

The Machine in Art, Celebration and Pessimism



This Impressionist painting, by Claude Monet (1840 – 1926) depicts a steam train from Normandy arriving at the Gare Saint-Lazare railway station in Paris, with crowds of people waiting amid the steam and smoke under the vaulted iron and glass vault of the station's train shed. It was painted *en plein air*, at the station.

The advent of the railways allowed artists to easily get away from Paris to find subjects in other parts of the country. This and the recently availability of ground oil paint in portable tubes are fundamental to the popularity of plain air painting and to the genesis of Impressionism.

Monet, *Arrival of the Normandy Train, Gare Saint-Lazare* 1877

After the outbreak of the Franco-Prussian War of 1870–71, having only Danish nationality and being unable to join the army, **Camille Pissarro** (1830 – 1903) moved his family to Norwood, then a village on the edge of London. He painted sights around his home in Norwood, including this view of Lordship Lane Station (now demolished). The station had opened only a few years earlier, catering to visitors of the Crystal Palace and to the residents of this growing south London suburb. In the painting, rows of new houses border areas of undeveloped land. Standing on a footbridge over the tracks, Pissarro depicted the train leaving the station.



Pissarro, *Lordship Lane Station, Dulwich* 1871

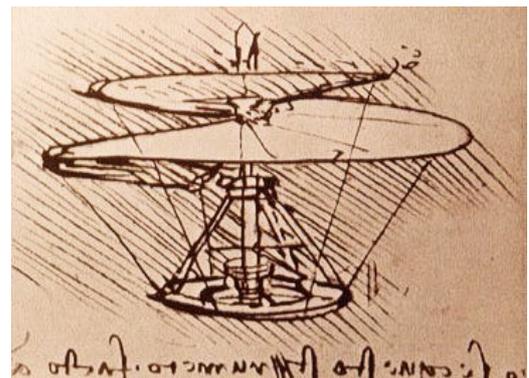


The view is looking east towards London, across Maidenhead Railway Bridge, designed by Isambard Kingdom Brunel and completed in 1838. A hare runs along the track in the bottom right of the painting, possibly symbolising speed itself. Some think this is a reference to the limits of technology. Others believe the animal is running in fear of the new machinery and **J. M. W. Turner** (1775 – 1851) meant to hint at the danger of man's new technology destroying the inherent sublime elements of nature.

Turner, *Rain, Steam and Speed - The Great Western Railway* 1844

Leonardo da Vinci (1452 – 1519) was fascinated by the phenomenon of flight for much of his life, producing many studies, including *Codex on the Flight of Birds* (c. 1505), as well as plans for several flying machines such as a flapping ornithopter and a machine with a helical rotor.

Leonardo da Vinci, *helicopter*





During his lifetime, Leonardo was valued as an engineer. In a letter to Ludovico il Moro, he wrote that he could create all sorts of machines both for the protection of a city and for siege.

Leonardo's journals include a vast number of inventions, both practical and impractical. They include musical instruments, a mechanical knight, hydraulic pumps, reversible crank mechanisms, finned mortar shells, and a steam cannon.

Leonardo, *An Artillery Park*

The central panel of **Hieronymus Bosch's** (1450 - 1560) *Haywain* features a large wagon of hay surrounded by a multitude of fools engaged in a variety of sins. Like a juggernaut it rolls relentlessly on conveying its passengers to inevitable doom.

The forward kinetic motion of the participants moves the viewer from present-day sin into unadulterated torture in the realms of Hell. The procession on the left side of this panel bends back into the middle ground, but the right side figures continue in a straight line with the wagon, a more evident progress into damnation.



Bosch, *Haywain; Triptych* 1516



Natalia Goncharova (1881 – 1962) was a Russian avant-garde artist, one of the leaders of the Moscow Futurists and a member of the avant-garde Der Blaue Reiter group from its founding in 1911. She became famous in Russia for her Futurist work such as *The Cyclist* and her later Rayonist works.

In this painting, influenced by Italian Futurism, man and machine are united into a single vibrating motion. Lines of force, a device picked up by cartoonists, create the impression of movement forward from right to left.

Goncharova, *The Cyclist* 1913

In this work two modern modes of transport blend in a kaleidoscope of colour and fragmented forms. As a biplane: yellow, the colour of light and the sun, swoops low over the train: black and dark greens, the colours of earth, the machines and the environment are swept up into a sensation of continuous movement.



Goncharova, *Airplane over train* 1913



Boccioni, *Dynamism of a Cyclist* 1913



Boccioni's (1882 – 1916) *Dynamism of a Cyclist* demonstrates the Futurist preoccupation with speed, modern methods of transport, and the depiction of the dynamic sensation of movement.

Boccioni's preparatory drawings for the painting depict a head-down racing cyclist, behind in the air, his movement indicated by the characteristic Futurist "force lines" and echoing curves. Force lines, which the Futurists claimed to have invented, show how an object would resolve itself if it followed the tendencies of its own forces, and reflected the interest of the Futurists in the philosophy of Henri Bergson, who believed that material objects exist in a state of continual flux. The painting is therefore an attempt to represent the dynamic sensation of a cyclist moving through time and space rather than a snap-shot of a particular moment in time. The bicycle, figure, and the surrounding space seemingly fuse together in a single form.

Robert Delaunay (1885 – 1941) was a French artist who, with his wife Sonia Delaunay and others, co-founded the Orphism art movement, noted for its use of strong colours and geometric shapes. His later works were more abstract. His key influence related to bold use of colour and a clear love of experimentation with both depth and tone.



He includes here a locomotive, its smoke and steam curving into the picture space in geometric circles, evoking the image of the turning wheel.

Delaunay, *Air, Iron, and Water* 1937



Boccioni, *Unique Forms of Continuity in Space* 1913

Boccioni's sculpture is seen as an expression of movement and fluidity. *Unique Forms of Continuity in Space* depicts a human-like figure apparently in motion. The sculpture has an aerodynamic and fluid form. As a pedestal, two blocks at the feet connect the figure to the ground. The figure is also armless and without a discernibly real face. The form was originally inspired by the sight of a football player moving on to a perfectly weighted pass. It is reminiscent of the Classical *Winged Victory of Samothrace*.

The sculpture is depicted on the obverse of the Italian-issue 20 cent euro coin.



***Winged Victory of Samothrace*. C200-190 BC**

In *Nude Descending a Staircase* French artist **Marcel Duchamp** (1887 – 1968) paints an impression of the mechanical process of the figure (neither male nor female) as it moves down the stairs.

The work seemingly depicts a figure demonstrating an abstract movement. The discernible "body parts" of the figure are composed of nested conical and cylindrical, abstract elements, assembled together in such a way as to suggest rhythm and convey the movement of the figure merging into itself.



Duchamp, *Nude Descending a Staircase, no 2* 1912

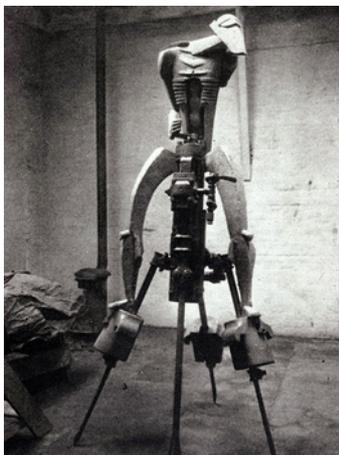


In the composition, Duchamp depicts motion by successive superimposed images, similar to stroboscopic motion photography. Duchamp also recognized the influence of the stop-motion photography of **Étienne-Jules Marey**, and particularly of **Eadward Muybridge's** *Woman Walking Downstairs* from his 1887 picture series, published as *The Human Figure in Motion*.



Marey, stop motion photography

Muybridge, woman walking downstairs



Jacob Epstein's (1880 – 1959) *Rock Drill* comprises a plaster figure perched on top of an actual rock drill. The combination of an industrial rock drill and the carved plaster figure makes the artwork an example of a "Readymade" created at the same time as Marcel Duchamp's *Bicycle Wheel* (1913). *Rock Drill* has been heralded as embodying the spirit of "radical Modernism more dramatically than any other sculpture, English or continental, then or since".

Although Epstein was not officially a member of the Vorticists, not having signed the Vorticist Manifesto, the full-figure sculpture has also been hailed as the pinnacle of Vorticist art. Originally a positive statement, *Rock Drill* stood as a celebration of modern machinery and masculine virility. **Wyndham Lewis** described the sculpture as 'one of the best things he [Epstein] has done. The nerve-like figure perched on the machinery, with its straining to one purpose, is a vivid illustration of the greatest function of life.'

Epstein, *Rock Drill* 1913

In 1940, however, recalling the horrors of the 1914–18 war in the context of the Second World War, Epstein reinterpreted the sculpture much more negatively:

My ardour for machinery (short-lived) expended itself upon the purchase of an actual drill, second-hand, and upon it I made and mounted a machine-like robot, visored, menacing, and carrying within itself its progeny, protectively ensconced. Here is the armed sinister figure of to-day and to-morrow. No humanity, only the terrible Frankenstein's monster we have made ourselves into.

Epstein dismantled the original sculpture. When he exhibited the radically transformed *Torso in Metal* from *Rock Drill* in 1916, he had evidently turned his back on his 'experimental pre-war days of 1913'. In contrast to the power and virility exuded by the full-figure, the truncated version appears defenceless and melancholic, evocative of the wounded soldiers who were returning home from the trenches in startling numbers.



Epstein, *Torso in Metal* 1913-14



Lewis, *A Battery Shelled* 1919

Wyndham Lewis (1882 – 1957) was a founder of the avant-garde Vorticist group, and of its polemical literary magazine *BLAST* in June 1914. He was a high-profile embodiment of the restless iconoclasm of Britain's educated youth on the eve of the First World War. Indeed, for the likes of **D. H. Lawrence** and **C. R. W. Nevinson**, the war offered a harsh tonic for a moribund society. He was an official war artist.

For his part, Lewis rejected the notion of a 'regenerative war' and regarded the First World War as the terrible, but logical, outcome of the philosopher Henri Bergson's notion of 'creative evolution'. This urged humans to embrace a universal 'life force' and submit to the impulses of the animal kingdom. Drawings such as the 1914 *Combat No. 2*, therefore, offer an image of humanity reduced to mechanical urges to either fight or mate.



Lewis, *Combat no 2* 1915



Bone, *Tanks* 1918

Sir Muirhead Bone (1876 – 1953) was a Scottish etcher and water-colourist who became known for his depiction of industrial and architectural subjects and his work as a war artist in both the First and Second World Wars.

In this etching the machine appears like an alien being, rolling relentlessly over everything lying in its path.

Bone had lobbied for the establishment of an Official War Artists scheme. In 1916 he was appointed the first official British war artist and in June 1916 was sent to France with an honorary rank.

In April 1917, with the support of **Muirhead Bone** and his own father, **C. R. W. Nevinson** (1889 – 1946) was appointed an official war artist by the Department of Information.

Nevinson aligned himself with the Italian futurists who celebrated and embraced the violence and mechanised speed of the modern age. But his experience as an ambulance driver in the First World War changed his view. In his paintings of the Front, the soldiers are reduced to a series of angular planes and grey colouring. Here, they appear almost like machines themselves, losing their individuality, even their humanity, as they seem to fuse with the machine gun which gives this painting its title.

Painted in London during the artist's honeymoon on leave from the R.A.M.C., It was described by **Walter Sickert** in 1916 as 'the most authoritative and concentrated utterance on the war in the history of painting'.



Nevinson,
La Mitrailleuse 1915

Mitrailleuse is the French word for machine gun, and originated from the mid-19th century French volley gun, the mitrailleuse. The painting shows three soldiers in the trenches wearing metal Adrian helmets, one firing a machine gun. A fourth soldier lies dead beside them. Around them are wooden beams and barbed wire. The subjects are abstracted into angular geometric blocks of colour, becoming dehumanised components in a machine of death. Nevinson later wrote: "To me the soldier [is] going to be dominated by the machine ... I was the first man to express this feeling on canvas."



Gertler,
Merry Go Round 1916

Merry-Go-Round is a large (189 x 142 cm.) oil on canvas painting made by **Mark Gertler** (1891 – 1939) in 1916, when he was 24 years old. It is perhaps his most famous work.

The painting depicts sixteen figures travelling on horseback around a fairground carousel, arranged in five groups of three plus one single person. The figures resemble dolls, becoming abstracted into blocks of bright colours, with open mouths as if they are screaming. Some are in military uniforms and others in civilian clothes. The work takes inspiration from the Vorticist and Futurist works of **David Bomberg** and Christopher Nevinson.

Letters written by Gertler's friend D. H. Lawrence in 1915 and 1916 mentions wounded soldiers in uniforms enjoying the rowdy entertainment at the fair. He describes the painting as "the best modern picture I have seen: I think it is great and true".

In the London Group exhibition in 1917 it was interpreted as a deliberately "modern" and decorative work, but is now seen as Gertler's visceral reaction to – and protest against – the First World War, perhaps, as he was a conscientious objector, triggered by the possibility that he could be conscripted into the British Army.

Expanding on the theme of war, the painting may represent the threefold colours of wholeness and balance in our Thinking, Feeling and Willing – within a human being. The four sets of people too suggest the balance between the masculine and feminine aspects within us; whilst the individual sailor is presented as the true unknown, unseen and rather elusive higher self. The continuous merry-go-round search for balance through the battle of suffering – as a strangely joyful part of the human Life.



French avant-garde artist **Francis Picabia** (1879 – 1953) vigorously avoided any singular style, and his work encompassed painting, poetry, publishing, performance and film. He is best known as one of the leaders of the Dada movement in the United States and France.

Machine Turn Quickly is one of the works in a series of mechanomorphic pictures Francis Picabia began around 1915. These works are often said to have been inspired by Picabia's various visits to New York during the 1910s, where he developed a fascination with machines, cars, and many kinds of technical devices. This interest may relate to society's emerging enthusiasm for technology and machines in general.

Picabia, *Machine Turn Quickly* 1916-1918

In *Fille née sans mere* (*Girl Born Without a Mother*) Picabia appropriated a pre-existing diagram of a railway machine and remade the image by painting in a background of gold, thus covering up unwanted portions of the original image. He also added areas of green gouache to the remaining visible aspects of a flywheel and shaft. The resulting collage-like image exemplifies Picabia's interest in the metaphors of machines and sexuality: as the flywheel turns, the shaft moves up and down replicating the mechanics of sexual intercourse. Further, the idea of a girl born without a mother is a reverse 'virgin birth', of an entity 'born' of the male, industrialised world.



Picabia, *Fille née sans mere* (*Girl Born Without a Mother*) 1916-18



George Grosz (1893 – 1959) was a German artist known especially for his caricatural drawings and paintings of Berlin life in the 1920s. He was a prominent member of the Berlin Dada and New Objectivity group during the Weimar Republic. During a terrible period in European history, he reacted to the cultural and political problems of the day to produce a kind of art that was impregnated with the sense of a society in disruption – divided between fascism and communism.

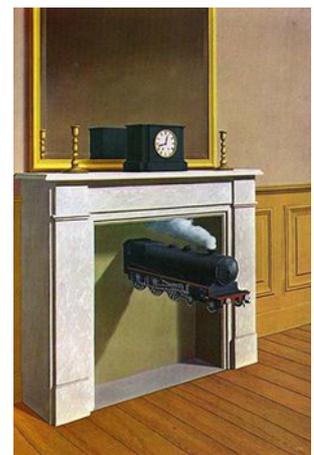
In *Republican Automatons* he satirises members of the Bourgeois class, who's militant political thinking and jingoism had brought about the war. One still waves the flag of nationalism and the other takes up a fencing stance with his useless mechanical prosthetic arm.

Grosz, *Republican Automatons* 1920

Belgian artist **René Magritte** (1898 – 1967) described his motivation for his painting *Time Transfixed*: "I decided to paint the image of a locomotive... In order for its mystery to be evoked, another immediately familiar image without mystery—the image of a dining room fireplace—was joined."

The painting (one of many done for surrealist patron and Magritte supporter **Edward James**) depicts an LMS 4-6-0 Locomotive jutting out of a fireplace, at full steam, in an empty room. Above the mantelpiece is a tall mirror. Only the clock and one candlestick standing on the mantelpiece are reflected in the mirror.

Magritte, *Time Transfixed* 1938



In contrast to the painting of trains by Monet and Turner and the futurists, celebrating speed, Magritte wishes to bring movement and time to a halt.

The title of the painting translates to English literally as *Ongoing Time Stabbed by a Dagger*, and Magritte was reportedly unhappy with the generally accepted translation of *Time Transfixed*. He hoped that James would hang the painting at the base of his staircase so that the train would "stab" guests on their way up to the ballroom. James instead chose to hang the painting above his own fireplace.



Ruby Loftus Screwing a Breech Ring is a 1943 painting by the British painter **Laura Knight** (1877 – 1970) depicting a young woman, Ruby Loftus (1921–2004), working at an industrial lathe as part of the British war effort in World War II. The painting was commissioned by the War Artists' Advisory Committee (WAAC) to bolster female recruitment to the ordnance factories as the Ministry of Supply were concerned at the level of disaffection and absenteeism among women in the factories.

Knight, *Ruby Loftus Screwing a Breech Ring* 1943

The component being worked is the breech ring of a Bofors anti-aircraft gun designed to fire one hundred twenty rounds per minute. Any lack of precision in forming the breech ring could result in the gun being destroyed when fired. In peacetime this task would only be performed by a man with eight or nine years' experience but the 21-year-old Loftus mastered the technique after only a year or two of training.

We can see this work, highly accomplished and dramatic as it is, as social realism, much in the mode of a propaganda piece, such as was common in the USSR.

Marcel Duchamp painted *Coffee Mill* for his brother, the sculptor **Raymond Duchamp-Villon**, who, at the time of his wedding, asked a number of his artist friends to make small works to decorate his kitchen. As Duchamp later recollected: 'I made this old-fashioned coffee mill for him. It shows the different facets of the coffee grinding operation and the handle on top is seen simultaneously in several positions as it revolves. You can see the ground coffee in a heap under the cogwheels of the central shaft, which turns in the directions of the arrow on top.'

Duchamp later explained, 'the arrow indicates the direction in which the machine should turn. The handle is shown in different positions - this having to do with the idea of movement, of repetition.'

Both functionally and symbolically *Coffee Mill* anticipates the role of the element identified as a chocolate grinder in Duchamp's celebrated work *The Bride Stripped Bare by her Bachelors, Even*



Marcel Duchamp, *Coffee Mill* 1911

Duchamp is regarded as an affiliate of Dada (absurdist) art, as a harbinger of conceptual art and as an artist/shaman. His work is puzzling, humorous, irrational and often disturbing; so a brief explanation of the genesis of his most important 'picture', *The Bride Stripped Bare by Her Bachelors, Even* or *The Large Glass* (1915–23), which has been likened to a pseudo scientific exercise in alchemy, is necessary in order to gain a basic understanding of this complex piece.



Duchamp worked on the piece, which is 277.5 cm tall, from 1915 to 1923, creating two panes of glass with materials such as lead foil, fuse wire, and dust. It combines chance procedures, plotted perspective studies, and laborious craftsmanship. He made numerous notes and studies, as well as preliminary works for the piece. The notes reflect the creation of unique rules of physics, and myth which describes the work.

The notes describe that his "hilarious picture" is intended to depict the erotic encounter between the "Bride", in the upper panel, and her nine "Bachelors" gathered timidly below in an abundance of mysterious mechanical apparatus in the lower panel.

The top rectangle of glass is known as the Bride's Domain; the bottom piece is the Bachelors' Apparatus. It consists of many geometric shapes melding together to create large mechanical objects, which seem to almost pop out from the glass and ever-changing background.

The chocolate grinder, which Duchamp based on a machine that he had seen in a confectioner's shop window, consists of three drum-like structures, arranged in even spacing around a circular platform. They are appropriately chocolate brown in colour, and are very textural, with a series of ridges running around the outside and spiralling out from the centre. It stands on three tiny legs that barely seem to support the entire structure.

Although executed with great (mechanical) precision, and at first glance seeming to be a product of pure, calculation and intellect, there is nevertheless a deep subconscious, irrational and emotional thread running through it. The 'laws of chance' and accident determine many of its features; for instance: the placement of the Bachelors' nine "shots", small holes to the right of the upper glass panel, (which never do reach the waiting Bride) was effected by dipping matches in wet paint and firing them from a toy cannon at the target; the *Glass* was left lying flat on the studio floor for six months gathering dust ('dust breeding' in Duchamp's words), which was then brushed onto the sieves which had been coated in adhesive, thus creating a colour which was unlike any commercial pigment. When the work returned from its first exhibition, to which it was sent 'unfinished', the glass was cracked. Rather than repairing and hiding the cracks Duchamp sandwiched it between two more glass panels and declared the work as then finished.

The *Large Glass* does not lend itself to simple interpretations. He produced notes and diagrams to go alongside the work; known as the *Green Box* this 'explanatory work' has been described as "No less ambiguously or freely interpretable than [*The Large Glass*] itself..."

Duchamp said that the idea is an invention of "playful physics." An autobiographical interpretation has been ascribed to it, as to many of Duchamp's works, as he was unable to fulfil his adolescent sexual desires towards his sister, **Suzanne Duchamp- Croti**.

Most critics, however, read the piece as an exploration of male and female desire as they complicate each other. One critic, for example, describes the basic layout as follows: *The Large Glass* has been called a love machine, but it is actually a machine of suffering. Its upper and lower realms are separated from each other forever by a horizon designated as the 'bride's clothes'. The bride is hanging, perhaps from a rope, in an isolated cage. The bachelors remain below ceaselessly 'grinding their chocolate', and never do reach the bride in order to 'strip' her, unable to fulfil their erotic desires. So the work, like its title, is finally open ended, unfulfilled and remaining to be completed in the subconscious dreamscapes of the viewer.

A reconstruction of the *Large Glass* in the Tate Collection was made by **Richard Hamilton** for the 1966 Duchamp retrospective.

Nicolas Schöffer (1912 — 1992) was a Hungarian-born French cybernetic artist. He built his artworks on cybernetic theories of feedback interactivity, primarily based on the ideas of mathematician and philosopher **Norbert Wiener**. Wiener's work suggested to Schöffer an artistic process in terms of the circular causality of feedback loops.

Schöffer was the first artist to be inspired by the new science of Cybernetics, and went so far as to describe a whole cybernetic city based on his so-called "Spatio-Dynamics".

The mirrored circular plates in this piece rotate, sending flashes of light into the surrounding landscape.



Schöffer, *Chronos 10B* 1980

Cybernetics is a trans-disciplinary approach for exploring regulatory systems — their structures, constraints, and possibilities. Norbert Wiener defined cybernetics in 1948 as "the scientific study of control and communication in the animal and the machine." In other words, it is the scientific study of how humans, animals and machines control and communicate with each other.



Schoffer, *Cysp1* 1956

Schöffer's kinetic art sculpture *CYSP-1* from 1956, that made use of electronic computations developed by the Philips Company, is considered the first cybernetic sculpture in art history. The sculpture is set on a base mounted on four rollers, which contains the mechanism and the electronic brain. The plates are operated by small motors located under their axis. Photo-electric cells and a microphone built into the sculpture catch all the variations in the fields of colour, light intensity and sound intensity. All these changes occasion reactions on the part of the responsive sculpture.

Although built as an art piece *CYSP-1* (a name composed of the first letters of *CY*bernetics and *SP*atiodynamic) is significant both in terms of the introduction of a new art form, as well as being a serious attempt as an autonomous "being".

CYSP-1 launches upon an adventure unique in the history of art. It participates in artistic life on multiple levels. In an actual spectacle, it dances in ballets with one or several human partners.

Fernand Léger (1881 – 1955) spent two years at the front during the First World War, where he produced many sketches of artillery pieces, airplanes, and fellow soldiers while in the trenches.

During World War II he lived in the United States. He taught at Yale University, and found inspiration for a new series of paintings in the novel sight of industrial refuse in the landscape. The shock of juxtaposed natural forms and mechanical elements, the "tons of abandoned machines with flowers cropping up from within, and birds perching on top of them" exemplified what he called the "law of contrast".



Leger, *Cyclists* 1945

During his American sojourn, Léger began making paintings in which freely arranged bands of colour are juxtaposed with figures and objects outlined in black. Léger credited the neon lights of New York City as the source of this innovation: "I was struck by the neon advertisements flashing all over Broadway. You are there, you talk to someone, and all of a sudden he turns blue. Then the colour fades—another one comes and turns him red or yellow."

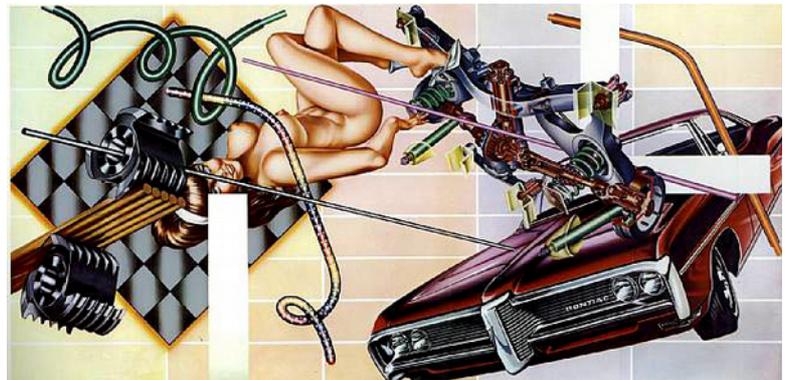


As an originator of Pop art, **Peter Phillips** (1939 -) trained at the Royal College of Art with his contemporaries **David Hockney, Allen Jones, R.B. Kitaj** and others figures in British Pop Art. Inspired by advertising and popular culture the artists associated with British Pop Art created brightly coloured works through an eclectic use of styles from expressionistic brush marks to slick hard edged assemblages of forms. These are conceptual, studio paintings made in complete rejection of 'traditional' *'plein air'* and observational painting.

Here he creates an image suggestive of juke boxes and pin ball machines.

Phillips, *The Entertainment Machine* 1960

In America Phillips went on to make large billboard sized paintings in which slickly painted free floating, clear, hard edged objects and conventionalised kitschy, female figures occupy invented spaces along with colourful abstract forms.



The smooth graduated paint surfaces are achieved with the mechanical aid of an airbrush. The titles have a mechanical indication.

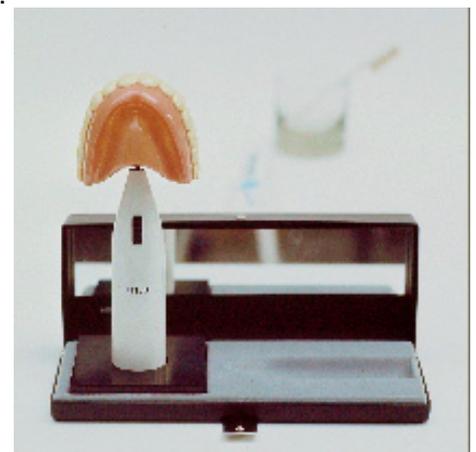
Phillips, *Select-O-Mat Rear Axel* 1971



In classical mythology, the Cyclops was an immensely strong giant with a single eye in the centre of his forehead. The skin of this lumbering bronze figure is imprinted with broken machine-parts and other found debris. **Eduardo Paolozzi** (1924 – 2005) made it by pressing pieces of metal into a bed of moist clay, and then pouring molten wax into the clay mould. He constructed the model from these sheets of wax forms and finally cast it in bronze. Its pierced armour and dilapidated state has been seen as an ironic comment on the condition of man in the nuclear age.

Paolozzi, *Cyclops* 1958

The Critic Laughs, an artwork produced in a multiple edition by **Richard Hamilton** (1922 – 2011), is an ironic comment on the unseeing critic who offers a worthless guarantee for art.

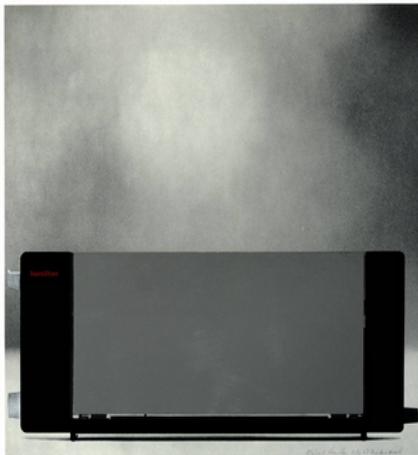


Hamilton, *The Critic Laughs* 1971-72

It consists of the white barrel of an electric toothbrush derived from a Braun model on which a naturalistically coloured plastic cast of an upper denture has been positioned in place of a brush head. This is presented in a specially designed presentation case with a stand, along with an accompanying instruction manual and guarantee card mimicking those that accompanied contemporary Braun electrical products.

In 1980, in a further twist, Hamilton found an opportunity to make a short film, as a form of advertisement for *The Critic Laughs*, that was included as a contribution to the BBC television series on art, *The Shock of the New*. Hamilton's short film starred the actress Loraine Chase presenting the multiple as being 'For connoisseurs who have everything ... At last a work of art to match the style of modern loving ... The critic laughs ... A perfect marriage of form and function'. The multiple, and the context that gave rise to it, exemplifies the ways in which, in the late 1960s and early 1970s, Hamilton was addressing the Duchampian tradition of the readymade and a pop concern for mass culture and style through an attention to high design products emanating from a Bauhaus tradition, a choice that was the exact opposite of Duchamp's process that avoided such judgement.

Richard Hamilton's *Toaster* is a print combining different printing techniques, and is a humorous and ironic take on the advertising of consumer products.



Toaster

New practical, outstanding, this print was made possible by a number of fresh ideas. The proof of the excellence of the toaster that inspired this work of art has been supplied by the results of severe endurance tests recently performed. The toaster has been working for a total of 1458.3 hours, not counting the first 100 hours of testing. This was the longest the toast 50-200 slices of bread. That is a great feat and one a toaster of a much high

could have sustained the design is can be proved by the fact that it has been

included among the most attractive objects for everyday use exhibited at the New York Museum of Modern Art – the only automatic toaster in the world to achieve this honour.

White plastic, black plastic on ends (see manual) All your friends and neighbours will be so impressed and amazed that they will not see that Hamilton is a

child and nothing. It makes good and has never been the cause of anyone losing their driving licence. It keeps you fit and your body needs it.

Printed on Barchess grain coated special printing on 200g 10x150 cm paper with Marcelline and Marcelline on and special engraved cover preparation in an edition of 75.

Dimensions: 21" wide, 30" high, image area 22" square.

Hamilton, *Toaster* 1967

NB. Editions of *The Critic Laughs* and *Toaster* are in the permanent collection of IVAM in Valencia, and are currently included in the exhibition *Times of Upheaval*

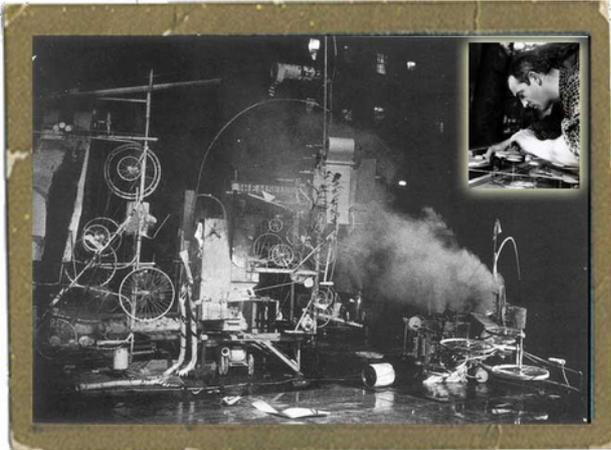
Jean Tinguely (1925 – 1991) was a Swiss sculptor best known for his kinetic art sculptural machines (known officially as metamechanics) that extended the Dada tradition into the later part of the 20th century. Tinguely's art satirised automation and the technological overproduction of material goods.

Chaos I was fabricated from new and scrap materials. It stands 30 feet tall, weighs 3 tons, and originally had 12 motors that operated 13 individual functions. Tinguely designed the artwork to have a "Jekyll and



Tinguely, *Chaos I* 1971-72

Hyde” personality so visitors can experience it being peaceful, sometimes with only a few functions working and other times with all of them working and it being noisy and loud.



Tinguely, *Homage to New York* 1960

Tinguely was best known for his 1960 performance piece entitled *Homage to New York*. This work involved the self-destruction of a huge sculpture in front of an audience at the Museum of Modern Art in New York. In collaboration with other artists/engineers, among them **Billy Klüver** and **Robert Rauschenberg**, he produced a self-destructing mechanism that performed for 27 minutes during a public performance for invited guests. In the end, the public browsed the remnants of the machine for souvenirs to take home. The work only partially auto-destructed before the fire department stepped in and put a stop to it all, much to the dismay of the crowd.

John Salt (1937 -) is an English artist, whose greatly detailed paintings from the late 1960s onwards made him one of the pioneers of the Photorealist school.

Salt's work in New York moved away from the earlier smooth consumerist portrayals of car interiors as he started to base his paintings on his own photographs. Initially these featured exterior shots of more worn vehicles, but after his discovery of a scrapyards under Brooklyn Bridge, his work began to feature images of cars, mangled and wrecked to the point of violence.



Salt, *Red Green Automobile* 1980

Salt's pictures generally feature wrecked cars and decrepit mobile homes in semi-rural locations in the United States. They are produced from photographs by projecting transparencies onto canvas and using an airbrush and stencils to reproduce the colour – a painstaking process that can take up to two years to complete.

The result is that Salt's pictures have an extreme level of detail and precision that lends them a heightened sense of reality and eliminates as far as possible the self-expression of the artist.



**Nicolas-Antoine Taunay,
Le triomphe de la guillotine
1795**