

Kinetic art

William Tuck, 4/30/20

Kinetic art is art that relies on motion for its effect. Many kinetic art pieces are metallic sculptures that have mechanical elements. It was born as a sculptural branch of the abstract movement and has since become a broad genre including everything from elaborate mobiles and moving fountains to walking machines. The Kinetic art style has been in motion for over a century, but I will only be covering four of my favorite artists today. Naum Gabo, Jean Tinguely, Arthur Ganson, and Theo Jansen. I feel that their work covers much of the breadth and history of kinetic art, standing on their own while painting an elaborate picture together of what wonderful machines moving sculptures can be.

Naum Gabo 1890-1977

Naum Gabo was a Russian sculptor and painter who is credited as pioneering the kinetic art movement. He was interested in mimicking wave forms and movement in his works. The earliest recognized kinetic art piece is his 1919-1920 Standing Wave, which he called a kinetic construction. It is a large smoothly standing strip of metal oscillated by an electric motor to form a wave form moving in profile. Gabo created the piece to be a demonstration of his constructivist ideals in which art reflects the changes of its time by moving in space, changing over time, and demonstrating the technology of its time rather than remaining flat and still. Gabo soon tired of the technical nature of working with electronics, and produced a number of still works made of plastic through the 1920's. He revisited kinetic art later in life and produced more works from the 1960's onward, including a moving brass fountain called Revolving Torsion 1972-1973.



Jean Tinguely 1925-1991

Jean Tinguely was a Swiss sculptor who produced a great many kinetic sculpture machines which he called metamechanics. His kinetic builds began in Paris during the early 1950's with a series of moving reliefs and wire sculptures. The reliefs resemble an abstract painting but the lines that comprise it have clock motors turning them independently to produce new configurations. His devices functioned, but often subverted the norm for a machine by clanking and jittering. Often their only function was to move, but this progressed through his career as his machines grew larger and more ambitious. By the late 50's his creations included a hand crank wheeled sculpture that drove around the gallery and machines built to draw abstract patterns on an easel by shaking. The latter were his famous metamechanics, which were intended to produce their own works of art and make the viewer consider the nature of art, automation and the artist. 1960 marked a turning point in Tinguely's career with his *Homage to New York*, a machine built from salvaged materials from junkyards and scrapyards in New Jersey. It continued the theme of questioning function and utility by dramatically self-destructing in front of an audience at the New York Museum of Modern Art. It spanned and chugged, caught fire, sawed off parts of itself, and clanked, whirred, spat, and drew pictures until it finally ground to a halt. It was a landmark piece that made Tinguely a national success overnight. From here his machines were often rougher, more clearly salvaged and left unpainted. He continued to create self-destructing machines, but also created large moving sculptures and machines designed to produce a great din of disharmonious clanging. The 1971 *Chaos 1* in Columbus Ohio commons is a 30-foot tall, 3-ton summation of this period. It featured 12 motors operating 13 individual functions and was built with different modes of action. It displayed a great variety of mechanisms, from drive belts and pulleys to worm gears. Tinguely continued to produce kinetic art throughout the rest of his life, experimenting with everything from incorporating bones and animal skulls to painting his machines bright colors. In his later years he emphasized the spirit of play that a bright and wobbly sculpture could impart. Arthur Ganson credits him as his "primary spiritual and artistic mentor."



Arthur Ganson 1955-

Arthur Ganson is an American kinetic sculptor, inventor, and musician. He was an artist-in-residence at MIT's mechanical engineering department from 1995-1999. The MIT museum and national inventor's hall of fame have permanent exhibits dedicated to him. He was invited to speak at a TED talk in 2004. He has produced several Rube Goldberg machines and has emceed the annual Friday After Thanksgiving Rube Goldberg competition at the MIT Museum since 1999. Some of his many exquisite kinetic sculptures include Machine with Oil, a bronze machine which gives new meaning to self-lubrication by anointing itself with a scoop, the aptly named Knife Throwing Machine, whose loud ratchets build a great deal of tension and drama, and Machine with 23 Scraps of Paper, which moves the eponymous paper scraps in a mimicry of flapping wings with delicate and precise machinery. He has also been interested in philanthropy and innovation and spoke out recently about face masks and the importance of wearing them during the coronavirus.



Theo Jansen 1948-

Theo Jansen is a Dutch kinetic sculptural artist who is best known for his strandbeest series which has been underway since 1990. His early works included a PVC and helium flying saucer (1979) and a painting machine (1984). Unlike many other kinetic artists, the strandbeesten (Dutch for beach beasts) are all composed of primarily plastic PVC pipes rather than metal, and are wind powered rather than electric or hydraulic. They feature intensely intricate mechanisms working in harmony to make the machines walk in a seemingly organic manner. Some pick their way across the beach on coordinated legs while others squirm like caterpillars, using a wave motion to oscillate across the sand. Remarkably, they are all based on a system of connected triangles and all move by converting the rotating of an axle into carefully timed leg movements. Some of them even have mechanisms to detect when they enter water and move away, or even plant themselves in anticipation of a storm.



References

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Museum Tinguely website

<https://www.tinguely.ch/en/tinguely/tinguely-biographie.html>

Arthur Ganson's website

<https://www.arthurganson.com/>

Strandbeest.com

<https://www.strandbeest.com/>