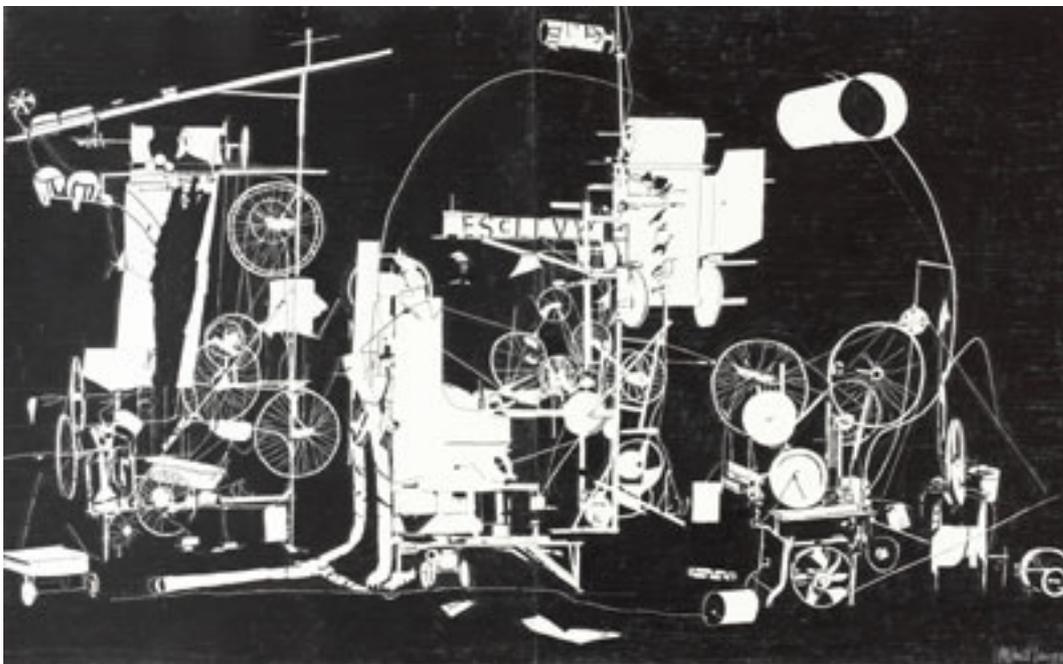


# Joyous Machines: *Michael Landy and Jean Tinguely*

## Educators' Pack

*"The machine is an instrument that permits me to be poetic. If you respect the machine, if you enter into a game with the machine, then perhaps you can make a truly joyous machine – by joyous I mean free"*  
Jean Tinguely.



Michael Landy, *H2NY*, *The self-destroying sculpture that didn't destroy itself*, 2006. ©Michael Landy

### *Introduction*

The Tate's 1982 Jean Tinguely exhibition in London brought the work of this innovative sculptor to a UK audience which included a young textiles student, Michael Landy. Now a prominent contemporary artist himself, Landy acknowledges the impact that the Tinguely retrospective exhibition had on his own approach to art. In 2009, Tate Liverpool has invited Landy to co-curate the exhibition, **Joyous Machines: Michael Landy and Jean Tinguely**, which traces the development of Tinguely's art and culminates with his legendary performance work *Homage to New York*, 1960.

This pack is designed to support educators in the planning, execution and following up to a visit to Tate Liverpool. It is intended as an introduction to the exhibition with a collection of ideas, workshops and points for discussion. The activities are suitable for

all ages and can be adapted to your needs.

## Contents

Machines and Art	page 2
Jean Tinguely – Early Works and Meta-matics	page 4
Work in Focus: Homage to New York	page 8
Michael Landy and Jean Tinguely	page 10
Other Resources and Further Information	page 11

## Machines and Art

We are surrounded by machinery. In the 21<sup>st</sup> century, most of our machines are digital or electronic and are increasingly sophisticated. Cars, coffee-makers, washing machines, escalators etc are part of everyday life. Over the centuries, machines have radically changed how we work, live and play.

In art the machine has often been used as a metaphor for modern life in order to comment on changing social conditions, particularly in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Modern artists have explored the machine as both subject and as a process enabling them to create different forms of art. Tinguely was one of the first artists to actually present functioning machinery as art. In this section are some examples of artists who have been associated with machines.

**Fernand Léger** greatly admired machine forms in their sleek efficiency and the figures in his art often look mechanical. His art itself appears to have been created by a machine – colours are flat and evidence of brushstrokes is eliminated in order to give the impression that it has been printed. He often combined simple forms such as discs, cylinders and cones to create mechanical compositions with a sense of movement.

Examples of Leger's art: *Soldiers Playing Cards*, 1916; *The Bargeman*, 1918; *The Discs in the City*, 1918; *Ballet Mechanique*, 1924 (film).

**Marcel Duchamp** is famous for his invention of the "ready made" – the presentation of objects from everyday life as sculpture. His fascination with movement can be traced to works such as *Nude Descending a Staircase*, 1913 but his first readymade *Bicycle Wheel*, 1913 has been described as the original kinetic sculpture due to its potential for motion. He became fascinated with moving parts and components, creating simple machines such as *Rotary Demisphere*, 1925 and his *Roto-Reliefs*, 1938

**Max Ernst** used images of machine parts cut from illustrations in advertisements and industrial manuals for his Surrealist collages. He often combined human anatomy with mechanical parts to bizarre, often disturbing effect.

Examples of Ernst's machines: *Small Machine Construction*, 1919-20; *Celebes*, 1921; *Les Malheurs des Immortels*, 1922

**César** was associated with Nouveau Réalisme along with Jean Tinguely and in the

1950s he created a number of sculptures from welded metal, using parts of scrapped cars. In the *DLA Piper Series: This is Sculpture*, the current collections display at Tate Liverpool, you can see his *Three Compressions*, 1958, a work created by an industrial machine used for crushing metal.

Other works by César: *Man of Saint-Denis*, 1958; *Portrait of Patrick Waldberg*, 1961-2.

**Richard Hamilton** is one of the key British artists of the Pop era. Machines have featured in his art from his early drawings to computer generated works of recent decades. His collages of the 1960s which feature sleek airbrushed images of vacuum cleaners, refrigerators and other household conveniences, offer a critique of the rise of consumerism in this country following the Second World War.

Works by Hamilton: *Reaper, Reaper*(series), 1949; *Just What Is It That Makes Today's Homes So Different, So Appealing?*, 1956; *Hommage à Chrysler Corp.* 1957; *She*, 1958.

**Eduardo Paolozzi's** collages of the post Second World War period share Hamilton's fascination with popular culture and modern technology. His sculptures incorporate impressions made by pressing mechanical components into the wax models before casting them into bronze.

Works by Paolozzi: *It's a Psychological Fact Pleasure Helps Your Disposition*, 1948; *Automobile Head*, 1954-62; *Cyclops*, 1957; *Daedalus on Wheels*, 1994

**Bernie Lubell** makes wooden machines that require audience participation in order to carry out totally impractical functions. His *Theory of Entanglement* installation was at FACT in Liverpool during the summer of 2009 and information about his works and video instructions for making your own machines can be found on their website:

<http://www.fact.tv/channels/watch/1>

See also:

**Cubism** – artists such as Picasso, Braque introducing the idea of mobile rather than fixed viewpoints in art

**Futurism** – a celebration of modern life and its technology and attempting to capture movement in painting and sculpture. See Boccioni, Balla, Severini

**Russian Constructivism** – constructivists believed that their art should appear to be a product of the modern industrial age through their use of materials and processes. See Gabo, Pevsner, Malevich, Tatlin

**Kinetic Art** – depends on motion for its effects. It has been used to explore the nature of vision, to introduce the dimension of time into art and to reflect the importance of technology in the modern world. See Calder, Gabo, Martin

## Activities

**Research** Leonardo da Vinci an artist who designed a number of machines including...  
**List** the machines you use as part of your daily life.

**Write** a short story about a day without all of this technology – how would you make breakfast? How would you get to school? What would you miss most?

**Find** examples of machines, robots etc in books, films, comics, tv...eg Dr Who, Frankenstein, Wallace and Gromit, Futurama, Rube Goldberg's cartoons, Star Wars...

**Discuss** machines in popular culture – are they scary or funny?

What makes them either sinister or comical? Are they a threat to human beings or a means of advancement? Is man in control or does the machine have a “mind” of its own?

**Invent** and draw your own machine or robot. You could make this into a collage or a sculpture

## Jean Tinguely: Early works and Méta-matics

Tinguely was born in Fribourg, Switzerland in 1925, but grew up in Basel where his father worked in a factory. From an early age, Jean was fascinated by machinery and began building his own contraptions. His first mechanical creation, made at the age of twelve, consisted of thirty small water wheels placed in a stream with various objects connected by rods to their axles. As the water turned the wheels, the arms noisily struck objects such as pots and tin cans. He later recalled this piece as one of his most successful works, though at the time he certainly did not think of it as art but a form of amusement made purely for his own entertainment. The sheer enjoyment of seeing his creation rattle into to life encouraged him to experiment further with similar constructions.

Sound and movement became an important part of his creations, which from the beginning were assembled from junk and any materials that came to hand. Although he quite often drew up designs for these works, chance was an important determining factor. He said that he always allowed the machine a certain independence from its creator, hoping that it would develop a character or even a “mind” of its own.

Never academically inclined, Jean left school at 15 and became a window dresser in a department store, but he also attended evening classes at a local art college. An influential tutor, Julia Ris, introduced him to Dadaist collages and, crucially, the work of Kurt Schwitters. Tinguely discovered allies in these “anti-artists” whose work consisted of everyday objects and discarded materials – junk! Schwitters incorporated rubbish into his art in order to comment on the banality of modern industrial existence and in order to resist the art establishment’s increasing commodification of objects. The young Tinguely had initially used junk in his creations simply because they were the most accessible materials available to him.

### Early Works

During World War II, many artists, writers and political refugees fled to Switzerland and Tinguely was exposed to a wide range of influences and political ideas. He became interested in Surrealism, Bauhaus, De Stijl and became acquainted with the history and concepts of modern art. His output of this period consisted largely of angular, geometric abstract paintings with a strong sense of movement that indicated the direction his art was to take. After experimenting briefly with painting, he returned to his three-dimensional concerns with sound and motion.

His work combined the influences of Russian Constructivism with a Dadaist interest in discarded material and an anarchic sense of fun. Works such as *Élément Détaché!*, 1954 and *Méta-Mécanique*, 1955 combine an interest in spatial construction with the playful, childlike paintings of Klee or Miro. The thin metal wire welded to flat tin sheets

allowed the artist to almost draw in space.

Some of his works of this period deliberately sent up non-figurative artists. The works from the *Méta-Malevich* series for example, are mobile paintings. They parody Malevich's work but replace static geometric shapes with moving parts cut out of sheet metal, secured to a ply-board background and attached to a motor which rotated each plane. They convert the Russian artist's paintings, not only into three dimensional reliefs, but also add the fourth dimension of time with the addition of motion.

Following the War, Tinguely moved to Paris and became a key figure of the Nouveau Réalisme group. Led by critic Pierre Restany, these artists interpreted realism as a direct appropriation of the real by incorporating materials from everyday life into their art. Despite their collective identity, the artists had no coherent style, each developing a highly individual means of expression: from *décollage* (a technique invented by tearing through layers of street posters) to happenings, performance and using the artist's own body to create art. Contemporaries of Warhol, Rauchenberg and Johns, they are often seen as the French equivalent of Pop Art.

Along with Yves Klein and Daniel Spoerri in 1959, Tinguely was involved with the Auto-théâtre at the Hesselhuis in Antwerp where spectators were invited to move around inside an art installation and to interact with mobile sculpture. Tinguely began to design sculpture that not only moved, but actually performed - creating a spectacle, amusing or entertaining his audience and often inviting them to play a part in activating the machine. The viewer thus became a collaborator with both artist and artwork.

### Méta-matics

*"In machines intended for practical use the engineer tries to reduce the irregularities as much as possible. Tinguely is after that exact opposite. His objective is mechanical disorder. His cog-wheels are so constructed that they jump the cogs continually jam, and start turning again, unpredictably...The same movement can appear ten times in succession and then, apparently, never be repeated again."*

Pontus Hulten 1955

This quote from curator Pontus Hulten from an exhibition catalogue of 1955 offers a description of Tinguely's erratic machines. At a time when technology was threatening to take the place of human beings in industry and to dominate the home and office, it was believed that the one advantage human beings had over the machine was the ability to create art. Tinguely "disproved" this with his *Méta-matic* sculptures which were machines that could draw and paint. Sending up American Abstract artists such as Jackson Pollock who rhythmically dripped layers of paint onto a canvas, this contraption could be used to create a unique artwork in a similarly autonomous manner. At the 1959 Paris Biennale, one of these *méta-matics* reportedly produced

over 40,000 original works by visitors.

No two works produced by the machine could be the same as the result varied according to how the machine was set up – the ink, paint or pen fixed in place; the fluidity, colour or density of the chosen drawing material; how close to the paper the drawing/painting implement was positioned; whether the user changed any of these factors during the operation and of course, how long the machine was allowed to run. The movement of the machine itself was erratic due to the way it had been put together with various cogs, belts, wheels and springs. It would jolt and shake, giving the operator little control over the resulting artwork.

Many artists viewed this type of work as an affront and considered Tinguely's machines as mere gimmickry. Not only was he mocking traditional values in art, but also inciting the audience to join in. He was breaking down the barriers between artist and spectator, destroying the artist's "aura" and demonstrating that art did not always have to take itself seriously.

In 1960, Tinguely visited New York for his first American exhibition and became excited about creating a big, powerful machine which could capture the spirit of the vibrant city. This would be his *Homage to New York* and would become one of the most mythologised performance works in the history of art.

### Activities

**Visit** *The DLA Piper Series: This is Sculpture* on the second floor at Tate Liverpool and see another machine by Tinguely called *Débricolage*. What is it made from? How do you think it works? Can you find any other moving artworks in this display?

**Take** the *Everyday Object* sculpture trail in *The DLA Piper Series: This is Sculpture* display. Do any of these works remind you of Tinguely's sculptures? Can you find any other works made from discarded materials in the gallery?

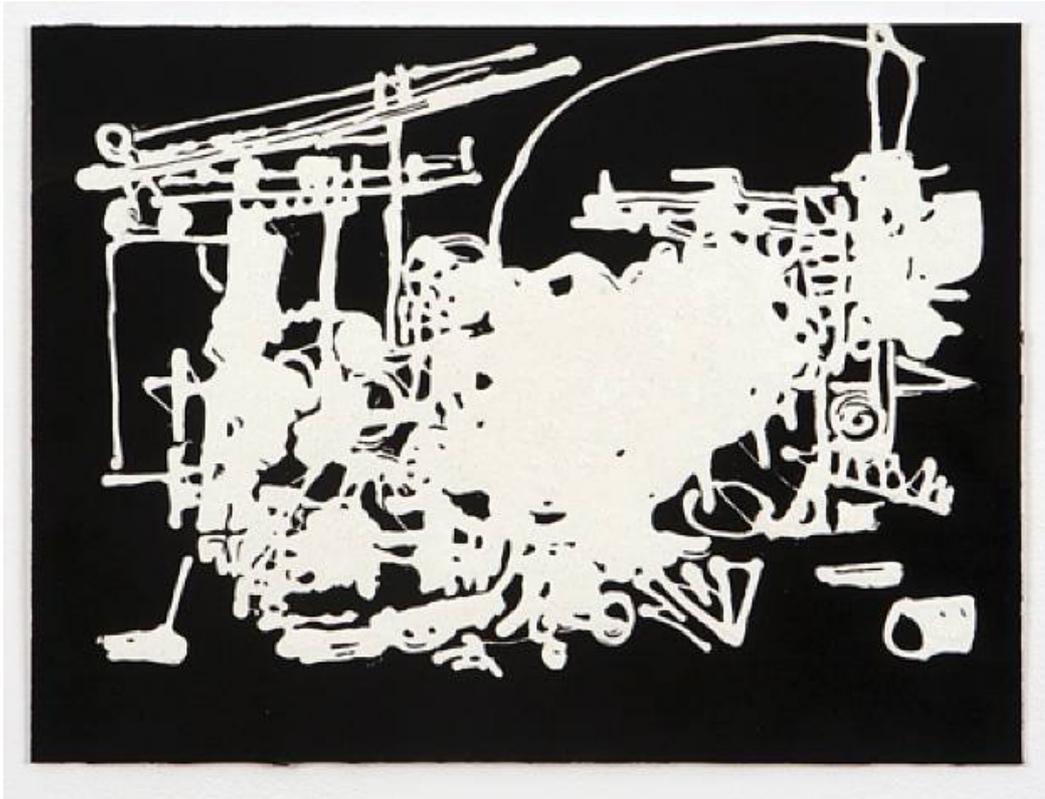
**Make** your own machine from junk – it does not matter if it does not work! (Many of Tinguely's designs failed!)

**Make** a collage from images of machine parts cut from magazines, shopping catalogues and manuals.

**Compose** a piece of "Tinguely music" using household objects, junk and anything else you can find with an interesting sound

(you can listen to examples of Tinguely's own music on various websites eg <http://new.music.yahoo.com/jean-tinguely/>)

### Work in Focus: Homage to New York



Michael Landy, *H2NY, Burning Piano*, 2006 ©Michael Landy

In March 1960, Tinguely gained permission from the Museum of Modern Art in New York to build a spectacular self-destructing machine in the Abby Rockefeller Sculpture Garden. This act would take place as a spectacular performance and would unfold in a series of choreographed parts – like a play or a piece of music – and it would take place before a live audience of invited guests, dignitaries and celebrities.

*Homage to New York* was constructed over three weeks with the help of an electrical engineer, Billy Kluver who claimed that over a hundred different operations were planned for the spectacle. The artist scoured the rubbish tips of the city in order to assemble his giant kinetic sculpture from an assortment of discarded objects that included pots, pans, a bathtub, various percussion instruments, a weather balloon, a méta-matic and a piano – all connected by cables and pulleys. Everything was painted white so that the huge assemblage would be visible in the darkness of the March evening. Concoctions of vile smelling liquids were bottled and carefully positioned about the structure where they would be smashed and release their noxious contents during the performance. A bucket of petrol and a fire extinguisher were also included to add fuel to the machines explosive demise.

Two hundred and fifty invited guests braved the cold evening including Mrs J D Rockefeller, Robert Rauschenberg, John Cage and Mark Rothko.

Set in motion by a motor driven chain reaction the machine was designed to bring about its own noisy, smoky, clumsy destruction in 27 minutes. It was intended to go out in a haze of gunpowder and in a cacophonous finale accompanied by fireworks. Due to technical problems, however, it took nearly two hours before being brought to

a spluttering end by the New York Fire Department. A fire had broken out near the piano, dangerously close to the bucket of fuel and the museum staff must have been particularly nervous as the building had almost been destroyed by fire only two years previously. Nevertheless, the firemen were booed by the crowd who after patiently observing the scene for two hours were desperate for some action and wanted the blaze to continue.

The art critic of the New York Times, John Canaday summed up the anti-climatic evening in his review:

*"Mr Tinguely makes fools of machines while the rest of mankind permits machines to make fools of the. Tinguely's machine wasn't quite good enough, as a machine, to make his point."*

The whole event was captured on film by the artist's friend, Robert Breer, an independent film-maker and in a documentary by D A Pennebacker (both of which are shown in the Liverpool exhibition). As with Tinguely's performance, chance also played a part in Breer's documentation of the event. In the excitement and chaos of the moment, Breer accidentally re-loaded the roll of film that he'd used to shoot earlier footage of the preparations and thus his "Homage to Jean Tinguely's Homage to New York" is a double exposure that shows the assembling and destruction of the machine simultaneously.

Writer Dore Ashton also recorded a blow-by-blow account of the evening as it happened and this is reproduced in the exhibition catalogue, *Joyous Machines: Michael Landy and Jean Tinguely*.

### Michael Landy and Jean Tinguely

Just as Tinguely's art had been affected by the discovery of Kurt Schwitters, so textiles student, Michael Landy had been inspired at a similar age by the machines of Tinguely which he encountered at the 1982 Tate retrospective exhibition in London. He recalled, "I remember riding sculptures, making abstract drawings, throwing balls about and watching machines pogo." He became a Tinguely fan and the work that really captured his imagination was *Homage to New York*. Landy's obsession with this sculpture has so far resulted in 160 drawings and his own documentary about the work. In the course of his research, he has tracked down spectators from the original performance and remnants that were taken away as souvenirs.

The mythologised event also had a profound influence on Landy's own artistic output, most evidently his 2001 *Break Down* where everything he owned was systematically catalogued, taken apart and ultimately destroyed, including the artwork he had created with Tinguely's *Méta-matic* at the 1982 Tate exhibition. Just as Tinguely had intended the remains of *Homage to New York* to find their way back to the city's dumps via the museum's trash cans, Landy's broken down belongings were consigned to what he dubbed "Landyfill" sites.

The 2009 exhibition at Tate Liverpool has given Landy the opportunity to pay his homage to *Homage to New York* by displaying his detailed drawings of the event

alongside video footage and salvaged remnants from the original event. As the ultimate homage, Landy hopes one day to re-stage the happening exactly as Tinguely intended it and with the machine destroying itself without the intervention of the fire brigade. If the sculpture had a life of its own then perhaps, Landy says, it now has a ghost:

*"I like to think that Jean Tinguely's Homage to New York comes back to life as an apparition once a year in the grounds of the Museum of Modern art and performs for 27 minutes...and then disappears once again."*

### Activities

- Imagine you were a reporter at Tinguely's performance in New York in 1960. Describe the event – include interviews with the crowd (the artist, the public, the museum staff and the firemen). What did they think of the happening? Would they describe it as art or entertainment? What do you think?
- Discuss how you would restage Tinguely's performance in 2009. Where would it take place? What preparations would you have to make? What precautions would you have to take? How would you publicise the event? Who would you invite? How would you record the happening for posterity?
- Make a collage poem about machinery by collecting words that describe mechanical noises (either draw these or cut the letters from magazines) Then stick the words together in the shape of wheels, cogs, belts etc to form the outline of a machine on a sheet of paper. Experiment with different fonts, colours and sizes of letters
- Design a "Homage to ..." ie your city or somewhere you have visited. This could be a drawing, painting, collage or assemblage. Where would you site it?
- Drop-in to Tate Liverpool's exciting Big Draw activities during half-term and make drawing machines from recycled junk (see <http://www.tate.org.uk/families/liverpool/20182.htm>)

### Further Information

**Bowness**, Alan, *Tinguely at the Tate*, Tate Publishing, 1999

**Hulten**, Pontus and **Tinguely**, Jean, *A Magic Stronger than Death*, Thames and Hudson, 1987

**Livingstone**, Marco, *Nouveau Realisme*, Mayor Gallery, 2000

**Schwabsky**, Barry, *Michael Landy H2NY*, Thomas Dane Ltd, 2007

**Sillars**, Laurence, *Joyous Machines: Michael Landy and Jean Tinguely*, Tate Publishing,

2009

**Tinguely, Jean**, Tinguely: *The Tate Gallery London 8 September – 28 November 1982*, Tate Publishing, 1982

<http://www.tinguely.ch/en/museum/index.html>

[http://www.moma.org/collection/browse\\_results.php?object\\_id=33838](http://www.moma.org/collection/browse_results.php?object_id=33838)(lecture on Homage to New York)

## Visiting Joyous Machines: Michael Landy and Jean Tinguely at Tate Liverpool

- The exhibition runs from 2<sup>nd</sup> October 2009 – 10<sup>th</sup> January 2010
- Tate Liverpool's opening hours are Tuesday to Sunday 10.00 to 17.50
- To book your school or college visit to see Joyous Machines please call one of our visitor services team on 0151 702 7400
- *Catalogue to the exhibition available in the Tate Shop - Joyous Machines: Michael Landy and Jean Tinguely, "A unique collaboration between two extraordinary artists, one living, one dead, this book is a unique testament to the way an artist's work can continue to inspire new creativity down the years."*

Tate Liverpool has a dedicated schools team that offers a range of services to support teachers including programmed and bespoke training. If you would like any more information about our programmes or an informal chat about bespoke training please contact Deborah Riding, Programme Manager: Schools and Families 0151 702 7452, or Abigail Christenson, Learning Curator: Schools Outreach 0151 702 7457 or e-mail [abigail.christenson@tate.org.uk](mailto:abigail.christenson@tate.org.uk)



**JOYOUS MACHINES:**  
**MICHAEL LANDY AND JEAN TINGUELY**

2 October 2009 – 10 January 2010

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