

Beyond the cosmos. Redesigning the confines of a system.

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“It is possible to find the most exotic small rocks in the entire universe in your roof’s rain gutter”.
Jon Larsen, stardust hunter and musician.

In the mists of time, when everything seemed to be darkened by suspicion, there was only one certainty for the human being. Some called it religion, others science and the most daring among them literature. All of them tried, in different ways, to shed light on the great mysteries that surround us. The darkness of an outside world that we cannot know. The fear of an outside enemy. The temptation to go where only the dreaming mind has ventured. The fear of being colonized by a superior power that is not the human species. The desire to treasure the unattainable. All these fears and longings of the human being are entwined with the search of a truth. A plausible certainty where the investigation of the cosmos and the race for progress and technology, finally, would endow the human species with the weapons and strategies for a conquest beyond outer space.

Being perturbed by the greatest of mysteries, by the lack of knowledge of the universe, and longing for an unattainable power, the human being has perpetuated his legacy at every step. Therefore, every advance and discovery has been celebrated in history, embedding every achievement in it since the human being has always thought of himself as being the centre of a divine creation, and not part of a whole. Thus, he has seen everything surrounding him as an object to conquer. Nevertheless, the adventures as well as the purposes have changed: from the interest in the astronomical studies of celestial events, preceded by mythology in classical times, to nuclear war and the space and arms race. However, everything has an origin and this one can be found in an abyssal field full of stars. This way, the initiation of an outer journey into the depths of our origin has become the most belligerent business of states and nations in the last century. This outside world has been understood as a threatening nothing, since the ignorant fears to be swallowed. Though, this nothing is replete with everything and it is known as the cosmos. And it is here where we can observe the harmony of life in all its dimensions. The cosmos has been revealed to us through the studies of science but also through the illusion of fiction. To create truth out of the knowledge of the cosmos, we need both imagination and scepticism. Alexandra Knie (Mechernich, 1984) aims to combine both qualities in the designing of bacterial microorganisms or microcosms and through the reconsideration of the macrocosm as well as the formulation of the planetary system.

This approach, which seems to unite certain opposites such as speculation and truth, imagination and scepticism, created a divide between those who defended the transparency of science over the ambiguity of fiction or science fiction literature.

Meanwhile, others aligned themselves with mitigated scepticism and considered literature a space of manifestation to shed light on possible scientific creations. This can also be observed in *In-between – Microcosmo y Macrocosmo*, Alexandra Knie's exposition in the Centro del Carmen, where fiction assumes a fundamental role to approach science. In this exposition, Knie explores, just like travellers in the universe or stardust hunters, a series of objects of unknown origin. On the one hand, we can find the continuation of all her previous work of recent years where the German artist is drawing inspiration from viruses or the medical and biological chain that unites the human being with a molecular whole and which is on display here in the form of new pieces.

And on the other hand, the design of a series of particles whose origin can be found beyond the Kuiper belt and which come to earth as pieces of the universe's natural history. As Carl Sagan would put it, "the cosmos is all that is or was or ever will be".

The elements scattered throughout the universe may deceive us on different levels, generating a certain vertigo comparable to the dance of the spheres. Here everything comes together: the small and the big, the concrete and the general, the near and the distant. Thus, we can recognize elements of a determining singularity under the lens of our microscope in a larger system such as the earth, or the latter in contact with our macrosphere, known as our galaxy, and later in an approximation to a superior scale with the universe. And in a certain way the cosmos repeats itself in all its variations. The particles that we discover on our planet or those that arrive from the outside are just a lightning of the cosmic storm beyond the earth. A storm of life, knowledge and strength that we cannot even imagine, let alone know. This room for uncertainty is what Knie expresses with respect to her viral particles or stardust. Since within this inaccuracy we can speculate about what lurks around us, what surrounds us and what we cannot know. In fact, this has been done by scientists positing their hypotheses and writers telling us about possible worlds. In this way, our artist positions herself in-between where science and fiction intersect, to create or define new formulas of real or imaginary objects. Based on real scientific events, she proposes several alterations to certain research objects mainly deriving from microbiology and, especially in her present work, to objects of astronomical science. In fact, Knie's embroideries speculate on the design of new worlds, new ways of life and new ways of organization. Therefore, her patterns try to break the fragile line of truth transcending boundaries to create new schematic concepts.

But how could the outside be defined that it amazes us to such an extent? What could be understood as breaking the pattern? What do we call outside? It seems that this series of questions will lead us to the same frightening questions on which researchers and scientists founded their career. And we continue to ask ourselves: What would happen if we were no longer protected from the outside? If the prophylactic barrier that we have tried to build through an aseptic world was teared down, we should consider that perhaps a micro-organic and micro-inorganic invasion has already crossed any interior-exterior border, disrupting that distinction. That is, breaking down the distance that we thought impassable.

In 1969, the film *The Andromeda Strain* was released based on the novel by Michael Crichton. It tells a science fiction story inspired by a true event that approaches the origins of Alexandra Knie's project. In the film as in the novel, a satellite lands back on earth carrying an unknown virus that leads to the death of the local population. To discover its extra-terrestrial substance and the reason for the deaths, a team of researchers is set up, among them the microbiologist Ruth Leavitt. She is able to observe in Andromeda, the name given to the virus, a form of autonomous life. Andromeda has a crystalline structure, just like the viruses that Knie designs in her laboratory-loom. And like the cinematographic virus, they evolve, breaking patterns and infecting everything that seems established. In fact, when Alexandra Knie presents virus samples in Petri dishes or under the microscope and later the supposed scans of nuclear-based micrometeorites, we observe how the grid that would possess such crystalline structure is broken up.

These pieces try to break the pattern to show a different type of behaviour. One that derives from a way of life that lies beyond the already known and that is in constant transformation. The artist tears the crystalline mesh, the structure that normally shapes these microscopic figures, and in other cases deforms them suggesting their possible alteration. In this way, any object that Knie works on seems to take shape under the thread that entwines imagination and reality. For that reason, we could say that she suggests we go beyond the confines of a system, be it the pictorial one through embroidery, the scientific one through fiction or the macrocosm through the transformation of the microcosm.