

## **Thijs Ebbe Fokkens, dreaming about art and science.**

By Michael van Hoogenhuyze

Art and science are, often unintentionally, connected. In science we can find aesthetic, ethical and emotional aspects where ideas from art can be significant. The relationship between artistic and scientific thinking is reflected in notions such as 'the connection between truth and beauty' and 'simplicity as the hallmark of the truth'. A specific beauty can be perceived in the search for a consistent model of the cosmos, based on a clear system of scientific laws. The beauty of systems can inspire artists, like those that manifest themselves in the shapes of crystals or the growth patterns in organisms. The heroic stories of scientists continuously searching for new discoveries and possibilities to escape from the restrictions of old ideas and visions are important for art. The ideal of the hero, the explorer or inventor, can be a role model for the individualistic artist, trying to change our vision of the world. And as results are often shown in presentations and demonstrations, the practice of science also has a theatrical character. We can see it for example in the anatomical amphitheatres at the European universities in the Renaissance and Baroque era, as well as in the shows and demonstrations of science, for the outsider, in the 'salons' of the eighteenth century.

So the beauty of order, the striving for openness and change and the theatrical aspect are inspiring for the arts. The connection of science and theatre is particularly ambiguous. The goal of science is the truth. In theatre it is necessary to play and to imitate. In some sense you can say that it is permitted to lie in theatre. In science it is not. When people in science indulge too much in the theatrical aspect of their presentation, their activity may end up being beautiful but deceitful rather than faithful to the truth. Or can it be that the beauty of the presentation refers to a kind of deeper truth? We have to be careful here.

The mingling of truth and design, of discovery and storytelling, in demonstrating scientific experiments, can be seen in space exploration. In 1986 the space probe *Giotto* approached the comet *Halley* at a distance of 400 miles. This moment was shown on Dutch television in 'real time'. It was an exciting moment. We saw photographs that were taken minutes previously and immediately sent to earth. These photographs were computer translations of the comet, beautiful but not understandable to an outsider. These images were alternated with images of the technicians in Darmstadt and the reporters in the studio. It was not clear *what, where and when* you were watching, but it was a great show. A more extreme example concerns the walk on the moon in 1969. There are rumors it did not happen at all, that the whole thing was shot by Stanley Kubrick in a studio. When we turn science into theatre and entertainment, immediately the question about truth arises. In art, however, we can postpone the question about truth for the sake of beauty and poetry.

One of the oldest stories about a discovery, you can call it a primal myth, may very well be the story of the soldier called *Er*, written by Plato in his book *The State*. *Er* was killed, but after his death he had the opportunity to see how the machinery of the cosmos worked, and what happened with the souls of deceased people. After these discoveries he was allowed to go back to earth to tell other people what he had seen. Plato had to use a myth to make his theories understandable. In his mind there had to be an ideal point from which you could get a view of the entirety and understand the world and life. After the story of *Er*, a lot of literature with the same subject followed. The best known in this field is the *Divina Commedia* by Dante. But, during the following centuries, many more texts and fantasies were published, and continue to be so even today. Reports about near-death experiences, for example, or science fiction creations like *The Matrix* movie. It doesn't necessarily have to be a very dramatic adventure though, as Argentinean writer Jorge Luis Borges describes in his story *The Aleph*. In this case, the ideal point, the Aleph, can be found in the cellar of an ordinary house. From there you can see everything simultaneously, clear and unmingled.

It is fascinating to fantasize about an ideal point of view from which everything can be known. But the concept of such a point has become more and more difficult. Nowadays we can no longer think of a model to show the world in an understandable and complete way. Since the quantum theory it is no longer possible to imagine matter and energy in a tangible visual representation. Moreover, the world is infinitely complex and we are at an accidental moment and point in this unimaginable big space. The world is not a planetarium anymore. So when we want to understand something of the cosmos, a more ambiguous and fragmented kind of presentation, like we see in contemporary art, is needed.

One of the places for advanced scientific research is the laboratory of the CERN (European Council for Nuclear Research) at Geneva. There, a particle accelerator was built, a huge circle as big as a town, to discover new particles. We cannot see it, because it is a hundred meters under the ground. And, for an outsider, the experiments are difficult to understand; they are about the smallest particles in energy and matter. The scientists assure us that their discoveries will lead to a new image of the cosmos. They are open in their efforts and try to convey their significance in newspapers and on television, for it is not a secret project. But at the same time it is not understandable. Considering the questions and the proportions, it is a mythical project. The CERN has a strong poetical power.

This poetical power can be recognized in a few elements. The laboratory has the shape of a circle. A strong form often used in representations of the cosmos and the system of the sun and the planets. It is a shape with religious connotations even, but also that of an amphitheatre. The research in Geneva is about the most fundamental questions in physics. It combines extremely big laboratories with the smallest particles we can imagine. A laboratory gives the feeling of openness to new possibilities and new discoveries. Thus, a laboratory can become the dreamed environment for an artist. Compared to the artist's studio as merely a place to produce works of craftsmanship, the laboratory is a place for research and reconfiguration. There, scientists share their results in demonstrations, which may become poetic spectacles along the way.

Thijs Ebbe Fokkens shows us his dreams about science. He uses the poetical power of the circle, and makes constructions and models, which remind of amphitheatres. In his detailed drawings people are shown working in some kind of mysterious ritual. When depicted in photographs the suggestion of an 'actual occurred event' is even stronger, because of the nature of the medium. Sometimes he builds the constructions in space using rough wood in a primitive way, stressing the material aspect of his work. But he can also use light as drawing material, making things more ephemeral, mysterious and abstract.

Fokkens' work is connected with the sources of avant-garde, the sketches of the architect Tatlin, the *Light Space Modulator* by Moholy Nagy and the visions of Constant for his project *New Babylon*. Like Constant, he 'collects' the documents and the images to prove the existence of his fantasy world. But in the work of Fokkens it is a poetical fantasy more than a vision of a utopia. He deliberately avoids - or plays with - these kinds of statements and questions about truth, for doing so provides space to contemplate and wonder. The optimism in his work is the fact that he discovers the poetical power in the reality of science.

He tries to collect the documents, drawings, models and photographs to prove the existence of the ideal point of observation, 'The Aleph'. These documents form a collage, not a closed system. They stress technology and science but give the means to dream.