

number of progressive architects who were members of *Der Ring joined the group, including Ludwig Mies van der Rohe (1886–1969). A new journal published by the Werkbund, *Die Form* (1922, 1925–34), helped to spread their modernist ideas. The group's most spectacular success, however, was the 1927 exhibition of an entire housing estate in Stuttgart. Drawing on the model of

the 1901 exhibition by the Darmstadt colony (see Jugendstil), the Weissenhofsiedlung (Weissenhof Estate) presented a whole future way of living to half a million visitors. The site plan of sixty housing units in twenty-one buildings was designed by Mies van der Rohe, and sixteen leading European architects took part in the design of the buildings: Mies van der Rohe himself, Gropius, Behrens, Poelzig, Bruno and Max (1884-1967) Taut, Hans Scharoun (1893-1972) and others from Germany, J. J. P. Oud (1890-1963, see *De Stijl) and Mart Stam (1899-1986) from the Netherlands, Josef Frank (1885-1967) from Austria, Le Corbusier (1887-1965, see *Purism) from France, and Victor Bourgeois (1897-1962) from Belgium. Together they presented the first co-ordinated demonstration of the concrete, glass and steel architectural mode that would come to be known as the *International Style.

The Werkbund was dissolved in 1934 due, on the one hand, to the economic pressures of the Depression, and on the other, to the rise of Nazism. After World War II it was

reconstituted, when it broadened its scope to address more political issues, including plans for post-war regeneration and environmental issues. The Werkbund's most influential years as an organization, however, lay in its first few decades. It gave rise to similar organizations in Switzerland and Austria (1910 and 1913 respectively), and inspired the founding of the Design and Industries Association in Britain (1915) and a similar institution in Sweden (1917). In 1919 Gropius, a prominent early Werkbund member, founded the Bauhaus, a school of design, art and architecture that enshrined many of the Werkbund's ideas. Above all, the Werkbund succeeded in drawing attention to the need for design reform and to the benefits of a closer relationship between art and industry. In large part it established the reputation for welldesigned, high-quality products that German design still enjoys today.

Key Monuments

Ludwig Mies van der Rohe, Weissenhofsiedlung, Stuttgart, Germany

Peter Behrens, AEG Turbine Factory, Berlin-Moabit, Germany
—, Behren's House, Alexandraweg, Darmstadt, Germany

Key Books

- L. Burckhardt, The Werkbund (1980)
- J. Campbell, The German Werkbund: The Politics of Reform in the Applied Arts (Princeton, NJ, and Guildford, UK, 1980)
- A. Stanford, Peter Behrens and a New Architecture for the Twentieth Century (Cambridge, MA, 2000)

Cubism

Truth is beyond any realism, and the appearance of things should not be confused with their essence.

JUAN GRIS

The origin of Cubism, perhaps the most famous of all avant-garde movements in the twentieth century, has been the subject of enduring contention among art historians. Early historians credited the Spaniard Pablo Picasso (1881–1973) as sole progenitor; later the honours were shared between Picasso and the Frenchman Georges Braque (1882–1963, see also *Fauvism), coming categorically in

favour of Braque. Picasso's claim to precedence rests on his Les Demoiselles d'Avignon (1907), which utilizes changes of viewpoint. Yet in the same year Braque was already engaged in an ongoing, intensive analysis of work by Paul Cézanne (see *Post-Impressionism), culminating in his L'Estaque landscapes in 1908. Braque was particularly interested in Cézanne's method of depicting three dimensions by



multiple viewpoints, and the way in which the older painter constructed forms out of different planes that seem to slide, or pass, through each other. This technique (*passage* in French) leads the eye to different areas of the painting, simultaneously creating a sense of depth, drawing attention to the surface of the canvas and projecting into the space of the viewer, one of the key characteristics of Cubism.

When the L'Estaque paintings were submitted to the selection jury of the 1908 Salon d'Automne, Henri Matisse (see Fauvism) supposedly dismissed them, in a conversation with the critic Louis Vauxcelles, as nothing but *petits cubes* (small cubes). The paintings were rejected by the jury and shown instead in a large solo exhibition in November at the Kahnweiler Gallery in Paris. Vauxcelles's review of the exhibition recycled Matisse's comment, claiming that Braque 'despises form and reduces everything, landscape and figures and houses, to geometric patterns, to cubes.' Cubism soon became the official, and lasting, name for the movement.

Above left: Georges Braque, Viaduct at L'Estaque, 1908

'[Braque] despises form and reduces everything, landscape and figures and houses, to geometric patterns, to cubes,' asserted critic Louis Vauxcelles in 1908. 'Cubism' became the recognized name for the movement.

Above right: **Pablo Picasso**, *Still Life with Chair-Caning*, **1911–12** In this work fragmented objects, planes and perspectives combine with illusionistic games in two and three dimensions: the rope is real, but the chair-caning is a pattern on printed oilcloth which has been pasted onto the canvas.



By 1909 Braque and Picasso had become close friends, and worked together from 1909 until 1914, when Braque went off to war. During this period the development of Cubism was a close collaborative venture and many of their works at this time are difficult to tell apart. Picasso described their alliance as a 'marriage', and Braque later said, 'We were like two mountain climbers roped together.'

For both artists Cubism was a type of realism, which conveyed the 'real' more convincingly and intelligently than the various sorts of illusionistic representation dominant in the West since the Renaissance. As well as rejecting the single viewpoint perspective, they abandoned the decorative qualities of previous avant-garde artists, such as the *Impressionists, Post-Impressionists, *Nabis and the Fauves Instead they went to two alternative sources: Cézanne's later paintings for structure and African sculpture for its abstracted geometric and symbolic qualities. For Picasso, the challenge of Cubism was to represent three dimensions on the two-dimensional surface of the canvas. Braque, on the other hand, wanted to explore the depiction of volume and mass in space. Both these interests are evident in the new techniques they developed together.

The first phase of Braque and Picasso's output, lasting until around 1911, is often called Analytical Cubism. In this period the two artists generally avoided subjects and colour with overt emotional qualities, opting instead for subdued often monochromatic palettes and neutral subject matter such as still lifes. These were reduced and fragmented into quasi-abstract compositions of interpenetrating planes, in which multi-faceted solids flowed into each other, weaving together figure and background in a shimmering tapestry or web. Space in these paintings seems to move backwards, the upwards and towards the viewer, all this occurring simultaneously, utterly confounding traditional expectations of the representation of depth.

Such composite images of an object seen from a variety of angles - top, bottom, back, front - represent what is known about an object rather than what can be seen from a fixed point and at one time. Objects are suggested rather than described, and viewers must construct them by thought as well as by sight. It is clear that the Cubist object is not the fleeting moment of Impressionism, but a continuous one. In this it relates to intellectual theories of its day, for instance fashionable speculation about the fourth dimension, the occult and alchemy. More importantly, it shows an intriguing correspondence with the thinking of the French philosopher Henri Bergson (1859-1941), whose notions of 'simultaneity' and 'duration' posited that the past merges into the present, which in turn flows into the future in a fluid, overlapping manner, with the result that one's perception of objects is in a state of continual flux. In its emphasis on the role of the artist's imagination, Cubism seems to extend aspects of *Symbolist thought, but in its introduction of issues of time and knowledge it clearly reflects the contemporary intellectual climate.

Although much of their work from this period can be difficult to decipher, abstraction was not the goal, but a means to an end. As Braque confirmed, fragmentation was 'a technique for getting closer to the object'. And Picasso emphasized the imaginative and inventive aspect of Cubism, writing, 'in our subjects we keep the joy of discovery, the pleasure of the unexpected.' These aims were evident in the next phase of Cubism, often called Synthetic Cubism, which began between 1911 and 1912.

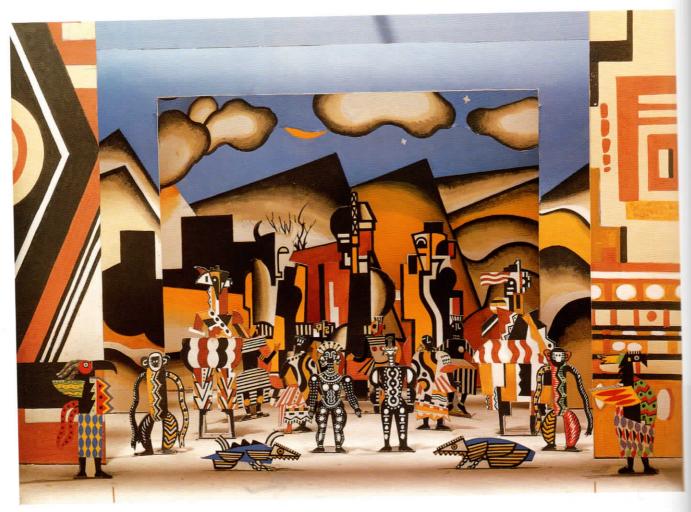
After flirting with non-objectivity, Braque and Picasso moved towards a mode of expression in which the subject was more recognizable, but laden with symbolism. In a sense they reversed their working procedure; instead of reducing objects and space towards abstraction, they built up pictures from fragmented abstractions assembled in arbitrary ways. The result was images in which the objective and subjective were delicately balanced, and the 'abstract' was used as a tool to create the 'real'. As the young Spaniard Juan Gris (1887–1927), who joined the older artists at this stage, explained: 'I can make a bottle from a cylinder.'

Two major innovations, both considered landmarks of modern art, occurred in 1912. Picasso incorporated a piece of oilcloth in his painting *Still Life with Chair Caning* creating the first Cubist collage (from the French coller, to stick) and all three artists produced papiers collés

Right: Juan Gris, Violin and Guitar, 1913 Gris was the purest exponent of Synthetic Cubism. His still lifes examine the object from every angle, exposing horizontal and vertical planes systematically. However, the paintings render light and colour to present a warm, naturalistic effect.

(compositions of cut-out pasted papers). The works generally included a clearer subject, richer colours and textures, readymade fragments from the 'real world' and text. However, although the compositions are on the whole simpler and more monumental, the spatial relationships are often very complex. The layering and overlapping of flat shapes simultaneously creates a sense of some space in front of the picture plane and pushes other space further back. The distinction between depicted depth and literal depth collapses, lending the works an architectural feel, as if one is seeing things in both plan and elevation. The associations of meaning are more complex too. In Picasso's Still Life with Chair Caning, the 'real object' stuck to the canvas turns out to be itself an illusion, not actual chair caning but a piece of oilcloth machine-printed with a caning-like pattern. The letters JOU stand for JOURNAL (newspaper) which itself stands for the newspaper one might find on a café table. The whole is surrounded with a piece of rope, which both frames the still life as an art work and calls attention to the picture's existence as an object.





Ultimately, such questions of fact and fiction challenge belief in a single definition of reality, and open the works to multiple interpretations. They assert the primacy of the artist's imagination, and claim for art an alternative existence of its own, independent of the outside world. The very strangeness of Cubism, however, is its eloquence in commenting on a strange world. As Picasso said some years later: 'This strangeness was what we wanted to make people think about because we were quite aware that our world was becoming very strange and not exactly reassuring.'

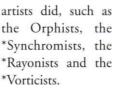
Although Picasso and Braque preferred to conduct their experiments in relative solitude, showing little of their work publicly until after World War I, their work was well known to other artists. From around 1910 Cubism evolved from a style to a movement as other artists developed their own responses to the innovations of Braque and Picasso. Gris, Fernand Léger (1881–1955), Roger de La Fresnaye (1885–1925), Francis Picabia (1879–1953, see *Dada), Marcel Duchamp (1887–1968, see Dada) and his brother Jacques Villon (1875–1963), André Derain (1880–1954, see Fauvism), Henri Le Fauconnier (1881–1946), Polishborn Henri Hayden (1883–1970), Auguste Herbin

(1882–1960), Hungarian-born Alfred Reth (1884–1966), Georges Valmier (1885–1937), Russian-born Léopold Survage (1879–1968), Polish Louis Marcoussis (1883–1941), André Lhote (1885–1962), Albert Gleizes (1881–1953) and Jean Metzinger (1883–1956) are among the best known. Of these, one of the most original was Léger, who fused Cubism with the machine aesthetic in a celebration of modern life and machine forms, a lively and humane are which translated easily into other forms, such as the theatre-

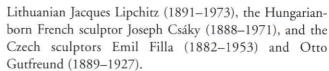
Soon Cubism had replaced Fauvism as the leading artistic movement in Paris. By 1912, it was a worldwide movement, the history of which was already being written. Gleizes and Metzinger published the enormously popular Du Cubisme in 1912 (fifteen printings in less than a year.

Above: Fernand Léger, Stage model for La Création du Monde (The Creation of the World), 1923 Léger's set for a one-act ballet (music by Darius Milhaud, libretto by Blaise Cendrars) shows the development of his own cubist vernacular, whose figures and compositions use vibrant contrasts of colour and form.

Opposite: Emil Králícek and Matej Blecha, Lamp-post, Prague 1912–13 The world's only Cubist lamp-post incorporates four seats into the base. Cubist architecture is itself unique to Prague. and an English translation in 1913), followed by the French poet and critic Guillaume Apollinaire's account, *Les Peintres cubistes* (The Cubist Painters) in 1913 (see *Orphism). Cubism's revolutionary methods rapidly served as a catalyst for other styles and movements, including *Expressionism, *Futurism, *Constructivism, Dada, *Surrealism and *Precisionism. While Picasso, Braque and Gris did not themselves pursue the angle towards abstraction, other

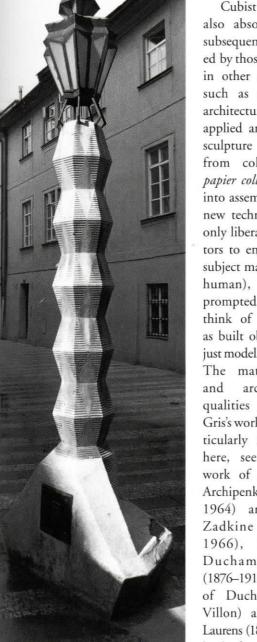


Cubist ideas were also absorbed and subsequently adapted by those working in other disciplines such as sculpture, architecture and the applied arts. Cubist sculpture developed from collage and papier collé, and fed into assemblage. The new techniques not only liberated sculptors to employ new subject matter (nonhuman), but also prompted them to think of sculptures as built objects, not just modelled objects. The mathematical architectural and qualities found in Gris's work were particularly influential here, seen in the work of Alexander Archipenko (1887-1964) and Ossip Zadkine (1890-1966), Raymond Duchamp-Villon (1876-1918, brother of Duchamp and Villon) and Henri Laurens (1885-1954), both from France,



Cubist theories were taken up enthusiastically in Czechoslovakia by artists, sculptors, designers and architects, who translated the characteristics of Cubist painting (simplified geometric forms, contrasts of light and dark, prism-like facets, angular lines) into architecture and the applied arts, including furniture, jewelry, tableware, fixtures, ceramics and landscaping. Prominent were the members of the Group of Plastic Artists, which was founded in 1911 by Filla to focus on Cubism. The group was active in Prague until 1914 and included sculptors Filla and Gutfreund, as well as architects and designers Pavel Janák, Josef Gočár (1880–1945), Josef Chochol (1880–1956), Josef Čapek, Vlastislav Hofman (1884–1964) and Otokar Novotny. Gutfreund published influential articles in the group's monthly journal.

The House of the Black Madonna (1911-12), a department store designed by Gočár, was the first piece of Cubist architecture to be built. The Grand Café Orient situated on the first floor, complete with a Cubist interior and Cubist light fixtures, rapidly became a meeting place for the avant-garde until its closure in the mid-1920s. The building is now part of the Czech Museum of Fine Arts and houses the Czech Cubism Museum, which was opened in 1994, containing a permanent exhibition of Cubist paintings, furniture, sculptures and porcelain. The Czech Cubism Museum also contains an exhibition of collages by the Czech artist and poet Jirí Kolár, who was also active in France. His ideas later introduced collage to a wider context. Paris may have been the site of the birth of Cubism, but it was in Prague that its possibilities were explored most fully, as a whole way of life.



Key Collections

Czech Cubism Museum, Prague, Czech Republic Musée Picasso, Paris Museum of Modern Art, New York Solomon R. Guggenheim Museum, New York Tate Gallery, London

Key Books

C. Green, Cubism and its Enemies (New Haven, CT, 1987)

J. Golding, Cubism: A History and an Analysis 1907–1914 (1988)

A. von Vegesack, Czech Cubism: Architecture, Furniture, Decorative Arts, 1910–1925 (1992)

L. Bolton, Cubism (2000)