## Dream Machines A Conversation with Theo Jansen



## BY CHRISTINA LANZL

In 1990, Dutch artist Theo Jansen began creating Strandbeests, or "beach animals," an interactive and dynamic, wind-driven life form that roams on the beach. Skeletal in structure and mechanical in nature, these large-scale kinetic sculptures bridge the realms of art and science. The Strandbeests, which are made of simple materials including PVC pipe, plastic water bottles, string, and canvas, have been evolving into various species, complete with Latin names and described by a vocabulary gleaned from the protocols of scientific terminology-tonguein-cheek but to the point when it comes to explaining what Jansen does and intends. His refreshingly simple explanations offer layers of complexity to everyone who experiences the work. Jansen, who has presented at several TED conferences, has been profiled by the New Yorker and the New York Times. He has shown extensively in Asia and Europe.

Several Strandbeests are currently traveling the United States, following their premiere at Art Basel Miami Beach in 2014. Artist sketches, facilitated demonstrations of the creatures' complex ambulatory systems, a hall of "fossils," as well as photography by Lena Herzog accompany the works. After debuting at the Peabody Essex Museum, the show traveled to the Chicago Cultural Center; it is now on view at the Exploratorium in San Francisco through September 5, 2016.

Animaris Adulari, 2012. PVC, 3.2 x 5 x 2 meters.



Above: Animaris Currens Ventosa, 1993. PVC, 4 x 24 x 8 meters. Below: Animaris Percipiere, 2005. PVC, 2 x 11 x 2 meters.

**Christina Lanzl:** You are Dutch and therefore surrounded by coastal culture. Which part of the Netherlands did you grow up in? Where do you live now?

Theo Jansen: I grew up in Scheveningen, a beach village, where my mother owned a bed and breakfast. I am the youngest of 11 children. When I was 20, I moved to Delft, a city located about 15 kilometers inland, where I studied physics from 1968 to 1975 at Delft University. After seven years, I left the university without finishing my studies and became a painter. I lived in Delft for 45 years, and two years ago, I moved back to Scheveningen.

**CL**: The Strandbeests blur art and science, sculpture and performance. These kinetic works are based on a skeletal structure. Is that what inspired you to think of them as animals?

**TJ:** As an artist, I believe that the walls between art and engineering exist only in the mind. My work is informed by nature and not so much by art itself, unlike most art these days. I want to discover things, not make art for art's sake. I try to influence how people look at the world. The Strandbeest idea germinated slowly, rooted in my mechanical engineering background and



popular computer programs with a surviving animal theme. You might consider my works materialized computer beasts. We humans are machines, very sophisticated machines.

I create new forms of life, not with pollen or seeds, but with yellow plastic tubes. I make skeletons that are able to walk on the wind, so they don't have to eat. Over time, these skeletons have become increasingly better at surviving the elements. Eventually, I want to put these animals out in herds on the beaches, so they will live their own lives.

Thinking of the Strandbeests as animals allows me to bring viewers into contact with another world. My work can change how people look at the real world, and so I hope, they are encouraged to approach it with more imagination. For example, my Strandbeests have

TOP:



Above: Animaris Rhinoceros, 2004. Steel framework and polyester skin, 4.7 x 6 x 7 meters. Below: Animaris Percipiere Primus, 2005. PVC, 2 x 11 x 2 meters.



many legs, so they won't lose balance or blow away in a storm. I have calculated that a dozen legs would be the ideal number, but they may have more depending on size or mechanics. My aesthetic intent is not to make "nice" animals. Rather, the aesthetic is driven by the mechanical purpose of every tube.

CL: You organize beach sessions, which are essentially public demonstrations. Have you ever lost a work because of the wind?TJ: Every summer, I schedule Strandbeest performances on the beach. Unexpected things can happen when you go outdoors, particularly

near the ocean, where conditions can change quickly. Occasionally, I have to reschedule an event due to a lack of wind. Once, a fiveminute storm ruined a herd of seven animals. They were blown a kilometer away. The storms are very destructive, but over the years, the Strandbeests have learned to survive them better.

**CL:** You are fascinated with evolutionary processes. Do you see yourself as a kind of archaeologist resuscitating extinct species? **TJ:** Normally, evolution has millions of years in which to take place, but I may only have another 20 years to work. I am always dreaming



Above: *Animaris Umerus*, 2009. PVC, 4 x 11 x 2 meters. Below: *Animaris Siamesis*, 2010. PVC, 4 x 10 x 4 meters.



about the future of the Strandbeests. By the time I leave the planet, I want to leave a new species. I am not interested in conceiving a dinosaur or in copying things. I am more interested in creating a new nature. In fact, my animals are based purely on function. They are mechanical machines, you could say. The resemblance to extinct animals is coincidental. I believe in the principles of evolution. Extinct species are a wonderful thing, but I want to create something new. The works have a very short lifespan. They all become fossils. The life cycle of an individual Strandbeest may be restricted to one year. However, I have devised a reproductive process with the help of assembly kits.

**CL**: *Are you able to repair the Strandbeests? Do you ever rebuild a deteriorating piece?* **TJ**: No. The Strandbeests are not very sturdy, though their survival is improving. I don't like

to repair. I don't want to be a doctor. I want to be a god. But, of course, I have to do these stupid repairs sometimes. Usually, I start building an animal in October and bring it to the beach in the spring. Then, during the summer, I perform all kinds of experiments trying to survive the storms, the sand, and the water. I learn a lot during the summer. Finally, in the fall, I declare the animal extinct. It goes to the bone-yard. Nowadays, the fossil animals appear in exhibitions that aive insight into the process of evolution. During an exhibition, we can reanimate a fossil animal by pumping up its wind stomach with a compressor. Then, it can continue to walk on the compressed wind. My creative nature is always seeking a new challenge, always in pursuit of a new life form. CL: A recent work, Animarus Umerus Segun-

**CL:** A recent work, Animarus Umerus Segundus, debuted as part of the U.S. exhibition. Can you talk about its germination? How does it relate to previous designs?

**TJ:** Animarus Umerus Segundus has a special drive system, which didn't work very well on the beach. But it survives quite well on museum floors. The animal moves forward because pumps push its shoulders apart. It works just like a steam machine. On the uneven surface on the beach, this drive system tended to break the animal's back. Animarus Umerus Primus was a suicidal animal. So Segundus is specially made for museum floors.

**CL:** Could you tell me more about the U.S. exhibition tour?

**TJ**: It includes five large kinetic sculptures, three of which have been in the U.S. since their appearance at Art Basel Miami Beach in 2014. In addition, I developed two new works at my studio in Scheveningen. One of them was finished on Crane Beach, several miles northeast of Salem.

Art Basel was my first large event in the U.S. Trevor Smith, guest curator for "Oceanfront," an outdoor exhibition of large-scale sculptures in an open lot along Miami Beach Drive, invited me to participate. Additional partners were Art Basel Miami Beach, of course, and a luxury watchmaker corporate sponsor, Audemars Piguet. During my threeweek stay in Miami, I led demonstrations along the beach with *Animaris Umerus Segundus*, as well as the 42-foot-long *Animaris Suspendisse*. I also worked with Trevor,



Animaris Gubernare, 2011. PVC, 4 x 10 x 4 meters.

in his role as Peabody Essex Museum curator, on developing the concept for the traveling exhibition and prepared a crew to move the works across the country. Our goal became to show the animals in action, because motion is what brings my work to life.

CL: You offer miniature assembly kits, including the Animaris Ordis Parvus. *The model resembles a caterpillar* with a propeller at the front, and it can be driven by the wind or quided manually. I am reminded of when my siblings and I built animals and structures from Legos or Fischer erector sets. Any moving parts were a great fascination. How did the assembly kit idea come about? TJ: People were saying to me, "You don't create real life, as long as the animals do not reproduce." So, I began building small reproductions of the Strandbeests. The big secret of making the Strandbeests is the length of the tubes, which are defined by a series of 13 numbers. This system is the DNA code of the Strandbeests. I published this code on my Web site, and since then, thousands of students have been building Strandbeests with it. All of these people think they are having a good time making Strandbeests, but in fact, they are contributing to their breeding. So, now the Strandbeests do reproduce, but they use humanity to do it. In Japan, a publisher sold 60,000 reproductions of the beasts - an unbelievable number. To me, this indicates that folks there are infected with the same virus that infected me a long time ago. They cannot do anything else but make Strandbeests.

CL: Your earliest investigation in the public sphere was in 1980, when you flew a UFO across Delft. What happened, and what inspired you to build a flying object? **TJ**: I like to blur the boundary between imagination and reality. The UFO project allowed the people of Delft to experience the world from a different perspective for a few days. I remember that the launch was on a hazy day. The contrast of the black UFO against the surrounding sky was so strong that the object appeared to have no depth. People just saw a flat black disk moving across the sky, and this was how the UFO rumor started. It was impossible to estimate the height. Fed by the assumption that my object was traveling at a high altitude, people thought it was very big and moving very fast. Of course, I knew I would never receive a permit. The UFO was a totally non-institutional project. It caused a huge public uproar. Later, in interviews, the police compared the size of the flying saucer to that of a nuclear reactor. Understandably, any connection with nuclear power immediately instilled the notion of impending danger and fear of a major environmental disaster. I was able to weather and survive that storm. **CL**: Movement is the driving force of the Strandbeests. Therefore, video becomes a very important medium to document the beauty of their kinetics. Do you discuss how your work is shot, or do you select those images you favor?

**TJ**: No, not really. Filmmakers, videographers, and photographers have their own preferences. They tend to look for certain angles, such as my own presence in a shot, me looking through the tubes, pretending to work on the beasts, or looking at the horizon. Low camera angles are preferred when the beast is walking. When I document the Strandbeests myself, I place the camera on a tripod, and I let the animals run through the frame, and I run behind them. I shoot my own footage. Others get theirs.

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