## SHIT PHOTOGRAPHS

Paul Wombell



## Duck

Jacques de Vaucanson was born in Grenoble, France, in 1709, the youngest of ten children. The story is told that when he was young, his mother would take him to church, and that while she was receiving confession, he would study the clock in the adjoining room. Very soon, he had calculated and memorized its mechanism and was able to build a replica of the clock at home.

When Jacques was seven his father died and he was sent to a monastery to be educated. He arrived with a metal box containing wheels, cogs, tools, and an unfinished model boat. He refused to study until he could complete the construction of the boat and sail it across the monastery pond, which resulted in Jacques being confined to a room for two days as punishment. When he was released, it was found that he had produced many exceptional drawings during his confinement; it was then that the teachers understood his great talent.

Later he attended classes in anatomy and medicine in Paris and in Rouen. In 1727, at the age of eighteen, he was offered a workshop in Lyon and was commissioned by a nobleman to make a set of machines. By 1732, Vaucanson was travelling around France exhibiting his first machine, which he described as "... automata, which imitate the natural functions of several animals by the action of fire, air, and water."

After a prolonged period of ill heath with anal fistula, Vaucanson clamed that during his illness he had dreamed of many strange things, one of which was making an automaton that could play the flute. He took as his inspiration the marble statue *The Flute Playing Shepherd* (1709) by Antoine Coysevox (1640-1720), then on display in Paris's Jardin des Tuileries; today, it can be found in the Louvre.

Finding himself in financial difficulties, Vaucanson sought support for his project from his then landlord, the Parisian Jean Marguin, who had taken a keen interest in his work. A loan agreement was reached where by Marguin would retain onethird ownership of the completed automaton and receive half the money taken in entrance fees when the automaton was exhibited.

With this new financial support, Vaucanson began his project of making a moving sculpture that made sound. The body was made from wood and placed on a plinth painted to look like marble and within which were hidden the mechanics. The air for blowing the flute was produced by three bellows run by clockwork. It was finished in1737 and the life-size automaton, which had a repertory of twelve songs, was exhibited to a paying public in Paris the following year.

A description of Flute Player appeared in the first volume of Diderot and *d'Alembert's Encyclopédie*, under the tile "androïd", "an automaton in human form, which, by means of certain well-positioned springs, etc. performs certain functions which externally resemble those of man."

Vaucanson made two more automata. The first simultaneously played a flute and a drum – the *galoubet* and *tambouin* – regarded

as the musical emblem of Provence. Similar to the earlier Flute Player, this figure was mounted on a pedestal and had a repertoire of twenty songs. One year later came his third and most ambitious automaton, the digesting duck. The size of a fleshand-blood duck, the automaton was made of gold-plated-copper, had a flexible neck, and could rise and settle back on its legs; it too was positioned on a pedestal. Each wing alone had four hundred articulated parts and the automaton could make a "quack" sound. The most unique feature of this metal duck however, was that it imitated a living creature by eating food from the hand of a human, swallowing it, digesting it, and then excreting it. The duck could shit. When in 1739 the duck went on display in Paris, people paid an admission fee of *three livres*, equal to a week's wages to see the duck perform.

In 1741, Vaucanson sold his automata to three Lyonnais businessmen, who took them on tour across Europe. Over the following years, the automata changed owners and at the time of Vaucanson's death in 1782, the three automata were in the possession of pawnbrokers. Not so long after, they found their way into the collection of the German chemist and doctor Gottfried Christoph Beireis (1730-1809). After Goethe visited the collector in 1805, he commented on the condition of the duck in his diary: "A duck without feathers stood like a skeleton, still devoured the oats briskly enough, but had lost its powers of digestion."

The two musical automata then disappear from the historical record, leaving the duck, which continued to be moved between various owners interested in mechanical artifacts. In 1839, the Swiss clockmaker Johann-Bartholome Rechsteiner (1810-1893) found the remains of the duck in Berlin and made an effort to repair it; the renovated automaton was exhibited during 1843, at the Teatro alla Scala, in Milan. One year later, just over a hundred years after the duck had first been exhibited in Paris, it returned to the city and was exhibited to great acclaim at the Exposition Nationale.

This part of the story concludes in 1879, when it was reported that the duck was on display in an exhibition of wax figures and antiques in Krakow, Poland. However, a letter to a local newspaper then reports that the exhibition had burnt down, leaving only misshapen wings and wheels from the body of the duck.

During the 1930s, some photographs of the duck were found at the Conservatoire National des Arts et Métiers in Paris. It seems that they had originally been sent from Dresden and were probably taken in the latter half of the nineteenth century. Could these photographs be of the original Vaucanson' duck, or were they of a reconstructed duck made from parts salvaged from the museum fire in Krakow? They depict the metal skeleton of the duck mounted on a wooden frame, with the mechanics of the automaton visible. This may be the only moment in history that the duck, the first invention of mechanical life to simulate digestion, and the photographic camera, the first machine to simulated vision, connected.

## Dog

Masaru Ibuka was born in 1908 in Nikk , Tochigi Prefecture, Japan.

He was educated at Waseda Senior High School and later at Waseda University, where he studied mechanical engineering. For his graduation project in 1930 he made a "light telephone" that used high-frequency sound waves to control the intensity of light. He then adapted the same technology to make "dancing neon", which was submitted to a science exhibition in Paris in 1933 where it won the Gold Prize for inventions.

Akio Morita was born in Nagoya, Aichi Prefecture, Japan, in 1921. This region of Japan is known for its *karakuri* puppets; originally made during the Edo period (1603-1868), the puppets are automata that perform small gestures to entertain and surprise humans. There are three types of *karakuri*; puppets for use in theater performances; puppets to be used in public on wooden floats during religious festivals; and smaller puppets, made for the home, which can serve tea. While at school, Morita developed a fascination with mechanics and started disassembling appliances at home and reading technical manuals. He later enrolled at the Osaka Imperial University to study physics.

The story continues in the aftermath World War Two, when in 1945 Ibuka stated a business repairing radios in Tokyo. One year later, Morita would join him to co-found the company Tokyo Tsushin Kogyo (Tokyo Telecommunications Engineering Corporation). In the founding principles of this new company Ibuka wrote, "My first and primary objective was establishing a stable workplace where engineers could work to their hearts' content in full consciousness of their joy in technology and their social obligation." By 1958, the company was known as Sony.

In the early 1950s, Ibuka had traveled to the United States and negotiated a licensing agreement with Western Electric to make transistors in Japan. From this agreement the company made Japan's first transistor radio. This was the foundation from which Sony would developed other technical objects for the consumer market that included the compact disc, the Walkman portable audio cassette player, the Trinitron color television, and the PlayStation computer gaming system. In 1981, the company produced the first prototype electronic still camera, the MAVICA (Magnetic Video Camera). "A new era in photography" was declared. This camera used a CCD sensor and stored images on floppy discs. Seven years later, in 1988, the same technology was used to produce the Sony MVC-C1 camera for the wider consumer market.

That same year, Sony established the Sony Computer Science Laboratory (CSL), partly based on the famous Xerox PARC research laboratory, the aim being, to quote Toshitada Doi, then chairman of CSL"... to invent the future." Together with artificial intelligence expert Masahiro Fujita, Doi played a key role in the development of the Artificial Intelligence Robot (AIBO), an autonomous robotic pet dog. Released on 11 May 1999, AIBO, which means "friend" or "companion" in Japanese, was marketed as a robot for home entertainment. In an interview with *Bloomberg* on 25 July of that year, Doi said, "It was the most successful [new product] announcement that Sony has ever made." When asked about future ideas and projects he replied, "People from the Computer Science Laboratory are working on [creature-like] search agents for a network. All these are very biological and autonomous. In the real world, we'll find lots of autonomous robots, and in the cyber world we'll find a lot of agents who will communicate among themselves. My message to the world is that the 21<sup>st</sup> century will be the age of digital creatures."

The artist Hajime Sorayama, known for his super-realistic erotic illustrations of women and feminine robots, undertook the early design work of AIBO's body. Other artists, such as Katsura Moshino and Shoji Kawamori designed the bodies for the later series, and the musicians and designers Nobukazu Takemura and Masaya Matsuur were involved in the programming of AIBO's "voice" sounds.

Running AIBOware software based on Sony's Aperios operating system, and featuring 64-bit RISC processor and up to 64MB of memory, AIBO had a range sensors and actuators that could respond to touch and allowed it to interact with humans and its environment. AIBO could detect distance and motion, and take photographs using its built-in camera. It had a range of complex movements involving its mouth, tail, head and ears. Capable of seeking out its charging station and replenishing its battery, it was always attentive and ready to play.

Equipped with microphone, speaker, and human speech recognition software, AIBO could hear and reply to the voice of its human owner. It was also capable of responding to its owner's emotional needs by displaying passions such as "joy" and "anger," through colored blinking lights in its LED illuminated face. Biophilia, the instinctive bond between humans and other living systems such as other animals, was now transferred to a form of technology that exhibited behaviors in respond to human desires and psychological needs. This is a form of technophilia, one in which humans love their AIBOs.

Sony stopped production of the AIBO in 2006. Over a seven-year period the company had introduced four generations of robot dogs and sold 150,000 of them mostly in Japan and North America. Sony discontinued customer support in 2014, but former Sony technicians still repair AIBOs and keep them alive for their loyal owners for a little longer than the average electrical consumer device.

When they can no longer be repaired owners in Japan can take them to a Buddhist temple where the priest performs funeral rites over the bodies and thus release the spirit of the AIBO. To quote one priest from a video released by the New York Times: "The meaning of this AIBO funeral comes from the realization that everything is connected. The inanimate and the animate are not separated in this world. We have to look deeper to see this connection. We pray for the sprit which resides inside AIBO to hear our prayers and feeling."

## Human

Craig Kalpakjian was born in 1961 in Huntington, New York, the youngest of three children. A family story is told that when his parents installed alarm systems in their home, he would amuse himself by trying to get around them, often inadvertently setting them off. He enrolled at the University of Pennsylvania to study physics, but soon realized that his interests lay elsewhere and began to study art history instead. Kalpakjian emerged onto the New York art scene during the early 1990s as a sculptor and installation artist.

At this stage in his artistic career, Kalpakjian continued to develop his interest in the technologies of control, containment and security. He learned how to us software like AutoCAD and Form-Z, and started making digitally rendered photographic images of institutional spaces devoid of human occupants, spaces often subjected to intensive systems of control and surveillance.

From this work he realized that technical objects like computers and cameras have their own agency and that we might not be fully aware what happens inside these devices. An English translation of *Towards a Philosophy of Photography* by Vilém Flusser (1920-1991), the Czech-born philosopher, was published in 2000. In *The Apparatus*, one of the book's essays Flusser writes: "No photographer, not even the totality of all photographers, can entirely get to the bottom of what a correctly programmed camera is up to. It is a black box."

In 2002 Kalpakjian exhibited his work *Black Box* at the Andrea Rosen Gallery, New York. This work included an AIBO Sony robot pet dog enclosed in a sealed box approximately  $35 \times 35 \times$ 80 inches in size, that was set on the floor. The robot dog, connected wireless to a computer, lived inside the box for the duration of the exhibition. Kalpakjian nicknamed the robot Weegee, the pseudonym of photographer Arthur Fellig (1899-1968), who is best known for his photographs of crime scenes in New York from the 1930s to the 1950s. Like Kalpakjian, Fellig also lectured at the New School.

The sealed box, which had white walls, a dark carpeted floor, and fluorescent lighting, was similar to a larger version of the "operant conditional chamber" used by researchers in laboratories to study the behavior of animals in a controlled environment. Developed by the psychologist B. F. Skinner (1904-1990), the "operant conditional chamber", commonly known as the Skinner box, was used to test his theory that animal behavior can be studied and compare to human behavior, and that environmental variables control and reinforce the behavior of all animals, including humans.

One of the main reasons that AIBO owners were so keen on their robot pets was the dog did not need food or water. It never made a mess, so avoiding the need to clean up the any shit. If the dog did excrete anything, it was photographic images. Weegee would occasionally take photographs of the interior of the box. The images were sent wirelessly to a computer, where Kalpakjian as a gesture of human kindness, would print these photographic excrements and display them on the gallery wall.

Given that Weegee was confined to its box, the only way that visitors could connect with the dog was by either speaking at a time when it happened to be awake or by looking at its photographic endeavors displayed in the gallery. What did the visitors make of these photographs taken inside an empty box that looked more like a corridor or a cubicle in a modern office? In a strange way Weegee's photographs looked very similar to some of Kalpakjian's earlier computer-generated images, which depicted interior spaces without any human presence. Had Weegee in someway copied Kalpakjian's work?

These photographs were not made by a conventional camera that can be held in the hand, or paw. The camera is positioned inside AIBO's head. This fusion of technology and the body, where the lens and the eye merge into a machine-eye has been a fantasy of many artists. To create the most objective and perfect view possible, one unencumbered by the subjectivity of the imperfect human eye, might have been one of the reasons why photography was invented.

Now after three hundred years of development, we have a new assemblage of mechanical life with machine vision, an autonomous robotic dog that can take photographs. With *Black Box*, Kalpakjian has set up an experiment that can monitor the evolution and behaviors of this new species of technical objects. More importantly, the gallery itself becomes an "operant conditional chamber," where humans can be studied as they learn to live with this digital creature. Perhaps we can now recognize our own psychological needs of relying on forms of technology for friendship, or that there is very little difference between AIBO and ourselves.

*Black Box* was last seen on public display in Montreal at the Vox, Centre de L'image Contemoraine, as part of the 2013 Le Mois de la Photo à Montreal Biennale, under the title *Drone: The Automated Image*, which was curated by the narrator.

At the time of writing the artist Kalpakjian lives in New York and holds the position of part-time assistant professor at Parsons The New School of Design. His work has been exhibited in venues across North America and Europe, including Metropolitan Museum of Art in New York, Massachusetts Museum of Contemporary Art and the Centre Pompidou in Paris. He is also a member of the musical ensemble *Das Audit*, which performs regularly in New York.

It is not known if Weegee is still alive, but its box is in storage in Brooklyn, New York. The camera would be the only device that could determine if Weegee is in working order, still taking photographs. So perhaps the sprit of AIBO continues as it occasional takes photographs confined within its box. May be sometime in the future these photographs will be found and eventually find their way into a museum?