technology itself is something I use a lot with my team to visualize network research findings, because it is suitable for studying very complex 3D systems. It was originally developed for military use in the era of Ronald Reagan's Star Wars Program, to locate enemy missiles and disable them using lasers. That is what made such a spectacularly fine resolution necessary. It can capture information with a sub-millimetre accuracy that is currently not available using other options for material modelling. *CHAOS* is a laser-engraved glass cube, interesting not because of the technological feat, but because of its highly conceptual nature. It is its content, the recognisability, simultaneousness, interdependence and meaning of the inscriptions ME/US/THEM from certain angles and perspectives that makes it amazing. From this point of view, there are many interpretations. That's what's exciting about it. But equally inspiring for me is the work titled *Daydreaming* (p. 214), which

was made for the thematic exhibition *Our Artificial Emotions* at the Vasarely Museum. It is characterized by the coexistence and collaboration of various media. In Antal Kelle's exhibitions, we have already encountered a number of kinematic and cybernetic works, where the breakdown into basic geometric forms and rotation is typically seen in a characteristically "artformer" simplicity. This results in a variety of forms with different characters and atmospheres, defining the space around them with their vibes. But in *Daydreaming*, the sculpture was complemented with and connected to a video screen. In the film, the virtualized construction appears as a mirror image, and then, inspecting it more closely, we realize that it is not a mirror image, because its movements and transformations are not exactly the same. It expands its possibilities, floating, and becoming airy or sometimes bulky.

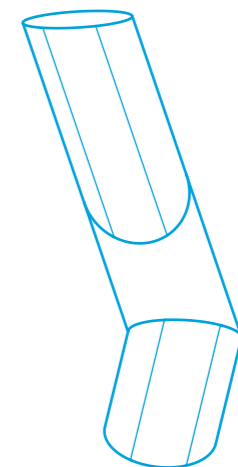
Kelle transposes the physical object into virtual animation, and vice versa; through the interaction we find the real object in the virtual representation.

For me, this is fascinating because at the Barabási Lab we are constantly struggling with the task of how to take our discoveries out of virtual space and implement them into physical reality. We are also looking for materials that can best reflect the internal structure of networks. The interplay between digital and physical space, and the tension between the two is what makes this installation so exciting. It is very attractive that it can be vested with a lot of content. I am touched by the beauty of art, and by the dilemma of whether and how much it should be allowed to be over-explained, so that we can retain the possibility and dream into it content that may not be there or is not there intentionally.

Albert-László Barabási

Written in 2021, after making a mutual acquaintance and some meetings.

Albert-László Barabási is a physicist, network researcher, member of the American Physical Society, and the Hungarian Academy of Sciences and Academia Europea. He is the director of the Center for Complex Network Research at Northeastern University.



DAYDREAMING

Opus 1017

videos, 3D, pictures



Daydreaming is a kinetic installation, consisting of a composition of sculptures, the motions of which are partly programmable and a video animation introducing its movements in a virtual manner. The sculpture itself consists of connected, adjustable scarlet rings of various sizes that rotate jointly with their pedestal. It revolves right for a short time, then for twice as long it will rotate left, then right again for short time and then in the opposite direction for twice as long. This motion seems a bit like marking time, or cynically, pessimistically we could also say we are moving twice as far backwards as forwards.

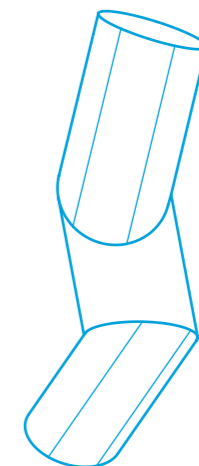
However, in the case of a circular motion who can tell what is “forwards” or “backwards”? It is relative, and up to us to interpret the way we move forwards at double speed and backwards at a single speed.

The sculpture is designed in such a way that we can manually rotate and adjust the connected rings, accordingly the sculpture can have a multitude of configurations. In fact, in several respects this means an infinite number of formations, while we can transform a fully enclosed construction through various mixed stages into an open form.

Behind the sculpture there is a permanently running video animation with not only an option to choose from several positions, but also to apply additional effects like folding, drifting, a number of theoretical, unlikely transformations including changes of material and shape, line drawings, minifications and enlargements. Within the composition this is supposed to represent the “what could have been” type of daydreaming. It is quite easy to empathize with the condition as we loaf around in the world, marking time. We have a lot more opportunities, as well as physical and spiritual capacities, yet instead of exploiting them we daydream gloomily about unrealistic options, yearning for them.



DAYDREAMING – pose

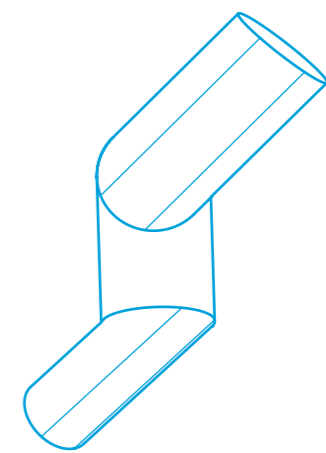




2019 | adjustable and automotive kinetic steel sculpture, with virtual video analogies | 70 x 150 x 250 cm



DAYDREAMING – with virtual analogies



ENTITY MODULATOR

Opus 1018

videos_3D_pictures



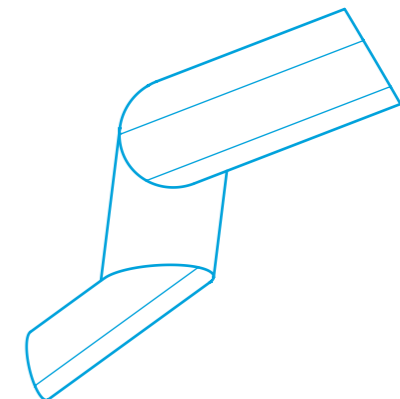
Entity Modulator is a kinetic installation consisting of a composition of sculptures, the motions of which are partly programmable and a light-projected analogue animation illuminating it. György Kurtág Jr. wrote an improvisation-based piece of music to accompany the work and the film that was made about it. The central element of the sculpture is a moving yellow composition made up of rotatable rings that was initially named *A joyful László Moholy-Nagy*, referring to his kinetic work *Light-space modulator*. In this case, I hung down the sculpture made up of rings that appear to be ellipses from above, simultaneously illuminating it using floodlights during its rotation. This resulted in the emergence of projected shadows on the white surface under the sculpture. The programmed rotation was produced using powerful impulses, and the outcome still appears natural. The reason for this lies in the way of hanging, the consequence of which is a delayed start and a subdued stop. Since we are free to rotate the elements of the sculpture, we can acquire an infinite number of positions in several places, while we can transform a fully enclosed construction—through the various mixed interim stages—into an open form. We can even modify its centre of gravity and consequently its inertia and spin dynamics too. This option and the programmability of the rotations provides the diversity of the artwork, its changes of rhythm and its characteristic atmosphere.

Because of the partial illumination and uncovering of shadows several different tonalities of grey shadows appear, the articulateness of the rings melts away formally, creating a big, majestically moving, projected monochrome kaleidoscope animation.

The eponymous film made about the work, *Entity Modulator* first introduces the changes of condition, the motions of the sculpture itself, then the ever-changing, projected animation of greys. This is a permanently changing shadow kaleidoscope made up of intersecting curves. During documentation, the objective was to keep visual effects and musical improvisations equivalent; we therefore approximated the two media using an “iteration”—repetition—method until they “became one”.

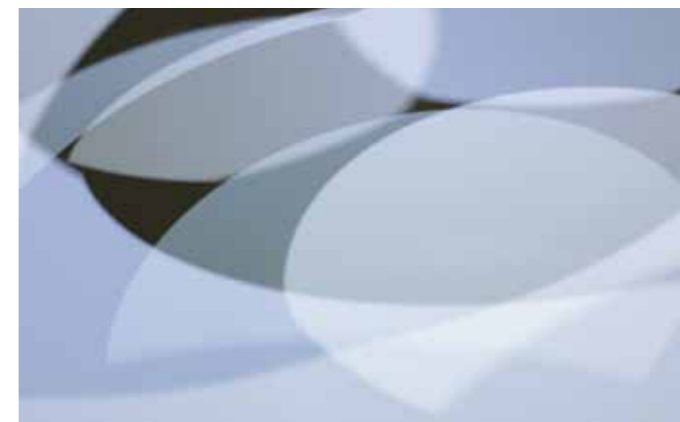


ENTITY MODULATOR – with shadows, snapshot

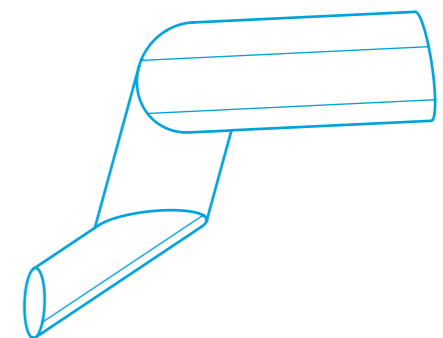




2019 | adjustable and controlled metal sculpture with projected shadows | 120 × 120 × 300 cm



ENTITY MODULATOR – snapshots



15 NANOSECONDS OF ADVANCED TECHNOLOGIES

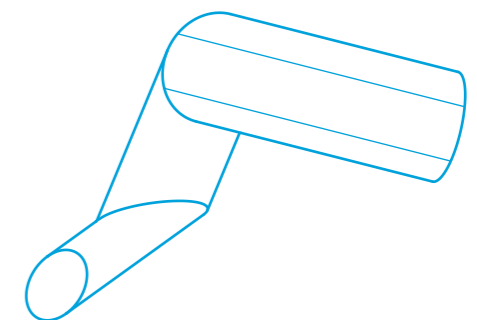
In connection with the statement attributed to Andy Warhol (“*In the future, everyone will be world-famous for 15 minutes*”) you might want to ask how up-to-date art is, i.e. how much it should and how much it can keep up with the changes. We can examine to what extent artists as important, fine-tuned sensors of society can anticipate or forecast events and issues to come.

Assumed or actual progressivity also apply for the technology used, i.e. the technique and set of tools the artist uses, but these will not generate artistic value by themselves. They may be appropriate where old techniques cannot be applied or only with great difficulty. Digital technologies like 3D printing or computer-assisted imaging are widely accepted means of expression, but the duration of fame in creative arts only based on these tools is getting shorter and at a quickening pace. In the title above, I may have slightly exaggerated with those 15 nanoseconds, since that duration is imperceptible in human terms and with human reactivity. This order of magnitude corresponds to the fusion time of the hydrogen bomb or the time it takes light to flash through our room. It is never technology itself, only the originality of the work accomplished through its use that produces quality and the resulting fame. Because of the precise finish of my works, people often think I use cutting edge technology to implement them. In fact, they are often manufactured using the traditional technologies of carpenters or locksmiths, applying old handicraft procedures.

The *vari.art* series could have been created a hundred years ago, but I like to consider them as “timeless”.

Nevertheless, my more complex, modern artworks invariably also feature the latest technology. Especially when interactivity, and the processing of information requires a cybernetic touch. In my work *Nexus* (p. 108) the performance implemented in several locations at the same time, as well as the service offered to the visitors connected to each other and the server through an internet connection definitely required highly advanced information technology. My objective with the project, however, was not to show off with technical virtuosity, but to analyse the issue of trust, which raises both individual and social issues.

In my more recent works, rather than artificial intelligence (AI) I deal with the aspects of artificial emotions (AE). In my installation *Admiration* (p. 224) the use of the industrial robot intended to question its legitimacy to replace humans in creative arts. In my sculpture *Soul of Buddha* (p. 204), on the other hand, a complex and intelligent mechanism performs a seemingly infinitely simple task, the waving of a long and majestic silk flag in a variety of moods and dynamics. Similarly to this project, I like to simplify the majority of my works infinitely, implementing them at the level of elementary movements. I study the universal validity of action and reaction, for example, receding from technical competition. In virtual space, my sculptures ascend and leave technological reality behind, giving way to immaterial artistic ideas.



ADMIRATION

Opus 999

videos_3D_pictures



We all have childhood memories of light, of a ray of light shining through a crack, illuminating the floating dust, of manipulating sunrays with a mirror or a magnifying glass, perhaps of a dancing candlelight. Later we learn the physical explanation of these phenomena, how lenses or prisms refract, reflect or separate light to its rainbow-coloured components.

These are fundamental phenomena that can be understood, learned and taught... even to an industrial robot that we can code to apply “if – then” logical recognitions, i.e. if we do this or that, it will have this or that consequence. We can even expect more sophisticated, self-learning equipment to perform a series of experiments in sufficiently high numbers and draw the respective conclusions, and create rules themselves.

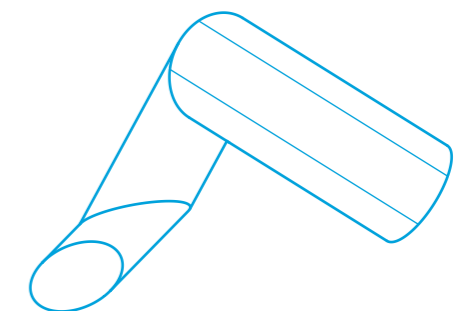
In a simplified world, we think we can understand such phenomena easily. But if we are not using a regular optical tool but the broken piece of a glass bottle, and examine the rays of the sun shining on it, then the colour of the bottle, the changes of its thickness, the rounded or splintered edges of its broken cylinder add a lot of variables, and we could even say it “springs to life”.

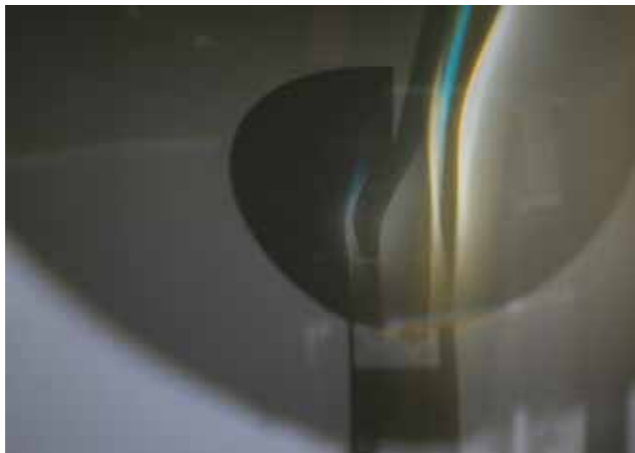
For the 2nd International Digital Triennial (Szekszárd, Hungary, 2018) I made a special installation. I picked two sculptures from the works of my friend, the glass artist Péter Botos, a prism consisting of several parts and a composition made up of sphere parts. Both were characterized by having dents and cuts on their surface and various slidings and turns at the parts, supplemented by (glued together with) some thin coloured sheets of glass. The various materials of different quality had different light-absorbing characteristics, different refractions of light, different reflections, so the exiting and projection properties of incident rays were practically unpredictable. We were happy if we could “solve” at least a part of the image, i.e. explain why it is like it is.

Visitors could sneak a glance at the installation set up in a separate, dimly lit room through a door with holes in it that also represents a part of the artwork. The robot illuminated the sculpture, sweeping its surface from various directions and distances, simultaneously creating a light animation projected on the wall in an abundance of shapes and a thousand shades of grey, including black. We may find it hard to believe instinctively that transparent glass could cast a black shadow and that in addition to colourful stripes, blinding white flashes can also emerge.

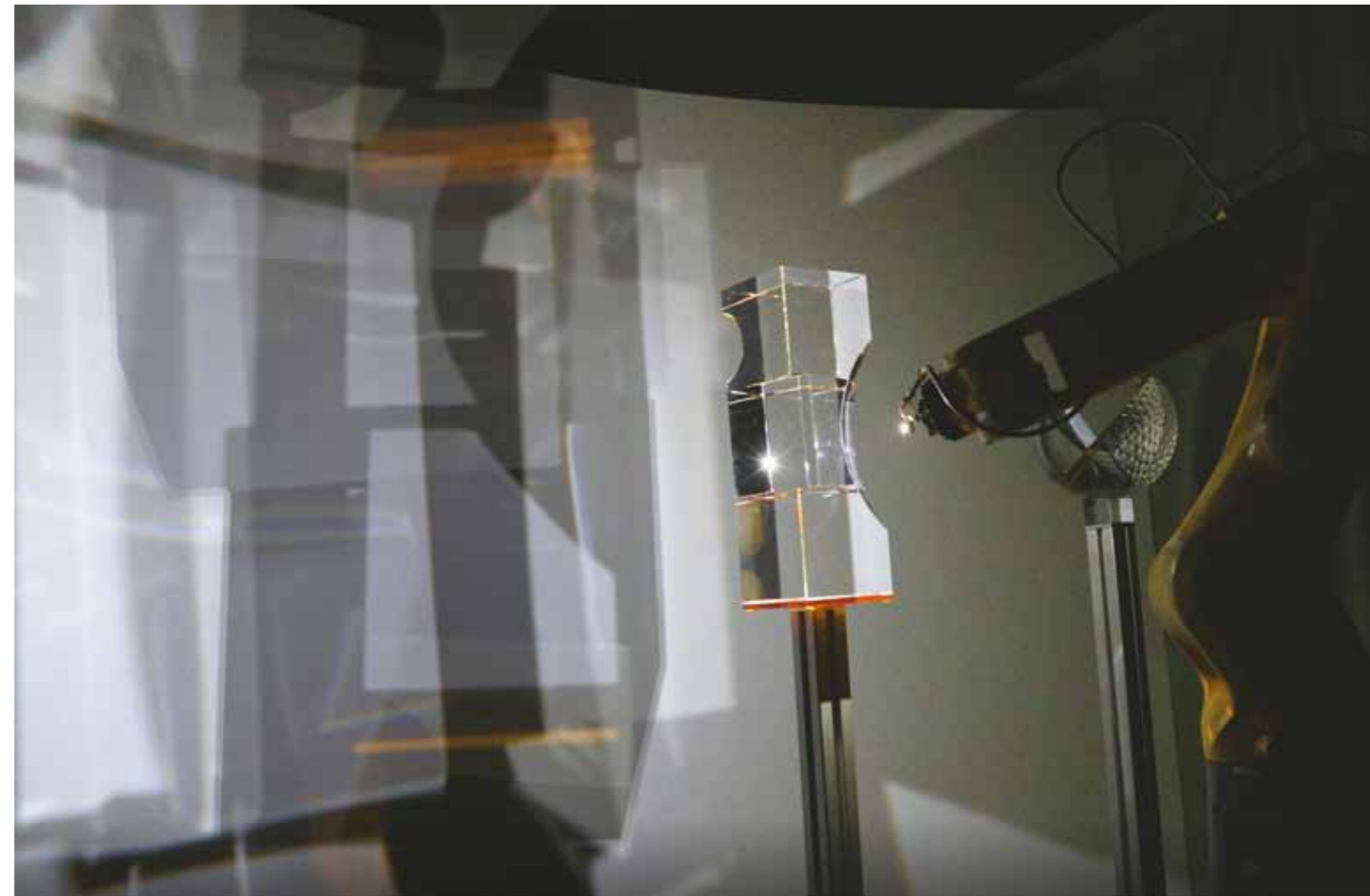
The term “contemporary creative art” has a strict requirement, which is to reflect upon the current issues of our times. Artificial intelligence (AI) and robotics could also be among such issues. We know that robots have already surpassed us in a number of human skills but we still cannot see if there is a limit to this development and if so, where it lies.

The robot will take a courteous bow at the end, but this is a coded mannerism and not an intelligent, instinctive or emotional reaction. We may ask the question: to what extent do we need advanced technology? Should we root for the robot? Would it not be easier to sit next to the glass sculptures, to illuminate them ourselves and experiment like that, observing and enjoying this rich world of shadow play?

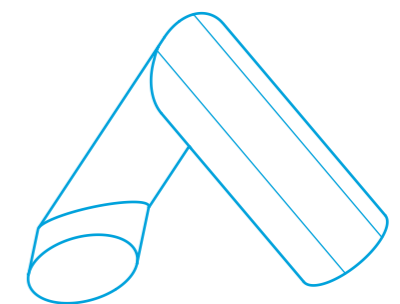




2018 | light-shadow-glass | robot installation | 4 × 4 × 3 m



ADMIRATION video | Opus 1005 – screenshots



FACING THE MIRROR

Opus 1012

videos_3D_pictures

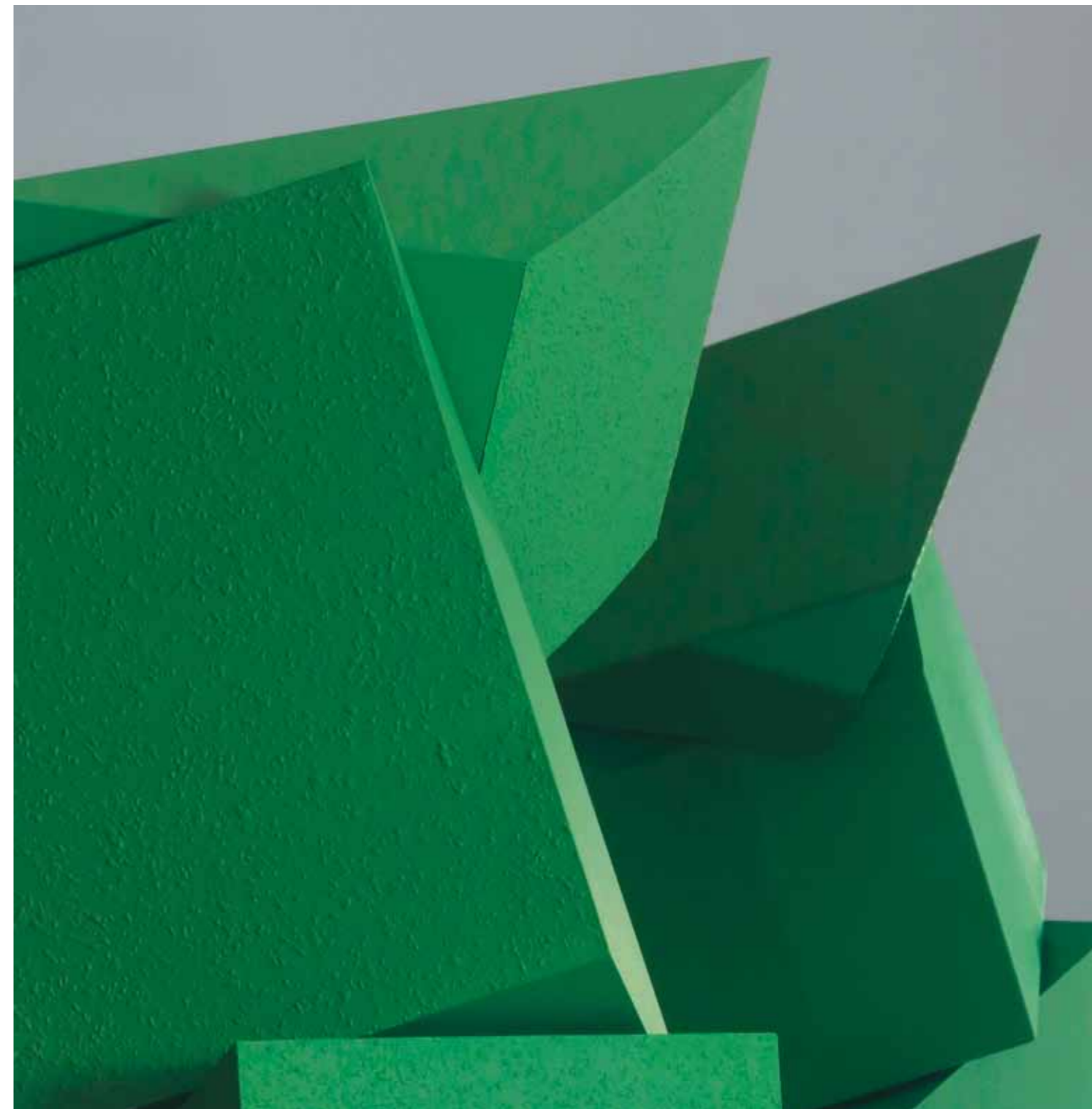


One of my works made for my exhibition *Our Artificial Emotions* organized at the Vasarely Museum in 2019 is *Facing The Mirror*. In its setup, it is very similar to my work *Daydreaming* (p. 214), except that instead of a monitor playing back an animated short I used an ordinary mirror to supplement the sculpture. The mirror will provide us with the optical characteristics of classical physics without any electric or electronic manipulation.

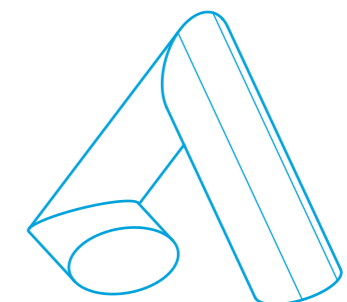
The sculpture itself consists of three connected parts, all of them with a pyramid- or prism-like geometric shape painted green, able to move independently or controlled by visitors. My primary intention was to present its self-motion in the same way as in the case of my artwork *Soul* (p. 204) I did this with the textile. We can ponder the relationship of the sculpture with its reflection in the mirror, and with its virtual self and what emotions they are connected by. In a way, this sculpture could remind us of persons admiring themselves in the mirror.

The type of motion generating the reproduction of an obvious reflection makes it theoretically possible for the sculpture, in spite of representing only an artificial intelligence, to find pleasure in its own image.

It is known that the mirror test in the classical sense has been used (and even surpassed) by present-day robotics since the beginning of the millennium, i.e. robots are capable of recognizing and identifying themselves through the image appearing in the mirror, i.e., their virtual selves. Going beyond artificial intelligence, the arrangement of the installation and the independent functioning of the sculpture suggests that it is not about intellect or recognizing intellect, rather about the emotional reaction of the artwork itself, or at least the chance of such a reaction, and about potential artificial emotions.



FACING THE MIRROR – snapshot

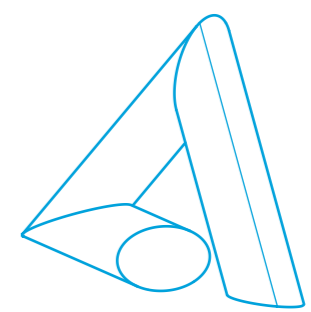




2019 | adjustable and automotive kinetic steel sculpture, with plastic and mirror additions | 100 × 150 × 250 cm



FACING THE MIRROR – positions



EXPERIENCING

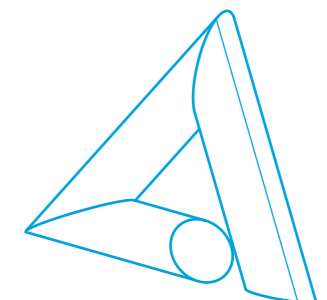
TIME

It is interesting to observe how diversely time is interpreted and visually represented. I can also accept two-dimensional geometrical symbols. Time appears in many ancient and contemporary religions, the geometrical representation of which is typically the circle standing for the cyclical recurrence of birth and death, or sometimes the half-line indicating the unclosed nature of time as professed in Judaism, in which, starting from an initial point, time progresses towards the infinite, but it could also be a line segment closed by the Christian concept of the end of the world.

There is a more sophisticated philosophical approach that could also be illustrated in 3D by a spiral, according to which things always recur in a more “advanced” form. The Big Bang could be associated with a pyramid growing out of a single point, perhaps a cone or a globe.

Time can be experienced in my kinetic works. I do not seek to represent it or find symbols to express it, it is simply present. It is easy to get lost in the multitude of concepts thrown up by religion, philosophy and science. Sometimes we find the perception of time, of the personal and community time we experience to be more important. In my objects interpreted as models the direction, or “flow” of time is not determined either. It is reversible, just like animations can be played back in reverse and then forward again.

Sculptures can be moved; movements can be repeated and modified in a variety of ways thanks to interactivity. Accordingly, their recipients can experience parallel realities.

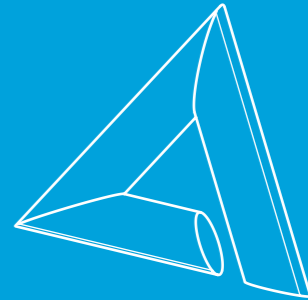


Linz
AUSTRIA

ARS ELECTRONICA

FESTIVAL

2011



BLUE REINCARNATION

Opus 1261

videos_3D_pictures



Blue Reincarnation is an automotive, but also interactively controllable kinetic sculpture. The first version of the flattened cylinder construction made up of three pieces was made in 2005, with its unusual tilted divisions only allowing rotations at two degrees of freedom. It was first exhibited in the Museum of Applied Arts in Budapest, initially bearing the name *Cognition Schöffer – Opus 261*.

Visitors enjoyed rotating the sculpture (painted red at that time) using a control terminal, setting it into countless positions in space, and observing its changes during the movements. Since its two terminal positions—one representing a straightened elliptic cylinder and the other a triangle-like shape reclosing into itself—also suggested infinities that could be interpreted in many ways, it was almost calling for intervention. To me it meant straightening out proudly versus shutting myself up, or from another perspective expansion versus marking time.

In several of my works, I have dealt with fellow artists and their creative methods that analysed similar issues that I was interested in and used them as an inspiration to create artworks.

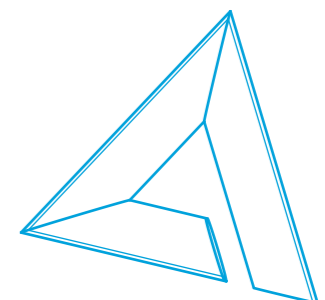
Miklós Schöffer, a cyberneticist and sculptor, was one of these stimulating artists. His sculpture concept *La Tour Lumière Cybernétique* stands out not only because of its huge scale, but also because of its approach, absorbing prevailing statistical figures, feasts, events and the very pulsation of Paris, transforming them into reactions of light and movement. This interactivity is what I have set

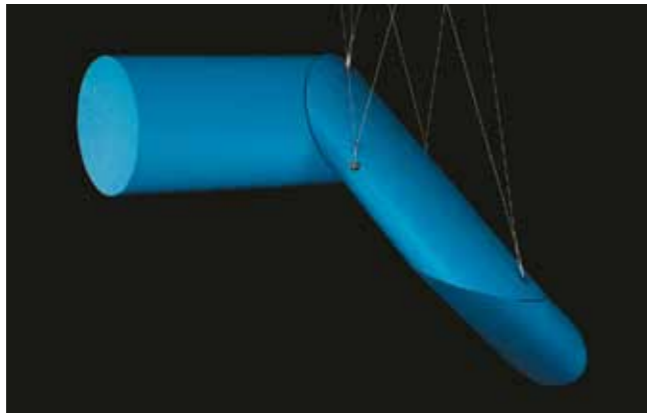
as an objective and by simplifying it I further abstracted my original work, reduced it to exhibition hall scale and made the instantaneous intervention of visitors possible.

I presented the sculpture with three degrees of freedom in 2017, at the *Ars Electronica* festival in Linz. I included an application for mobile phones and a large interactive touchscreen wall, through which visitors could enjoy moving and rotating the artwork in a variety of ways using the opportunities provided by these high-tech tools.

In 2019, at the Vasarely Museum in Budapest we were able to experience the rebirth of the sculpture in a blue version. Visitors could move and rotate it, and set it into various positions using a terminal. When there were no active users around, the sculpture started moving independently, rotated in various rhythms, and set into various positions by its own computer control with a pre-set randomness.

In the case of *Blue Reincarnation* I did not wish to make it a walk around object, but rather to create an installation, in which the illumination of the moving sculpture with powerful floodlights makes several shadows of the object appear on the surrounding walls. Like most objects it will look different from another perspective and evoke different associations. The projections of various directions make the simultaneous observation of these statuses or series of movements possible, where shadows are just as important as the object itself.

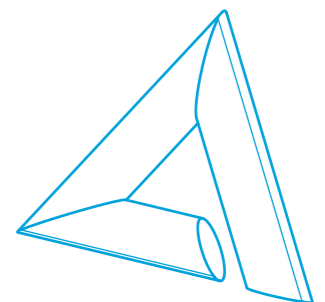




BLUE REINCARNATION – snapshots

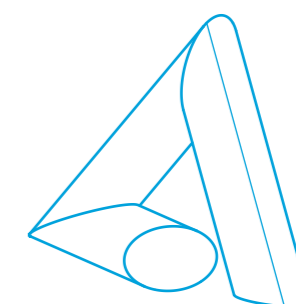


2004–2021 | controlled interactive and automotive sculpture made of wood, bakelite and metal | 3.5 × 3.5 × 4.5 m





BLUE REINCARNATION – with its shadows, photo montages



SHORT LYRICAL COMMENTARY ON THE SIGNS OF ANTAL KELLE

Gyula Urbán

Opening speech of Antal Kelle's *Aspects* exhibition
at Ponton Gallery, 2005.

Gyula Urbán is a writer, poet, actor and a puppet theatre director.
Holder of the Cross of Merit of the Republic of Hungary and the
Teréz Séd-ring.

God created this earth, and with it the universe, in his good pleasure. I have ample evidence of this. Perhaps the most obvious is a field or garden full of grass and flowers. You can find mugwort, white goosefoot, eringoes, meadow-saffrons and marsh marigold, to name but the best known.

Yet there are also, for example, the big-headed roses, the beauties that reign from spring to autumn. Some are tiny but many-petalled; the wild rose—a favourite of German songwriters. And then there are the big, barely fragrant ones, which seemingly indifferent English lords rave about. Why so many colours, so many shades and shapes?—I ask.

One flower would be enough, and preferably interchangeable!

But there are many—thank God!—for God created the world in good cheer. Flowers! And then we haven't even mentioned the splendour of autumnal forests that are fast approaching.

What is this seemingly senseless orgy of colour, this unprecedented waste!

It would be enough if the leaves simply just fell! Or did not fall at all!

Because then there would be no autumn, winter, spring and summer.

What is this ever-repeating, yet always different change?

Perhaps it would be enough just to have one tree that would neither grow, nor wither—it would simply exist or not exist.

But it cannot be—for God created the world in his good pleasure.

I should have begun with stones, minerals—for they too are innumerable.

I would only mention animals with great trepidation in this swarming that has prevailed since the beginning of the world.

And then there is mankind! Why did the Almighty create man and woman?

And if He created man and woman, why must we procreate in this way, giving and receiving pleasure?

A word, a push of a button would be enough, if we already have this command to populate the earth.

But no, we must whisper subdued words in each other's ears and caress each other—for God created the world in good cheer.

This is what my friend Antal Kelle noticed in the Lord; this shoreless, fizzy, divine joy, which we could also safely call love.

And one more thing!

The beauty that this whole mass of love is composed of the different variations, permutations of a single spiritual or material particle—it is all the same here and now, anyway!

Antal Kelle knows the Tabula Emeraldina, and so, like Béla Hamvas, he will continue to repeat it until the day he dies, like a mantra: what is up is down, and what is down is up.

This is the sum of human wisdom that scholars rarely recognize and point out, but which poets and Antal Kelle recognize and point out all the more surely and immediately.

Panta einai—all is one, proclaimed the Greek philosophers.

All is one, these signs declare here, signs that can guide us for a lifetime.

So let us follow them, for all things are appearance and reality

**—for God created both appearance and reality,
and Antal Kelle in good cheer.**

about me

- 2022 *Delineo ergo Cogito*, Vasarely Museum, Budapest
8AK exhibition, Artezi Gallery, Budapest
- 2021 *Influences*, HáromHét Gallery, Budapest
Sculpture Biennial – Connections, MűvészetMalom, Szentendre – MKISZ Award
In Memoriam Joseph Beuys, Kortárs Gallery, Hungary, Tatabánya
Hungarian Genius, Pécs Gallery – organized by Gallery Max, Hungary, Pécs
- 2020 *Shadows and Projections*, MET Gallery, Budapest
Light–Motion–Illusion, Vasarely Museum, Budapest
Full member – Hungarian Academy of Sciences – MTA-SZIMA, Budapest
- 2019 *Our Artificial Emotions*, anket and exhibition Vasarely Museum, Budapest
Code and Algorithm – OSAS exhibition, Vasarely Museum, Budapest
Art et mathématiques, Abstract Project Galerie, France, Paris
D. Agora, The Box, Athens – Hungarian Electrographic Society Award
- 2018 *Aesthetica Art Prize 100* – UK – awardee
Konkret Leto – Gallery Z, Slovakia, Bratislava
2nd International Digital Triennial – *D. Agora*, Hungary, Szekszárd – awardee
Presentation of *Persona Grata* – Vasarely Museum, Budapest
- 2017 *Soulmates, Kinetica Show – Ugly Duck*, UK, London
Sculptures Come to Life, Hungarian Cultural Centre, UK, London
Eroded Theories, MOMATH – National Museum of Mathematics, USA, New York
Ars Electronica, Austria Linz
- 2016 *Personal Abstractions*, Gallery U, Finland, Helsinki
Colour–Space–Form, Reök Palace, Hungary, Szeged
LATENT TOLERANCE, Érd Gallery, Hungary, Érd
Dada 100, Lajos Vajda Studio, Hungary, Szentendre
Bridges – Collegium Hungaricum, Austria, Vienna
- 2015 1st National Quadriennial of Small Sculpture – Main Prize, Hungary, Pécs
Reflections on the Black Square, Vasarely Museum, Budapest
Fény(ny)elvek [Principles/Languages of Light], Kepes Institute, Hungary, Eger
National Salon – Kunsthalle, Budapest
- 2014 *Hungarian Week – Unesco Palace, France Paris*
International Mobile Madi Museum – permanent exhibition, Hungary, Vác
- 2013 *DLA Doctor of Liberal Arts – Marcel Breuer Doctoral School (University of Pécs)*
Refractions, FUGA, Budapest
17th Sculpture Exhibition – International Mobile MADI, Slovakia, Bratislava
- 2012 *Spacemaker, La Biennale di Venezia of Architecture*, Italy, Venice
Mobility, Collection of Nicolas Schöffer, Hungary, Kalocsa
16th Sculpture Exhibition, Slovakia, Bratislava
- 2011 *Noémi Ferenczy Award*
Exhibition of National Art Award Winners, House of Hungarian Creative Artists
- 2010 D Gallery, Hungary, Szeged
Conjectures and Suggestions, Hungarian National Gallery, Budapest
Reverence, Cella Septichora, European Capital of Culture – Hungary, Pécs
- 2009 1st Biennial of Sculpture, Hungary, Szentendre
ArtFormer – Colour Spaces in Creation – Hungarian Intellectual Property Office
Nexus, Museum of Fine Arts, Budapest
- 2008 Charles Eames Scholarship (1.5 years), NID – India, Ahmedabad
Conducting a sculpture workshop – Estonian University of Fine Arts, Tartu
Variations and Aspects, Bauhaus Meisterhauses Kandinsky–Klee, Germany, Dessau
Point of View, University of Art Gallery, Estonia, Tartu
- 2007 Lectures, Moholy-Nagy University of Art and Design (MOME), Budapest
Visiting Lecturer at the National Institute of Design (NID), India, Delhi, Bangalore
Staggerer, Hungarian Design 1st Prize
Variations, exhibition at Aquarium Gallery, India, Ahmedabad
- 2005 Teaching an art course, Armenia, Yerevan
Aspects, Ponton Gallery – MOME, Budapest
vari.art, exhibition Museum of Applied Arts, Budapest
Pro Ludo Award
- 2000–2004 Course teaching professor, University of West Hungary, Sopron
Visiting Professor of Art, in Germany University and Art and Design, Halle
Teaching art courses, Thailand, Bangkok
Creative Arts Workshop, Seven Oaks Royal Institute, UK, London
- 1999 Member of “First Circle”—community of artists from Törökbálint, Hungary
- 1986–1989 Teacher at the Secondary School of Fine and Applied Arts, Budapest
- 1987 *Útban a mikromechanika felé* book, *Gyorsuló idő* series, by Magvető Kiadó
- 1972–1988 Studies in art and technology, Budapest University of Technology, Hungary and Bauhaus Dessau

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on ArtFormer

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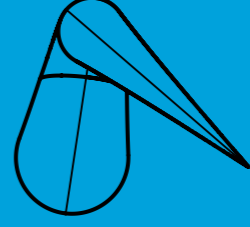
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thanks

...time for waiting patiently for this book to be finished.

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Rembrandt van Rijn, René Descartes and Baruch Spinoza

The trio attends the opening of a sculpture exhibit of Antal Kelle, capping an afternoon discussion among European educators on integrating the arts into science education. STEAM (Science, Technology, Engeneering, Art and Mathematics), not STEM, is their slogan. “What are we supposed to do here,” asks Rembrandt. “Have fun, or get a math lesson?”

Spinoza replies, “I think we’re here to imagine what-ifs. What if the Greek geometers had twisted cones around their conic sections. Or maybe these things look like those little creatures our friend Leeuwenhoek claims to see in his new gadget, the microscope.” Descartes plays with Kelle’s sculpture,

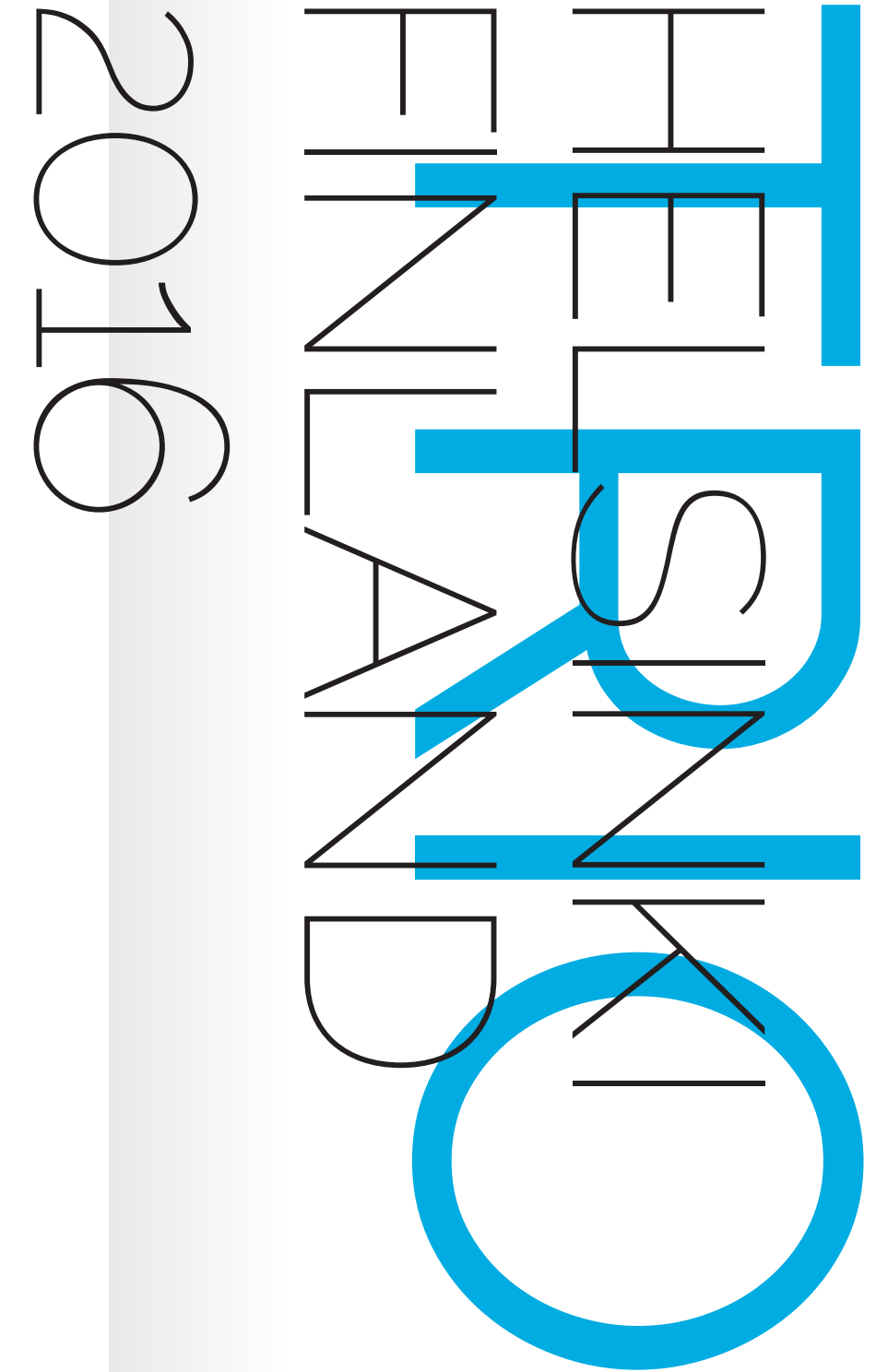
*“Helix, interactive object for meditation.
La geometrie, c’est l’art!”*

he says.

Marjorie Senechal

opened the Antal Kelle ArtFormer’s exhibition *Personal Abstractions* in Helsinki in 2016, where she participated in the Bridges conference. One of its main themes was how to include art in education. She sent this in 2021, in place of the lost opening text.

Marjorie Senechal is an American mathematician, science historian, professor emerita of mathematics at the Kahn Liberal Arts Institute, and editor-in-chief of the scientific journal *The Mathematical Intelligencer*.



ArtFormer

The name is an original coinage by Antal Kelle. ArtFormer is a person working at the intersection of art, design, science, technology and play, creating a new quality by combining these fields of knowledge. In many ways, ArtFormer is related to László Moholy-Nagy's human ideal, the so-called whole person.

