

Iza Tarasewicz  
**The Strange Attractors**

Polnisches Institut Berlin  
Curated by Lorenzo Sandoval  
Burgstrasse 27, Berlin  
February 21th-April 3th, 2014  
Guiding tour: February 6th, 2014  
Performance with Louis Armand March 27th 2014



*In terms of function, space means speed, "celeritas". It was something that the antique Romans knew too, but for them it was only used to start wars. In modernity space becomes, together with speed, the fundamental rule for all relations that compose the social life. The modernity is the epoch of the space, of the general equivalence of all its parts. (...) In every epoch, all cultures have elaborated images of the world but only one, the occidental, will pretend that its own image of the world is the world itself and be suitable to the world, hence operate over the image means to operate directly or indirectly over the world.*

Franco Farinelli. *The Perspective*

*With the advent of Cartesian logic, however, space has entered the realm of the absolute. As Object opposed to Subject, as res extensa opposed to, and present to, res cogitans, space came to dominate, by containing them, all senses and all bodies.*

Henry Lefebvre, *The Production of Space*. LEFEBVRE, Henri, *The Production of Space*, Blackwell Publishing, Oxford, 2012.

In substitution of the Aristotelian idea of "place", modernity established the use of the notion of "space". As Franco Farinelli pointed out, space became a quantifiable object, which can be measured. This transition would not be possible if in the representation of this new countable reality there had not appeared a new technology. A new set of instruments allowed a new kind of subject: the one who is placed in front of the world, determining it as his study object.

In the 15<sup>th</sup> century, *perspective* appeared together with a new set of techniques, which expanded the western way of seeing. Art, architecture and science were still at the same junction, the one from where the representation and measurement of the world was made and for which a large number of instruments emerged. Those prostheses brought a new way of representing and understanding the world, a novel way of looking at reality: bringing closer the object in the distance, magnifying details of bodies and recording them into the flat surfaces of the paper.

One consequence was that reality was reorganized under the lens of this new vision, producing new rules through the emerging scientific discourse and in fact, a new order. Another one, was that a radical separation happened: the subject, the one who is looking through this new position that emerged through the idea of perspective, was not anymore in reality, which became the object - that space that has to be quantified and measured.

As the world was understood through these new rules, it became mechanised. It was supposed that every single movement, before or after, would be analysed and calculated. Which means: every motion could be predicted. The modern subject, empowered by this knowledge, would believe in his ability to anticipate the future since every signal traces its own possibilities of development. This modern tale was told thanks to the extreme simplification of the abstract writing under the ideal conditions of the mathematicians. However most of the time, reality does not fit to models. Fortunately, the unexpected has plenty of possibilities.

Iza Tarasewicz places her practice in alignment with the branch of physics that problematizes the study of patterns of behaviours in space: the Chaos Theory. This line of scientific thought works under the assumption that dynamical systems are highly sensitive to the variation of the given initial conditions. Small differences in initial conditions (such as those due to rounding errors in numerical computation) yield widely diverging outcomes for such dynamical systems, rendering long-term prediction impossible in general. This happens even though these systems are deterministic, meaning that their future behaviour is fully determined by their initial conditions, with no random elements involved. In other words, the deterministic nature of these systems does not make them predictable. This behaviour is known as deterministic chaos, or simply chaos. From [http://en.wikipedia.org/wiki/Chaos\\_theory](http://en.wikipedia.org/wiki/Chaos_theory). Summarizing, what the Chaos Theory tells us is that an understanding through science is the impossibility of predicting the future.

In order to visualize these systems where chaotic movement is represented, diagrams are used. When a movement appears in the diagram, it is represented though a roving orbit. When this happens, it is said that there is an Attractor. Strange Attractors are elements that influence the behaviour of the reality to be studied, altering the given conditions. In the Chaos Theory, they have structure in all their scales, which follows a fractal logic. We could say that they are catalysts of unexpected possibilities.

The book "Strange Attractors" by Louis Armand, who will present a response to the exhibition at the finissage, also influenced Tarasewicz. This book explores the poetic potential of the language and concepts coming from the Chaos Theory applied to the understanding of layers of reality not necessarily linked to physics. Tarasewicz's incorporation of this poetic license shows an approach more related to a philosophical trajectory rather than an illustration of the concept. With her proposal, she speculates on processes that cover a range of phenomena from the micro to the macro, analysing the representations incorporated in diagrams, statistics and other scientific devices, which magnify details of microscopic reality such as DNA fragments or describe the movements of the weather presented in the Lorenz Attractor, well known as the Butterfly Effect. With these strategies, she rehearses on the tangled and often unacknowledged relations between control and disorder, expected and unexpected, and attraction and repulsion.

The perception of the space unfolded from these models of thought places us in a different situation than the one described in the classical modern approach. There is not an absolute determination. The classical opposition between Object and Subject is not functional anymore. Through this paradigm, a situation is presented where the one who operates the instruments of observation cannot be separated from the object that is observed, the reality. The subject is an inevitable part of the context, constituting a model capable of restoring that radical separation. Tarasewicz's works go into this multi-layered composition with an analysis of Chaos representations and references to the instruments used in physics to produce them. She interweaves a composition between the perception and its representation, producing artworks that restore the relation between the Object and the Subject.

**Lorenzo Sandoval**









**Terrain**  
2014  
canvas, metal  
260 x 140 x 100 cm

The canvas and metal table "**Terrain**" is a flexible hexagonal field that functions as a graph where other objects and artworks come to relate, accentuating similarities and differences. Objects sink into and deform the flat surface, articulating a reciprocal relation between objects and their supposedly neutral supports. A temporary structure redeployed with varying objects and in different contexts, the work is a system of display, a map that is changed by its contents. Objects on surface function more as tools: contingent, temporary, and variable engines of information that chart lines of flight between scales, dimensions, and events, displaying the consequences of entering objects into a system. They are at once representations of micro and macro processes, and bare demonstrations of their own thingness, the result of material properties and constitutive relationships.





**Rate**  
2014  
metal, salt  
40 x 20 x 60 cm



**String**  
2014  
caoutchouc mass, hemp fibre  
40 x 12 x 12 cm



**Strange Attractors**

2014

caoutchouc mass, hemp fibre

15 x 15 x 10 cm



**Force becoming reason**

2014

ash, animal intestines, paraffin, metal

100 x 20 x 20 cm



**Antenna**

2013/ 2014

15 min soundtrack in loop with improvisation of  
Brazilian drummer

Rio de Janeiro/ Berlin

55 x 30 x 155 cm



**Ash and diamond**

2014

ash, epoxy resin, metal

200 x 25 x 22 cm





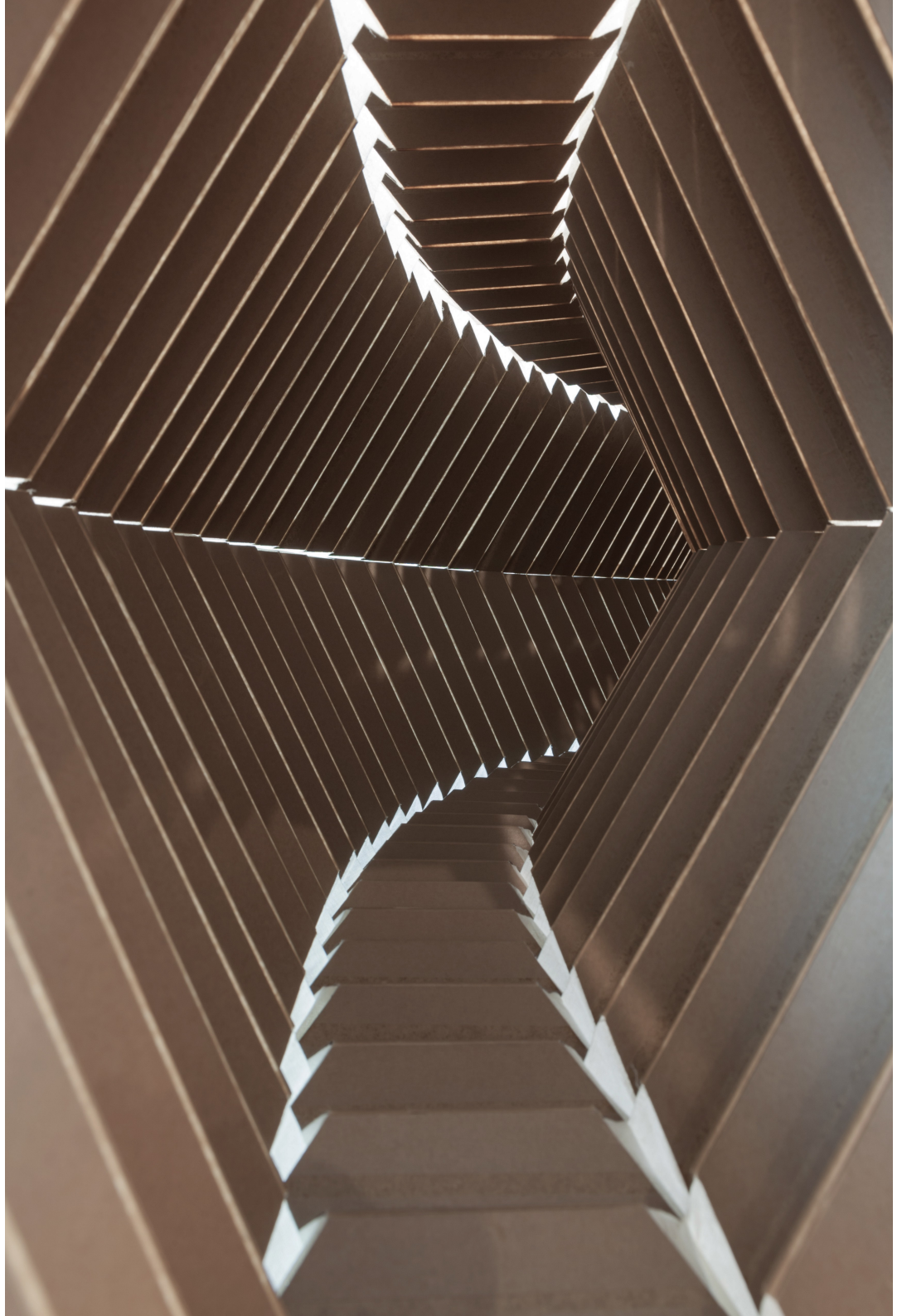
**Dimensional compression**

2014

mdf, canvas

400 x 40 x 55 cm

**Dimensional compression** refers to processes of storage of energy and matter. Inspired by human DNA, the adjustable folded sculpture evokes fundamental architectures known in the biological and physical sciences, but also points to the need to economize vast amounts of information. This work is a tool for data transmission and the structure itself very strongly refers to the idea of multidimensional and parallel realities. Meticulously hand built using craft techniques borrowed from traditional accordion manufacturing, the bellows implies the potential for sound, and silently calls attention to the channeling of waves of information.





**Continuation is important and continuation is a  
matrix and a matrix is a set of possibilities**  
2013/2014  
metal, canvas, caoutchouc, rotation mechanism  
100 x 60 x 250 cm

**Continuation is important and continuation is a matrix and a matrix is a set of possibilities** is a metal tripod structure fitted with a rotation mechanism that rapidly spins a canvas and caoutchouc disc. The device presents a portable and constantly moving black hole that the viewer encounters face to face. The movable blind spot is a reference to the hidden possibilities in the lack of knowledge and subcutaneous sense of the world.





**At the junction of clarification**

hemp fibre, plastic  
230 x 150 cm/ 5 pieces



night view from the street

**Louis Armand**

Iza Tarasewicz, THE STRANGE ATTRACTORS

In 1963 Edward Lorenz, working as a meteorologist, evolved a topological model for "describing" various state-changes in a thermodynamic system during the onset of turbulence. This model, which ostensibly plots sets of coordinates of evolving "chaos," exposes unanticipated patterns in a seemingly random constellation of effects graphed in two-dimensional phase-space. The locus of these emergent "patterns" is known as the "strange attractor" and has a characteristic visual representation which resembles a convoluted multi-skeined cross-section of something whose contour suggests a Möbius strip or feedback-loop set in a kind of oscillation around an imaginary axis—imaginary because it only exists as a product of a statistical procedure. The distinctive feature of the Strange Attractor is that the patterns it describes never intersect—their vectors are non-repeating.

The Strange Attractor gives a representation not only to relationships between apparently random phenomena (such as turbulence), but also provides a visual analogue to relations across scales and dimensions that are otherwise not representable. A key facet of Chaos Theory is the idea of "sensitive dependence" in which micro-scale perturbations produce systemic macro-scale effects. By giving a 'representation' to these relationships, the Strange Attractor both de-mystifies and de-trivialises the causal nature of local and global phenomena. To a certain way of thinking, the Strange Attractor is a map of "possibility" conceived in radically stochastic, probabilistic terms. That is to say, the Strange Attractor is a kind of cosmic operator in which perturbation and indeterminacy are the driving forces of what we perceive as structure, from the quantum level, to the universal.

For Chaos theorists like Robert Shaw, Strange Attractors are "engines of information"—information which is counter-intuitive, irreducible, non-predictive, which tells us, so to speak, something "new." It is no surprise that the idea of the Strange Attractor exercises an appeal in the cultural sphere, and to a discourse that is both compelled and directed by a desire to explore the "new" in ways that attempt to avoid trivialisation. Iza Tarasewicz's work belongs to precisely such an exploration. It is an informatic art in the sense that it undertakes the production of "new" forms, it contributes new information in a cultural discourse constantly beset by entropy. There is nothing tentative about the emergent character Iza Tarasewicz's "Strange Attractors." Each is a kind of dynamic system, manifested in three-dimensional phase-space: duration objects, armatures of forms, collapsed extra-dimensions—collapsed in the sense of being made visible, implying formulations of space that are invisible.

Iza Tarasewicz's work invites us to envisage "possibility"—not implied possibilities, other possibilities, unrealised possibilities, but—like Eva Hesse perhaps—the formal lineaments of possibility as such. The Strange Attractor is both a thing and a dynamic system, it is the presentation of an unrepresentability. To the eye-mind as it encounters these works, there is a conceptual permeability: the materiality of each of these objects is in effect an accordion space, a "wormhole" between bifurcated perceptual fields, topologies of sense that cannot be contained in the act of observing but instead offer a way of seeing. Filaments, strings, light-modulators, microscale environments which evoke macroscale events enclosed within them like Klein bottles, infinities contained within the weave of a fabric, for example, or a shadowed "distortion" of navigable space, "hollowed-out" or solidified according to variable densities. In this way, too, the entire installation, with its arrangement of particularities, constructs a cosmos. A "gravitational" field in which the body of the viewer defines a mobile potentiality—the locus, both "real" and "imaginary," of these Strange Attractors.

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