POLISH
PAVILION
IN VENICE

WHATHATHGODWROUGHT.
Kuba Bąkowski

curator: Przemysław Strożek

Documentation submitted for the competition
for the curatorial project for the exhibition
in the Polish Pavilion at the
59th International Art Exhibition in Venice in 2022

Concept of the Exhibition

The title of the project *WHATHATHGODWROUGHT* ("What Hath God Wrought") was taken from the biblical verse from the Book of Numbers and is identical to the text of the first machine code sent by telegraph by Samuel Morse on May 2, 1844. It looked like this: - .... .- - .... .- - .... --. --- -.. .-- .-. --- ..- --. ....-. The coded verse "What Hath God Wrought" points to scientific discoveries of pioneering ways of technological communication and at the same time to aspects of the creation of the world.

Morse code, the first of the methods of telecommunication language representation, is used in Kuba Bąkowski's project by sculpture-machines. They represent figures of biomechanical hybrids. Their shape resembles marine invertebrates, fragments of abandoned devices, three-dimensional models of bacteriophages and other microscopic life forms. They create an electromagnetic communication channel between each other through artificial intelligence. They are kinetic sculptures controlled by it, capable of moving elements of their own construction. The notation and rhythm of the dots and lines of the biblical verse code WHAT HATH GOD WROUGHT are processed by the programs controlling the sculptures and are interpreted in the form of video projections. The letters of the code become an alphabet and a channel of autonomous communication between he three sculptures. This machine-like conversation is revealed through the kinetics of the objects, the sound accompanying their work and the rhythmic projection of the modified text. The projection is displayed on two large screens.

The *WHATHATHGODWROUGHT* project shows the humanistic dimension of natural and technical sciences. Contemporary research on communication between organisms and machines provokes questions from the fields of psychology, philosophy of language, natural sciences and research on new forms of culture. At what level of advancement of biological structure and machine code algorithms can appear the emotional states and, consequently, the need to communicate sensations? To what extent will the interpenetration of modern technoculture and nature lead to the production of new forms of communication? To what extent are these questions valid in relation to biomechanical entities or synthetic creations of digital reality, such as virtual organisms and self-organizing programs?

Kuba Bąkowski's project is in line with the main theme of the Biennale: The Milk of Dreams, taken from the short stories of the British surrealist Leonora Carrington. This year's edition aims to explore a "magical world" in which nothing is stable and everything is subject to constant modification. The exhibition space *WHATHATHGODWROUGHT* blurs the boundaries between nature and technology, science and poetic narrative. The project simultaneously echoes Stanisław Lem's short story Terminus and Philip K. Dick's "Valis Trilogy". In Lem's short story, Morse code is the only available means of communication for astronauts trapped in a damaged spaceship, and the witness to this event is a damaged android who subconsciously recreates their conversation. In the "Valis Trilogy" on the other hand, the figures of the Bible and Torah are an important element placed in a four-dimensional space-time continuum.

The viewer at the exhibition witnesses a kinetic-audiovisual exchange of energy and information between the three mechanisms. The exhibition space becomes part of a special environment in which the biblical verse from the Book of Numbers, used over 150 years ago by Morse in the first act of telecommunication, merges with modernist experiments of language and becomes the subject of autonomous actions of artificial intelligence. The exhibition *WHATHATHGODWROUGHT* deals thus with timeless desires and ways of communication between man, the natural environment and the technicized world. At the same time it points out that inanimate beings, such as artificial intelligence, are becoming more and more autonomous and conscious,and therefore an important element of this world.

Short scenario of the exhibition

Three objects are placed in the central part of the exhibition space of the Polonia Pavilion.

Sculpture no. 1 / **Bacteriophage** is 3 meters high. It is an interpretation of the structure of bacteriophage - a specific form of a virus which attacks biochemical communication systems of a bacterial cell in order to reproduce genetic information.

Sculpture No. 2 / **Sea Anemone** is an object with geometric spears in the form of a hemisphere with a diameter of 1.75 meters. It resembles the shape of an anemone or other anatomically similar organism of a coral reef environment.

Sculpture No. 3 / **Eag**: is about 1.25 meters high. Its shape resembles an elliptical insect egg covered with stiff spines suspended on a pantograph in the center of the pavilion.

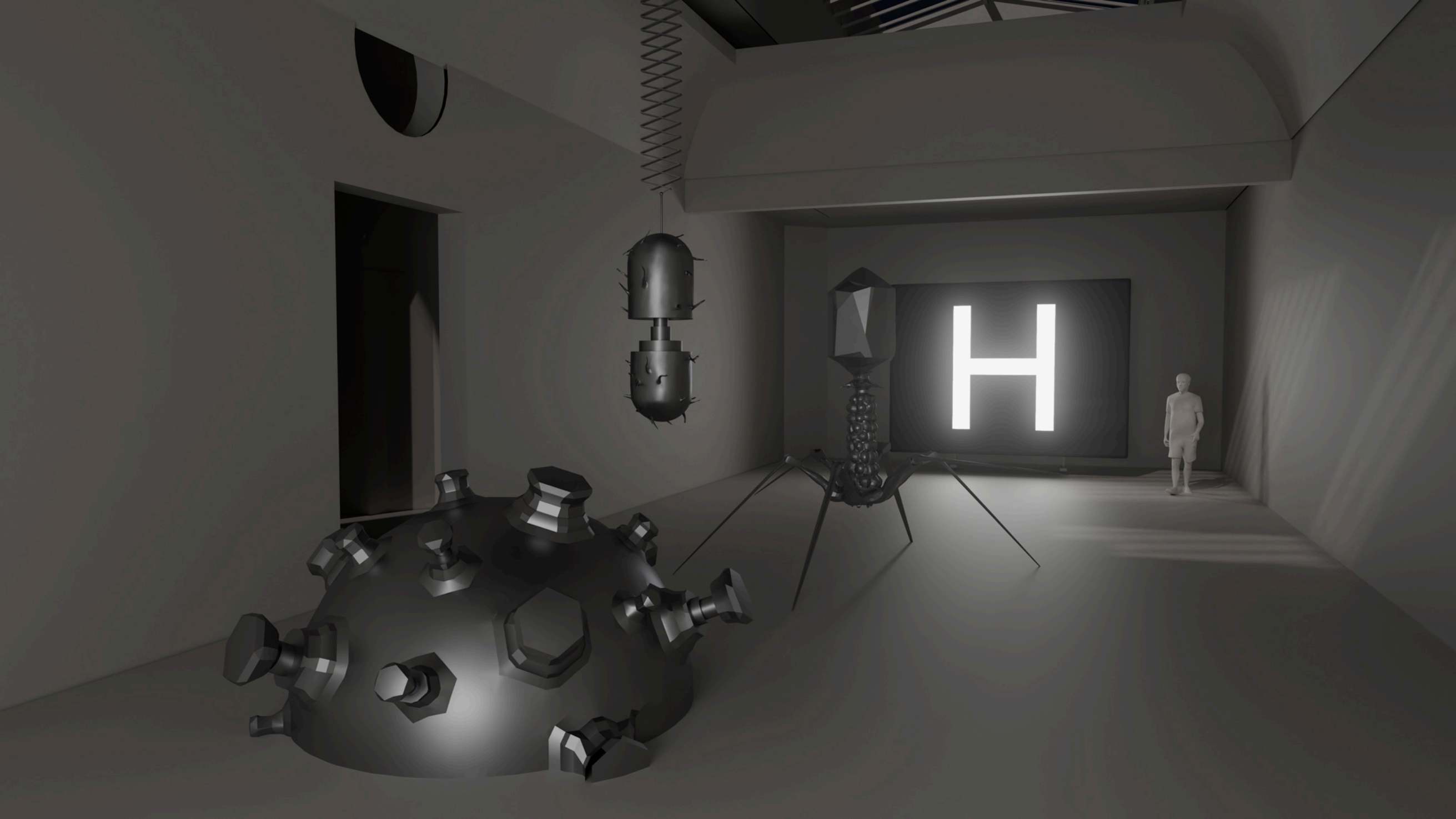All these objects are kinetic sculptures controlled by artificial intelligence algorithms. Their movements are accompanied by video animations. These projections are created live from the letters corresponding to the characters of the first Morse code sent on May 2, 1844: WHATHATHGODWROUGHT "-.... .- - .... .- - .... --. --- -.. .-- .-. --- ..- --. ....-".
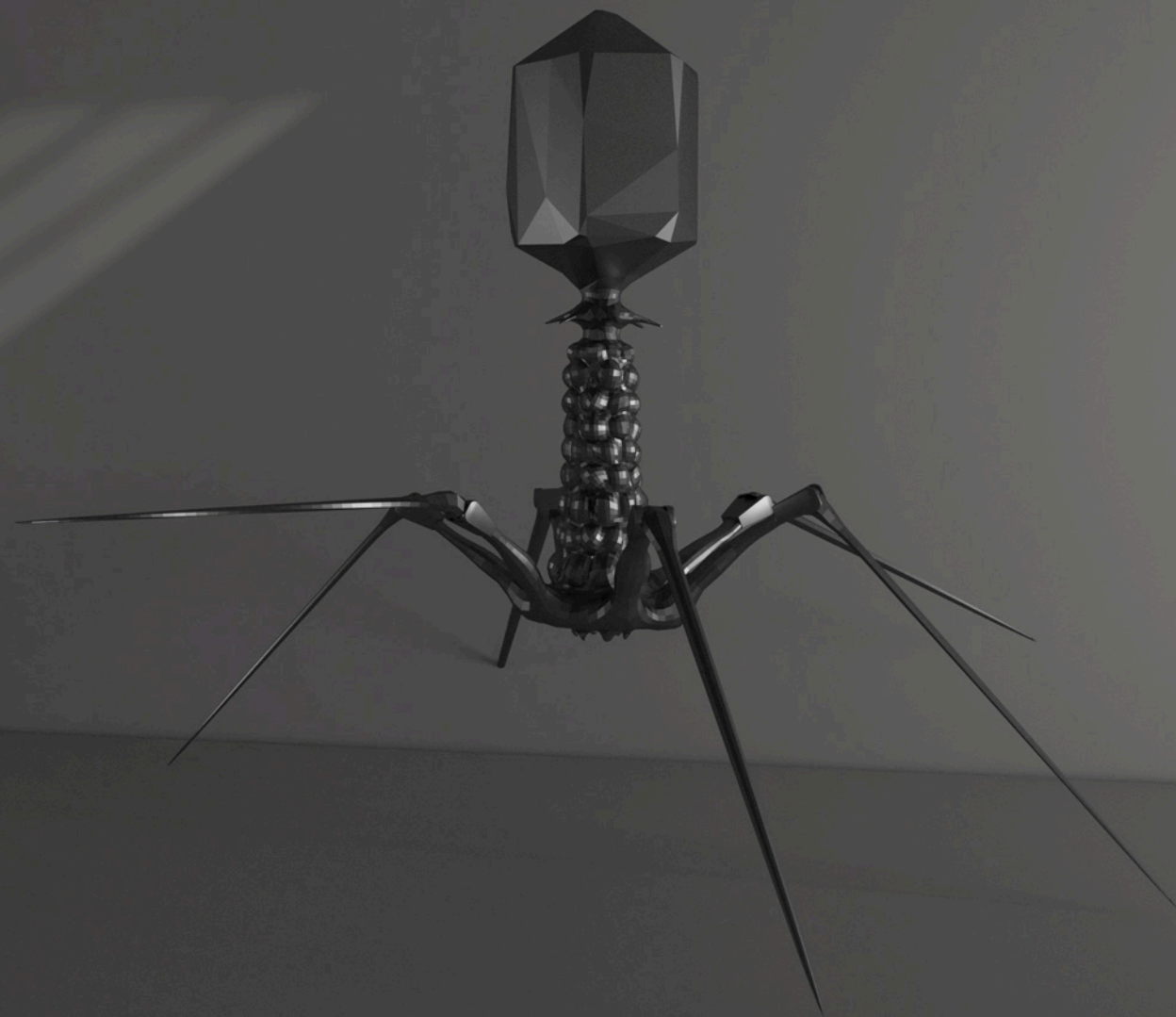The notation and rhythm of the code's dots and dashes are reproduced by the movements of the sculptures. They are visualized as projections of changing sequences of letters and words. The projections are shown on screens placed in the spaces of the Pavilion to the left and right of its central part. This works in such a way that through the so-called machine learning the artificial intelligence acquires a set of code elements. It then treats them as characters of its own alphabet. A self-modifying algorithm analyzes the original sentences and breaks them down into sequences of letters and formed words. This "electro-semantic" communication manifests itself in sudden changes of the sequence of words and letters on the screens. The rhythm of the code is emphasized by the sounds made by the working sculptures. Sequences of movements, the sound of working servo motors and projections pulsating with light create the audiovisual environment of the exhibition.

The exhibition is accompanied by a curator-edited publication on scientific and cultural modes of communication. The compilation will include texts on the philosophy of language, anthropology, the functioning of new media and issues in the area of futurology, as well as critical interpretations of cultural texts and fragments of literary works, including concrete poetry.

The project in the Polish Pavilion is a part of Kuba Bąkowski's artistic practice. He creates, among others, hybrid figures, which he calls sculptures, by juxtaposing and combining seemingly incompatible elements. Like his other projects, the sculptures in the *WHATHATHGODWROUTH* project are a particular attempt to adapt research procedures to artistic practice. Kuba Bąkowski collaborates with scientists, engineers, and machine constructors. He is the creator of the software-controlled kinetic sculpture *I Do Not Pay For My Pleasure*, which uses Samuel Morse code to communicate with the audience (collection of the Wrocław Contemporary Museum). He also created a large-scale installation *Dust Eater*, which is able to clean the city air of the most harmful smog particles, and communicate measurements of its quality on mobile and desktop devices. The last show of this realization took place in 2020 at the exhibition in New Normativity. Art Symposium Wroclaw '70 at the Contemporary Museum. The artist has knowledge, experience and contacts in the circles of programmers, engineers and constructors, which will enable the realization of the *WHATHATHGODWROUGHT* project.
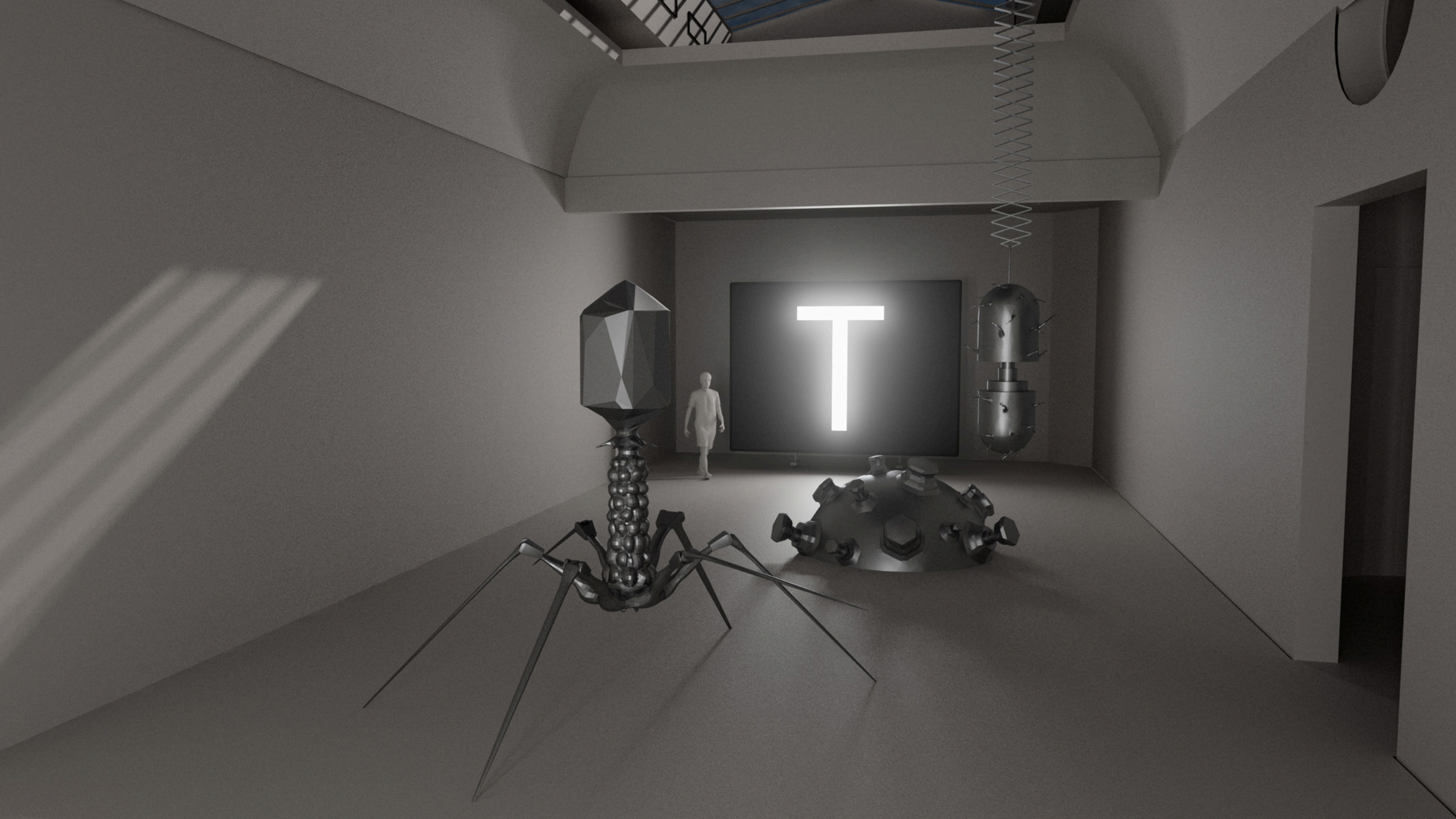
Kuba Bąkowski has presented his works at exhibitions at Zachęta National Gallery of Art, Centre for Contemporary Art Ujazdowski Castle, Foksal Gallery in Warsaw, Museum Moderner Kunst in Vienna, Musée d'Art Moderne in Saint-Etienne, Art Space in Sydney, Palazzo delle Arti in Naples, Royal Scottish Academy and Chelsea Art Museum in New York, among others. He has received fellowships from the Ministry of Culture and National Heritage, the National Centre for Culture, the Trust for Mutual Understanding (USA), the Royal Scottish Academy (UK) and the Conseil 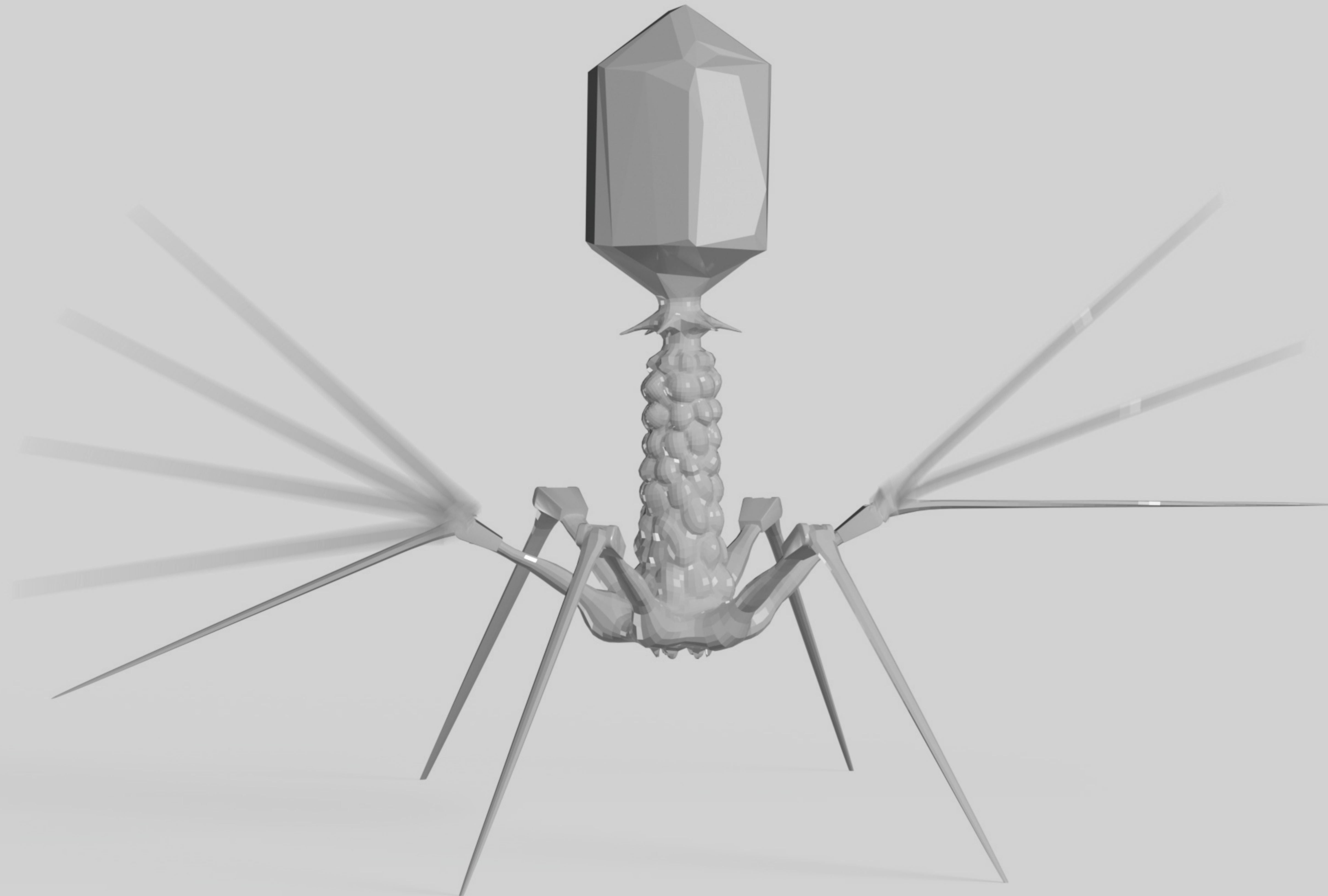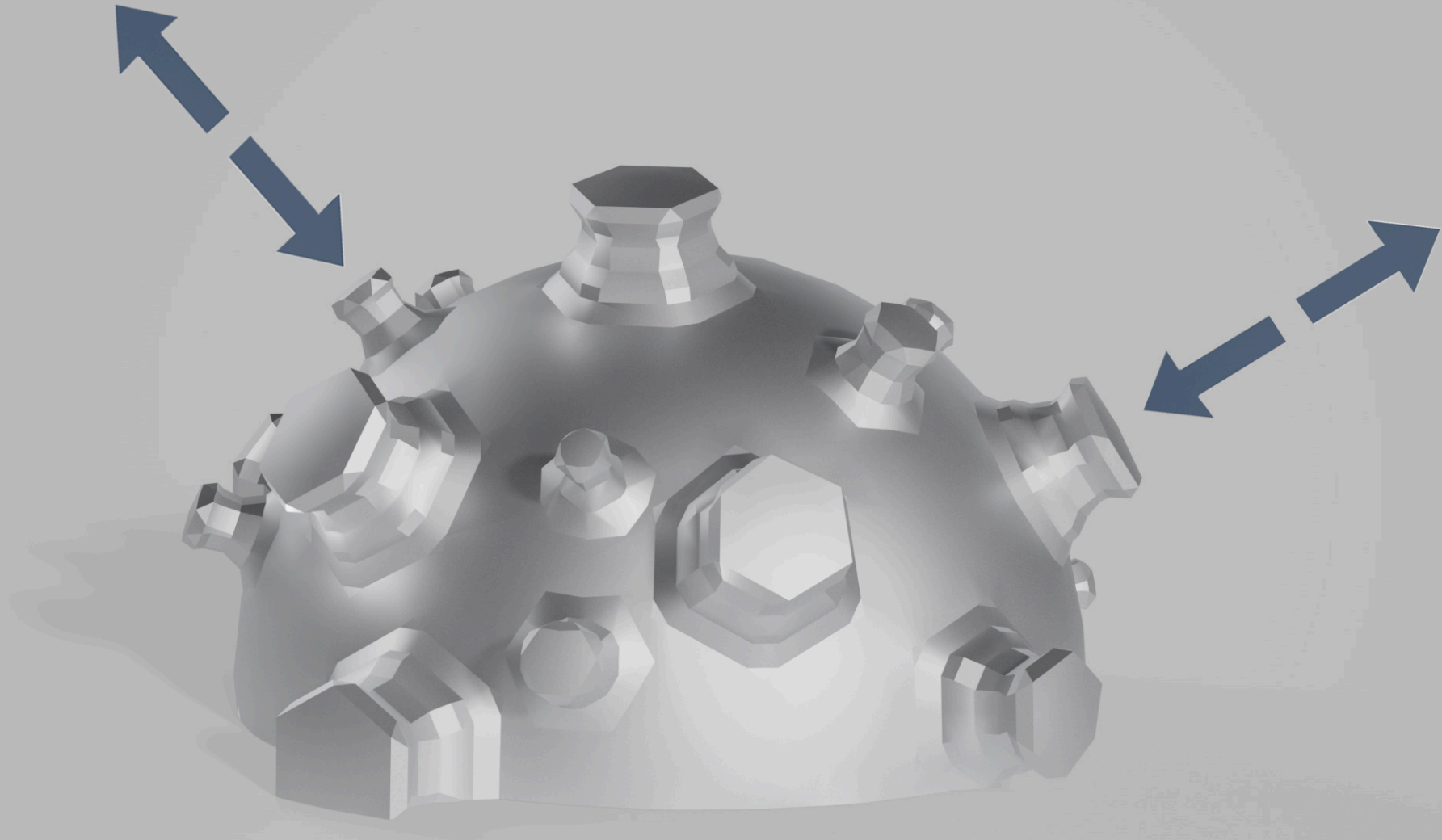des art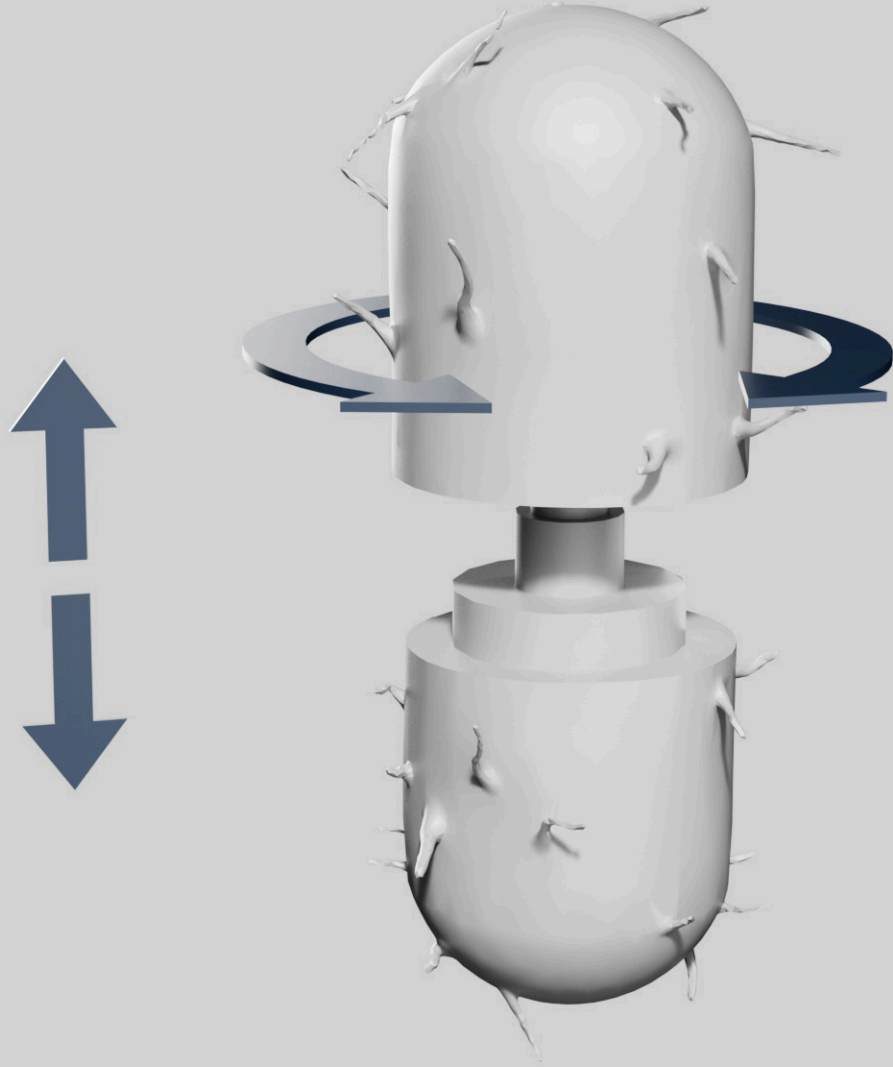s et des lettres du Québec (Canada).